

Request For Budgetary Estimate of furniture work for Government Medical College & Hospital, Chandrapur, Maharashtra.

HSCC/GMC Chandrapur/Furniture/2025

Date: 13/01/2025

HSCC (India) Ltd. intends to invite on-line Budgetary Estimate from eligible bidders for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital, Chandrapur, Maharashtra.

Technical Specifications and Bill of Quantity proposed for Furniture items are annexed herewith. It is requested to submit the Budgetary Quotation of the Furniture items with inclusive of all taxes & duties, 5 Years warranty and freight from warehouse to consignee location i.e. Government Medical College & Hospital, Chandrapur, Maharashtra.

The quotation should be on Company Letter Head with sign and stamp as per the BOQ format enclosed and should be submitted in both Hard & Soft Copy within 15 days of issue of this Notice at the following address:

General Manager (Procurement)  
Furniture Department  
HSCC (India) Ltd.,  
E-6(A), Sector-1,  
Noida (U.P.) - 201301.

Soft copy may please be sent to: [r\\_kumar@hsccltd.co.in](mailto:r_kumar@hsccltd.co.in) , [l\\_singh@hsccltd.co.in](mailto:l_singh@hsccltd.co.in)

General Manager (Procurement),  
HSCC (India) Ltd.

**Technical Specification of Furniture work for Hostel and residential Block at  
Government Medical College & Hospital, Chandrapur, Maharashtra. (BOQ item No. 1  
to 40)**

**All Images are indicative only**

1. Steel Almirah



Providing, supplying and placing of wardrobe. 900mm(W)x507mm(D)x1950mm(H) (Height without leveler). Construction & Material- Aesthetically appealing Slim line, completely knock down construction. Removable Skirting to cover integral legs. Legs fitted with screw type leveler Made from combination of CRCA 0.8 mm Thickness. It should have 4 Nos. adjustable shelves with thickness of 0.8 mm CRCA sheets, Main Door: Steel Hinged Door, stiffener shall be provided in door up to full height, Width of stiffener : 115 mm, Stiffener sheet thickness: 0.8 mm, Main Door Locking/handle: Handle & Base Aesthetically appealing, Ergonomic, flush with door made from Zinc alloy. 3 way 90 Degree Removable key type Cam lock & locking mechanism. Locker Door & it's locking / handle for Model 'H'. Fixed Half locker on RH side Hinged Door 2 way Cam lock with Knob type handle Shelving: Finish: Epoxy Powder coated to the thickness of 50 microns (+-10). Steel Make : TATA Steel/Sail Steel/JINDAL Steel, Steel Almirah as approved by engineer in-charge/employer. This product Should be Certified by GREENPRO.

## 2. Metal Single Bed



### **bed with metal sheet with headboard**

Providing, supplying and placing of bed. Overall Size : Width : 208cm Depth : 92.5cm Bed Height : 38.5cm Bed with Headboard Height : 84cm. Color : Black . bed -metal frame materials & dimensions:(gauge +/- 0.1mm)m.s. pipe 25.4x 50.8 x 1.2 thk.;m.s. pipe 19.05x 19.05 x 0.8 thk.;m.s. angle 20x20x1.6 thick; ms pipe dia. 50.8 x 0.9 thk.;m.s. pipe dia. 15.875 x 0.8 thk.

## 3. Single Bed mattress



Providing, supplying and placing of Mattress

Thickness 50 mm. Quilting Material-PU Foam. Density of Quilting Material ( $\pm 2$  Kg/m<sup>3</sup>)-18 Kg/m<sup>3</sup>.Mattress Top-Box Type.

Cover-Fabric Composition-Polyester. MATTRESS COVER-Printed.

#### 4. Steel Study Table



Providing, supplying and placing of Study Table.  
Table Top:40. Kg. Shelf:15 Kg.Drawer:-- Kg.

Overall Size (Width X Depth X Height): (+/-1) mm

Length: 900 mm Width: 590 mm Height: 745 mm

Number of Cartons: 01 Carton Specs:5 ply, 120 gsm, 16 BS.

Carton Size (each Carton): (in mm)L x W x H (Carton 1 of 1) 950 X 635 X 130 mm /Net Wt: 21.3 kg /Gross Wt: 23.3Kg Raw Material (specs of laminations & thickness): PLB top :PLB: 25 mm for table top with 2.0 mm thick PVC lipping .Metal Parts: MS ERW Tube , MS CRCA sheets & MS Bright Bar.

Powder coated : 35 microns Minimum. Multi-colored Modesty

Hardware: (Details) .Nut & Bolts , 5 Glide screws ,Self Tapping Screws & Articulated Plastic KBPT Construction: Knock down fitting. Table **as approved by engineer in-charge/employer.**

## 5. Study Chair



Providing, supplying and placing of Visitor Chair. SEAT/BACK ASSEMBLY: The seat and back should be made up of 1.2 ±0.1 cm. thick hot pressed plywood and upholstered with fabric and moulded Polyurethane foam with PVC lipping all around. The back foam should be designed with contoured lumbar support for extra comfort.

BACK SIZE: 49.5cm. (W) X 45.5cm. (H).

SEAT SIZE: 49.5cm. (W) X 43.0cm. (D).

**HIGH RESILIENCE (HR) POLYURETHANE FOAM:** The HR polyurethane foam should be moulded with density = $45 \pm 2$  kg/m<sup>3</sup> and hardness load  $16 \pm 2$  kgf for 25% compression.

**ARMRESTS:** The one-piece armrests made of black integral skin polyurethane with 50-70 Shore Hardness and reinforced with M.S. insert. The armrests should be scratch and weather resistant tant. The armrests should be fitted to the seat with seat armrest connecting bracket made of  $0.3 \pm 0.022$ cm. thk. HR steel.

**FIXED TYPE mechanism:** The fixed type mechanism should be without back tilt.

**TUBULAR UNDERSTRUCTURE:** The understructure should be made of  $\varnothing 2.54$   $2.54 \pm 0.03$ cm.x  $0.2 \pm 0.016$ cm.thk. M.S. E.R.W. tube and black powder coated (DFT 40-60 microns).

**Overall Dimensions of Chair**

Seat Height - 45.0cm.

Height -84.0cm.

Width & Depth of Chair as measured from pedestal - Width-55.0 cm and Depth-58.0 cm.

**Study Chair as approved by engineer in-charge/employer.**

## 6. Warden Cabin Table



Supplying and placing in position Main table of the following specifications. Its size shall be 1650 Width mm x 900 Depth mm x 740 Height mm .Table top shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick backing laminate (bdl) .Flat edge Duly sealed with 2 mm thick PVC beading. The modesty shall be 18 mm thick plain particle board ( ) PPB Clad with 1.0 mm thick decorative laminate (DL) on both sides. Edge Sealed with 2 mm thick PVC beading.

Supplying and placing in position ERU of the following specifications. Its size shall be 1550 Width x 450 Depth x 705 Height. The top of ERU shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick Backing Laminate (BDL). Flat Edge duly sealed with 2 mm thick PVC beading. The Modesty shall be 18 mm thick plain particle board (PPB) Clad with 1.0 mm thick Decorative Laminate (DL) on both sides. Edge sealed with 2 mm thick PVC Beading.

Supplying and placing in position Free Standing Pedestal of the following specifications with Overall Dimensions shall be 390mm(W)x440mm(D)x646mm(H). The construction & Material used shall be welded assembled, 0.8 mm thick CRCA for body shell, drawer front & tray, front side stiffener, rear side stiffener and 1.2 mm thick CRCA Top stiffener & Bottom stiffener. The drawer fronts shall be metal front straight edge. Locking shall be 10 lever cam lock & Central RH locking with actuator & lock channel mechanism for box-box-file Pedestal. The top panel shall be metal straight edge top. Castor should be swiveling non-lockable castors mounted below the body shell for free standing full height mobile pedestal and M8 Leveling stud for free standing pedestal. The anti-tipping mechanism shall have fifth roller arrangement mounted below file drawer to avoid toppling of unit when file drawer is pulled out. Partition in drawer shall be 1 no. Partition in box drawers with lock mounted. Plastic pencil tray shall be optional accessory. Finish shall be epoxy polyester powder coated to the thickness of 50 microns. Application shall be suitable for pushing below work surface which has got a clear height of 725 mm from below. For drawer pulling side wise tapered recess provided in shell behind drawer fronts.

## 7. High Back Chair





Providing, supplying and placing of Mid Back Chair. SEAT ASSEMBLY: The Cushioned seat inner is made of injection moulded glass filled poly-amide. Upholstered seat sub-assembly consists of moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2 \text{ kg/m}^3$ , and hardness load  $16 \pm 2 \text{ kgf}$  as per IS:7888 for 25% compression.

\*Seat SIZE: 45.5cm. (D) x 52.4cm. (W)

BACK ASSEMBLY: The Cushioned back is made of PU Foam with Polypropylene Injection molded Plastic Inner.

\*HIGH BACK SIZE: 50.5 cm. (W) x 76.7 cm. (D)

ARMRESTS: The armrest having four range of adjustment

- Height adjustment sub assembly is inserted in the Aluminum Die Cast Arm body & all other adjustment are provided in adjustable arm top sub assembly.
- Up-Down adjustment has 8 position ( $10.5 \pm 0.5 \text{ cm}$  range)
- Arm top swivel adjustment- 2 position,  $12^\circ \pm 2^\circ$  swivel inside
- Arm top width adjustment - Any position ( $2.0 \pm 0.5 \text{ cm}$  range each arm top)
- Arm top To - Fro Adjustment- any position ( $4.0 \pm 0.5 \text{ cm}$  range)
- Armrest top is made up of high density PU molded over glass filled Poly-amide inner.

POSTURE PERFECT MECHANISM: The adjustable tilting mechanism is designed with the following features:

- $360^\circ$  revolving type.
- Forward tilt of seat and back.
- Upright tilt lock.
- Tilt tension adjustment can be operated in seating position.
- 3-position Tilt limiter.

SEAT DEPTH ADJUSTMENT: Seat depth adjustment is housed below the seat and integrated with the mechanism with help of Polypropylene Seat cover. Seat Depth can be adjusted in sitting position. Seat depth adjustment range is of  $5.0 \pm 0.5 \text{ cm}$ .

ADJUSTABLE BACK SUPPORT: Back Assembly is connected to buff polish die cast aluminum Spine with an Up-Down mechanism assembly. Back Height can be adjusted in sitting position. It can be adjusted in the range of  $7.5 \pm 0.5 \text{ cm}$ .

PNEUMATIC HEIGHT ADJUSTMENT: The heavy duty class 4 pneumatic height adjustment has an adjustment stroke of  $13.0 \pm 0.3 \text{ cm}$ .

PEDESTAL: The pedestal is made of die-cast aluminium with buffing finish. It is fitted with 5nos. twin wheel castor. The pedestal is  $67.0 \pm 0.5 \text{ cm}$  pitch-center dia.

TWIN WHEEL CASTOR: 5 Nos. twin wheel soft castors are injection moulded in Poly-amide with PU lining, having  $6.5 \pm 0.1 \text{ cm}$  wheel Diameter and assembled to pedestal.

WIDTH (W): 74.0 CM.

DEPTH (D): 74.0 CM.

HEIGHT (H): 112.0 - 132.5 CM.

SEAT HEIGHT (SH): 44.5 - 58.0 CM. chair **As approved by engineer in-charge/employer.**



## 8. Visitor Chair



Providing, supplying and placing of Mid Back Chair. SEAT ASSEMBLY: The Cushioned seat inner is made of injection moulded glass filled poly-amide. Upholstered seat sub-assembly consists of moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2 \text{ kg/m}^3$ , and hardness load  $16 \pm 2 \text{ kgf}$  as per IS:7888 for 25% compression.

\*Seat SIZE: 45.5cm. (D) x 52.4cm. (W)

BACK ASSEMBLY: The Cushioned back is made of PU Foam with Polypropylene Injection molded Plastic Inner.

\*MID BACK SIZE: 50.5 cm. (W) x 61.8cm. (D)

ARMRESTS: The armrest having four range of adjustment

- Height adjustment sub assembly is inserted in the Aluminum Die Cast Arm body & all other adjustment are provided in adjustable arm top sub assembly.
- Up-Down adjustment has 8 position ( $10.5 \pm 0.5 \text{ cm}$  range)
- Arm top swivel adjustment- 2 position,  $12^\circ \pm 2^\circ$  swivel inside
- Arm top width adjustment - Any position ( $2.0 \pm 0.5 \text{ cm}$  range each arm top)
- Arm top To - Fro Adjustment- any position ( $4.0 \pm 0.5 \text{ cm}$  range)
- Armrest top is made up of high density PU molded over glass filled Poly-amide inner.

POSTURE PERFECT MECHANISM: The adjustable tilting mechanism is designed with the following features:

- $360^\circ$  revolving type.
- Forward tilt of seat and back.
- Upright tilt lock.
- Tilt tension adjustment can be operated in seating position.
- 3-position Tilt limiter.

**SEAT DEPTH ADJUSTMENT:** Seat depth adjustment is housed below the seat and integrated with the mechanism with help of Polypropene Seat cover. Seat Depth can be adjusted in sitting position. Seat depth adjustment range is of  $5.0\pm 0.5$  cm.

**ADJUSTABLE BACK SUPPORT:** Back Assembly is connected to buff polish die cast aluminum Spine with an Up-Down mechanism assembly. Back Height can be adjusted in sitting position. It can be adjusted in the range of  $7.5\pm 0.5$  cm.

**PNEUMATIC HEIGHT ADJUSTMENT:** The heavy duty class 4 pneumatic height adjustment has an adjustment stroke of  $13.0\pm 0.3$  cm.

**PEDESTAL:** The pedestal is made of die-cast aluminium with buffing finish. It is fitted with 5nos. twin wheel castor. The pedestal is  $67.0 \pm 0.5$ cm pitch-center dia.

**TWIN WHEEL CASTOR:** 5 Nos. twin wheel soft castors are injection moulded in Poly-amide with PU lining, having  $6.5\pm 0.1$ cm wheel Diameter and assembled to pedestal.

**WIDTH (W):** 74.0 CM.

**DEPTH (D):** 74.0 CM.

**HEIGHT (H):** 96.0 - 116.0 CM.

**SEAT HEIGHT (SH):** 44.5 - 58.0 CM..

**Chair As approved by engineer in-charge/employer.**

### **9. Three-Seater Sofa**



**Supply and Installation of Three-Seater Sofa Dimensions W x H x D (cm)-132.5 x 83.5 x 81.5**

**Upholstery**

- Material: PVC
- Shade: Coffee Brown
- Thickness: 1 mm

**Frame:**

- Material: Pine Wood
- Moisture content: 10 - 12 %
- Thickness of Plywood used: 12 mm & 18 mm

**Seat Foam:**

- Material: Slab stock
  - Density: 32 kg/m<sup>3</sup> at seat
- Back cushion:
- Conjugated hollow fibre (recron)
- Armrest:
- Conjugated hollow fibre (recron)
- Webbing:
- Material: Nylon
- Legs:
- Material: PVC Sofa: as approved by Engineer In-Charge/employer.

#### 10. Two-seater Sofa



Supply and Installation of Two-Seater Sofa Dimensions W x H x D (cm)-132.5 x 83.5 x 81.5

Upholstery

- Material: PVC
- Shade: Coffee Brown
- Thickness: 1 mm

Frame:

- Material: Pine Wood
- Moisture content: 10 - 12 %
- Thickness of Plywood used: 12 mm & 18 mm

Seat Foam:

- Material: Slab stock
- Density: 32 kg/m<sup>3</sup> at seat

Back cushion:

- Conjugated hollow fiber (recron)

Armrest:

- Conjugated hollow fiber (recron)

Webbing :

- Material : Nylon

Legs :

- Material : PVC Sofa: as approved by Engineer In Charge/employer.

### 11. Single Seater Sofa



Supply and Installation of single-Seater sofa, Dimensions W x H x D (cm)-91 x 83.5 x 81.5

Upholstery

- Material: PVC
- Shade: Coffee Brown
- Thickness: 1 mm

Frame:

- Material : Pine Wood
- Moisture content : 10 - 12 %
- Thickness of Plywood used : 12 mm & 18 mm

Seat Foam :

- Material : Slab stock
- Density : 32 kg/m<sup>3</sup> at seat

Back cushion :

- Conjugated hollow fibre (recron)

Armrest :

- Conjugated hollow fibre (recron)

Webbing :

- Material : Nylon

Legs :

- Material : PVC Sofa: as approved by Engineer In Charge/employer.

## 12. Center Table



Providing and supplying center table Providing, supplying and placing of Coffee Table

Dimensions W x H x D (cm)

Overall Size : Width : 119.9cm Depth : 59.9cm Height : 45cm

Primary Material - Plywood

Finish Color - Walnut

Maximum Load Capacity (kg) - 50

Wheels Included - **No**center table as approved by engineer in-charge/employer.

## 13. Corner Table



Providing and supplying center table Providing, supplying and placing of Coffee Table.

Overall Size :

Width : 60cm

Depth : 60cm

Height : 45cm

Primary Material - Plywood

Finish Color - Walnut

Net Weight (kg) - 12

Warranty - 1 Year

Maximum Load Capacity (kg) - 30

Style - Contemporary & Modern **corner table as approved by engineer in-charge/employer.**

#### 14. Dining Table six-seater.



Providing and Placing in position Canteen table of the following specifications. 6 Seater PU Coated size shall be 1734 Width mm x 1175 Depth mm x 750 Height mm . Top shall be 25 mm thick base material shall be 25 mm MDF board . On top PU painting of minimum 2H hardness with 75% glass as per color chart .Combination color graphics on the centre . Brown Laminate on bottom specially profiled edges for comfort . The Understructure shall be having bend pipe structure of MS powder coated . Pipe dia 38 mm , 2 mm thick and it shall be fitted with top by SS machine screws . Legs shall be of MS powder coated and 38 mm dia. pipe legs are fixed with inderstructure and table top . Glide shall be of Plastic fixed at the understructure to prevent the damage of table top during stacking .. Dining table as approved by engineer in-charge/employer.

#### 15. Dining Chair



Providing, supplying and placing of Café Chair. SHELL : The single piece seat back shell is made up of injection moulded high impact strength glass filled polypropylene polymer compound (refer product catalogue for colour chart).

SHELL SIZE : 44.0 cm. (W) x 50.2 cm. (D) x 40.5 cm. (H)

M.S. POWDER COATED UNDERSTRUCTURE OPTION (SM6): The powder coated (DFT 50±10 microns) welded tubular frame is made from  $\varnothing 2.22 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm M.S. E.R.W tube. The  $0.16 \pm 0.008$  cm thk CRCA sheet is welded to tubes for fixing shell to the frame. The shoe is made of high impact strength polypropylene polymer compound and are fitted at the end of the tubular frame.

WIDTH (W) : 51.5 CM

DEPTH (D) : 52.5 CM

HEIGHT (H) : 81.8 CM

SEAT HEIGHT (SH) : 45.9 CM. Dining Chair as approved by engineer in-charge/employer.

#### 16. Stainless steel Dustbin



Supply and installation of Stainless steel perforated Dustbin with open lid - Dimension to be 10" X 14" Weight to be 1.2 KG and capacity 15 Liter. Material Non Magnetic Stainless 15 steel (SS 202 grade), Thickness of wall 1.2 mm, or Stainless steel Dustbin approved by Engineer/Employer.



## 17. Roller Blind curtain



Providing & fixing up of Window curtain (Roller blind) Black out/translucent type in required sizes having the following specification: Mounting Bracket: Mounting hardware brackets, universal brackets including end plugbracket should come with lock down retainer device. Metal brackets provided should come in powder coated finish. All installation brackets made of stamped and hardened steel allowing a 46mm projection from the wall, ceiling and side fitting with screws and end cap covers. Cassette: It is a cover for blinds installed outside the window frame to hide tube brackets and mechanism. This is aluminium extruded rail made up of high strength aluminium alloy, which is covered with matching fabric. For 38 mm grooved roller tube cassette size should be 100mm (Width)\*100mm (Height) and having weight =1200gm/running meter ( $\pm 5\%$ ). Cassette Ceiling Bracket: This is made up of carbon Steel, DIN Standard Steel, Thickness: 1.0mm, Powder Coating Thickness: 0.15mm to 0.20mm. This provides near invisible fixing of the cassette. Cassette system end caps: It should have minimum 2.5mm thickness plastic end cap and should be in coordination with the blind fabric colour. Roller Tube: This is made up of High Strength Aluminium Alloy Extruded grooved tube having outer diameter 38mm( $\pm 1$ mm) & thickness 1.25mm ( $\pm 5\%$ ) as per AA6063 Alloy. Tubes must come in natural anodized finish. To achieve greater reinforcement anodized tubes must have at least six internal ribs so that additional tensile strength can be achieved and allowing provision for secured placements of clutch and end plug. Roller tube brackets: Spring steel metal brackets powder coated in matching finish to be used on both ends to support the roller system. Brackets can be top or face fixed. Control Unit: Blinds mechanism must have the control clutch drive unit with engineered heavy duty chain drive pulley operating system consisting of gear clutch housing and locking plug containing at least 6 ribs and inserted into a minimum of 38mm dia. roller tube. Clutch has to be self-lubricating with safety pins for secure bracket installation and unlocking pin for quick manual removal. Provided clutch system must allow convenience in

operation for large windows to the smallest windows. The control unit should be made up of polypropylene material using injection moulding method. Gearing Ratio: 1.75:1 to reduce operating force for larger blinds. 24nos Sprocket for 38mm diameter roller tube. Control unit is operated directionally by the use of beaded endless chain to raise and lower the blind smoothly. Idler: Tube bearing plug idler should have the properties of self-lubricating spring-loaded plastic bearing end plug with positive locking wheel that allows for adjustment and provides a secure installation and removal of blinds. Tube bearing plug should contain at least 6 ribs and inserted a tube not less than 38mm roller tube. Idler is of high strength reinforced plastic, consisting of an outside sleeve and centre shaft. Sleeve provide bearing

surface for centre shaft and rotate freely, providing smooth, quiet and long wearing operation. It is a Part of Control Unit Assembly.

Bottom Rail: This is made up of extruded aluminium bottom bar having powder coating of 55 microns and wall thickness of  $\pm 1.2\text{mm}$  ( $\pm 0.1$ ) and width of  $26.5\text{mm}$  ( $\pm 1\text{mm}$ ) and height of  $33.5\text{mm}$  ( $\pm 1\text{mm}$ ) and weight:  $380\text{gm}/\text{meter}$  ( $\pm 5\%$ ). All bottom rails should come with powder coated finish with an end cover perfectly in matching with the fabric. Bottom bar also includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines and dimensions of concealed bottom bar rod specified as inner diameter:  $10.8\text{mm}$ , outer diameter:  $14.8\text{mm}$ , Weight:  $219\text{gm}/\text{meter}$ , Thickness:  $1\text{mm}$  ( $\pm 5\%$ ) should be provided with matching cover. Concealed bottom bar rod: Bottom bar includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines. Aluminium bottom bar rod made up of AA6063 alloy having

Rod I/D:  $10.8\text{mm}$ , O/D:  $14.8\text{mm}$ , Weight:  $219\text{gm}/\text{meter}$ , Thickness:  $1\text{mm}$  ( $\pm 5\%$ ) with the covered matching. Bottom bar end caps: End caps of bottom bar should be made up of ABS material using Injection moulding method having perfect push fit with the bottom bar. The dimensions of end caps of bottom bar specified as length:  $18\text{mm}$ , width:  $27.5\text{mm}$ , height:  $34.5\text{mm}$ , thickness  $2\text{mm}$  and end caps of bottom bar should also have polyurethane bush to fit in

bottom tube for smooth operation of blinds. Operating chain: Blinds set is to be driven by a ball chain pulley and ball chain and can be positioned at Right hand or Left-hand side of the blinds set. This is made of  $4.5\text{mm}$  plastic beads moulded on  $2.0\text{mm}$  thick polyester cord. The chain drives the sprocket fixed in the

end control unit to close and open the blind. The pitch of the chain corresponds to the sprocket in perfect match for trouble free operation. Average number of balls on chain should be 50 per foot length. Plastic chain should provide ease in operation with chain connector and polycarbonate stopper of O/D:  $6\text{mm}$  & I/D:  $4\text{mm}$  to avoid reverse rolling of fabric over tube and protecting damages to blind fabric. Cord Weight: It should have suitable acrylic clear cord weight to suit the operating chain.

Thickness:  $14\text{mm}$ , width:  $30\text{mm}$  and height:  $80\text{mm}$ . Note: The control unit & cassettes shall be made with matching colour of blind with aesthetically pleasing matching look of room. The fabric shall be selected from best quality fabric. The fabric shall have properties such as acoustic control, anti-fungal and anti-microbial. Sheer fabrics shall allow in maximum amount of light (20-100% light transmission), whilst still preserving privacy and dim out (Privacy fabrics) (1 – 19% light transmission) allow in restricted amount of light, whilst ensuring complete privacy, even in the evening. Blackout fabric shall completely block out sunlight, for complete privacy, room darkening and temperature regulation (0% light transmission). The fabric colour as approved by employer The weighted composition of fabric shall be made of 100% Polyester woven fabric with a openness factor of 3%. The

fabric shall have a weight of 168 GSM ( $\pm 5$  GSM). The solid depth of fabric shall be 75mm and sheer depth shall be 50mm. Light fastness shall be 4-5 Grade tested in accordance with BS EN ISO 105-B01:1999, **Roller Blind Curtain as approved by engineer in-charge/employer.**

#### 18. Granite Work for Kitchen slab



Providing & fixing of 18 mm thick high quality granite in Jet black color having good Chemical resistance high scratches and wears resistance. The granite is provided with edge Molding, cutting & polishing fixed in Kitchen area. Granite Work as approved by engineer in-charge/employer.

#### 19. Kitchen Under Counter Storage



Carcass: All Side, Top, Bottom and Back panels, to be made in 18mm thick Pre laminated HDHMR board (High-Density High Moisture Resistance board) with 2 mm matching edge banding on all sides. Holes for the Sink and Faucet are to be provided as per drawing and in alignment with the holes in the Granite Platform. The carcass is at an elevation of about

100 mm from the floor. Adjustable leveling screws fitted at the bottom of carcass. This shall be covered with a standard PVC skirting. Internal dividers and Shelves to be made in 18mm thick Pre laminated HDHMR Board (High-Density High Moisture Resistance) with 2mm matching edge banding on all sides. All Shutters, Drawer Facia shall be made in 18mm thick High Density High Moisture resistance Fiber board (Pre laminated HDHMR board (High-Density High Moisture Resistance) with High Gloss PVC Foil. Drawers and Pull-outs: Tandem Box for Shutter height 348mm with Partition with Vertical and lateral partitions; tandem box length 500 MM; Weight load capacity-75 Kg.Min, Material-M.S with white powder coating; High grade nylon rollers in tandem runners. Tandem Box for Shutter height 138mm;tandem box length: 500MM, Weight of Tandem Box system: 3 KG Consist of Drawer side, Blumstein cabinet profile, wooden back fixing bracket white, Tam box Front Fixing Bracket insert a version, rectangular Cover cap back; Weight load capacity-45Kg. Min.; Material-M.S with white powder coating; High grade nylon rollers in tandem runners. Tandem Box for Shutter height 208mm;tandem box length 500 MM, Weight of Tandem Box system 3.1 KG Consist of Drawer side, BlueMotion cabinet profile, wooden back fixing bracket white, Tam box Front Fixing Bracket inserta version ,rectangular Cover cap, Gallery MS Powder coated ;Weight load capacity-65 Kg. Min.; Material-M.S with white powder coating; High grade nylon rollers in tandem runners. Spice & Oil Bottle Pull Out ;Shutter Height 700mm; Pull out with soft closing; RAL 9006(Silver Grey);Finish-Anti corrosive;02 fixed trays;3 D adjustment; Weight-2300 gm. Min. without channel. cutlery tray suitable for cabinet width 900mm;Weight-Min. 1000gm.;MaterialPolystyrene. Tandem Box, Cutlery tray and Bottle Pullout shall be made up of Hettich or equivalent. Drawers and Pull-outs Fascia to be made in 18mm thk Prelaminated HDHMR high gloss PVC foil; and fitted with Hettich Stabia anodized aluminum handle 0115021 (length 140mm) Hinged Shutter: to be made in 18mm thick Prelaminated HDHMR with 2mm 19 matching edge banding on all sides; and fitted with Hettich Stabia anodized aluminum handle 0115021 (length 140mm).

## 20. Kitchen Overhead Storage



Carcass :- All Side, Top, Bottom and Back panels, including Internal dividers and Shelves, to be made in 18mm thick Pre laminated HDHMR board (High-Density High Moisture Resistance) with 2mm matching edge banding on all sides. Internal dividers and Shelves to



be made in 18mm thick Pre laminated HDHMR board (High-Density High Moisture Resistance) with 2mm matching edge banding on all sides. Hinged Shutter: to be made in 18mm thick Pre laminated HDHMR board (High-Density High Moisture Resistance) high gloss PVC foil; banding on all sides; and fitted with Hettich Stabia anodized aluminum handle 0115024 (length 236mm). Lamination: For Side Panels, Factory-pressed .08mm thick Laminate in high-gloss, scratch and abrasion proof finish to be used for all outer surfaces, and Factory-pressed 0.8mm thick Laminate in matt finish to be used for all inner surfaces. For Top and Back panels, Internal dividers and shelves, Factory-pressed 0.8mm thick Laminate in matt finish to be used for all surfaces. For Bottom Panels (for all shelves except Under-sink Shelf), Factory pressed 0.8mm thick Laminate in matt finish to be used for all surfaces. For Bottom panel of Under-sink Shelf, manually-pressed Checkered Aluminum foil Laminate shall be used for top and all sides, and factory-pressed Laminate in matt finish shall be used for the bottom surface. For Drawer Fascia and Hinged Shutter, Factory-pressed 0.8mm thick Laminate scratch and abrasion proof finish to be used for all outer surfaces, and Factory-pressed 0.8mm thick Laminate in matt finish to be used for all inner surfaces. For Drawer Fascia and Hinged Shutter, Factory-pressed 0.8mm thick Laminate scratch and abrasion proof finish to be used for all outer surfaces, and Factory-pressed 0.8mm thick Laminate in matt finish to be used for all inner surfaces. Laminates shall be made by Merino, Green ply, Century. All Laminates are to be applied only after approval of Laminate samples by Eng incharge. **HARDWARE & FASTNERS** Hinges Stainless steel 304 metal soft closing hinges; 110 degree opening angle, Thickness /dia of hinge cup 11.3 mm/35mm respectively; suitable for door 20 thickness-14-24mm;MaterialSteel;Finish-NicklePlated, 3 Dimensional Adjusting Facility; Weight-Approx.200 gm. for 2 Hinges plus two mounting plates plus SS Screws. Cylinder swing out Dust Bin (Capacity 13 ltr) SS black with plastic cover, weight of dust bin - 800 GM. CASING MINIFIX of Zinc alloy material 15N / 18 MM NICKEL PLATED, ECONO-S BOLT MS GALVANISED CLIPON PLASTIC SLEEVE 15-24/5 ZINC PLATE.GLUE-IN DOWEL, PLASTIC, Ø10MM, LENGTH 12 MM. Skirting:- Double extrusion covered PVC Plinths with finish as per E/I, Height 100 mm ; Weight- Min. 275 grams per meter. Plinth Adjusting Foot, plastic, black, for plinth height 100 MM PC; Weight- Min. 45 grams per leg.

## 21. Curtain Rod with pendent.



Supply and installation of round stainless steel (SS 302 grade) Curtain Rod with bracket

and pendent (as approved by Engineer In charge/employer ), Diameter of rod shall be 25 mm, with thickness of 1.8 mm to 2.0 mm, loading capacity 15 kg, Curtain Rod shall be heavy duty and rust proof, or as per approved by Engineer In charge/employer..

## 22. Dining Table Ten-seater.



Supply Installation of 10 seater Dining table with Stainless Steel tubular Section of SS 304 grade with table top shall be made of pre polished 30 mm thick Engineered Stone (highly resistant to heat, staining and scratches (single piece) with overall size 2400 mm W1200mmDX 750mmH ( $\pm 5\%$  Engineering Variation), approved color as per employer with necessary beveled edges all around with full round nosing & groove 2mm deep on all open 21 edges. The Dining table frame is of overall size 2350 mm x 1150 mm fabricated with minimum 45mm x 45mmx1.6mm thickness square section of Stainless Steel 304 grade with 4 legs and 2 legs pedestal as necessary for sturdy and structurally stable with tentative arrangement, overall height of 750 mm (to table top). All the joints of the fram are to be true to line & shape and are to be welded using Stainless Steel welding rods to full contact length and are to be buffed & polished to finish presenting seamless finish. The 30mm thick Engineered Stone top slab shall be fixed to the frame with proper adhesive. The legs are to be provided with SS 304 base plate 80mmx80mmx5mm thickness. Dining table as approved by engineer in-charge/employer..

## 23. Mid Back Chair



Providing, supplying and placing of High Back Chair. SEAT/BACK ASSEMBLY: The back is made up of 1.2  $\pm$  0.1cm. thick hot-pressed plywood & seat is made up of 1.5  $\pm$  0.1cm. thick hot-pressed plywood measured and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam is designed with contoured foam lumbar support. The seat has extra thick foam on front edge to give comfort to popliteal area.

The chair seat & back size are

HIGH BACK SIZE 51.5 cm. (W) x 82.0 cm. (H)

SEAT SIZE 53.5 cm. (W) x 51.0 cm. (D)

HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam is moulded with density = 45 $\pm$ 2 kg/m<sup>3</sup> and hardness load 14  $\pm$  2 kgf as per IS:7888 for 25% compression.

ARMRESTS : The adjustable armrest is designed with the following features

- Up-Down adjustment- 6 steps (7.2  $\pm$  0.5cm range)
- Armrest top is mounted on Armrest structure made of glass filled Nylon.
- Armrest Top is PU moulded over glass filled Nylon insert.

CENTER TILT SYNCHRO MECHANISM WITH MULTI LOCK : The mechanism is designed with the following features:

- 360° revolving type.
- 3 position locking with anti shock mechanism.
- Tilt tension adjustment

PNEUMATIC HEIGHT ADJUSTMENT : The pneumatic height adjustment has an adjustment stroke of 9.5  $\pm$  0.3 cm

PEDESTAL ASSEMBLY : The pedestal is injection moulded in black glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal is 66.1  $\pm$  0.5cm. pitch-center dia. (76.1  $\pm$  1.0cm with castors).

TWIN WHEEL CASTORS : The twin wheel castors are injection moulded in Black Nylon.

WIDTH (W): 76.1 CM.

DEPTH (D): 76.1 CM.

HEIGHT (H): 113.5-123.5 CM.

SEAT HEIGHT (SH): 46.0-56.0 CM.

24. IMA Office Cabin Table



Finish - Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10 micron).

#### 24. Director bungalow Office table with back unit



Supplying and placing in position Main table of the following specifications. The Main table shall be of size 1800 Width mm x 900 mm Depth x 750 mm height. Top surface of the table shall made up of MDF (Medium density fibre ) board duly finished with Veneer and final coating of PU. The Main desk should contain in built key board pull out tray for keeping keyboard of computer. The front modesty panel of the table shall be made up of MDF board of size 1640 mm x 600 mm x 16mm which shall also be duly finished with Veener and PU coating. For personal storage one mobile pedestal (3 drawer unit) shall be provided of size 510 mm Width x 635 mm Height and 445 mm Depth. The storage pedestal shall also be made up of MDF duly finished with veener & final coating of PU. The Side shall be of size 1200mm Width x 445mm Depth x 660 mm Height. The side unit shall be made up of MDF board duly finshed with Veneer and final finish by PU Coating. The design of the side unit shall be such that it can be placed on either side of the main table. The side unit shall contain open space for keeping cpu in extreme right side, one closed storage shutter at extreme left end & open space in the middle with one shelf for keeping files. The thickness of the top of the side unit shall be 25mm.

Supplying and placing in position Back unit of the following specifications. The Size of the Back unit shall be 2215mm width x 410 mm Depth x 2000mm height. The back unit shall be made up of MDF board duly finished with veneer & final finish by PU coating. Below storage shall be provided with wooden shutters & the upper left & right side of the back unit shall also be provided with wooden shutters. The middle 3 door shutters should be of

glass of minimum 5mm thick for display purpose. The hardness of the PU coating shall be 1.5H

## 25. Twelve-Seater Meeting Table



Supplying and placing in position meeting table of the following specifications with overall size shall be 3600 X 1500 X 740. Work top-Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

Soft closing dual access flap provided for access to power supply and data cables.

Understructure-The Under-structure consists of mixture of 25mm and 18mm Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Anodised aluminium alloy 63400 - WP profile is added at bottom edges for improving the aesthetics. The product has a knock-down construction.

Wire Management- A wire raiser made of 0.8mm CRCA MS IS:513. It is epoxy polyester powder coated (DFT 40-60 microns) for flow of wires and cables. A Power box with 2 cutouts on either sides for standard 8 module Anchor Roma is provided. Beside each cutout, an additional cutout with plate is provided for mounting Audio Visual Cables(eg. HDMI,VGA-A,etc). Meeting Table as approved by engineer in-charge/employer.

## 26. Three-Seater Sofa



Supply and Installation of Three-Seater Sofa Dimensions W x H x D (cm)-132.5 x 83.5 x 81.5  
Upholstery

- Material: PVC
- Shade: Coffee Brown
- Thickness: 1 mm

Frame:

- Material: Pine Wood
- Moisture content: 10 - 12 %
- Thickness of Plywood used: 12 mm & 18 mm

Seat Foam:

- Material: Slab stock
- Density: 32 kg/m<sup>3</sup> at seat

Back cushion:

- Conjugated hollow fibre (recron)

Armrest:

- Conjugated hollow fibre (recron)

Webbing:

- Material: Nylon

Legs:

- Material: PVC Sofa: as approved by Engineer In-Charge/employer.

## 27. Two-seater Sofa



Supply and Installation of Two-Seater Sofa Dimensions W x H x D (cm)-132.5 x 83.5 x 81.5

Upholstery

- Material : PVC
- Shade : Coffee Brown
- Thickness : 1 mm

Frame :

- Material : Pine Wood
- Moisture content : 10 - 12 %
- Thickness of Plywood used : 12 mm & 18 mm

Seat Foam :

- Material : Slab stock
- Density : 32 kg/m<sup>3</sup> at seat

Back cushion :

- Conjugated hollow fiber (recron)

Armrest :

- Conjugated hollow fiber (recron)

Webbing :

- Material : Nylon

Legs :

- Material : PVC Sofa: as approved by Engineer In Charge/employer.

## 28. . Single Seater Sofa



Supply and Installation of single-Seater sofa, Dimensions W x H x D (cm)-91 x 83.5 x 81.5

Upholstery

- Material : PVC
- Shade : Coffee Brown
- Thickness : 1 mm

Frame :

- Material : Pine Wood
- Moisture content : 10 - 12 %
- Thickness of Plywood used : 12 mm & 18 mm

Seat Foam :

- Material : Slab stock
- Density : 32 kg/m<sup>3</sup> at seat

Back cushion :

- Conjugated hollow fiber (recron)

Armrest :

- Conjugated hollow fiber (recron)

Webbing :

- Material : Nylon

Legs :

- Material : PVC Sofa: as approved by Engineer In Charge/employer.

## 29. Center Table



Providing and supplying center table Providing, supplying and placing of Coffee Table

Dimensions W x H x D (cm)

Overall Size : Width : 119.9cm Depth : 59.9cm Height : 45cm

Primary Material - Plywood

Finish Color - Walnut

Maximum Load Capacity (kg) - 50

Wheels Included - **Nocenter table as approved by engineer in-charge/employer.**

### 30. Corner Table



Providing and supplying center table Providing, supplying and placing of Coffee Table.

Overall Size :

Width : 60cm

Depth : 60cm

Height : 45cm

Primary Material - Plywood

Finish Color - Walnut

Net Weight (kg) - 12

Warranty - 1 Year

Maximum Load Capacity (kg) - 30

Style - Contemporary & Modern **corner table as approved by engineer in-charge/employer.**

### 31. Dining Table Eight-Seater



Providing, supplying and placing of dining Table

Dimensions W x H x D (cm) - 175 x 77 x 89.9

Primary Material - Rosewood (Sheesham)

Finish Color - Dark Brown

Net Weight (kg) - 45

Warranty - 1 Year

Delivery Condition - Knock Down

Style - Contemporary & Modern Dining Table as approved by engineer in-charge/employer.

### 32. Dining Chair



Providing, supplying and placing of dining Chair

Overall Size :

Dining Chair :Length : 45cm Width : 45cm Height : 95cm

Cushion Seat : Length : 45cm Width : 45cm Height : 50cm

METAL MATERIALS : (gauge +/- 0.1mm):Material :NUT & WASHER WOODEN MATERIALS

:Material:SHEESHAM SOLID WOOD, **Dining chair as approved by engineer in-charge/employer.**

### 33. King size Double Bed



Overall Size :Length - 2060.0 mm Width - 1733.0 mm Height - 945.0 mm

Material:Bed Structure consist of metal frames made of M.S. Channels in 1.0 mm Thickness.Horizontal plinths and bottom plilth are made of 25 mm Thick Prelaminated Particle Board. Plinth support assembly is made of M.S. 25 mm square pipe in 1.2 mm

thickness. Head board is made of 18 mm thick Prelaminated Particle board with imported H.D.F. foil wrapped decorative trims fixed to it. Tail board is made of 18 mm thick Prelaminated Particle board with imported H.D.F. foil wrapped decorative trims fixed to it.

Side rail is made of 18 mm thick Prelaminated Particle board with imported H.D.F. foil wrapped decorative trims fixed on to it. Mattress panels of Bed are made of 18 mm thick Prelaminated Particle Board with all the exposed edges are edge banded with 0.8 mm thick PVC edge banding. Construction: Knock Down construction. Packets: 1 Bed in 2 packets. Finish: 18 mm thick Prelaminated Particle Board is in Walnut shade. Metal frames are powder coated in shade Mat Black to the thickness of 50 microns(+10), double bed as approved by engineer in-charge/employer.

#### 34. Double Bed Mattress



Providing, supplying and placing of Mattress.

Thickness 50 mm. Quilting Material-PU Foam. Density of Quilting Material ( $\pm 2$  Kg/m<sup>3</sup>)-18 Kg/m<sup>3</sup>. Mattress Top-Box Type.

Cover-Fabric Composition-Polyester. MATTRESS COVER-Print mattress as approved by engineer in-charge/employer.

#### 35. Bed Side Table



Providing, supplying and placing of bed Side table Overall Size :Depth — 461.0 mm Width — 460.0 mm Height — 510.0 mm Material: Body panels of Bed side table are made of 18 mm thick Prelaminated Particle Board 1S:12823 Class E1 (as per EN13986) .All the exposed edges are edge banded with 0.8 mm thick PVC edge banding glued with Hot Melt EVA glue. Drawer front are made of 18 mm thick Prelaminated Particle board 1S:12823 Class E1 (as per EN13986). Hardware: The high quality hardware used like Roller slides, Hinges, Mini fix, dowels is of make Hettich. Construction: Knock Down construction. Packets :1 packet. Finish :.18 mm thick Prelaminated Particle Board 1S:12823 Class E1 (as per EN13986) is in Imperial Oak shade. Lipping shade is 299P MAKE REHAU all complete as per direction of Engineer-In-charge/employer.



### 36. Wooden TV Unit



Providing, supplying and placing of Meraki tv Unit.

Overall Size: Width: 120cm Depth: 56cm Height: 192cm (Without Bush) Material: All carcass panel are made of 18 mm prelaminated particle

board with edge banding 1.5 mm thickness. Upper vertical side are of 18 mm thickness in PU. Bottom side doors are of 18 mm thick MDF in PU on front. Bottom middle doors are made of 4 mm thick toughened

glass with PU paint in black. All doors are fitted with push to open fittings. Levelers are provided on vertical panels at back to rest the unit properly against the wall. Hardware: Hettich. Construction: Knock down. Finish: All 18 mm prelaminated particle board panels are Noce Versailles with walnut edge band . PU lamination is high gloss in Ecrú shade. Packets: 3 nos, TV Unit as approved by engineer in-charge/employer.

### 37. Premium Sofa Chairs for Bed Room



Providing and placing of premium Lounge sofa Chair of size: 666-700mm(W) x 590-690mm(D) x 755mm(H) ( $\pm$  5% Engineering Variation). The seat and back are made of 15mm thick bent plywood. The seat, back and sides of the chairs are moulded in PU foam and upholstered with polyester fabric of high quality. Seat PU Foam density: 28-30Kg/cum with 150mm thickness, Back - PU Foam density: 30-32Kg/cum with 100 mm thickness,

Sides (inside) - PU Foam density: 28 Kg/cum with 45 mm thickness, Sides (outside) & back (back side) - PU Foam density: 30-32Kg/cum with 30 mm thickness, The legs are made of solid rubber wood complete as per direction of Engineer-in-Charge/Employer.

### 38.. Round Table for Bed Room.



Providing and placing of Round Center Table of size : 900mm (Diameter) x 525mm (H) ( $\pm$  5% Engineering Variation). Understructure of the table includes legs and under support is made of round MS ERW tubes 30 mm diameter with 1.6 mm thickness powder coated in 60-70 microns in white color. The top is made of 25mm thick MDF board coated with Hi loss PU Finish having scratch resistance of 2H. The Table has a load carrying capacity of 80 kg, MDF Board Make: (Century/Action Tesa/Merino/Greenlam or equivalent make) Round Center Table complete as per direction of Engineer-in-Charge/Employer

### 39. HIGH BACK CHAIR-2



Providing, supplying and placing of High Back Chair. SEAT/BACK ASSEMBLY : The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette  
Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

HIGH BACK SIZE: 47.7 cm. (W) x 76.4 cm

ARMRESTS : The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

ACTIVE BIO-SYNCHRO MECHANISM : The adjustable tilting mechanism should be designed with the following features:

- 360° revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminium black powder coated.

SEAT DEPTH ADJUSTMENT : Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm.

ADJUSTABLE BACK SUPPORT: Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.

**PNEUMATIC HT. ADJUSTMENT:** The pneumatic ht adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

**PEDESTAL ASSEMBLY:** The pedestal should be High Pressure Die cast polished Aluminium and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$ cm. pitch-center dia. ( $75.0 \pm 1.0$ cm. With castors.)

**TWIN WHEEL CASTORS:** The twin wheel castors should be injection moulded in black PP having  $6.0 \pm 0.1$ cm wheel Diameter.

Overall Dimensions of Chair

Seat Height -43.1-53.1cm

Height -112.7-130.2cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm.

#### 40. Mid back chair -2



Providing, supplying and placing of Mid Back Chair. **SEAT/BACK ASSEMBLY :** The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS

E.R.W Round Tube of size  $1.9 \pm 0.03$ cm x  $0.16 \pm 0.0128$ cm. It upholstered with Leatherette.

Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

MID BACK SIZE: 47.7 cm. (W) x 60.1 cm. (D)

**ARMRESTS :** The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$ cm in 5 steps.

**ACTIVE BIO-SYNCHRO MECHANISM :** The adjustable tilting mechanism should be designed with the following features:

- 360° revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminium black powder coated.

**SEAT DEPTH ADJUSTMENT:** Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm.

**ADJUSTABLE BACK SUPPORT :** Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.

**PNEUMATIC HT. ADJUSTMENT :** The pneumatic ht adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

**PEDESTAL ASSEMBLY:** The pedestal should be High Pressure Die cast polished Aluminium and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$ cm. pitch-center dia. ( $75.0 \pm 1.0$ cm. With castors.)

**TWIN WHEEL CASTORS:** The twin wheel castors should be injection moulded in black PP having  $6.0 \pm 0.1$ cm wheel Diameter.

**Overall Dimensions of Chair**

Seat Height -43.1-53.1cm

Height -96.5-114.0.cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm

# Technical Specification Medical College Lab (BOQ item No. 41 to 69)

## 41. Office table



Supplying and placing in position Main table of the following specifications. Its size shall be 1650 Width mm x 900 Depth mm x 740 Height mm. Table top shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick backing laminate (bdl). Flat edge Duly sealed with 2 mm thick PVC beading. The modesty shall be 18 mm thick plain particle board ( ) PPB Clad with 1.0 mm thick decorative laminate (DL) on both sides. Edge Sealed with 2 mm thick PVC beading.

Supplying and placing in position ERU of the following specifications. Its size shall be 1550 Width x 450 Depth x 705 Height. The top of ERU shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick Backing Laminate ( BDL). Flat Edge duly sealed with 2 mm thick PVC beading. The Modesty shall be 18 mm thick plain particle board (PPB) Clad with 1.0 mm thick Decorative Laminate (DL) on both sides. Edge sealed with 2 mm thick PVC Beading.

Supplying and placing in position Free Standing Pedestal of the following specifications with Overall Dimensions shall be 390mm(W)x440mm(D)x646mm(H). The construction & Material used shall be welded assembled, 0.8 mm thick CRCA for body shell, drawer front & tray, front side stiffener, rear aide stiffener and 1.2 mm thick CRCA Top stiffener & Bottom stoffener. The drawer fronts shall be metal front straight edge. Locking shall be 10 lever cam lock & Central RH locking with actuator & lock channel mechanism for box-box-file Pedestal. The top panel shall be metal straight edge top. Castor should be swiveling non-lockable castors mounted below the body shell for free standing full height mobile pedestal and M8 Leveling stud for free standing pedestal. The anti-tipping mechanism shall have fifth roller arrangement mounted below file drawer to avoid toppling of unit when file drawer is pulled out. Partition in drawer shall be 1 no. Partition in box drawers with lock mounted. Plastic pencil tray shall be

optional accessory . Finish shall be epoxy polyester powder coated to the thickness of 50 microns . Application shall be suitable for pushing below work surface which has got a clear height of 725 mm from below . For drawer pulling side wise tapered recess provided in shell behind drawer fronts .

#### 42. Work Table for office



Supplying and placing in position office table of the following specifications. Its size shall be 1200 Width x 600 Depth x 740 Height . The top shall be made from 25 mm thick pre-laminated board. All the edges are sealed with 2 mm thick PVC edge band all around . Side panels shall be made from 25 mm thick pre- laminated particle board . All the edges are sealed with 2 mm thick PVC edge band on the user side and 0.8 mm on the top and bottom side .The side panels have 2 glide screws each for levelling of the desk. Modesty panel shall be made from 18 mm thick pre- laminated particle board . All the edges are sealed with 0.8 mm thick PVC edge band all around. Freestanding Pedestal shall be made from 18 mm pre-laminated particle board with a combination of 2 mm and 0.8 mm PVC edge band on all the exposed surfaces as per requirement . The drawers are provided with suitable slides for smooth operation . All the pedestal drawers are centrally locked with a single key .Drawer slides are of Hettich. Work Table as approved by engineer in-charge/employer

#### 43. HIGH BACK CHAIR FOR CABIN TABLE





Providing, supplying and placing of High Back Chair. SEAT/BACK ASSEMBLY : The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette  
Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

HIGH BACK SIZE: 47.7 cm. (W) x 76.4 cm

ARMRESTS : The armrest top should be moulded from polyurethane (PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

ACTIVE BIO-SYNCHRO MECHANISM : The adjustable tilting mechanism should be designed with the following features:

- 360° revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminium black powder coated.

SEAT DEPTH ADJUSTMENT : Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm.

ADJUSTABLE BACK SUPPORT: Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.

PNEUMATIC HT. ADJUSTMENT: The pneumatic ht adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

PEDESTAL ASSEMBLY: The pedestal should be High Pressure Die cast polished Aluminium and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$  cm. pitch-center dia. ( $75.0 \pm 1.0$  cm. With castors.)

TWIN WHEEL CASTORS: The twin wheel castors should be injection moulded in black PP having  $6.0 \pm 0.1$  cm wheel Diameter.

Overall Dimensions of Chair

Seat Height -43.1-53.1cm

Height -112.7-130.2cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm.

#### 44. Mid Back Chair for Cabin Table



Providing, supplying and placing of Mid Back Chair. SEAT/BACK ASSEMBLY : The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette. Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

MID BACK SIZE: 47.7 cm. (W) x 60.1 cm. (D)

ARMRESTS : The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

ACTIVE BIO-SYNCHRO MECHANISM : The adjustable tilting mechanism should be designed with the following features:

- 360° revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminium black powder coated.

SEAT DEPTH ADJUSTMENT: Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm.

ADJUSTABLE BACK SUPPORT : Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.

PNEUMATIC HT. ADJUSTMENT : The pneumatic ht adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

PEDESTAL ASSEMBLY: The pedestal should be High Pressure Die cast polished Aluminium and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$  cm. pitch-center dia. ( $75.0 \pm 1.0$  cm. With castors.)

**TWIN WHEEL CASTORS:** The twin wheel castors should be injection moulded in black PP having  $6.0 \pm 0.1$ cm wheel Diameter.

**Overall Dimensions of Chair**

Seat Height -43.1-53.1cm

Height -96.5-114.0.cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm

#### 45. Demo Chair with Tablet (Examination Hall/ Demonstration Room)



compound which is upholstered with fabric upholstery covers and moulded Polyurethane foam.

The Back is injection moulded in glass filled Polypropylene compound which is upholstered with

Mesh fabric (Refer colour chart for seat & Back upholstery in product catalog).

\* SEAT SIZE : 50.0cm. (W) x 48.0 cm. (D)

\* BACK SIZE : 53.0 cm. (W) x 39.0cm. (H)

**HIGH RESILIENCE (HR) POLYURETHANE FOAM:** The HR polyurethane seat foam is moulded with density  $45 \pm 2$  kg/m<sup>3</sup> and hardness  $16 \pm 2$  kgf as per IS:7888 for 25% compression.

**3. M.S. POWDER COATED FRAMES FOR 4 LEG CHAIRS :**The powder coated ( DFT  $50 \pm 10$  microns) welded tubular main frame is made from  $\varnothing 2.54 \pm 0.03$  cm x  $0.2 \pm 0.016$  cm and

$\varnothing 1.6 \pm 0.3$ mm x  $0.16 \pm 0.0128$ cm M.S. E.R.W tube. The  $\varnothing 1.9 \pm 0.3$ mm x  $0.12 \pm 0.0096$  cm M.S.E.R.W. tube used as connecting member between LH & RH frames.

Desklet support frame is made from  $\varnothing 2.22 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm and welded to main frame.

**ARMREST :** The Armrest are made of glass filled Polypropylene compound and assembled over the tubular frame.

**QUARTER DESKLET:** The 'L' shape desklet is made of  $1.8 \pm 0.05$ cm. thk. pre-laminated particleboard with  $0.2 \pm 0.05$ cm. thk. injection moulded PolyPropylene all around. Desklet has

Front and back adjustment of  $8.0$  cm  $\pm 0.5$  cm

**OUTER DIMENSION:**  $31.5 \pm 0.1$ cm. (W) X  $47.0 \pm 0.1$ cm. (D)**WIRE TRAY:** The paper tray is made of  $\varnothing 0.5 +0/-0.005$ cm. M.S. rod which is welded to form a mesh-type structure. It is powder coated ( DFT  $50 \pm 10$  microns ). It will retro fit to Relax

with desklet chair.

**SIZE:**  $40.5$ cm. (W) X  $29.8$ cm. (D) X  $18.0$  cm (H).

TWIN WHEEL CASTORS: The twin wheel castors are injection moulded in Black Poly Amide.

WIDTH (W): 59.0 CM.

DEPTH (D): 76.0 CM.

HEIGHT (H): 86.5 CM.

SEAT HEIGHT (SH): 46.0 CM. Chair as approved by engineer in-charge/employer

#### 46. 3-Seater Waiting Chair



Providing, supplying and placing of waiting chair. SEAT SHELL :The seat shell should be a welded assembly of seat,back and side frame. The seat and back should be made of  $0.12\pm 0.013$ cm thk CR steel sheet with oblong perforations.They should be welded to sideframe of size  $3.2\pm 0.05$ cm x  $0.5 \pm 0.05$  cm thk HR steel.The welded assembly should be powder coated ( DFT 40-60 microns ).

The seat has a front water fall edge to provide popliteal clearance for comfortable seating. It also has a buttock support curve that not only provides rear support but also prevents small children from falling through the gap between seat and back. Clean and flat surfaces of seat and back aids in easy maintenance. \* SEAT SIZE : 47.8 cm (W) x 44.6 cm (D) \* BACK SIZE : 41.6 cm (W) x 23.0 cm (H) Understructure assembly should be made of connecting beam and leg assembly made of M.S. E.R.W. oblong tube of size  $7.5\pm 0.03$ cm x  $2.5\pm 0.03$ cm x  $0.2\pm 0.016$ cm thk.The welded structure assembly should be powder coated ( DFT 40-60 microns ).The leg assembly should be fitted with shoes and levellers in Nylon. The leg structure should be designed with minimal contact close to ground providing easy access for cleaning purposes. The shoes fitted to leg assembly help in aligning the structure for back to back arrangements. Levellers take care of uneven flooring.Connecting beam should be fitted with snap locking end cap.It also aids in side-by-side understructure alignment .

Armrest assembly should be made of armrest frame and armrest pad . The armrest frame should be made up of size  $3.175\pm 0.05$ cm x  $0.47\pm 0.027$ cm thk HR steel and it should be powder coated ( DFT 40-60 microns ). Armrest pad should be injection molded in Nylon and should be fitted onto the armrest frame.

Overall Dimensions of Chair

Seat Height - 44.1 cm.

Height - 78.5 cm.

Width & Depth of Chair as - Width-169.5cm and Depth-63.8 cm.

The cushions for seat and back should be made up of  $1.5 \pm 0.1$  cm thk foam on a flat MR grade ply  $0.8 \pm 0.04$  cm thk and should be upholstered with leatherite.

**47. 2-Seater Dual desk with Cushion for Lecture Theatre**



Providing, supplying and placing of Desk cum Bench N Seater Legs should be made of MS ERW oblong tube (IS7138) of size 75x25x2 mm thick with 5 mm thk HR brackets as per IS:2062 and 2mm thk CRCA brackets as per IS-S l3welded on to the tubes. Assembly will be epoxy polyester powder coated of minimum 40 micron thickness. It is to be grouted to floor through 8mm thk HR steel (IS 2062) base plate using anchor bolts.\*\* Shoe made of ultramid - Nylon should be provided at the bottom for covering the base plate.Swiveling arms should be made of MS ERW tube (IS7138) of size 50x30x1.6mm thk. oblong tube with one end welded with 0 55x4mm thk. MS ERW tube (IS7138) and at other end welded with 0 48x3.2mm thk. MS ERW tube (IS 7138). The swiveling arms should be epoxy polyester powder coated to a minimum of 40 microns. The swiveling arm will be held with powder coated Aluminum die cast piece with swiveling mechanism consist of Ni-Cr plated Shaft (IS:9550), Torsion spring made of spring steel (IS4454) and Bush made of Nylon (PA6-GF30). Chair Back should be made of blow molded High-density polyethylene and is fixed on the understructure assembly with the help of Stainless steel pop rivets. Seat should be made of blow molded High-density polyethylene and is fixed on the understructure assembly. All side metal frames should be made from Mild steel ERW oblong tubes 40x20x2mm thk(approx. 14 SWG) as per IS:7138, seat support bracket made of 3mm thk. HR sheet (IS 2062), MS ERW oblong tube 35x15x1.6mm (IS7138) which are welded together. Seat support channel made of 1mm thk Mild steel sheet (as per IS:513) should be welded to the understructure for fixing seat. The welded structures are coated with epoxy polyester powder to a minimum of 40 microns thickness.

The base plate mechanism should be designed with the following features : 1) 360° revolving type 2) Provision for Upright height adjustment . The seat should be provided with height adjustment using a gas lift with an adjustment stroke of  $70.0 \pm 0.3$ cm. The gas lift will also have a auto return feature to allow the user free movement while being seated and after use guides the upper structure to rotate back to its original position enabling all chairs to align with the work top.

The Worktops should be made of 25 mm thick Pre-Laminated Board of E I-P2 Grade and approved shade conforming to IS:12823:1990. All the edge of worktops will be provided with machine pressed 2mm thick pvc edge band glued with hot melt glue. The modesty should be made of 25mm thick pre-laminated twin board of EI-P2 Grade conforming to IS:12823:1990 of approved shade All the edge of modesty are provided with machine pressed 2 mm thick pvc edge band glued with hot melt glue.

Desk Height (H) - 730avg.

Desk Depth (D) - 425

Seat Height (H) - Min 454 - Max 524

Clear Height below desk (C) - 655

Pitch (p) -660.5

#### 48. Three-Seater Sofa



Supply and Installation of Three-Seater Sofa Providing, supplying and placing of 3 Seater Sofa.

Dimensions W x H x D (cm)-176.5 x 83.5 x 81.5

Upholstery

- Material : PVC
- Shade : Coffee Brown
- Thickness : 1 mm

Frame :

- Material : Pine Wood
- Moisture content : 10 - 12 %
- Thickness of Plywood used : 12 mm & 18 mm

Seat Foam :

- Material : Slab stock
- Density : 32 kg/m<sup>3</sup> at seat

Back cushion :

- Conjugated hollow fiber (recron)

Armrest :

- Conjugated hollow fiber (recron)

Webbing :

- Material : Nylon

Legs :

- Material : PVC Sofa: as approved by Engineer In-Charge/employer.

49. Centre Table (Ante Room)



Supplying and placing in position coffee table of the following specifications.800 x 800 x 320 TOP AND BOTTOM PANEL: Made of 36mm Thick ( $\pm 1$ ) combination of MDF and particle board with top veneer face coated with clear lacquer. All edges are edge banded with matching 1mm thick veneer lipping.

SIDE PANEL: Made of 18mm Thick Pre-laminated twin board (PLT) of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick Plipping. Side panels are fitted with aluminum trim.

SKIRTING: Made of 18mm Thick Pre-laminated twin board (PLT) of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

50. Corner Table (Ante Room).



Supplying and placing in position side table of the following specifications.450 x 450 x 370 TOP AND BOTTOM PANEL: Made of 36mm Thick ( $\pm 1$ ) combination of MDF and particle board with top veneer face coated with clear lacquer. All edges are edge banded with matching 1mm thick veneer lipping.

SIDE PANEL: Made of 18mm Thick Pre-laminated twin board (PLT) of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Side panels are fitted with aluminum trim.

SKIRTING: Made of 18mm Thick Pre-laminated twin board (PLT) of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. side Table: as approved by Engineer In-Charge/employer.

51. 6-Seater Reading Table For (Museum/ Department Library/ Department Library-Anatomy)



Supplying and placing in position meeting table of the following specifications with overall size shall be 2100 X 1150 X 740. Work top-Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

Soft closing dual access flap provided for access to power supply and data cables.

Understructure-The Under-structure consists of mixture of 25mm and 18mm Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Anodised aluminium alloy 63400 - WP profile is added at bottom edges for improving the aesthetics. The product has a knock-down construction.

Wire Management- A wire raiser made of 0.8mm CRCA MS IS:513. It is epoxy polyester powder coated (DFT 40-60 microns) for flow of wires and cables. A Power box with 2 cutouts on either sides for standard 8 module Anchor Roma is provided. Beside each cutout, an additional cutout with plate is provided for mounting Audio Visual Cables(eg. HDMI,VGA-A,etc). **as approved by engineer in-charge/employer.**



52. Reading Chairs (Museum/ Department Library/ Department Library-Anatomy)



Providing, supplying and placing of High Back Chair. SEAT/BACK ASSEMBLY: The back is made up of  $1.2 \pm 0.1$ cm. thick hot-pressed plywood & seat is made up of  $1.5 \pm 0.1$ cm. thick hot-pressed plywood measured and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam is designed with contoured foam lumbar support. The seat has extra thick foam on front edge to give comfort to popliteal area.

The chair seat & back size are

HIGH BACK SIZE 51.5 cm. (W) x 82.0 cm. (H)

SEAT SIZE 53.5 cm. (W) x 51.0 cm. (D)

HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam is moulded with density =  $45 \pm 2$  kg/m<sup>3</sup> and hardness load  $14 \pm 2$  kgf as per IS:7888 for 25% compression.

ARMRESTS : The adjustable armrest is designed with the following features

- Up-Down adjustment- 6 steps ( $7.2 \pm 0.5$ cm range)
- Armrest top is mounted on Armrest structure made of glass filled Nylon.
- Armrest Top is PU moulded over glass filled Nylon insert.

CENTER TILT SYNCHRO MECHANISM WITH MULTI LOCK : The mechanism is designed with the following features:

- 360° revolving type.
- 3 position locking with anti shock mechanism.
- Tilt tension adjustment

PNEUMATIC HEIGHT ADJUSTMENT : The pneumatic height adjustment has an adjustment stroke of  $9.5 \pm 0.3$  cm

PEDESTAL ASSEMBLY : The pedestal is injection moulded in black glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal is  $66.1 \pm 0.5$ cm. pitch-center dia. ( $76.1 \pm 1.0$ cm with castors).

TWIN WHEEL CASTORS : The twin wheel castors are injection moulded in Black Nylon.

WIDTH (W): 76.1 CM.

DEPTH (D): 76.1 CM.

HEIGHT (H): 113.5-123.5 CM.

SEAT HEIGHT (SH): 46.0-56.0 CM. **Chair as approved by engineer in-charge/employer.**

53. Steel Almirah



Providing, supplying and placing of storage unit.

Overall size shall be 900mm(W)x450mm(D)x1830mm(H) . The construction shall be rigid knock down construction and Material used shall be prime quality CRCA steel - panels from 0.6 mm thick & front frame . Shelf shall be 0.8 mm thick .Configuration (Door) shall be full height steel hinged door . Locking shall be Plastic Recessed Handle cum Cam lock with 3 way locking mechanism with shooting bolt arrangement . Height wise adjustable shelf mounting , Uniformly distributed load capacity per each full shelf shall be 80 Kg maximum . For Plain 4 Nos. of adjustable full shelves . The top shall be metal and Epoxy Powder coated finish to the thickness of 50 microns .

54. Library double side Book Rack



Providing, supplying and placing Book Rack .

Body - a. Side panels, Frame & Cross L bracket are made using 0.8 mm CRCA (IS:513).

b. The assembly consists of 2 tie rods, 4 fixing brackets and 2 turnbuckles. The tie rods are fixed in a shape of 'X'

The tie rods are made of 4mm diameter rods of MS while fixing brackets are made of 2mm thick. CRCA IS:513 Grade.

c. Optional wooden panel of 25mm thk PLT, E1-P2 grade board for PLT

It shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue

Under Structure - Under structure is made of 0.8m CRCA (IS:513).

b. Sizes of under structure for single body :

1. 1200W x 295D x 80H

2. 2400W X 295D X 80H

Shelves - a. Shelves used are 10 bend panel made of 0.8mm CRCA (IS:513).

Shelf panels are placed on shelf support and then fixed using nut and bolts from below.

Standard config. consists of 6 loading levels formed by 5 no of adjusted shelf for each main and add on unit.

Uniformly Distributed Load Capacity per each shelf is 80 Kg maximum.

Construction- Completely Knock down construction

Finish- All MS Sheetmetal and metal frame components are powder coated with epoxy polyester powder to the min thickness of min 45 microns.

Stickability- The add-on units can be stacked width wise to form a bank of racks having common side panel up to 4800W

Shelves back stiffener - At the rear side of the shelves back stiffeners are provided. These act as separators made of 0.8mm THK CRCA (IS:513).

Label Holder -It is an aluminum extrusion of length 296mm for single body bookrack , fitted on to front of body. The Paper is 300GSM matt finish, to be inserted into the aluminum extrusion. The length of paper is 296mm for single body bookrack.

Optional Accessory - Rollout shelf: Rollout shelf accessory is a pull-out tray which has 2 nos. 'C shaped brackets of 1.2mm thk. Firmly mounted on shelf support with adjustable height. Slides are then fixed on these C brackets and rollout shelf assembly is mounted on the slides. This shelf opens outwards up to 250mm & has load capacity of 40 KG UDL.

Book Separator: Book separator is made of 2mm thk. CRCA sheet (IS:513) and is used to as a partition and support for books placed vertically on a shelf., Double sided book Rack as **approved by engineer in-charge/employer.**

55. Steel Almirah with glass shutter.



Providing, supplying and placing of full height storage.

Overall Dimensions of VSDU - 8 shall be 900mm(W)x450mm(D)x1830mm(H). The top shall be Metal top (1 mm add in unit height). The Rigid Knock Down Construction, Back , Sides and Door shall be made from 0.7 mm high yield strength CRCA ,rest in 0.8 mm CRCA . CRCA - 'D' Grade as per IS-513. Sliding door arrangement shall have sliding door wth top hanging arrangement to prevent derailment. Each door shall be provided with 2 plastic rollers having steel ball bearing for smooth movement of door & less noise. VSDU 8 shall have glass door for visibility of the content. Locking shall be 5 lever cam lock for safe locking. Handle shall be plastic flush & recessed handle. Shelving shall have Height wise adjustable shelf mounting. Uniformly Distributed Load Capacity of the shelf is 40 Kg maximum. VSDU - 8 shall have 4 no. of adjustable full shelves. Accessories optional shall be cradle with pipes for hanging godrej instadex files. Leveler shall be screw type leveler with hex plastic base and overall finish shall be epoxy polyester coated to the thickness of 50 microns. For VSDU 8 - A4 size box file can be stored vertically on four shelves and clear space above fifth shelf is 220 mm . Almirah as **approved by engineer in-charge/employer**

## 56. Stainless Steel Dissection Table



Supply and Installation of Stainless-steel dissection table with Dimension - 1820mmL\*600mmW\*900mmH. It should be made of stainless steel (SS 304 grade steel) with a frame 50mmx50mm with 1.6 mm thickness and made of rugged torsion resistant stainless-steel profiles. It should have 4 solid rubber swivel locking castors, Table top depth should be approx. 15 mm sloping towards the drain, 10 litre removable containers with bayonet lock, mounted beneath base frame. Airtight Compartment should be mounted beneath the table top to serve as an odour - free storage of drapes. size 2 ft (length)\* 1.5ft (width)\*9 inch (Dept), It should have stainless steel full extension drawer and a removable stainless-steel tray provided with a perforated plate and a removable lid Size (2 fit) \*1.5ft(width)\*9 (Depth), System Configuration Accessories:

Stainless Steel Bucket 50 Liter, eadrest, ody support shims, oot rest: Supply and Installation of foot Step with under structure is made of stainless steel (SS 304 grade) square tube 32mm X 32mm with 1.6 mm thickness, Top Sheet shall be made of 1.6 mm thick Size:485mm(L) x Width of single step :335mm (W) X Height of Foot Step: 150 mm-200mm from the ground ( $\pm$  5% Engineering Variation in dimension), foot Step as approved by engineer in-charge/employer.Foldable Extendable arm rests. acility to fix stands & stands for lithotomy strapping

### 57. Laboratory Stool



Supply, assembly and placement of Fixed SS top square stool- Overall dimension should be 411(l) x 411(w) x 522mm (h). Top should be made of SS 304 sheet with buffed matt finish. MS square flat tube of section 25 x 25mm with thickness of 2mm should be used. Thermosetting epoxy polyester powder coating must be done for all MS parts. Neoprene shoes should be provided to avoid the wear & tear of the product. All powder coating parts must be in Raal white & plastic, rubber parts in gray. Safe working load must be 135kg

### 58. Stainless Steel Dustbin



Supply and installation of Stainless steel Dustbin with Lid and foot operated- Dimension to be 10" X 14" Weight to be 1.2 KG and capacity 15 Liter. Material Non Magnetic Stainless steel (SS 202 grade), Thickness of wall 1.2 mm, or Stainless steel Dustbin approved by Engineer/Employer.

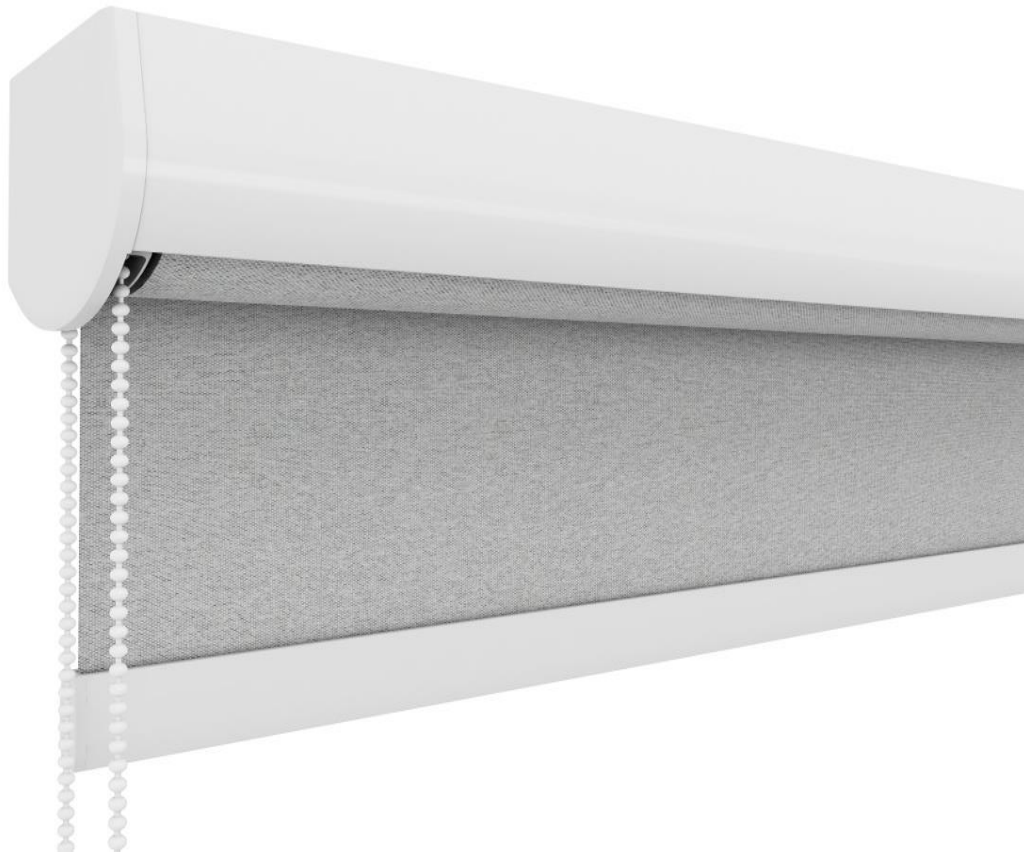
59. Over-head storage cabinet for Laboratory



Overall Dimensions of Store Up shall be 900 mm W x 380 mm D x 785 mm H. The Construction shall be aesthetically appealing completely knock down construction made from 0.8 mm thick CRCA as per IS - 513 . Horizontal stiffener shall be made from 1.2 mm thick CRCA as per IS - 513 . The doors shall be made from 0.8 mm thick CRCA sheet with 8 mm thick glass as per IS - 513. Two door with single lock on Right Hand door. Locking shall be 10 lever cam lock lever at the bottom of the door. Shelving shall be Height wise adjustable shelf 1 no. Uniformly distributed load capacity of 40 Kg UDL .The finish shall be Epoxy powder coated to the thickness of 50 microns .

Overall Dimensions of DOOR shall be 448 mm W x 783 mmH RH side door with lock. 448 mm W x 783 mm H, LH side door w/o lock . it shall have two door with single lock on RH door. MODULAR OVERHEAD STORAGE as per approved sample and as per the direction of Engineer-In-charge.

60. Roller Blind Curtain.



Providing & fixing up of Window curtain (Roller blind) Black out/translucent type in required sizes having the following specification:

**Mounting Bracket:** Mounting hardware brackets, universal brackets including end plug bracket should come with lock down retainer device. Metal brackets provided should come in powder coated finish. All installation brackets made of stamped and hardened steel allowing a 46mm projection from the wall, ceiling and side fitting with screws and end cap covers.

**Cassette:** It is a cover for blinds installed outside the window frame to hide tube brackets and mechanism. This is aluminum extruded rail made up of high strength aluminum alloy, which is covered with matching fabric. For 38 mm grooved roller tube cassette size should be 100mm (Width)\*100mm (Height) and having weight =1200gm/running meter ( $\pm 5\%$ ).

**Cassette Ceiling Bracket:** This is made up of carbon Steel, DIN Standard Steel, Thickness: 1.0mm, Powder Coating Thickness: 0.15mm to 0.20mm. This provides near invisible fixing of the cassette.



Cassette system end caps: It should have minimum 2.5mm thickness plastic end cap and should be in coordination with the blind fabric color.

Roller Tube: This is made up of High Strength Aluminum Alloy Extruded grooved tube having outer diameter 38mm(+/-1mm) & thickness 1.25mm (+/-5%) as per AA6063 Alloy. Tubes must come in natural anodized finish. To achieve greater reinforcement anodized tubes must have at least six internal ribs so that additional tensile strength can be achieved and allowing provision for secured placements of clutch and end plug.

Roller tube brackets: Spring steel metal brackets powder coated in matching finish to be used on both ends to support the roller system. Brackets can be top or face fixed.

Control Unit: Blinds mechanism must have the control clutch drive unit with engineered heavy duty chain drive pulley operating system consisting of gear clutch housing and locking plug containing at least 6 ribs and inserted into a minimum of 38mm dia. roller tube. Clutch has to be self-lubricating with safety pins for secure bracket installation and unlocking pin for quick manual removal. Provided clutch system must allow convenience in operation for large windows to the smallest windows. The control unit should be made up of polypropylene material using injection molding method. Gearing Ratio: 1.75:1 to reduce operating force for larger blinds. 24nos Sprocket for 38mm diameter roller tube. Control unit is operated directionally by the use of beaded endless chain to raise and lower the blind smoothly.

Idler: Tube bearing plug idler should have the properties of self-lubricating spring-loaded plastic bearing end plug with positive locking wheel that allows for adjustment and provides a secure installation and removal of blinds. Tube bearing plug should contain at least 6 ribs and inserted a tube not less than 38mm roller tube. Idler is of high strength reinforced plastic, consisting of an outside sleeve and center shaft. Sleeve provide bearing surface for center shaft and rotate freely, providing smooth, quiet and long wearing operation. It is a Part of Control Unit Assembly.

Bottom Rail: This is made up of extruded aluminum bottom bar having powder coating of 55 microns and wall thickness of  $\pm 1.2\text{mm}$  ( $\pm 0.1$ ) and width of 26.5mm( $\pm 1\text{mm}$ ) and height of 33.5mm( $\pm 1\text{mm}$ ) and weight: 380gm/meter ( $\pm 5\%$ ). All bottom rails should come with powder coated finish with an end cover perfectly in matching with the fabric.

Bottom bar also includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines and dimensions of concealed bottom bar rod specified as inner diameter: 10.8mm, outer diameter: 14.8mm, Weight: 219gm/meter, Thickness: 1mm ( $\pm 5\%$ ) should be provided with matching cover.

Concealed bottom bar rod: Bottom bar includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines. Aluminum bottom bar rod made up of AA6063alloy having Rod I/D: 10.8mm, O/D:14.8mm, Weight: 219gm/meter, Thickness: 1mm ( $\pm 5\%$ ) with the covered matching.

Bottom bar end caps: End caps of bottom bar should be made up of ABS material using Injection molding method having perfect push fit with the bottom bar. The dimensions of end caps of bottom bar specified as length: 18mm, width: 27.5mm, height: 34.5mm,

thickness 2mm and end caps of bottom bar should also have polyurethane bush to fit in bottom tube for smooth operation of blinds.

Operating chain: Blinds set is to be driven by a ball chain pulley and ball chain and can be positioned at Right hand or Left-hand side of the blinds set. This is made of 4.5 mm plastic beads molded on 2.0 mm thick polyester cord. The chain drives the sprocket fixed in the end control unit to close and open the blind. The pitch of the chain corresponds to the sprocket in perfect match for trouble free operation. Average number of balls on chain should be 50 per foot length. Plastic chain should provide ease in operation with chain connector and polycarbonate stopper of O/D:6mm & I/D: 4mm to avoid reverse rolling of fabric over tube and protecting damages to blind fabric.

Cord Weight: It should have suitable acrylic clear cord weight to suit the operating chain. Thickness: 14mm, width: 30mm and height: 80mm.

Note: The control unit & cassettes shall be made with matching colour of blind with aesthetically pleasing matching look of room.

The fabric shall be selected from best quality fabric. The fabric shall have properties such as acoustic control, anti-fungal and anti-microbial. Sheer fabrics shall allow in maximum amount of light (20-100% light transmission), whilst still preserving privacy and dim out (Privacy fabrics) (1 - 19% light transmission) allow in restricted amount of light, whilst ensuring complete privacy, even in the evening. Blackout fabric shall completely block out sunlight, for complete privacy, room darkening and temperature regulation (0% light transmission).

The fabric colour as approved by employer The weighted composition of fabric shall be made of 100% Polyester woven fabric with a openness factor of 3%. The fabric shall have a weight of 168 GSM ( $\pm 5$  GSM). The solid depth of fabric shall be 75mm and sheer depth shall be 50mm. Light fastness shall be 4-5 Grade tested in accordance with BS EN ISO 105-B01:1999, **Roller Blind Curtain as approved by engineer in-charge/employer.**

#### 61. Dustbin Large (100 Liter)



Supply and installation of Large dustbin (100 Litre) with wheel and Lid , the dustbin shall be Heat resistant  
UV stabilized

Made of High-Density Polyethylene (HDPE) material Injection moulded

- Leg Operated lid.
- Dead weight approx. (kg) -10.5
- Useful load (kg)- 60
- Overall height (mm)- 940
- Overall width (mm) 480
- Overall depth (mm)-550
- Upper edge comb (mm)-870
- Wheel diameter (mm)-200

Dustbin as approved by Engineer/Employer

## 62. Laboratory Table with Bottle Rack (Single wall Side Unit with 600mm Width)



### D-FRAME SYSTEM

All D-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from -5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. HORIZONTAL MEMBERS

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames

together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths.

#### COVER PANELS

All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating WELDED UNDER-BENCH STORAGE CABINETS Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Drawer: Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. DROPPER All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm. REAGENT SHELVES Fixed-Type reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of 0.8mm thick CRCA MS with pure epoxy powder coating sheets to kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets. Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope. WELDED OVER HEAD STORAGE CABINETS Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm. Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover

with 1.2mm thick hinge stiffener. Empty gap should be filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. SERVICE FITTINGS AND ACCESSORIES Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the color coding as per DIN 12920.

LABORATORY SINK AND ACCESSORIES Polypropylene Molded Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer)

63. Laboratory Table with Bottle Rack (Single wall Side Unit with 750mm Width)



#### D-FRAME SYSTEM

All D-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from -5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. HORIZONTAL MEMBERS

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths.

**COVER PANELS**

All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating

**WELDED UNDER-BENCH STORAGE CABINETS** Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet.

**Unit Construction :** It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

**Shelf :** Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening.

**Drawer:** Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening.

**Units** should be in 450mm and 600mm widths.

**DROPPER** All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm.

**REAGENT SHELVES** Fixed-Type reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of 0.8mm thick CRCA MS with pure epoxy powder coating sheets to kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets.

Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope.

**WELDED OVER HEAD STORAGE CABINETS** Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit

Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm. Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. SERVICE FITTINGS AND ACCESSORIES Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the color coding as per DIN 12920.

LABORATORY SINK AND ACCESSORIES Polypropylene Molded Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer)

#### 64. Laboratory Table with Bottle Rack (Single wall Side Unit with 900mm Width)



#### D-FRAME SYSTEM

All D-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from - 5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. HORIZONTAL MEMBERS

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths. COVER PANELS

All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating WELDED UNDER-BENCH STORAGE CABINETS Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Drawer: Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. DROPPER All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm. REAGENT SHELVES Fixed-Type reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of



0.8mm thick CRCA MS with pure epoxy powder coating sheets to be kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets. Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope. **WELDED OVER HEAD STORAGE CABINETS** Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. **Unit Construction :** It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm. **Shelf :** Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. **SERVICE FITTINGS AND ACCESSORIES** Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. **Service Indexes:** Fittings should be identified with service indexes in the color coding as per DIN 12920.

**LABORATORY SINK AND ACCESSORIES** Polypropylene Molded Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer)

## 65. Laboratory Furniture Corner Table (Single wall Side Unit))



### D-FRAME SYSTEM

All D-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from -5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. HORIZONTAL MEMBERS

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths. COVER PANELS

All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating WELDED UNDER-BENCH STORAGE CABINETS Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Drawer: Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. DROPPER All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm. REAGENT SHELVES Fixed-Type reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of 0.8mm thick CRCA MS with pure epoxy powder coating sheets to kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets. Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope. WELDED OVER HEAD STORAGE CABINETS Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm. Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. SERVICE FITTINGS AND ACCESSORIES Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be

powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the color coding as per DIN 12920.

**LABORATORY SINK AND ACCESSORIES Polypropylene Molded Sinks:** Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer).

66. Laboratory Sink table Single wall Side.



#### D-FRAME SYSTEM

All D-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from -5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. **HORIZONTAL MEMBERS**

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames

together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths.

#### COVER PANELS

All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating

#### WELDED UNDER-BENCH STORAGE CABINETS

Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet.

Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening.

Drawer: Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening.

Units should be in 450mm and 600mm widths.

#### DROPPER

All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm.

#### REAGENT SHELVES

Fixed-Type reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of 0.8mm thick CRCA MS with pure epoxy powder coating sheets to kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets. Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope.

#### WELDED OVER HEAD STORAGE CABINETS

Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm.

Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should

be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should be filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. SERVICE FITTINGS AND ACCESSORIES Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the color coding as per DIN 12920.

LABORATORY SINK AND ACCESSORIES Polypropylene Molded Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer)

#### 67. Laboratory Island Table with Bottle Rack and storage



#### D-FRAME SYSTEM

All D-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from -5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. HORIZONTAL MEMBERS

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths.

**COVER PANELS**

All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating

**WELDED UNDER-BENCH STORAGE CABINETS** Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet.

**Unit Construction :** It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

**Shelf :** Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening.

**Drawer:** Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening.

**Units** should be in 450mm and 600mm widths.

**DROPPER** All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm.

**REAGENT SHELVES** Fixed-Type reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of 0.8mm thick CRCA MS with pure epoxy powder coating sheets to kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets.

Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope.

**WELDED OVER HEAD STORAGE CABINETS** Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit



Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm. Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. SERVICE FITTINGS AND ACCESSORIES Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the color coding as per DIN 12920.

LABORATORY SINK AND ACCESSORIES Polypropylene Molded Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer)

#### 68. Laboratory Island Sink Table Both Side



#### D-FRAME SYSTEM

All D-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from -5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing

nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. **HORIZONTAL MEMBERS**

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths. **COVER PANELS**

All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating **WELDED UNDER-BENCH STORAGE CABINETS** Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. **Unit Construction :** It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

**Shelf :** Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. **Drawer:** Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. **DROPPER** All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm. **REAGENT SHELVES** Fixed-Type reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of 0.8mm thick CRCA MS with pure epoxy powder coating sheets to kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets. Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have

a slope. **WELDED OVER HEAD STORAGE CABINETS** Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm. Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. **SERVICE FITTINGS AND ACCESSORIES** Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the color coding as per DIN 12920.

**LABORATORY SINK AND ACCESSORIES** Polypropylene Molded Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer)

#### 69. Wooden Podium



Supply and Installation of Podium with institute Logo, Podium made up of 25 mm ( $\pm 3$ mm) thick commercial plywood (MR grade plywood) with 0.8 mm thick High Gloss Laminate of approved make and Colour, E1 grade laminate with zero urea formaldehyde emissions ( $\leq 8$ mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All Exposed edges of Ply board to be sealed with 2mm thick PVC edge banding on the user side and 0.8mm thick PVC edge-banding tape pressed on top and bottom side at 200o C to be applied with the help of hot-melt glue through fit edge-banding machines. The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel. The angel top is made up of 25 mm ( $\pm 3$ mm) thick commercial plywood (MR grade plywood) with 0.8

mm thick High Gloss Laminate of approved make and below top sliding self of 25 mm ( $\pm 3$ mm) thick commercial plywood (MR grade plywood) with 0.8 mm thick High Gloss Laminate of approved make and Colour fixed with telescopic channel for keyboard. Decorative aluminium bidding should be in front. Provision of CPU shelves Should be there and should be made up of 25 mm ( $\pm 3$ mm) thick commercial plywood (MR grade plywood) with 0.8 mm thick High Gloss Laminate of approved make and Colour, Podium with provision of Mic and Wire manger cap, Overall size of podium should be 600mm ( $\pm 30$ mm) (W) x 600 mm( $\pm 30$ mm) (B) x 1200 /1050 ( $\pm 30$ mm) mm(H). Podium as approved by Engineer In-charge/Employer

## Technical Specification for Library and Admin Block (BOQ item No. 70 to 101)

### 70. Work Station



Providing and placing WISH spine based modular workstation, with partition .thickness as 52.4 mm thk and ht - 1200 including powder coated aluminium trims.SPLIT Tiles on main spine: Combination of two finishes for the top tiles on the user side shall be split fabric tackable along with split white board. • FABRIC TACKABLE BLOCKS:

These shall be made from 18mm thick PLB battens which hold 3mm MDF in between. 6mm thick PE foam shall be pasted on 3mm thick MDF and this assembly shall be upholstered with approved shade of fabric on both sides using adhesive. • WHITEBOARD BLOCKS:

These shall be made of 16mm thick particle board laminated with 0.6mm thick white glossy high pressure laminate on both sides and having all its edges with minimum 0.5 mm thick PVC edging. INTERMEDIATE BLOCKS on main spine Intermediate blocks are given in fabric + DL finish. • LAMINATE FINISH BLOCKS:Laminate finish blocks shall be made from 18mm thick particle board (PLT), clad with 1mm thk laminate of approved shade. These shall be made from 18mm thick ppb/plb upholstered with 1mm thk approved shade of fabric using adhesives. Bottom Tile plain metal. • METAL FINISH BLOCKS:

Metal finish blocks shall be made from two components of 0.8 mm thick M.S. CRCA Grade D as per IS: 513 powder coated with epoxy polyester finish.WORKTOP 25 MM THICK LAMINATED (with PVC edge band):

Work top shall be made of 25mm thick Plain particle board of interior grade (As per IS: 12823) as a Substrate. The top shall be laminated with laminate of 0.6 mm thickness of approved shade as per IS: 2046-1995. Bottom shall have a backing laminate of 0.6 mm thickness. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC edge band glued with hotmelt EVA glue.The single side legs shall be used for supporting panels & work surface on one side only. Single side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm. this shall be coated with

min. 45-micron thickness of epoxy powder coating. The double side legs shall be used for supporting panels & work surface on both sides. Double side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm and coated with min. 45-micron thickness of epoxy powder coating. Cable duct shall be made from 0.8 mm thick M.S. CRCA Grade D as per IS: 513 - 1994. It is constructed with two parts; one is body & another is cover. It holds the cables & gives aesthetic appearance by covering all cables entry, which are moving upward to the panels. Size of Cable duct is 107mm W X 154 mm H X 21 mm D.  
**Work station as approved by engineer in-charge/employer**

#### 71. Cabin Table for Principal Room



Supplying and placing in position Main Table, ERU & pedestal of the following specifications. The Main table shall be of size 3600 Width mm x 1080 mm Depth x 750 mm height. Top surface of the table shall be made up of MDF (Medium density fibre) board duly finished with Veneer and final coating of PU. The Main desk should contain in Smart Case - space slides effortlessly in style. The mobile Pedestal shall be of size 480 Width mm x 640 Depth mm x 600 Height mm. Mobile pedestal shall be coated of MDF (medium density fiber) with veneer coating and PU coating. The ERU Top shall be of MDF (medium density fiber) board duly finished with veneer and final PU coating. Size of ERU top 1900 Width mm x 480 Depth mm x 550 (not from ground with castors). The main desk is provided with the wire management system also there is perfect storage side unit. Supplying and placing in position Back unit of the following specifications. The Size of the Back unit shall be 1000 mm width x 480 mm Depth x 2035 mm height. The back unit shall be made up of MDF board duly finished with veneer & final finish by PU coating. The mobile unit can be bought in multiples. PU coating hardness 1.5H.

72. Cabin Table for Director Room



Supplying and placing in position Main table of the following specifications. The Main table shall be of size 2400 Width mm x 1050 mm Depth x 750 mm height. Top surface of the table shall be made up of MDF (Medium density fibre ) board duly finished with Veneer and final coating of PU. The Main desk should contain a built-in keyboard pull-out tray for keeping the keyboard of a computer. The front modesty panel of the table shall be made up of MDF board of size 1640 mm x 600 mm x 16mm which shall also be duly finished with



Veener and PU coating. For personal storage one mobile pedestal (3 drawer unit) shall be provided of size 510 mm Width x 635 mm Height and 445 mm Depth. The storage pedestal shall also be made up of MDF duly finished with veener & final coating of PU. The Side shall be of size 1200mm Width x 445mm Depth x 660 mm Height. The side unit shall be made up of MDF board duly finished with Veneer and final finish by PU Coating. The design of the side unit shall be such that it can be placed on either side of the main table. The side unit shall contain open space for keeping cpu in extreme right side, one closed storage shutter at extreme left end & open space in the middle with one shelf for keeping files. The thickness of the top of the side unit shall be 25mm. Supplying and placing in position Back unit of the following specifications. The Size of the Back unit shall be 2215mm width x 410 mm Depth x 2000mm height. The back unit shall be made up of MDF board duly finished with veneer & final finish by PU coating. Below storage shall be provided with wooden shutters & the upper left & right side of the back unit shall also be provided with wooden shutters. The middle 3 door shutters should be of glass of minimum 5mm thick for display purpose. The hardness of the PU coating shall be 1.5H

73. Cabin Table for Director Student Affairs, Director Admission



Supplying and placing in position Main Table, ERU & pedestal of the following specifications. 1800x2100x750 Primary Work Surface Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top Soft closing access flap with in-built power box are provided on work surface for wire management

Secondary Work Surface Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top.

Modesty Panel Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top.

Under structure Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

Integrated Pedestal Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade

confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

Drawer fronts made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top

Pedestal construction is BOX-BOX-FILE type which Uses powder coated 400 MM long metal Panel Drawer Slides. Drawer extension is 325 MM.

Drawers have a soft closing & anti slam mechanism.

Handles are provided for ease of opening.

Pedestals are provided with lock for security.

#### 74. Cabin Table for PA Office Room



Supplying and placing in position Main table of the following specifications. Its size shall be 1800 Width mm x 900 Depth mm x 740 Height mm .Table top shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick backing laminate (bdl) .Flat edge Duly sealed with 2 mm thick PVC beading. The modesty shall be 18 mm thick plain particle board ( ) PPB Clad with 1.0 mm thick decorative laminate (DL) on both sides. Edge Sealed with 2 mm thick PVC beading..

Supplying and placing in position ERU of the following specifications. Its size shall be 1550 Width x 450 Depth x 705 Height. The top of ERU shall be 25 mm thick plain particle board

(PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick Backing Laminate (BDL). Flat Edge duly sealed with 2 mm thick PVC beading. The Modesty shall be 18 mm thick plain particle board (PPB) Clad with 1.0 mm thick Decorative Laminate (DL) on both sides. Edge sealed with 2 mm thick PVC Beading.

Supplying and placing in position Free Standing Pedestal of the following specifications with Overall Dimensions shall be 390mm(W)x440mm(D)x646mm(H). The construction & Material used shall be welded assembled, 0.8 mm thick CRCA for body shell, drawer front & tray, front side stiffener, rear side stiffener and 1.2 mm thick CRCA Top stiffener & Bottom stiffener. The drawer fronts shall be metal front straight edge. Locking shall be 10 lever cam lock & Central RH locking with actuator & lock channel mechanism for box-box-file Pedestal. The top panel shall be metal straight edge top. Castor should be swiveling non-lockable castors mounted below the body shell for free standing full height mobile pedestal and M8 Leveling stud for free standing pedestal. The anti-tipping mechanism shall have fifth roller arrangement mounted below file drawer to avoid toppling of unit when file drawer is pulled out. Partition in drawer shall be 1 no. Partition in box drawers with lock mounted. Plastic pencil tray shall be optional accessory. Finish shall be epoxy polyester powder coated to the thickness of 50 microns. Application shall be suitable for pushing below work surface which has got a clear height of 725 mm from below. For drawer pulling side wise tapered recess provided in shell behind drawer fronts.

#### 75. High Back Chair for Principal, Director Room



Providing, supplying and placing of High Back Chair. SEAT ASSEMBLY: The seat is made up of 12mm thick MR Grade plywood, layered with pocket spring coms, super soft foam of 32 kg/m<sup>3</sup> density and edging foam of 28 kg/m<sup>3</sup> dormity. A 200GSM soft touch fibre

fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

**BACK ASSEMBLY:** The back assembly is made up of a combination of pinewood members, 12mm thick MR Grade

plywood and 2mm thick cardboard, layered with slab stock foam of 28 kg/m<sup>3</sup> density. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette

**ARMPAD ASSEMBLY:** The armpad assembly is made up of 6mm thick MR Grade plywood fixed with MS powder-coated

brackets, layered with foam of 60 kg/m<sup>3</sup> density, A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

**CENTER TILT WITH MULTI POSITION LOCK MECHANISM:** The mechanism is designed with the following features:

360 revolving type

3 position locking

Tilt tension adjustment

**PNEUMATIC HEIGHT ADJUSTMENT:** The Class 4 pneumatic height adjustment has stroke of 100.3 cm

**PEDESTAL ASSEMBLY:** The pedestal is made of high-pressure die-cast polished aluminum with a buffed outside surface and black color-coated internal surface, it is fitted with 5 castors and has a pitch-center diameter of 67.5/10.5 cm (77.5/10 cm with castors).

**TWIN WHEEL CASTORS:** The twin wheel castors are injection moulded in Black polyamide.

WIDTH (W) - 69.0cm

DEPTH (D) - 77.8cm

HEIGHT (H) - 123.5-133.5cm

SEAT HEIGHT (SH) - 49.5-59.5 cm.

## 76. Mid Back Chair for Principal, Director Room



Providing, supplying and placing of Full Back Chair. SEAT ASSEMBLY: The seat is made up of 12mm thick MR Grade plywood, layered with pocket spring coms, super soft foam of 32 kg/m<sup>3</sup> density and edging foam of 28 kg/m<sup>3</sup> dormity. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

BACK ASSEMBLY: The back assembly is made up of a combination of pinewood members, 12mm thick MR Grade

plywood and 2mm thick cardboard, layered with slab stock foam of 28 kg/m<sup>3</sup> density. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette

ARMPAD ASSEMBLY: The amped assembly is made up of 6mm thick MR Grade plywood fixed with MS powder-coated

brackets, Inyered with foam of 60 kg/m<sup>3</sup> density, A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

CENTER TILT WITH MULTI POSITION LOCK MECHANISM: The mechanism is designed with the following features:

360 revolving type

3 position locking

Till tension adjustment

**PNEUMATIC HEIGHT ADJUSTMENT:** The Class 4 pneumatic height adjustment has stroke of 100.3 cm

**PEDESTAL ASSEMBLY:** The pedestal is made of high-pressure die-cast polished aluminum with a buffed outside surface and black color-coated internal surface, it is fitted with 5 castors and has a pitch-center diameter of 67.510.5 cm (77.5 10 cm with castors).

**TWIN WHEEL CASTORS:** The twin wheel castors are injection moulded in Black polyamide.

**WIDTH (W) - 69.0cm**

**DEPTH (D) - 77.8cm**

**HEIGHT (H) - 105.0-115.0 cm**

**SEAT HEIGHT (SH) - 49.5-59.5 cm..**

#### 77. High Back Chair for Director Student Affairs



Providing, supplying and placing of High Back Chair. SEAT/BACK ASSEMBLY : The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette

Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

HIGH BACK SIZE: 47.7 cm. (W) x 76.4 cm

ARMRESTS : The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

ACTIVE BIO-SYNCHRO MECHANISM : The adjustable tilting mechanism should be designed with the following features:

- 360° revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminium black powder coated.

SEAT DEPTH ADJUSTMENT : Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm.

ADJUSTABLE BACK SUPPORT: Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.

PNEUMATIC HT. ADJUSTMENT: The pneumatic ht adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

PEDESTAL ASSEMBLY: The pedestal should be High Pressure Die cast polished Aluminium and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$  cm. pitch-center dia. ( $75.0 \pm 1.0$  cm. With castors.)

TWIN WHEEL CASTORS: The twin wheel castors should be injection moulded in black PP having  $6.0 \pm 0.1$  cm wheel Diameter.

Overall Dimensions of Chair

Seat Height -43.1-53.1cm

Height -112.7-130.2cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm **High back chair as approved by engineer in-charge/employer.**



78. MID Back Chair 2 for PA office, Work table



Providing, supplying and placing of Mid Back Chair. SEAT/BACK ASSEMBLY : The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette.

Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

MID BACK SIZE: 47.7 cm. (W) x 60.1 cm. (D)

ARMRESTS : The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

ACTIVE BIO-SYNCHRO MECHANISM : The adjustable tilting mechanism should be designed with the following features:

- 360° revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminum black powder coated.

SEAT DEPTH ADJUSTMENT: Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm.

**ADJUSTABLE BACK SUPPORT:** Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.

**PNEUMATIC HT. ADJUSTMENT:** The pneumatic ht adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

**PEDESTAL ASSEMBLY:** The pedestal should be High Pressure Die cast polished Aluminum and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$ cm. pitch-center dia. ( $75.0 \pm 1.0$ cm. With castors.)

**TWIN WHEEL CASTORS:** The twin wheel castors should be injection molded in black PP having  $6.0 \pm 0.1$ cm wheel Diameter.

Overall Dimensions of Chair

Seat Height -43.1-53.1cm

Height -96.5-114.0.cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm, **Mid back chair as approved by engineer in-charge/employer.**

79. Chair for Work table/work station.



Providing, supplying and placing of High Back Chair. **SEAT/BACK ASSEMBLY:** The back is made up of  $1.2 \pm 0.1$ cm. thick hot-pressed plywood & seat is made up of  $1.5 \pm 0.1$ cm. thick hot-pressed plywood measured and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam is designed with contoured foam lumbar support. The seat has extra thick foam on front edge to give comfort to popliteal area.

The chair seat & back size are

HIGH BACK SIZE 51.5 cm. (W) x 82.0 cm. (H)

SEAT SIZE 53.5 cm. (W) x 51.0 cm. (D)

HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam is moulded with density =  $45 \pm 2$  kg/m<sup>3</sup> and hardness load  $14 \pm 2$  kgf as per IS:7888 for 25% compression.

ARMRESTS : The adjustable armrest is designed with the following features

- Up-Down adjustment- 6 steps ( $7.2 \pm 0.5$ cm range)
- Armrest top is mounted on Armrest structure made of glass filled Nylon.
- Armrest Top is PU moulded over glass filled Nylon insert.

CENTER TILT SYNCHRO MECHANISM WITH MULTI LOCK : The mechanism is designed with the following features:

- 360° revolving type.
- 3 position locking with anti shock mechanism.
- Tilt tension adjustment

PNEUMATIC HEIGHT ADJUSTMENT : The pneumatic height adjustment has an adjustment stroke of  $9.5 \pm 0.3$  cm

PEDESTAL ASSEMBLY : The pedestal is injection moulded in black glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal is  $66.1 \pm 0.5$ cm. pitch-center dia. ( $76.1 \pm 1.0$ cm with castors).

TWIN WHEEL CASTORS : The twin wheel castors are injection moulded in Black Nylon.

WIDTH (W): 76.1 CM.

DEPTH (D): 76.1 CM.

HEIGHT (H): 113.5-123.5 CM.

SEAT HEIGHT (SH): 46.0-56.0 CM. **Chair as approved by engineer in-charge/employer.**

#### 80. 3-Seater Waiting Chair



Providing, supplying and placing of waiting chair. SEAT SHELL :The seat shell should be a welded assembly of seat,back and side frame. The seat and back should be made of  $0.12 \pm 0.013$ cm thk CR steel sheet with oblong perforations.They should be welded to sideframe of size  $3.2 \pm 0.05$ cm x  $0.5 \pm 0.05$  cm thk HR steel.The welded assembly should be powder coated ( DFT 40-60 microns ).

The seat has a front water fall edge to provide popliteal clearance for comfortable seating. It also has a buttock support curve that not only provides rear support but also prevents

small children from falling through the gap between seat and back. Clean and flat surfaces of seat and back aids in easy maintenance. \* SEAT SIZE : 47.8 cm (W) x 44.6 cm (D) \* BACK SIZE : 41.6 cm (W) x 23.0 cm (H) Understructure assembly should be made of connecting beam and leg assembly made of M.S. E.R.W. oblong tube of size  $7.5 \pm 0.03 \text{ cm} \times 2.5 \pm 0.03 \text{ cm} \times 0.2 \pm 0.016 \text{ cm}$  thk. The welded structure assembly should be powder coated ( DFT 40-60 microns ). The leg assembly should be fitted with shoes and levellers in Nylon. The leg structure should be designed with minimal contact close to ground providing easy access for cleaning purposes. The shoes fitted to leg assembly help in aligning the structure for back to back arrangements. Levellers take care of uneven flooring. Connecting beam should be fitted with snap locking end cap. It also aids in side-by-side understructure alignment .

Armrest assembly should be made of armrest frame and armrest pad . The armrest frame should be made up of size  $3.175 \pm 0.05 \text{ cm} \times 0.47 \pm 0.027 \text{ cm}$  thk HR steel and it should be powder coated ( DFT 40-60 microns ). Armrest pad should be injection molded in Nylon and should be fitted onto the armrest frame.

Overall Dimensions of Chair

Seat Height - 44.1 cm.

Height - 78.5 cm.

Width & Depth of Chair as - Width-169.5cm and Depth-63.8 cm.

The cushions for seat and back should be made up of  $1.5 \pm 0.1 \text{ cm}$  thk foam on a flat MR grade ply  $0.8 \pm 0.04 \text{ cm}$  thk and should be upholstered with leatherite.

#### 81. 18-Seater Meeting Table

**Scope:** Supply, assembly and installation in-situ of 18--seater Modular Conference Tables per technical specification.



## Features



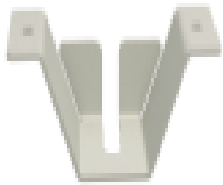
Cable holder for easy access of cable and keeping cables tangle free



Clutter free top with provision of Power Module at bottom



Unique module designed to give ample leg space



HDMI Holder



HDMI Wire Cover



Document Shelf



Two Way Name Plate

## Supply and installation of 18-Seater Modular Meeting Table

Modular 2-Seater Main Table: 1350mmx600mmx730mm+ Modular 2 Seater Shared Table: 1350mmx600mmx730mm + Modular 2 Seater End\_Left Hand Side: 1350mmx600mmx730mm+ Modular 2 Seater End Right Hand Side: 1350mmx600mmx730mm+Modular 2350mm W St2350mm X 850mm X 730mm+Desk 2 Way Name Plate +Desk Mod Doc Shelf +Desk Hdmi Wire Manger.

Work surface: Made of 32 mm thick Pre-laminated MDF Board conforming to IS 14587: 1998, Grade II corresponding to IS 12406:2003, E1 grade laminate with zero urea formaldehyde emissions (<or= 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All Exposed edges of MDF board

to be sealed with 2mm thick PVC edge band and 0.8mm thick PVC edge-band to be applied on non-exposed edges with the help of hot-melt glue through fit edge-banding machines, The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing, All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel.

Understructure: It consist of 25 mm thick Pre-laminated MDF Board conforming to IS 14587: 1998, Grade II corresponding to IS 12406:2003, ). All Exposed edges of MDF board to be sealed with 2mm thick PVC edge band and 0.8mm thick PVC edge-band to be applied on non-exposed edges with the help of hot-melt glue through fit edge-banding machines, The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. Aluminum alloy 63400 - WP profile is used for connecting panels together. The product has a knock-down construction. Plastic ABS access flap is provided for easy access to wires and cables. Work top is available in various shapes as shown above.

Modesty Panel : Made of 25 mm thick Pre-laminated MDF Board conforming to IS 14587: 1998, Grade II corresponding to IS 12406:2003, ). All Exposed edges of pre laminated MDF board to be sealed with 2mm thick PVC edge band and 0.8mm thick PVC edge-band to be applied on non-exposed edges with the help of hot-melt glue through fit edge-banding machines. Powder coated accent metal strip provided below work surface to enhance aesthetics. It is made of 0.8mm CRCA as per IS 513, epoxy polyester powder coated (DFT 40-60 microns)

Wire Management: An array of panels made of 0.8mm CRCA MS IS:513, epoxy polyester powder coated (DFT 40-60 microns) is used for flow of wires and cables. Provision o mount Anchor Roma 6 module plate is provided below worktop. Cutout on top with two piece injection molded plastic part polymer component is fitted to pull out audio, video cables onto worktop and connect devices charger to power socket below worktop. All, Hardware (Handles, Slides, Hinges, locks, sliding channel etc ) Hettich/Ebco Make. Pre laminated MDF Board and Laminate Make: (Century/Action Tesa/Merino/Greenlam)

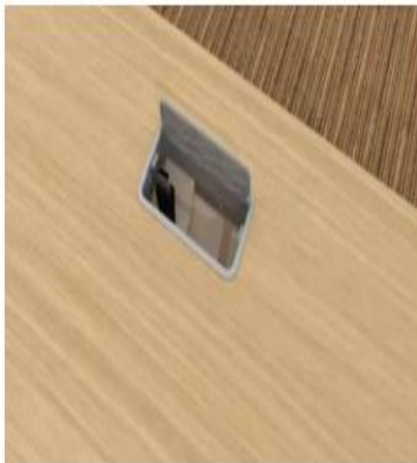
## 82. 23-Seater Meeting Table

**Scope:** Supply, assembly and installation in-situ of 23-seater Modular Conference Tableas per technical specification.





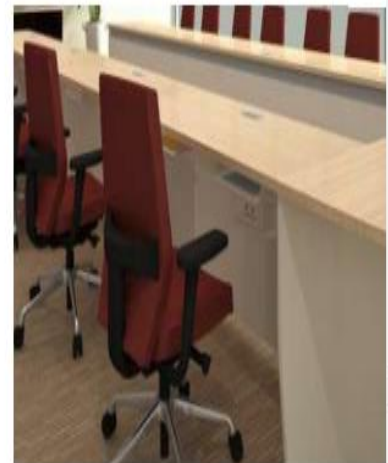
## Features



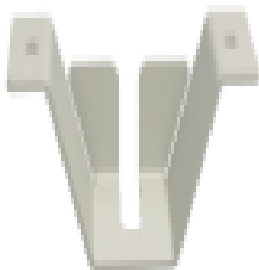
Cable holder for easy access of cable and keeping cables tangle free



Clutter free top with provision of Power Module at bottom

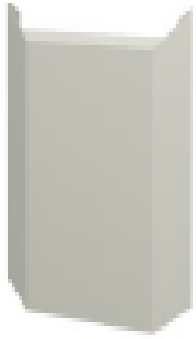


Unique module designed to give ample leg space



HDMI Holder





HDMI Wire Cover



Document Shelf



Two Way Name Plate

#### Supply and installation of 23-Seater Modular Meeting Table

Modular 2-Seater Main Table: 1350mmx600mmx730mm+ Modular 2-Seater Shared Table: 1350mmx600mmx730mm + Modular 2-Seater End Left Hand Side: 1350mmx600mmx730mm+ Modular 2-Seater End Right Hand Side: 1350mmx600mmx730mm+Modular 2350mm W St2350mm X 850mm X 730mm+Desk 2 Way Name Plate +Desk Mod Doc Shelf +Desk HDMI Wire Manger.

Work surface: Made of 32 mm thick Pre-laminated MDF Board conforming to IS 14587: 1998, Grade II corresponding to IS 12406:2003, E1 grade laminate with zero urea formaldehyde emissions ( $\leq 8\text{mg}/100\text{g}$  oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All Exposed edges of MDF board to be sealed with 2mm thick PVC edge band and 0.8mm thick PVC edge-band to be applied on non-exposed edges with the help of hot-melt glue through fit edge-banding machines, The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing, All the exposed edges should have buffing radius of 1.5 to 2mm without affecting aesthetic value of the panel.

Understructure: It consist of 25 mm thick Pre-laminated MDF Board conforming to IS 14587: 1998, Grade II corresponding to IS 12406:2003, ). All Exposed edges of MDF board to be sealed with 2mm thick PVC edge band and 0.8mm thick PVC edge-band to be applied

on non-exposed edges with the help of hot-melt glue through fit edge-banding machines, The Edge-banding of exposed area to be done in the way that there should not be any sharp edge or corner left after processing. Aluminum alloy 63400 - WP profile is used for connecting panels together. The product has a knock-down construction. Plastic ABS access flap is provided for easy access to wires and cables. Work top is available in various shapes as shown above.

Modesty Panel: Made of 25 mm thick Pre-laminated MDF Board conforming to IS 14587: 1998, Grade II corresponding to IS 12406:2003, ). All Exposed edges of pre laminated MDF board to be sealed with 2mm thick PVC edge band and 0.8mm thick PVC edge-band to be applied on non-exposed edges with the help of hot-melt glue through fit edge-banding machines. Powder coated accent metal strip provided below work surface to enhance aesthetics. It is made of 0.8mm CRCA as per IS 513, epoxy polyester powder coated (DFT 40-60 microns)

Wire Management: An array of panels made of 0.8mm CRCA MS IS:513, epoxy polyester powder coated (DFT 40-60 microns) is used for flow of wires and cables. Provision o mount Anchor Roma 6 module plate is provided below worktop. Cutout on top with two piece injection moulded plastic part polymer component is fitted to pull out audio, video cables onto worktop and connect devices charger to power socket below worktop. All, Hardware (Handles, Slides ,Hinges, locks, sliding channel etc ) Hettich/Ebco Make. Pre laminated MDF Board and Laminate Make: (Century/Action Tesa/Merino/Greenlam)

### 83. Meeting Chair



Providing, supplying and placing of High Back Chair. SEAT/BACK ASSEMBLY: The back is made up of 1.2 ±0.1cm. thick hot-pressed plywood & seat is made up of 1.5 ±0.1cm. thick hot-pressed plywood measured and upholstered with fabric upholstery covers and

moulded Polyurethane foam. The back foam is designed with contoured foam lumbar support. The seat has extra thick foam on front edge to give comfort to popliteal area.

The chair seat & back size are

HIGH BACK SIZE 51.5 cm. (W) x 82.0 cm. (H)

SEAT SIZE 53.5 cm. (W) x 51.0 cm. (D)

HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam is moulded with density =  $45 \pm 2$  kg/m<sup>3</sup> and hardness load  $14 \pm 2$  kgf as per IS:7888 for 25% compression.

ARMRESTS : The adjustable armrest is designed with the following features

- Up-Down adjustment- 6 steps ( $7.2 \pm 0.5$ cm range)
- Armrest top is mounted on Armrest structure made of glass filled Nylon.
- Armrest Top is PU moulded over glass filled Nylon insert.

CENTER TILT SYNCHRO MECHANISM WITH MULTI LOCK : The mechanism is designed with the following features:

- 360° revolving type.
- 3 position locking with anti shock mechanism.
- Tilt tension adjustment

PNEUMATIC HEIGHT ADJUSTMENT : The pneumatic height adjustment has an adjustment stroke of  $9.5 \pm 0.3$  cm

PEDESTAL ASSEMBLY : The pedestal is injection moulded in black glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal is  $66.1 \pm 0.5$ cm. pitch-center dia. ( $76.1 \pm 1.0$ cm with castors).

TWIN WHEEL CASTORS : The twin wheel castors are injection moulded in Black Nylon.

WIDTH (W): 76.1 CM.

DEPTH (D): 76.1 CM.

HEIGHT (H): 113.5-123.5 CM.

SEAT HEIGHT (SH): 46.0-56.0 CM. **Chair as approved by engineer in-charge/employer.**

#### 84. Two-seater Sofa



Supply and Installation of Two-Seater Sofa Providing, supplying and placing of 2 Seater Sofa.

Dimensions W x H x D (cm)-132.5 x 83.5 x 81.5

#### Upholstery

- Material : PVC
- Shade : Coffee Brown
- Thickness : 1 mm

#### Frame :

- Material : Pine Wood
- Moisture content : 10 - 12 %
- Thickness of Plywood used : 12 mm & 18 mm

#### Seat Foam :

- Material : Slab stock
- Density : 32 kg/m<sup>3</sup> at seat

#### Back cushion :

- Conjugated hollow fiber (recron)

#### Armrest :

- Conjugated hollow fiber (recron)

#### Webbing :

- Material : Nylon

#### Legs :

- Material : PVC

#### 85. Center Table



Providing and supplying center table Providing, supplying and placing of Coffee Table

Dimensions W x H x D (cm)

Overall Size : Width : 119.9cm Depth : 59.9cm Height : 45cm

Primary Material - Plywood

Finish Color - Walnut

Maximum Load Capacity (kg) - 50

Wheels Included - **Nocenter table as approved by engineer in-charge/employer.**

## 86. Corner Table



Providing and supplying center table Providing, supplying and placing of Coffee Table.

Overall Size :

Width : 60cm

Depth : 60cm

Height : 45cm

Primary Material - Plywood

Finish Color - Walnut

Net Weight (kg) - 12

Warranty - 1 Year

Maximum Load Capacity (kg) - 30

Style - Contemporary & Modern **corner table as approved by engineer in-charge/employer.**

## 87. Dining Table 4 seater



Providing and Placing in position Canteen table of the following specifications. 4 Seater PU Coated size shall be 1135 Width mm x 1175 Depth mm x 750 Height mm . Top shall be 25 mm thick base material shall be 25 mm MDF board . On top PU painting of minimum 2H hardness with 75% glass as per color chart .Combination color graphics on the centre . Brown Laminate on bottom specially profiled edges for comfort . The Understructure shall be having bend pipe structure of MS powder coated . Pipe dia 38 mm , 2 mm thick and it

shall be fitted with top by SS machine screws . Legs shall be of MS powder coated and 38 mm dia. pipe legs are fixed with inderstructure and table top . Glide shall be of Plastic fixed at the understructure to prevent the damage of table top during stacking .

88. Dining Table 6 Seater



Providing and Placing in position Canteen table of the following specifications. 6 Seater PU Coated size shall be 1734 Width mm x 1175 Depth mm x 750 Height mm . Top shall be 25 mm thick base material shall be 25 mm MDF board . On top PU painting of minimum 2H hardness with 75% glass as per color chart .Combination color graphics on the centre . Brown Laminate on bottom specially profiled edges for comfort . The Understructure shall be having bend pipe structure of MS powder coated . Pipe dia 38 mm , 2 mm thick and it shall be fitted with top by SS machine screws . Legs shall be of MS powder coated and 38 mm dia. pipe legs are fixed with inderstructure and table top . Glide shall be of Plastic fixed at the understructure to prevent the damage of table top during stacking .

89. Dining Chair



Providing, supplying and placing of Café Chair. SHELL : The single piece seat back shell is made up of injection moulded high impact strength glass filled polypropylene polymer compound (refer product catalogue for colour chart).

SHELL SIZE : 44.0 cm. (W) x 50.2 cm. (D) x 40.5 cm. (H)

M.S. POWDER COATED UNDERSTRUCTURE OPTION (SM6): The powder coated (DFT  $50\pm 10$  microns) welded tubular frame is made from  $\varnothing 2.22 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm M.S. E.R.W tube. The  $0.16 \pm 0.008$  cm thk CRCA sheet is welded to tubes for fixing shell to the frame. The shoe is made of high impact strength polypropylene polymer compound and are fitted at the end of the tubular frame.

WIDTH (W) : 51.5 CM

DEPTH (D) : 52.5 CM

HEIGHT (H) : 81.8 CM

SEAT HEIGHT (SH) : 45.9 CM.

### 90. Metal Shelving Rack





Supply and Installation of Slotted Angel Rack (Size: 910mmW x480mmDx1800mmH (OPEN RACK))

Rack with 5 nos. of shelves should be hanging arrangement (adjustable).

Racks shall be manufactured from Slotted M.S angle size 40mmx60mmx 2.0 mm.

Shelves shall be manufactured from 1.6 mm thick CRCA sheet.

The rack shall be assembled with G I bolt, nuts and washers.

Slotted angle and M.S sheet shall be made of cold rolled with anti-rust treated and shall be finished with powder coating with 7 tank treatment process on all parts (color: as per buyer choice).

H/D Rubber bushes shall be provided to the bottom of legs of slotted angle racks. height of bottom shelves from ground is 100 mm. The quality of M.S sheet which is used for racks shall be free from any defects, Undulations, and old paints and surface corrosion, etc, Minimum Load bearing capacity of each shelf is 80- 100kgs. Steel Make: TATA Steel/Jindal Steel or equivalent make, Slotted Angel Rack as approved by engineer in-charge/employer.

91. 4 door Personal Locker Unit



Providing, supplying and placing of storage unit.

Product Size - 375(W) x 470(D) x 1950\*(H)

\*Height including leveler

\* Height of leveler is 50mm and adjustment possible is 15mm.

Construction & Material - Aesthetically appealing completely knock down construction. The add-on units are stack widthwise to form a row of Lockers. (Note- Single Main unit should not be offered. Minimum 1Main + 1Addon to be offered, Maximum 1Main + 4Addon to be offered) .Legs fitted with screw type leveler.

Made from combination of Top panel(0.5mm CRCA), side panel(0.5mm CRCA), Bottom panel(0.5mm CRCA), Back panel(0.5mm CRCA), Top Bottom stiffener(1.2mm CRCA) and End Cover(0.5mm CRCA). \*\* - CRCA 'D' Grade as per IS-513 - CRCA 'D' Grade as per IS-513 Doors (Without envelope slot) - Made from 0.6mm Thick CRCA (D Grade, IS-513) Soft closing hinge.

Door size - For 4 Door locker - 373(W) X 18(T) X 473(H)

4 Digit Combination Numeric Lock - Keyless operation

- Code setting without tools

- Code finding from the front by recovery key

- Master key system available.

- Up to 9999 combination of password

- Special shaped handle knob offers grip for pulling door open

Shelving - 3 Shelves for 4 Door locker without envelope slot

Finish - Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10 micron)..

92. Steel storage with Glass Shutter.



Providing, supplying and placing of full height storage.

Overall Dimensions of VSDU - 8 shall be 900mm(W)x450mm(D)x1830mm(H). The top shall be Metal top (1 mm add in unit height ) .The Rigid Knock Down Construction , Back , Sides and Door shall be made from 0.7 mm high yield strength CRCA ,rest in 0.8 mm CRCA .

CRCA - 'D' Grade as per IS-513 . Sliding door arrangement shall have sliding door with top hanging arrangement to prevent derailment . Each door shall be provided with 2 plastic roller having steel ball bearing for smooth movement of door & less noise .VSDU 8 shall have glass door for visibility of the content . Locking shall be 5 lever cam lock for safe locking . Handle shall be plastic flush & recessed handle . Shelving shall have Height wise adjustable shelf mounting . Uniformly Distributed Load Capacity of the shelf is 40 Kg maximum . VSDU - 8 shall have 4 no. of adjustable full shelves . Accessories optional shall be cradle with pipes for hanging godrej instadex files . Leveler shall be screw type leveler with hex plastic base and overall finish shall be epoxy polyester coated to the thickness of 50 microns . For VSDU 8 - A4 size box file can be stored vertically on four shelves and clear space above fifth shelf is 220 mm. Almira as **approved by engineer in-charge/employer**

93. Library Reading Table 4-Seater



# Providing and placing "UPBEAT" meeting tables with worktop ht - 750 mm. Overall top size 1200 X 1200 mm Swing legs a PDC (Swing leg corner PDC) part made from Aluminum alloy, which is connected to the worktop and cross members. Swing leg can be offer in dual color. Wire Management Single Power box (8M+3M & 8M+3M Anchor Roma)with raiser and Soft closing dual access flap with brush. Worktop: 25mm thick prelaminated particle board with pvc lipping. Reading table as approved by engineer in-charge/employer

94. Library Reading Table 6-Seater



# Providing and placing "UPBEAT" conference tables with worktop ht - 750 mm. Overall top size 1800 X 1200 mm. Argo Shield fabricates cube legs & have a square section. Cube legs are available for work top level 750 mm from base. Wire Management Single Power box (8M+3M & 8M+3M Anchor Roma) with raiser and Soft closing dual access flap with brush. Worktop: 25mm thk prelaminate particle board with pvc lipping. Reading table as approved by engineer in-charge/employer.

95. Library Reading Chair



Providing, supplying and placing of Visitor Chair. SEAT/BACK ASSEMBLY: The seat and back should be made up of 1.2 ±0.1 cm. thick hot pressed plywood and upholstered with fabric and moulded Polyurethane foam with PVC lipping all around. The back foam should be designed with contoured lumbar support for extra comfort.

BACK SIZE: 49.5cm. (W) X 45.5cm. (H).

SEAT SIZE: 49.5cm. (W) X 43.0cm. (D).

HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam should be moulded with density =45+/-2 kg/m<sup>3</sup> and hardness load 16 ± 2 kgf for 25% compression.

ARMRESTS: The one-piece armrests made of black integral skin polyurethane with 50-70 Shore Hardness and reinforced with M.S. insert. The armrests should be scratch and weather resistant tant. The armrests should be fitted to the seat with seat armrest connecting bracket made of 0.3 ±0.022cm. thk. HR steel.

FIXED TYPE mechanism: The fixed type mechanism should be without back tilt.

TUBULAR UNDERSTRUCTURE: The understructure should be made of Ø2.54 2.54±0.03cm.x 0.2 ±0.016cm.thk. M.S. E.R.W. tube and black powder coated (DFT 40-60 microns).

Overall Dimensions of Chair

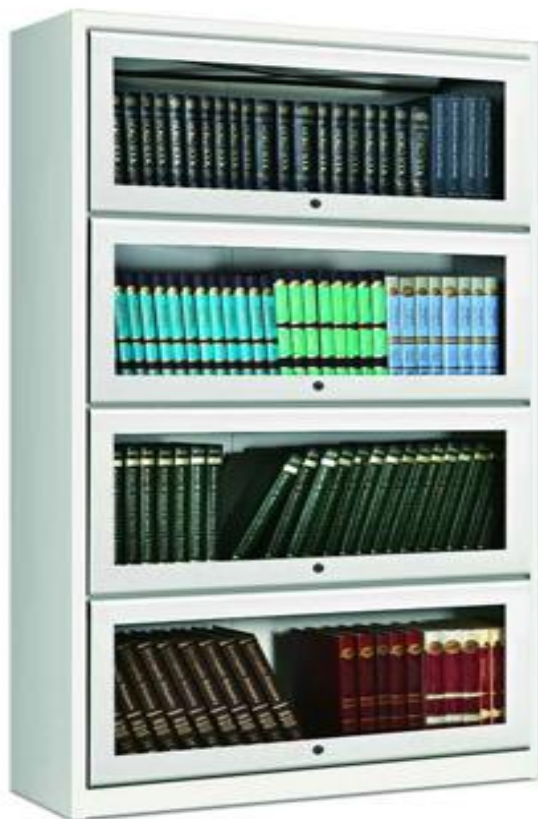
Seat Height - 45.0cm.

Height -84.0cm.

Width & Depth of Chair as measured from pedestal - Width-55.0 cm and Depth-58.0 cm.

**, Study Chair as approved by engineer in-charge/employer.**

96. 4 Door Bookcase (LIBRARIAN STAFF OFFICE/ STORE ROOM)



### Supply, Fitting & Fixing of Bookcase

Overall size shall be 914mm(W)x320mm(D)x1742mm(H). The unique design provides the right rigidity to the Top hinged doors , which shall facilitate easy use. The Book Case shall be made from prime quality CRCA steel with anti rusting treatment. It shall have a Rigid Knock Down Construction. The Top Pannel, Back Pannel and Side Pannel are made from 0.7mm high yield CRCA and other components from 0.8mm CRCA. Each door shall have a 6 Lever Cam Lock with Common Key. 3mm thick glass should be used in each door for clear inside vision whih shall be secured in a metal frame through a rubber gasket. Scissor Mechanism should be provided in each door for receding inside the top of every compartment and it shall ensure parallel and smooth movement. Each door should be provided with plastic side end caps as handle which is easy to grip. Each compartment shall have a storage shelf with a UDL capacity of max 80 Kg. The Book Case shall have 18mm PLB Top straight edge with PVC lipping. The finishing shall include Epoxy powder coated to the thickness of 50 microns (+/- 10)., Book case as **approved by engineer in-charge/employer**

#### 97. Library Rack Single Sided



Providing, supplying and placing Book Rack .

Body - a. Side panels, Frame & Cross L bracket are made using 0.8 mm CRCA (IS:513).

b. The assembly consists of 2 tie rods, 4 fixing brackets and 2 turnbuckles. The tie rods are fixed in a shape of 'X'

The tie rods are made of 4mm diameter rods of MS while fixing brackets are made of 2mm thick. CRCA IS:513 Grade.

c. Optional wooden panel of 25mm thk PLT, E1-P2 grade board for PLT

It shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue

Under Structure - Under structure is made of 0.8m CRCA (IS:513).

b. Sizes of under structure for single body :

1. 1200W x 295D x 80H
2. 2400W X 295D X 80H

Shelves - a. Shelves used are 10 bend panel made of 0.8mm CRCA (IS:513).

Shelf panels are placed on shelf support and then fixed using nut and bolts from below. Standard config. consists of 6 loading levels formed by 5 no of adjusted shelf for each main and add on unit.

Uniformly Distributed Load Capacity per each shelf is 80 Kg maximum.

Construction- Completely Knock down construction

Finish- All MS sheetmetal and metal frame components are powder coated with epoxy polyester powder to the min thickness of min 45 microns.

Stackability- The add-on units can be stacked width wise to form a bank of racks having common side panel up to 4800W

Shelves back stiffener - At the rear side of the shelves back stiffeners are provided. These act as separators made of 0.8mm THK CRCA (IS:513).

Label Holder -It is an aluminum extrusion of length 296mm for single body bookrack , fitted on to front of body. The Paper is 300GSM matt finish, to be inserted into the aluminum extrusion. The length of paper is 296mm for single body bookrack.

Optional Accessory - Rollout shelf: Rollout shelf accessory is a pull-out tray which has 2 nos. 'C shaped brackets of 1.2mm thk. Firmly mounted on shelf support with adjustable height. Slides are then fixed on these C brackets and rollout shelf assembly is mounted on the slides. This shelf opens outwards up to 250mm & has load capacity of 40 KG UDL.

Book Separator: Book separator is made of 2mm thk. CRCA sheet (IS:513) and is used to as a partition and support for books placed vertically on a shelf. Book case as **approved by engineer in-charge/employer.**

#### 98. Library Rack Double Sided



Providing, supplying and placing Book Rack .



Body - a. Side panels, Frame & Cross L bracket are made using 0.8 mm CRCA (IS:513).

b. The assembly consists of 2 tie rods, 4 fixing brackets and 2 turnbuckles. The tie rods are fixed in a shape of 'X'

The tie rods are made of 4mm diameter rods of MS while fixing brackets are made of 2mm thick. CRCA IS:513 Grade.

c. Optional wooden panel of 25mm thk PLT, E1-P2 grade board for PLT ref. Specification - FF04/DSN/STD/101, edges shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue

Under Structure - Under structure is made of 0.8m CRCA (IS:513).

b. Sizes of under structure for single body :

1. 1200W x 595D x 80H

2. 2400W X 595D X 80H

Shelves - a. Shelves used are 10 bend panel made of 0.8mm CRCA (IS:513).

Shelf panels are placed on shelf support and then fixed using nut and bolts from below.

Standard config. consists of 6 loading levels formed by 5 no of adjusted shelf for each main and add on unit.

Uniformly Distributed Load Capacity per each shelf is 80 Kg maximum.

Construction- Completely Knock down construction

Finish- All MS sheetmetal and metal frame components are powder coated with epoxy polyester powder to the min thickness of min 45 microns.

Stackability- The add-on units can be stacked width wise to form a bank of racks having common side panel up to 4800W

Shelves back stiffener - At the rear side of the shelves back stiffeners are provided. These act as separators made of 0.8mm THK CRCA (IS:513).

Label Holder -It is an aluminum extrusion of length 596mm for double body bookrack , fitted on to front of body. The Paper is 300GSM matt finish, to be inserted into the aluminum extrusion. The length of paper is 596mm for double body bookrack.

Optional Accessory - Rollout shelf: Rollout shelf accessory is a pull-out tray which has 2 nos. 'C shaped brackets of 1.2mm thk. Firmly mounted on shelf support with adjustable height. Slides are then fixed on these C brackets and rollout shelf assembly is mounted on the slides. This shelf opens outwards up to 250mm & has load capacity of 40 KG UDL.

Book Separator: Book separator is made of 2mm thk. CRCA sheet (IS:513) and is used to as a partition and support for books placed vertically on a shelf., Book case as **approved by engineer in-charge/employer.**

99. Stainless steel Dustbin



SS Dustbin with Lid and Handel- Dimension to be 10"X 14 " Weight to be 1.2 KG and capacity 15 Liter. Material Non-Magnetic stainless steel 202, Thickness of wall is 0.8 mm, leg operated or as approved by Engineer/Employer.

100. Dustbin Large



Supply and installation of large dustbin (100 Liters) shall be

Heat resistant

UV stabilized

Made of High-Density Polyethylene (HDPE) material Injection molded

- Leg Operated

-Dead weight approx. (kg) -10.5

-Useful load (kg)- 60

- Overall height (mm)- 940

- Overall width (mm) 480

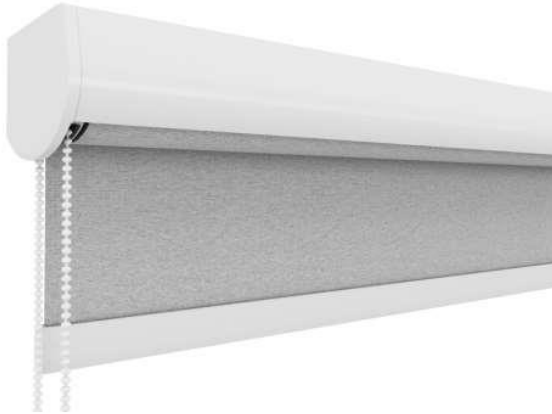
- Overall depth (mm)-550

- Upper edge comb (mm)-870

- Wheel diameter (mm)-200

or as approved by Engineer/Employer.

101. Roller Blind Curtain.



Providing & Fixing up of Window curtain (Roller blind) Black out/translucent type in required sizes having the following specification:

**Mounting Bracket:** Mounting hardware brackets, universal brackets including end plug bracket should come with lock down retainer device. Metal brackets provided should come in powder coated finish. All installation brackets made of stamped and hardened steel allowing a 46mm projection from the wall, ceiling and side fitting with screws and end cap covers.

**Cassette:** It is a cover for blinds installed outside the window frame to hide tube brackets and mechanism. This is aluminum extruded rail made up of high strength aluminum alloy, which is covered with matching fabric. For 38 mm grooved roller tube cassette size should be 100mm (Width)\*100mm (Height) and having weight =1200gm/running meter ( $\pm 5\%$ ).

**Cassette Ceiling Bracket:** This is made up of carbon Steel, DIN Standard Steel, Thickness: 1.0mm, Powder Coating Thickness: 0.15mm to 0.20mm. This provides near invisible fixing of the cassette.

**Cassette system end caps:** It should have minimum 2.5mm thickness plastic end cap and should be in coordination with the blind fabric color.

**Roller Tube:** This is made up of High Strength Aluminum Alloy Extruded grooved tube having outer diameter 38mm( $\pm 1$ mm) & thickness 1.25mm ( $\pm 5\%$ ) as per AA6063 Alloy. Tubes must come in natural anodized finish. To achieve greater reinforcement anodized tubes must have at least six internal ribs so that additional tensile strength can be achieved and allowing provision for secured placements of clutch and end plug.

Roller tube brackets: Spring steel metal brackets powder coated in matching finish to be used on both ends to support the roller system. Brackets can be top or face fixed.

Control Unit: Blinds mechanism must have the control clutch drive unit with engineered heavy duty chain drive pulley operating system consisting of gear clutch housing and locking plug containing at least 6 ribs and inserted into a minimum of 38mm dia. roller tube. Clutch has to be self-lubricating with safety pins for secure bracket installation and unlocking pin for quick manual removal. Provided clutch system must allow convenience in operation for large windows to the smallest windows. The control unit should be made up of polypropylene material using injection molding method. Gearing Ratio: 1.75:1 to reduce operating force for larger blinds. 24nos Sprocket for 38mm diameter roller tube. Control unit is operated directionally by the use of beaded endless chain to raise and lower the blind smoothly.

Idler: Tube bearing plug idler should have the properties of self-lubricating spring-loaded plastic bearing end plug with positive locking wheel that allows for adjustment and provides a secure installation and removal of blinds. Tube bearing plug should contain at least 6 ribs and inserted a tube not less than 38mm roller tube. Idler is of high strength reinforced plastic, consisting of an outside sleeve and center shaft. Sleeve provide bearing surface for center shaft and rotate freely, providing smooth, quiet and long wearing operation. It is a Part of Control Unit Assembly.

Bottom Rail: This is made up of extruded aluminum bottom bar having powder coating of 55 microns and wall thickness of  $\pm 1.2\text{mm}$  ( $\pm 0.1$ ) and width of  $26.5\text{mm}$  ( $\pm 1\text{mm}$ ) and height of  $33.5\text{mm}$  ( $\pm 1\text{mm}$ ) and weight:  $380\text{gm/mtr}$  ( $\pm 5\%$ ). All bottom rails should come with powder coated finish with an end cover perfectly in matching with the fabric.

Bottom bar also includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines and dimensions of concealed bottom bar rod specified as inner diameter:  $10.8\text{mm}$ , outer diameter:  $14.8\text{mm}$ , Weight:  $219\text{gm/mtr}$ , Thickness:  $1\text{mm}$  ( $\pm 5\%$ ) should be provided with matching cover.

Concealed bottom bar rod: Bottom bar includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines. Aluminum bottom bar rod made up of AA6063alloy having Rod I/D:  $10.8\text{mm}$ , O/D:  $14.8\text{mm}$ , Weight:  $219\text{gm/mtr}$ , Thickness:  $1\text{mm}$  ( $\pm 5\%$ ) with the covered matching.

Bottom bar end caps: End caps of bottom bar should be made up of ABS material using Injection molding method having perfect push fit with the bottom bar. The dimensions of end caps of bottom bar specified as length:  $18\text{mm}$ , width:  $27.5\text{mm}$ , height:  $34.5\text{mm}$ , thickness  $2\text{mm}$  and end caps of bottom bar should also have polyurethane bush to fit in bottom tube for smooth operation of blinds.

Operating chain: Blinds set is to be driven by a ball chain pulley and ball chain and can be positioned at Right hand or Left-hand side of the blinds set. This is made of  $4.5\text{mm}$  plastic beads molded on  $2.0\text{mm}$  thick polyester cord. The chain drives the sprocket fixed in the end control unit to close and open the blind. The pitch of the chain corresponds to the sprocket in perfect match for trouble free operation. Average number of balls on chain should be 50 per foot length. Plastic chain should provide ease in operation with chain

connector and polycarbonate stopper of O/D:6mm & I/D: 4mm to avoid reverse rolling of fabric over tube and protecting damages to blind fabric.

Cord Weight: It should have suitable acrylic clear cord weight to suit the operating chain. Thickness: 14mm, width: 30mm and height: 80mm.

Note: The control unit & cassettes shall be made with matching color of blind with aesthetically pleasing matching look of room.

The fabric shall be selected from best quality fabric. The fabric shall have properties such as acoustic control, anti-fungal and anti-microbial. Sheer fabrics shall allow in maximum amount of light (20-100% light transmission), whilst still preserving privacy and Dim out (Privacy fabrics) (1 - 19% light transmission) allow in restricted amount of light, whilst ensuring complete privacy, even in the evening. Blackout fabric shall completely block out sunlight, for complete privacy, room darkening and temperature regulation (0% light transmission).

The fabric color as approved by employer, The weighted composition of fabric shall be made of 100% Polyester woven fabric with a openness factor of 3%. The fabric shall have a weight of 168 GSM ( $\pm 5$  GSM). The solid depth of fabric shall be 75mm and sheer depth shall be 50mm. Light fastness shall be 4-5 Grade tested in accordance with BS EN ISO 105-B01:1999, **Roller Blind Curtain as approved by engineer in-charge/employer.**

# Technical Specification for Hospital Block (BOQ item No. 102 to 162)

## 102. Linier Work Station



Providing and placing WISH spine based modular workstation, with partition .thickness as 52.4 mm thk and ht - 1200 including powder coated aluminium trims.SPLIT Tiles on main spine: Combination of two finishes for the top tiles on the user side shall be split fabric tackable along with split white board. • FABRIC TACKABLE BLOCKS:

These shall be made from 18mm thick PLB battens which hold 3mm MDF in between. 6mm thick PE foam shall be pasted on 3mm thick MDF and this assembly shall be upholstered with approved shade of fabric on both sides using adhesive. • WHITEBOARD BLOCKS:

These shall be made of 16mm thick particle board laminated with 0.6mm thick white glossy high pressure laminate on both sides and having all its edges with minimum 0.5 mm thick PVC edging. INTERMEDIATE BLOCKS on main spine Intermediate blocks are given in fabric + DL finsh. • LAMINATE FINISH BLOCKS:Laminate finish blocks shall be made from 18mm thick particle board (PLT), clad with 1mm thk laminate of approved shade.These shall be made from 18mm thick ppb/plb upholstered with 1mm thk approved shade of fabric using adhesives. Bottom Tile plain metal. • METAL FINISH BLOCKS:

Metal finish blocks shall be made from two components of 0.8 mm thick M.S. CRCA Grade D as per IS: 513 powder coated with epoxy polyester finish.WORKTOP 25 MM THICK LAMINATED (with PVC edge band):

Work top shall be made of 25mm thick Plain particle board of interior grade (As per IS: 12823) as a Substrate. The top shall be laminated with laminate of 0.6 mm thickness of

approved shade as per IS: 2046-1995. Bottom shall have a backing laminate of 0.6 mm thickness. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC edge band glued with hotmelt EVA glue. The single side legs shall be used for supporting panels & work surface on one side only. Single side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm. this shall be coated with min. 45-micron thickness of epoxy powder coating. The double side legs shall be used for supporting panels & work surface on both sides. Double side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm and coated with min. 45-micron thickness of epoxy powder coating. Cable duct shall be made from 0.8 mm thick M.S. CRCA Grade D as per IS: 513 - 1994. It is constructed with two parts; one is body & another is cover. It holds the cables & gives aesthetic appearance by covering all cables entry, which are moving upward to the panels. Size of Cable duct is 107mm W X 154 mm H X 21 mm D.

**Work station as approved by engineer in-charge/employer**

103. L Shape work Station.



Providing and placing WISH spine based modular workstation, with partition .thickness as 52.4 mm thk and ht - 1200 including powder coated aluminium trims. SPLIT Tiles on main spine: Combination of two finishes for the top tiles on the user side shall be split fabric tackable along with split white board. • FABRIC TACKABLE BLOCKS:

These shall be made from 18mm thick PLB battens which hold 3mm MDF in between. 6mm thick PE foam shall be pasted on 3mm thick MDF and this assembly shall be upholstered with approved shade of fabric on both sides using adhesive. • WHITEBOARD BLOCKS:

These shall be made of 16mm thick particle board laminated with 0.6mm thick white glossy high pressure laminate on both sides and having all its edges with minimum 0.5 mm thick PVC edging. INTERMEDIATE BLOCKS on main spine Intermediate blocks are given in fabric + DL finsh. • LAMINATE FINISH BLOCKS: Laminated finish blocks shall be made from



18mm thick particle board (PLT), clad with 1mm thk laminate of approved shade. These shall be made from 18mm thick ppb/plb upholstered with 1mm thk approved shade of fabric using adhesives. Bottom Tile plain metal. • METAL FINISH BLOCKS:

Metal finish blocks shall be made from two components of 0.8 mm thick M.S. CRCA Grade D as per IS: 513 powder coated with epoxy polyester finish. WORKTOP 25 MM THICK LAMINATED (with PVC edge band):

Work top shall be made of 25mm thick Plain particle board of interior grade (As per IS: 12823) as a Substrate. The top shall be laminated with laminate of 0.6 mm thickness of approved shade as per IS: 2046-1995. Bottom shall have a backing laminate of 0.6 mm thickness. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC edge band glued with hotmelt EVA glue. The single side legs shall be used for supporting panels & work surface on one side only. Single side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm. This shall be coated with min. 45-micron thickness of epoxy powder coating. The double side legs shall be used for supporting panels & work surface on both sides. Double side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm and coated with min. 45-micron thickness of epoxy powder coating. Cable duct shall be made from 0.8 mm thick M.S. CRCA Grade D as per IS: 513 - 1994. It is constructed with two parts; one is body & another is cover. It holds the cables & gives aesthetic appearance by covering all cables entry, which are moving upward to the panels. Size of Cable duct is 107mm W X 154 mm H X 21 mm D..

**Work station as approved by engineer in-charge/employer.**

104. Cabin Table for Dean Room (High end Office table with ERU+Mobile Pedestal+Back Unit)



Supplying and placing in position Main Table, ERU & pedestal of the following specifications. The Main table shall be of size 3600 Width mm x 1080 mm Depth x 750 mm height. Top surface of the table shall made up of MDF (Medium density fibre ) board duly finished with Veneer and final coating of PU. The Main desk should contain in Smart Case - space slides effortlessly in style. The mobile Pedestal shall be of size 480 Width mm x 640 Depth mm x 600 Height mm. Mobile pedestal shall be coated of MDF (medium density fiber) with veneer coating and PU coating. The ERU Top shall be of MDF (medium density fiber) board duly finished with veneer and final PU coating. Size of ERU top 1900 Width mm x 480 Depth mm x 550(not from ground with castors).The main desk is provided eith the wire management system also there is perfect storage side unit . Supplying and placing in position Back unit of the following specifications. The Size of the Back unit shall be 1000 mm width x 480 mm Depth x 2035 mm height. The back unit shall be made up of MDF board duly finished with veneer & final finish by PU coating. The mobile unit can be bought in multiples. PU coating hardness 1.5H.

#### 105. Cabin Table for Director Room



Supplying and placing in position Main table of the following specifications.The Main table shall be of size 2400 Width mm x 1050 mm Depth x 750 mm height. Top surface of the table shall made up of MDF (Medium density fibre ) board duly finished with Veneer and final coating of PU. The Main desk should contain in built key board pull out tray for keeping keyboard of computer. The front modesty panel of the table shall be made up of MDF board of size 1640 mm x 600 mm x 16mm which shall also be duly finished with Veener and PU coating. For personal storage one mobile pedestal (3 drawer unit) shall be provided of size 510 mm Width x 635 mm Height and 445 mm Depth. The storage pedestal shall also be made up of MDF duly finished with veener & final coating of PU. The Side shall be of size 1200mm Width x 445mm Depth x 660 mm Height. The side unit shall be made up of MDF board duly finshed with Veneer and final finish by PU Coating. The design of the side unit shall be such that it can be placed on either side of the main table. The side unit

shall contain open space for keeping cpu in extreme right side, one closed storage shutter at extreme left end & open space in the middle with one shelf for keeping files. The thickness of the top of the side unit shall be 25mm. Supplying and placing in position Back unit of the following specifications. The Size of the Back unit shall be 2215mm width x 410 mm Depth x 2000mm height. The back unit shall be made up of MDF board duly finished with veneer & final finish by PU coating. Below storage shall be provided with wooden shutters & the upper left & right side of the back unit shall also be provided with wooden shutters. The middle 3 door shutters should be of glass of minimum 5mm thick for display purpose. The hardness of the PU coating shall be 1.5H.

106. Cabin Table for Security Room & Consultation Room



Supplying and placing in position Main table of the following specifications. Its size shall be 1800 Width mm x 900 Depth mm x 740 Height mm. Table top shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick backing laminate (bdl). Flat edge Duly sealed with 2 mm thick PVC beading. The modesty shall be 18 mm thick plain particle board ( ) PPB Clad with 1.0 mm thick decorative laminate (DL) on both sides. Edge Sealed with 2 mm thick PVC beading..

Supplying and placing in position ERU of the following specifications. Its size shall be 1550 Width x 450 Depth x 705 Height. The top of ERU shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick Backing Laminate (BDL). Flat Edge duly sealed with 2 mm thick PVC beading. The Modesty shall be 18 mm thick plain particle board (PPB) Clad with 1.0 mm thick Decorative Laminate (DL) on both sides. Edge sealed with 2 mm thick PVC Beading.

Supplying and placing in position Free Standing Pedestal of the following specifications with Overall Dimensions shall be 390mm(W)x440mm(D)x646mm(H). The construction & Material used shall be welded assembled, 0.8 mm thick CRCA for body shell, drawer front & tray, front side stiffener, rear aide stiffener and 1.2 mm thick CRCA Top stiffener & Bottom stiffener. The drawer fronts shall be metal front straight edge. Locking shall be 10 lever cam lock & Central RH locking with actuator & lock channel mechanism for box-box-

file Pedestal . The top panel shall be metal straight edge top . Castor should be swiveling non - lockable castors mounted below the body shell for free standing full height mobile pedestal and M8 Leveling stud for free standing pedestal . The anti-tipping mechanism shall have fifth roller arrangement mounted below file drawer to avoid toppling of unit when file drawer is pulled out . Partition in drawer shall be 1 no. Partition in box drawers with lock mounted . Plastic pencil tray shall be optional accessory . Finish shall be epoxy polyester powder coated to the thickness of 50 microns . Application shall be suitable for pushing below work surface which has got a clear height of 725 mm from below . For drawer pulling side wise tapered recess provided in shell behind drawer fronts .

107. Cabin Table for Assistant Professor Room & Store Manager



Supplying and placing in position Main table of the following specifications. Its size shall be 1650 Width mm x 900 Depth mm x 740 Height mm . Table top shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick backing laminate (bdl) . Flat edge Duly sealed with 2 mm thick PVC beading. The modesty shall be 18 mm thick plain particle board ( ) PPB Clad with 1.0 mm thick decorative laminate (DL) on both sides. Edge Sealed with 2 mm thick PVC beading. Supplying and placing in position ERU of the following specifications. Its size shall be 1550 Width x 450 Depth x 705 Height. The top of ERU shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick Backing Laminate ( BDL). Flat Edge duly sealed with 2 mm thick PVC beading. The Modesty shall be 18 mm thick plain particle board (PPB) Clad with 1.0 mm thick Decorative Laminate (DL) on both sides. Edge sealed with 2 mm thick PVC Beading. Supplying and placing in position Free Standing Pedestal of the following specifications with Overall Dimensions shall be 390mm(W)x440mm(D)x646mm(H). The construction & Material used shall be welded assembled , 0.8 mm thick CRCA for body shell , drawer front & tray , front side stiffener , rear aide stiffener and 1.2 mm thick CRCA Top stiffener & Bottom stoffener . The drawer fronts shall be metal front straight edge . Locking shall be 10 lever cam lock & Central RH locking with actuator & lock

channel mechanism for box-box-file Pedestal . The top panel shall be metal straight edge top . Castor should be swiveling non - lockable castors mounted below the body shell for free standing full height mobile pedestal and M8 Leveling stud for free standing pedestal . The anti-tipping mechanism shall have fifth roller arrangement mounted below file drawer to avoid toppling of unit when file drawer is pulled out . Partition in drawer shall be 1 no. Partition in box drawers with lock mounted . Plastic pencil tray shall be optional accessory . Finish shall be epoxy polyester powder coated to the thickness of 50 microns . Application shall be suitable for pushing below work surface which has got a clear height of 725 mm from below . For drawer pulling side wise tapered recess provided in shell behind drawer fronts .

#### 108. Work Table



Supplying and placing in position office table of the following specifications. Its size shall be 1200 Width x 600 Depth x 740 Height . The top shall be made from 25 mm thick pre-laminated board . All the edges are sealed with 2 mm thick PVC edge band all around . Side panels shall be made from 25 mm thick pre- laminated particle board . All the edges are sealed with 2 mm thick PVC edge band on the user side and 0.8 mm on the top and bottom side .The side panels have 2 glide screws each for levelling of the desk. Modesty panel shall be made from 18 mm thick pre- laminated particle board . All the edges are sealed with 0.8 mm thick PVC edge band all around. Freestanding Pedestal shall be made from 18 mm pre-laminated particle board with a combination of 2 mm and 0.8 mm PVC edge band on all the exposed surfaces as per requirement . The drawers are provided with suitable slides for smooth operation . All the pedestal drawers are centrally locked with a single key .Drawer slides are of Hettich.**Work Table as approved by engineer in-charge/employer**

109. High Back Chair for Dean Room



Providing, supplying and placing of High Back Chair. SEAT ASSEMBLY: The seat is made up of 12mm thick MR Grade plywood, layered with pocket spring coms, super soft foam of 32 kg/m<sup>3</sup> density and edging foam of 28 kg/m<sup>3</sup> dormity. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

BACK ASSEMBLY: The back assembly is made up of a combination of pinewood members, 12mm thick MR Grade

plywood and 2mm thick cardboard, layered with slab stock foam of 28 kg/m<sup>3</sup> density. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette

ARMPAD ASSEMBLY: The amped assembly is made up of 6mm thick MR Grade plywood fixed with MS powder-coated

brackets, Inyered with foam of 60 kg/m<sup>3</sup> density, A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

CENTER TILT WITH MULTI POSITION LOCK MECHANISM: The mechanism is designed with the following features:

360 revolving type

3 position locking



Till tension adjustment

**PNEUMATIC HEIGHT ADJUSTMENT:** The Class 4 pneumatic height adjustment has stroke of 100.3 cm

**PEDESTAL ASSEMBLY:** The pedestal is made of high-pressure die-cast polished aluminum with a buffed outside surface and black color-coated internal surface, it is fitted with 5 castors and has a pitch-center diameter of 67.510.5 cm (77.5 10 cm with castors).

**TWIN WHEEL CASTORS:** The twin wheel castors are injection moulded in Black polyamide.

**WIDTH (W) - 69.0cm**

**DEPTH (D) - 77.8cm**

**HEIGHT (H) - 123.5-133.5cm**

**SEAT HEIGHT (SH) - 49.5-59.5 cm.**

#### 110. MID Back Chair for Dean Room



Providing, supplying and placing of Full Back Chair. **SEAT ASSEMBLY:** The seat is made up of 12mm thick MR Grade plywood, layered with pocket spring coms, super soft foam of 32 kg/m<sup>3</sup> density and edging foam of 28 kg/m<sup>3</sup> dormity. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

**BACK ASSEMBLY:** The back assembly is made up of a combination of pinewood members, 12mm thick MR Grade



plywood and 2mm thick cardboard, layered with slab stock foam of 28 kg/m<sup>3</sup> density. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette

ARMPAD ASSEMBLY: The armpad assembly is made up of 6mm thick MR Grade plywood fixed with MS powder-coated

brackets, layered with foam of 60 kg/m<sup>3</sup> density, A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

CENTER TILT WITH MULTI POSITION LOCK MECHANISM: The mechanism is designed with the following features:

360 revolving type

3 position locking

Tilt tension adjustment

PNEUMATIC HEIGHT ADJUSTMENT: The Class 4 pneumatic height adjustment has stroke of 100.3 cm

PEDESTAL ASSEMBLY: The pedestal is made of high-pressure die-cast polished aluminum with a buffed outside surface and black color-coated internal surface, it is fitted with 5 castors and has a pitch-center diameter of 67.5/10.5 cm (77.5/10 cm with castors).

TWIN WHEEL CASTORS: The twin wheel castors are injection moulded in Black polyamide.

WIDTH (W) - 69.0cm

DEPTH (D) - 77.8cm

HEIGHT (H) - 105.0-115.0 cm

SEAT HEIGHT (SH) - 49.5-59.5 cm.

## 111. High Back Chair for security Room & Consultation Room



Providing, supplying and placing of High Back Chair. SEAT/BACK ASSEMBLY : The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette

Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

HIGH BACK SIZE: 47.7 cm. (W) x 76.4 cm

ARMRESTS : The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

ACTIVE BIO-SYNCHRO MECHANISM : The adjustable tilting mechanism should be designed with the following features:

- 360° revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminium black powder coated.

SEAT DEPTH ADJUSTMENT : Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0\pm 0.5$  cm.

ADJUSTABLE BACK SUPPORT: Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42\pm 0.5$  cm for the comfortable back support to suit individual need.

PNEUMATIC HT. ADJUSTMENT: The pneumatic ht adjustment has an adjustment stroke of  $10.0\pm 0.3$  cm.

PEDESTAL ASSEMBLY: The pedestal should be High Pressure Die cast polished Aluminium and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$ cm. pitch-center dia. ( $75.0 \pm 1.0$ cm. With castors.)

TWIN WHEEL CASTORS: The twin wheel castors should be injection moulded in black PP having  $6.0\pm 0.1$ cm wheel Diameter.

Overall Dimensions of Chair

Seat Height -43.1-53.1cm

Height -112.7-130.2cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm **High back chair as approved by engineer in-charge/employer.**

112. MID Back Chair 2 for PA office, Work table



Providing, supplying and placing of Mid Back Chair. SEAT/BACK ASSEMBLY : The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette.

Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

MID BACK SIZE: 47.7 cm. (W) x 60.1 cm. (D)

ARMRESTS : The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

ACTIVE BIO-SYNCHRO MECHANISM : The adjustable tilting mechanism should be designed with the following features:

- 360° revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminum black powder coated.

SEAT DEPTH ADJUSTMENT: Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm.

ADJUSTABLE BACK SUPPORT: Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.

PNEUMATIC HT. ADJUSTMENT: The pneumatic ht adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

PEDESTAL ASSEMBLY: The pedestal should be High Pressure Die cast polished Aluminum and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$  cm. pitch-center dia. ( $75.0 \pm 1.0$  cm. With castors.)

TWIN WHEEL CASTORS: The twin wheel castors should be injection molded in black PP having  $6.0 \pm 0.1$  cm wheel Diameter.

Overall Dimensions of Chair

Seat Height -43.1-53.1cm

Height -96.5-114.0.cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm, **Mid back chair as approved by engineer in-charge/employer.**

### 113. Chair for Work table/work station.



Providing, supplying and placing of High Back Chair. SEAT/BACK ASSEMBLY: The back is made up of  $1.2 \pm 0.1$ cm. thick hot-pressed plywood & seat is made up of  $1.5 \pm 0.1$ cm. thick hot-pressed plywood measured and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam is designed with contoured foam lumbar support. The seat has extra thick foam on front edge to give comfort to popliteal area.

The chair seat & back size are

HIGH BACK SIZE 51.5 cm. (W) x 82.0 cm. (H)

SEAT SIZE 53.5 cm. (W) x 51.0 cm. (D)

HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam is moulded with density =  $45 \pm 2$  kg/m<sup>3</sup> and hardness load  $14 \pm 2$  kgf as per IS:7888 for 25% compression.

ARMRESTS : The adjustable armrest is designed with the following features

- Up-Down adjustment- 6 steps ( $7.2 \pm 0.5$ cm range)
- Armrest top is mounted on Armrest structure made of glass filled Nylon.
- Armrest Top is PU moulded over glass filled Nylon insert.

CENTER TILT SYNCHRO MECHANISM WITH MULTI LOCK : The mechanism is designed with the following features:

- 360° revolving type.
- 3 position locking with anti shock mechanism.
- Tilt tension adjustment

PNEUMATIC HEIGHT ADJUSTMENT : The pneumatic height adjustment has an adjustment stroke of  $9.5 \pm 0.3$  cm

PEDESTAL ASSEMBLY : The pedestal is injection moulded in black glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal is  $66.1 \pm 0.5$ cm. pitch-center dia. ( $76.1 \pm 1.0$ cm with castors).

TWIN WHEEL CASTORS : The twin wheel castors are injection moulded in Black Nylon.

WIDTH (W): 76.1 CM.

DEPTH (D): 76.1 CM.

HEIGHT (H): 113.5-123.5 CM.

SEAT HEIGHT (SH): 46.0-56.0 CM. **Chair as approved by engineer in-charge/employer.**

114. Demonstration Chair with Tablet (Demo Room).



compound which is upholstered with fabric upholstery covers and moulded Polyurethane foam.

The Back is injection moulded in glass filled Polypropylene compound which is upholstered with

Mesh fabric (Refer colour chart for seat & Back upholstery in product catalog).

\* SEAT SIZE : 50.0cm. (W) x 48.0 cm. (D)

\* BACK SIZE : 53.0 cm. (W) x 39.0cm. (H)

HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane seat foam is moulded with density  $45 \pm 2 \text{ kg/m}^3$  and hardness  $16 \pm 2 \text{ kgf}$  as per IS:7888 for 25% compression.

3. M.S. POWDER COATED FRAMES FOR 4 LEG CHAIRS :The powder coated ( DFT  $50 \pm 10$  microns) welded tubular main frame is made from  $\varnothing 2.54 \pm 0.03 \text{ cm} \times 0.2 \pm 0.016 \text{ cm}$  and

$\varnothing 1.6 \pm 0.3 \text{ mm} \times 0.16 \pm 0.0128 \text{ cm}$  M.S. E.R.W tube. The  $\varnothing 1.9 \pm 0.3 \text{ mm} \times 0.12 \pm 0.0096 \text{ cm}$  M.S.E.R.W. tube used as connecting member between LH & RH frames.

Desklet support frame is made from  $\varnothing 2.22 \pm 0.03 \text{ cm} \times 0.16 \pm 0.0128 \text{ cm}$  and welded to main frame.

ARMREST : The Armrest are made of glass filled Polypropylene compound and assembled over the tubular frame.

QUARTER DESKLET: The 'L' shape desklet is made of  $1.8 \pm 0.05 \text{ cm}$ . thk. pre-laminated particleboard with  $0.2 \pm 0.05 \text{ cm}$ . thk. injection moulded PolyPropylene all around. Desklet has

Front and back adjustment of  $8.0 \text{ cm} \pm 0.5 \text{ cm}$

OUTER DIMENSION: 31.5±0.1cm. (W) X 47.0±0.1cm. (D) WIRE TRAY: The paper tray is made of  $\varnothing 0.5 +0/-0.005$ cm. M.S. rod which is welded to form a mesh-type structure. It is powder coated ( DFT 50± 10 microns ). It will retro fit to Relax with desklet chair.

SIZE: 40.5cm. (W) X 29.8cm. (D) X 18.0 cm (H).

TWIN WHEEL CASTORS: The twin wheel castors are injection moulded in Black Poly Amide.

WIDTH (W): 59.0 CM.

DEPTH (D): 76.0 CM.

HEIGHT (H): 86.5 CM.

### 115. 3-Seater Waiting Chair



Providing, supplying and placing of waiting chair. SEAT SHELL :The seat shell should be a welded assembly of seat,back and side frame. The seat and back should be made of  $0.12\pm 0.013$ cm thk CR steel sheet with oblong perforations.They should be welded to sideframe of size  $3.2\pm 0.05$ cm x  $0.5 \pm 0.05$  cm thk HR steel.The welded assembly should be powder coated ( DFT 40-60 microns ).

The seat has a front water fall edge to provide popliteal clearance for comfortable seating. It also has a buttock support curve that not only provides rear support but also prevents small children from falling through the gap between seat and back. Clean and flat surfaces of seat and back aids in easy maintenance. \* SEAT SIZE : 47.8 cm (W) x 44.6 cm (D) \* BACK SIZE : 41.6 cm (W) x 23.0 cm (H) Understructure assembly should be made of connecting beam and leg assembly made of M.S. E.R.W. oblong tube of size  $7.5\pm 0.03$ cm x  $2.5\pm 0.03$ cm x  $0.2\pm 0.016$ cm thk.The welded structure assembly should be powder coated ( DFT 40-60 microns ).The leg assembly should be fitted with shoes and levellers in Nylon. The leg structure should be designed with minimal contact close to ground providing easy access for cleaning purposes. The shoes fitted to leg assembly help in aligning the structure for back to back arrangements. Levellers take care of uneven



flooring. Connecting beam should be fitted with snap locking end cap. It also aids in side-by-side understructure alignment.

Armrest assembly should be made up of armrest frame and armrest pad. The armrest frame should be made up of size  $3.175 \pm 0.05 \text{ cm} \times 0.47 \pm 0.027 \text{ cm}$  thick HR steel and it should be powder coated (DFT 40-60 microns). Armrest pad should be injection molded in Nylon and should be fitted onto the armrest frame.

Overall Dimensions of Chair

Seat Height - 44.1 cm.

Height - 78.5 cm.

Width & Depth of Chair as - Width-169.5cm and Depth-63.8 cm.

The cushions for seat and back should be made up of  $1.5 \pm 0.1 \text{ cm}$  thick foam on a flat MR grade ply  $0.8 \pm 0.04 \text{ cm}$  thick and should be upholstered with leatherite.

#### 116. 8-Seater Meeting Table



Supplying and placing in position meeting table of the following specifications with overall size shall be 2350 X 1150 X 740. Work top-Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

Soft closing dual access flap provided for access to power supply and data cables.

Understructure-The Under-structure consists of mixture of 25mm and 18mm Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Anodised aluminium alloy 63400 - WP profile is added at bottom edges for improving the aesthetics. The product has a knock-down construction.

Wire Management- A wire raiser made of 0.8mm CRCA MS IS:513. It is epoxy polyester powder coated (DFT 40-60 microns) for flow of wires and cables. A Power box with 2 cutouts on either sides for standard 8 module Anchor Roma is provided. Beside each

cutout, an additional cutout with plate is provided for mounting Audio Visual Cables(eg. HDMI,VGA-A,etc).

### 117. 18- Seater Meeting Table



#### Features



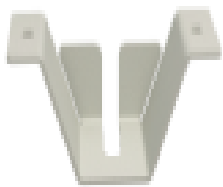
Cable holder for easy access of cable and keeping cables tangle free



Clutter free top with provision of Power Module at bottom



Unique module designed to give ample leg space



HDMI Holder



HDMI Wire Cover



Document Shelf



Two Way Name Plate

Supplying and placing in position conference table Work Surface-Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Plastic ABS access flap is provided for easy access to wires and cables. Work top is available in various shapes.

Understructure-It consist of 18mm Thick Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Aluminium alloy 63400 - WP profile is used for connecting panels together. The product has a knock-down construction.

Modesty Panel-Made of 18mm Thick Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

Powder coated accent metal strip provided below work surface to enhance aesthetics. It is made of 0.8mm CRCA as per IS 513, epoxy polyester powder coated (DFT 40-60 microns).

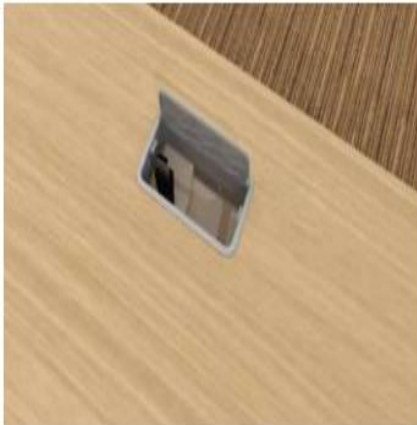
Wire Management-An array of panels made of 0.8mm CRCA MS IS:513, epoxy polyester powder coated (DFT 40-60 microns) is used for flow of wires and cables. Provision to mount Anchor Roma 6 module plate is provided below worktop. Cutout on top with two piece injection moulded plastic part polymer component is fitted to pull out audio,video cables onto worktop and connect devices charger to power socket below worktop.

#### 118. 20-Seater Meeting Table

**Scope:** Supply, assembly and installation in-situ of 20-seater Modular Conference Tables per technical specification.



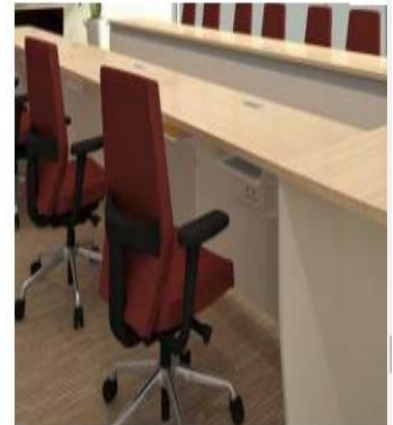
## Features



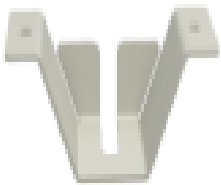
Cable holder for easy access of cable and keeping cables tangle free



Clutter free top with provision of Power Module at bottom



Unique module designed to give ample leg space



HDMI Holder



HDMI Wire Cover



Document Shelf



Two Way Name Plate

### Supply and installation of 20-Seater Modular Meeting Table

Supplying and placing in position conference table Work Surface-Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Plastic ABS access flap is provided for easy access to wires and cables. Work top is available in various shapes.

Understructure-It consist of 18mm Thick Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Aluminium alloy 63400 - WP profile is used for connecting panels together. The product has a knock-down construction.

Modesty Panel-Made of 18mm Thick Pre-laminated twin board of E1-P2 grade and approved shade conforming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

Powder coated accent metal strip provided below work surface to enhance aesthetics. It is made of 0.8mm CRCA as per IS 513, epoxy polyester powder coated (DFT 40-60 microns).

Wire Management-An array of panels made of 0.8mm CRCA MS IS:513, epoxy polyester powder coated (DFT 40-60 microns) is used for flow of wires and cables. Provision to mount Anchor Roma 6 module plate is provided below worktop. Cutout on top with two piece injection moulded plastic part polymer component is fitted to pull out audio, video cables onto worktop and connect devices charger to power socket below worktop.



## 119. Chair for Meeting Room



Providing, supplying and placing of High Back Chair. SEAT/BACK ASSEMBLY: The back is made up of  $1.2 \pm 0.1$ cm. thick hot-pressed plywood & seat is made up of  $1.5 \pm 0.1$ cm. thick hot-pressed plywood measured and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam is designed with contoured foam lumbar support. The seat has extra thick foam on front edge to give comfort to popliteal area.

The chair seat & back size are

HIGH BACK SIZE 51.5 cm. (W) x 82.0 cm. (H)

SEAT SIZE 53.5 cm. (W) x 51.0 cm. (D)

HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam is moulded with density =  $45 \pm 2$  kg/m<sup>3</sup> and hardness load  $14 \pm 2$  kgf as per IS:7888 for 25% compression.

ARMRESTS : The adjustable armrest is designed with the following features

- Up-Down adjustment- 6 steps ( $7.2 \pm 0.5$ cm range)
- Armrest top is mounted on Armrest structure made of glass filled Nylon.
- Armrest Top is PU moulded over glass filled Nylon insert.

CENTER TILT SYNCHRO MECHANISM WITH MULTI LOCK : The mechanism is designed with the following features:

- 360° revolving type.
- 3 position locking with anti shock mechanism.
- Tilt tension adjustment

PNEUMATIC HEIGHT ADJUSTMENT : The pneumatic height adjustment has an adjustment stroke of  $9.5 \pm 0.3$  cm

**PEDESTAL ASSEMBLY** : The pedestal is injection moulded in black glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal is 66.1 ±0.5cm. pitch-center dia. (76.1 ±1.0cm with castors).

**TWIN WHEEL CASTORS** : The twin wheel castors are injection moulded in Black Nylon.

**WIDTH (W):** 76.1 CM.

**DEPTH (D):** 76.1 CM.

**HEIGHT (H):** 113.5-123.5 CM.

**SEAT HEIGHT (SH):** 46.0-56.0 CM.

## 120. 2 seater Duel Desk for Lecture theatre



Providing, supplying and placing of Desk cum Bench N Seater Legs should be made of MS ERW oblong tube (IS7138) of size 75x25x2 mm thick with 5 mm thk HR brackets as per IS:2062 and 2mm thk CRCA brackets as per IS-S 13welded on to the tubes. Assembly will be epoxy polyester powder coated of minimum 40 micron thickness. It is to be grouted to floor through 8mm thk HR steel (IS 2062) base plate using anchor bolts.\*\* Shoe made of ultramid - Nylon should be provided at the bottom for covering the base plate. Swiveling arms should be made of MS ERW tube (IS7138) of size 50x30x1.6mm thick. oblong tube with one end welded with 0 55x4mm thk. MS ERW tube (IS7138) and at other end welded with 0 48x3.2mm thk. MS ERW tube (IS 7138). The swiveling arms should be epoxy polyester powder coated to a minimum of 40 microns. The swiveling arm will be held with powder coated Aluminum die cast piece with swiveling mechanism consist of Ni-Cr plated



Shaft (IS:9550), Torsion Spring made of spring steel (IS4454) and Bush made of Nylon (PA6-GF30). Chair Back should be made of blow molded High-density polyethylene and is fixed on the understructure assembly with the help of Stainless-steel pop rivets. Seat should be made of blow molded High-density polyethylene and is fixed on the understructure assembly. All side metal frames should be made from Mild steel ERW oblong tubes 40x20x2mm thk(approx. 14 SWG) as per IS:7138, seat support bracket made of 3mm thk. HR sheet (IS 2062), MS ERW oblong tube 35x15x1.6mm (IS7138) which are welded together. Seat support channel made of 1mm thick Mild steel sheet (as per IS:513) should be welded to the under structure for fixing seat. The welded structures are coated with epoxy polyester powder to a minimum of 40 microns thickness.

The base plate mechanism should be designed with the following features: 1) 360° revolving type 2) Provision for Upright height adjustment . The seat should be provided with height adjustment using a gas lift with an adjustment stroke of  $70.0 \pm 0.3$ cm. The gas lift will also have a auto return feature to allow the user free movement while being seated and after use guides the upper structure to rotate back to its original position enabling all chairs to align with the work top.

The Worktops should be made of 25 mm thick Pre-Laminated Board of E I-P2 Grade and approved shade conforming to IS:12823:1990. All the edge of worktops will be provided with machine pressed 2mm thick pvc edge band glued with hot melt glue. The modesty should be made of 25mm thick pre-laminated twin board of EI-P2 Grade conforming to IS:12823:1990 of approved shade All the edge of modesty are provided with machine pressed 2 mm thick pvc edge band glue with hot melt glue.

Desk Height (H) - 730avg.

Desk Depth (D) - 425

Seat Height (H) - Min 454 - Max 524

Clear Height below desk (C) - 655

Pitch (p) -660.5

121. Metal Single Bed for Duty Room



**bed with metal sheet with headboard**

Providing, supplying and placing of bed. Overall Size : Width : 208cm Depth : 92.5cm Bed Height : 38.5cm Bed with Headboard Height : 84cm. Color : Black . bed -metal frame materials & dimensions:(gauge +/- 0.1mm)m.s. pipe 25.4x 50.8 x 1.2 thk.;m.s. pipe 19.05x 19.05 x 0.8 thk.;m.s. angle 20x20x1.6 thick; ms pipe dia. 50.8 x 0.9 thk.;m.s. pipe dia. 15.875 x 0.8 thk.

122. Single Bed mattress



Providing, supplying and placing of Mattress

Thickness 50 mm. Quilting Material-PU Foam. Density of Quilting Material ( $\pm 2$  Kg/m<sup>3</sup>)-18 Kg/m<sup>3</sup>.Mattress Top-Box Type.

Cover-Fabric Composition-Polyester. MATTRESS COVER-Printed.

### 123. Three-Seater Sofa



Supply and Installation of Three-Seater Sofa Dimensions W x H x D (cm)-132.5 x 83.5 x 81.5

Upholstery

- Material: PVC
- Shade: Coffee Brown
- Thickness: 1 mm

Frame:

- Material: Pine Wood
- Moisture content: 10 - 12 %
- Thickness of Plywood used: 12 mm & 18 mm

Seat Foam:

- Material: Slab stock
- Density: 32 kg/m<sup>3</sup> at seat

Back cushion:

- Conjugated hollow fibre (recron)

Armrest:

- Conjugated hollow fibre (recron)

Webbing:

- Material: Nylon

Legs:

- Material: PVC Sofa: as approved by Engineer In-Charge/employer.

## 124. Two-seater Sofa



Supply and Installation of Two-Seater Sofa Dimensions W x H x D (cm)-132.5 x 83.5 x 81.5

### Upholstery

- Material : PVC
- Shade : Coffee Brown
- Thickness : 1 mm

### Frame :

- Material : Pine Wood
- Moisture content : 10 - 12 %
- Thickness of Plywood used : 12 mm & 18 mm

### Seat Foam :

- Material : Slab stock
- Density : 32 kg/m<sup>3</sup> at seat

### Back cushion :

- Conjugated hollow fiber (recron)

### Armrest :

- Conjugated hollow fiber (recron)

### Webbing :

- Material : Nylon

### Legs :

- Material : PVC Sofa: as approved by Engineer In Charge/employer.

## 125. Single Seater Sofa



Supply and Installation of single-Seater sofa, Dimensions W x H x D (cm)-91 x 83.5 x 81.5

### Upholstery

- Material : PVC
- Shade : Coffee Brown
- Thickness : 1 mm

### Frame :

- Material : Pine Wood
- Moisture content : 10 - 12 %
- Thickness of Plywood used : 12 mm & 18 mm

### Seat Foam :

- Material : Slab stock
- Density : 32 kg/m<sup>3</sup> at seat

### Back cushion :

- Conjugated hollow fiber (recron)

### Armrest :

- Conjugated hollow fiber (recron)

### Webbing :

- Material : Nylon

### Legs :

- Material : PVC Sofa: as approved by Engineer In Charge/employer.

126. Center Table



Providing and supplying center table Providing, supplying and placing of Coffee Table

Dimensions W x H x D (cm)

Overall Size : Width : 119.9cm Depth : 59.9cm Height : 45cm

Primary Material - Plywood

Finish Color - Walnut

Maximum Load Capacity (kg) - 50

Wheels Included - **Nocenter table as approved by engineer in-charge/employer.**

127. Corner Table



Providing and supplying center table Providing, supplying and placing of Coffee Table.

Overall Size :

Width : 60cm

Depth : 60cm

Height : 45cm

Primary Material - Plywood

Finish Color - Walnut

Net Weight (kg) - 12

Warranty - 1 Year

Maximum Load Capacity (kg) - 30

Style - Contemporary & Modern **corner table as approved by engineer in-charge/employer.**

128. Dining Table six-seater.



Providing and Placing in position Canteen table of the following specifications. 6 Seater PU Coated size shall be 1734 Width mm x 1175 Depth mm x 750 Height mm . Top shall be 25 mm thick base material shall be 25 mm MDF board . On top PU painting of minimum 2H hardness with 75% glass as per color chart .Combination color graphics on the centre . Brown Laminate on bottom specially profiled edges for comfort. The Understructure shall be having bend pipe structure of MS powder coated. Pipe dia 38 mm, 2 mm thick and it shall be fitted with top by SS machine screws . Legs shall be of MS powder coated and 38 mm dia. pipe legs are fixed with understructure and table top . Glide shall be of Plastic fixed at the understructure to prevent the damage of table top during stacking .. Dining table as approved by engineer in-charge/employer.

129. Dining Chair





Providing, supplying and placing of Café Chair. SHELL : The single piece seat back shell is made up of injection moulded high impact strength glass filled polypropylene polymer compound (refer product catalogue for colour chart).

SHELL SIZE : 44.0 cm. (W) x 50.2 cm. (D) x 40.5 cm. (H)

M.S. POWDER COATED UNDERSTRUCTURE OPTION (SM6): The powder coated (DFT 50±10 microns) welded tubular frame is made from  $\varnothing 2.22 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm M.S. E.R.W tube. The  $0.16 \pm 0.008$  cm thk CRCA sheet is welded to tubes for fixing shell to the frame. The shoe is made of high impact strength polypropylene polymer compound and are fitted at the end of the tubular frame.

WIDTH (W) : 51.5 CM

DEPTH (D) : 52.5 CM

HEIGHT (H) : 81.8 CM

SEAT HEIGHT (SH) : 45.9 CM. Dining Chair as approved by engineer in-charge/employer.

### 130. Steel Almirah



Providing, supplying and placing of storage unit.

Overall size shall be 900mm(W)x450mm(D)x1830mm(H) . The construction shall be rigid knock down construction and Material used shall be prime quality CRCA steel - panels from 0.6 mm thick & front frame . Shelf shall be 0.8 mm thick .Configuration (Door) shall be full height steel hinged door . Locking shall be Plastic Recessed Handle cum Cam lock with 3 way locking mechanism with shooting bolt arrangement . Height wise adjustable shelf mounting , Uniformly distributed load capacity per each full shelf shall be 80 Kg maximum .

For Plain 4 Nos. of adjustable full shelves . The top shall be metal and Epoxy Powder coated finish to the thickness of 50 microns .

**131. Metal Shelving Rack.**



Supply and Installation of Slotted Angel Rack (Size: 910mmW x480mmDx1800mmH (OPEN RACK))

Rack with 5 nos. of shelves should be hanging arrangement (adjustable).

Racks shall be manufactured from Slotted M.S angle size 40mmx60mmx 2.0 mm.

Shelves shall be manufactured from 1.6 mm thick CRCA sheet.

The rack shall be assembled with G I bolt, nuts and washers.

Slotted angle and M.S sheet shall be made of cold rolled with anti-rust treated and shall be finished with powder coating with 7 tank treatment process on all parts (color: as per buyer choice).

H/D Rubber bushes shall be provided to the bottom of legs of slotted angle racks. height of bottom shelves from ground is 100 mm. The quality of M.S sheet which is used for racks shall be free from any defects, Undulations, and old paints and surface corrosion, etc, Minimum Load bearing capacity of each shelf is 80- 100kgs. Steel Make: TATA Steel/Jindal Steel or equivalent make, Slotted Angel Rack as approved by engineer in-charge/employer.

### 132. ALMIRAH WITH GLASS SHUTTER



Providing, supplying and placing of full height storage.

Overall Dimensions of VSDU - 8 shall be 900mm(W)x450mm(D)x1830mm(H). The top shall be Metal top (1 mm add in unit height) .The Rigid Knock Down Construction , Back , Sides and Door shall be made from 0.7 mm high yield strength CRCA ,rest in 0.8 mm CRCA . CRCA - 'D' Grade as per IS-513 . Sliding door arrangement shall have sliding door with top hanging arrangement to prevent derailment . Each door shall be provided with 2 plastic roller having steel ball bearing for smooth movement of door & less noise .VSDU 8 shall have glass door for visibility of the content . Locking shall be 5 lever cam lock for safe locking . Handle shall be plastic flush & recessed handle . Shelving shall have Height wise adjustable shelf mounting . Uniformly Distributed Load Capacity of the shelf is 40 Kg maximum . VSDU - 8 shall have 4 no. of adjustable full shelves . Accessories optional shall be cradle with pipes for hanging godrej instadex files . Leveler shall be screw type leveler with hex plastic base and overall finish shall be epoxy polyester coated to the thickness of 50 microns . For VSDU 8 - A4 size box file can be stored vertically on four shelves and clear space above fifth shelf is 220 mm .

### 133. 4 DRAWER PLU LOCKER



Providing, supplying and placing of storage unit.

Product Size - 375(W) x 470(D) x 1950\*(H)

\*Height including leveler

\* Height of leveler is 50mm and adjustment possible is 15mm.

Construction & Material - Aesthetically appealing completely knock down construction. The add-on units are stack widthwise to form a row of Lockers. (Note- Single Main unit should not be offered. Minimum 1Main + 1Addon to be offered, Maximum 1Main + 4Addon to be offered) .Legs fitted with screw type leveler.

Made from combination of Top panel(0.5mm CRCA), side panel(0.5mm CRCA), Bottom panel(0.5mm CRCA), Back panel(0.5mm CRCA), Top Bottom stiffener(1.2mm CRCA) and End Cover(0.5mm CRCA). \*\* - CRCA 'D' Grade as per IS-513 - CRCA 'D' Grade as per IS-513 Doors (Without envelope slot) - Made from 0.6mm Thick CRCA (D Grade, IS-513) Soft closing hinge.

Door size - For 4 Door locker - 373(W) X 18(T) X 473(H)

4 Digit Combination Numeric Lock - Keyless operation

- Code setting without tools
- Code finding from the front by recovery key
- Master key system available.
- Up to 9999 combination of password
- Special shaped handle knob offers grip for pulling door open

Shelving - 3 Shelves for 4 Door locker without envelope slot

Finish - Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10 micron).

134. Stainless steel Dustbin



SS Dustbin with Lid and Handel- Dimension to be 10"X 14 " Weight to be 1.2 KG and capacity 15 Ltr. Material Non Magnetic stainless steel 202, Thickness of wall is 0.8 mm, leg operated or as approved by Engineer/Employer.

135. Dustbin Large



Heat resistant

UV stabilized

Made of High Density Polyethylene (HDPE) material Injection molded

- Leg Operated

-Dead weight approx. (kg) -10.5

-Useful load (kg)- 60

- Overall height (mm)- 940

- Overall width (mm) 480

- Overall depth (mm)-550

- Upper edge comb (mm)-870

- Wheel diameter (mm)-200

or as approved by Engineer/Employer

136. Fully Motorized ICU Bed With Mattress (Icu/ Pre-Operative/ Post-Operative)



Supply, assembly and placement of Motorized bed. 1. 7 Function Bed, 6 embedded control panel + 1 ACT panel Intensive care unit bed with back rest up down, knee rest up-down, Trendelenburg and reverse Trendelenburg, Hi-low position, Lateral Tilt controlled through electro mechanical actuators operated using soft touch control panel.

2. The embedded control panels are placed: 4 no's at the Head boards and 2 no's at the Leg boards.

Nurse embedded panel should have features like backrest, leg-rest, High-low, TR/ATR, Auto CPR, Single button Cardiac chair position, Shock position, auto-contour and Locking features.

Patient embedded panel should have features like backrest, leg-rest, High-low.

3. The Digital Attendant Control Touch Panel mounted on leg-board can be used to operate functions such as backrest, leg-rest, High-low, TR/ATR, Auto CPR, Single button Cardiac chair position, Shock position, Lateral Tilt, auto-contour , weight measurement, Under bed light, Out of bed alarm & Locking features.

The lateral tilt feature can only be operated when the sideboards are up / engaged to prevent patient fall, when the lateral tilt orientation is shifting from right to left/left to right there should be a pause of 4 seconds and beep sound as a safety feature.

4. Base frame is made of 30mmx 60mm 2mm thick MS CRCA rectangular tube with the bed frame of 50x 25mm and 40 x20mm, 2mm thick MS CRCA rectangular tube.

5. The embedded control panel ICU bed has four section lying surface with ABS vacuum formed with antimicrobial property which should be easily removable, washable to maintain hygiene with integrated mattress retainer.

6. The bed has four numbers of PP moulded side boards with embedded control panels (2 no's for Patient and 4 no's for Attendant) and drop-down mechanism, completely collapsible ,

7.the side boards should be air mattress compatible and height of the side boards should be more than 400 mm

8. There are 4 nos of bumpers given at the four corners made up of TPE ( thermo plastic elastomer) with excellent shock absorbing property.

9. There are two nos of CPR lever, one at either side of the bed for quick release of the back rest during emergencies.

10. In order to achieve the Deep Vein Thrombosis (DVT) position, the lower leg rest portion of the bed frame has the Provision of a MS zinc plated ratchet. The ratchet is adjustable in five different positions.

11. Technical Details:

- Overall Length: <2200mm
- Overall Length (with extended): <2380mm
- Overall Width :1010mm
- Height Range: 500 mm to 860 mm without mattress.
- Trendelenburg: 0°-15° (+/-1°)
- Reverse Trendelenburg: 0°-15° (+/-1°)
- Backrest Angle (Max.) : 0°-66° (+/-5°)
- Leg rest Angle (Max.): 0°-24°(+/-5°)
- Lateral tilt: 0-17° (+/-2°)
- Castor Diameter: 125mm
- Under Bed Clearance: 150mm
- Safe Working Load (With Accessories) : 250kg

12. The bed should have single button Auto Contour, Single button Shock position and Single button Cardiac Chair position on embedded panels.

13. The bed has a double Auto Regression feature during backrest operation to minimize abdominal pressure of the patient.

14. The head board and leg board are of with 3mm wall thickness. The head board, leg board & side boards has Provision for colour stickers & made of moulded PP with antibacterial additives. Both the head & leg board are removable without locking mechanism for ease of use during emergency.

15. There are four nos of nylon moulded patient lifting pole holders and Heavy Duty saline stand holders Provided at the four corners of the bed.

16. The bed is Provided with 125mm plastic injection moulded twin wheel castors with central and directional locking facility. The castors are Provided with an auxiliary brake made of MS round tube.

17. It has accessories like urine bag holders; MS chrome plated linen tray and Provisions for bed extension up to 180mm.

19. Electrical details:

- Classification: Class 1
- Electrical Shock Protection: Type B
- Liquid Ingress Protection: Actuators - IPX4
- Control box - IPX6 Washable:
- Battery (optional) – IPX6



- Battery type (optional): lead acid battery, rechargeable, 1.2-amp hrs / 28.8Wh.
- 20. All the MS parts are treated with seven pre-treatment procedures with zinc phosphate and powder coated with antimicrobial and thermosetting epoxy polyester to control the bacterial growth.
- 21. Bed is Provided with telescopic Heavy-duty IV pole. This SS made IV pole is of MS frame and SS made saline stand which can be fitted on the bed.
- 22. The bed has Provision for patient retainers.
- 23. Ingress protection of bed should be IPx4.
- 24. The bed should have Weight Measurement system consisting of 4 numbers Shear Beam Load Cells & LINAK® Scale System compatible with LINAK® Open-bus platform. The Weight Management System should have the following features:
  - 1) Measuring Range: 0 to a max 250 kg Load on application (SWL)
  - 2) Safety key- magnetic safe key to activate ACT for weight management, Trend/Anti-trend, Lateral tilt, Cardiac chair position & Out of bed alarm.
  - 3) Accuracy Adjustment: 100 or 500 gm of measured weight
  - 4) Auto Compensation Feature
  - 5) Reset/Zero Adjustment (to omit weight of mattress)  $\leq 50$  Kg
  - 6) Out of Bed Detection/Alarm Feature for patient leaving the bed.
  - 7) Weight Unit Selection: Kg/Lbs. **Fully Motorized ICU Bed With Mattress as approved by engineer in-charge/employer.**

137. Mechanical Fowler Bed with Mattress.



Overall dimension: (L) 2100 x (W) 912 x (H) 605

Functions: Polypropylene (PP) made Two function bed with adjustable backrest 65 degrees & upper leg rest 30 degrees.

Maximum Patient Load: 120 kg

Maximum Safe Working Load: 155 kg

Headboard & foot board: Polypropylene (PP) Headboard and foot board have a curved profile at the top made of MS ERW round tubes of thickness 1.2 mm & diameter 25.4 mm.

**Base frame:** Base frame is made of MS ERW tube of size 20mm x 40mm of 1.6mm thick. It has a provision of 4 IV pole holders.

**Lying surface:** Lying surface is made of MS sheet of thickness 1mm. This lying surface has 4 sections for bed profiling i.e., back adjustment, fixed pelvic section, upper and lower leg adjustment. Lower leg rest section is provisioned with Ratchet for leg rest adjustment.

**Mechanism:** The backrest and leg rest are operated with the help of lead screws with EN1A nut and an integrated handle.

**Handles:** All the functions are operated with the help of ergonomically dedicated handles for each function (back and leg inclination), which are made of MS with chrome finish. All the handles are provided with operating guidance stickers.

**Castors:** The castors are made of Plastic Polymer with a wheel diameter of 125mm. It is a single-wheel diagonal locking system.

**Urine bag holder:** The bed has a urine bag holder on both side of the bed.

**welding:** To ensure quid quality welding " Co2 Argon" process is adhered to.

**Powder Coating:** All metal components are pre-treated with zinc phosphating in 9 tank process and then powder coated with epoxy polyester powder coating.

**Packing:** Goods are supplied in knocked down construction to reduce carbon emission.

The optional accessories include Aksh Mattress, Document Holder and Lite IV Pole SS.,  
**Mechanical Fowler Bed with Mattress As approved by engineer in-charge/employer.**

#### 138. Bedside Locker



Supply, assembly and placement of Bedside Locker . The bedside locker has single drawer and cabinet with lock and with plastic molded handle. There is space between plastic top and the cabinet to keep the general items for the frequent use. Cabinet is Provisioned with lock to keep the valuable items for the safety.

overall dimensions should be 490mmW x 410mm D x 941mm H Corner tube made of ERW round tube with section 25.4 mm dia of 1.2 mm thickness Cabinet made of CRCA sheet of 0.8 mm thick Provided with lock.( 470 mm x 410 mm x 382 mm) Top made of ABS of 2.2 mm thick. Top has recessed and contoured shape for better aesthetic and usability.

Plastic molded knob is Provisioned with Matt finish and dome shaped for better grip.

Plastic molded castors with 50 mm dia placed in diagonal locking arrangement.

RAL white, plastic parts in Grey.

5 kg UDL on both the tops and 10 kg in the cabinet.

All metal components are pretreated with zinc phosphating in 7 tank process and then powder coated with anti-microbial epoxy polyester powder coating to fulfill the requirements for bacterial protection against at least 2 commonly found bacteria in Hospital environment [Gram positive and Gram Negative]. goods are supplied in knocked down construction to reduce carbon emission. **Locker as approved by engineer in-charge/employer.**

### 139. Over Bed Table



Supply, assembly and placement of height adjustable feature . overall dimensions is 1050mm length 850 mm widthx964mm Height

The top is made of MDF 18mm thick and finished with membrane foil. Bottom of the table top is laminated

Bottom structure of the table, is made of ERW round tube of dia 25.4mm and thickness 1.2mm. It has members of dia 19mm and thickness 1.2mm ( 2 nos on each side ) for rigidity. For ease in mobility, it has castors of 50mm dia

To ensure quid quality welding " Co2 Argon" process is adhered to.

All metal components is pre treated with zinc phosphating in 7 tank process and then powder coated with epoxy polyester powder coating.

goods is supplied in knocked down construction to reduce carbon emission.

the product perform proof loading test , cycle tests , impact test, salt spray test, castor break test,

.. Over Bed Table as approved by engineer in-charge/employer.

#### 140. Patient Stool



Supply, assembly and placement of Fixed SS top square stool- Overall dimension should be 411(l) x 411(w) x 522mm (h). Top should be made of SS 304 sheet with buffed matt finish. MS square flat tube of section 25 x 25mm with thickness of 2mm should be used. Thermosetting epoxy polyester powder coating must be done for all MS parts. Neoprene shoes should be provided to avoid the wear & tear of the product. All powder coating parts must be in Raal white & plastic, rubber parts in gray. Safe working load must be 135kg **Stool as approved by engineer in-charge/employer.**

#### 141. Saline Stand



Supply, assembly and placement of IV stand . Telescopic height adjustable saline stand mounted on castor. Over all dimension is 652 mm dia base circle with ht adj from 1655 mm to 2365 mm.

The 5 prong bottom frame is of 1.6 mm thick stainless steel and the lower basement made of 31.75 mm dia with 1.6 mm thick ss tube. Five nos.high endurance anti static plastic molded 50 mm castors are Provisionided with dual locking.

The telescopic rod is 19 mm dia , 1.6 mm thick SS 304 grade tube with locking knob. 2 nos hooks are Provisionided for hanging saline bags. The telescopic tube have plastic bush at the bottom which Provisionide smooth linear motion during ht adjustable. **Saline stand as approved by engineer in-charge/employer.**

#### 142. Examination Couch



Supply, Assembly and placement of Examination couch with full storage- Overall dimension 1975 mm (L) x 560 mm (W) x 805 mm (H). Examination couch with three drawers with three cabinets, inbuilt step stool and BP tray holder. The base frame should be made of 30 mm x 30 mm x 1.6 mm thick ERW tube. The cabinets should be made of 1 mm thick CRCA sheet with recessed plastic handles and with lock and plastic door latch. The hinges of the cabinet should be made of sheet metal and pin arrangement. The internal dimension of the two side cabinets should be 422 mm (W) x 455 mm (D) x 540 mm (H). The internal dimension of the central cabinet should be 422 mm (W) x 455 mm (D) x 358 mm (H). The storage cabinet unit should be mounted on a tubular base frame. The head rest should be adjustable on a gas spring which should be actuated with a C-shaped handle lever. The drawers should be made of 1 mm thick CRCA sheet with recessed plastic handles and work on double extension ball slides for smooth glide. The internal dimension of the drawer should be 330 mm (W) x 427 mm (D) x 92 mm (H). The mattress platform should be 65 mm thick, which is made of 12 mm thick ply and PU foam and covered with a leatherite cover. The cover should be water resistant, fire retardant, anti-microbial. The cover should have an in-vitro cytotoxicity test report from a reputed test lab. The end of the top mattress surface should be tapered for ergonomic benefit. There should be a SS304 made tissue roll holder present on the lower side of the back rest. There should be a 1 mm thick CRCA made step stool with leveler with double extension ball slide for smooth operation. There should be a 1 mm thick CRCA made BP apparatus holder which should be adjustable in height on a SS made height adjustable rod. Total load bearing capacity should be 135 kg. The examination couch should be provided with six numbers levelers made of metal & plastic for adjustment on the uneven floor. All the metal parts should be pre-treated and powder coated with epoxy polyester powder coating. **Examination couch As approved by engineer in-charge/employer.**

#### 143. Dressing Trolley with Bowl & Bucket



Supply, assembly and placement of Instrument trolley- SS 304 sheet should be provided at top for the placement of the instruments being used & also for easy in portability. SS 304 sheet should be provided at the top as well as bottom shelf for keeping the instrument being used. Horizontal bars should be welded with legs so as to provide protection at sides with supporting legs giving a sturdy look. Castors of 125mm Dia. should be used for easy in movement. Overall Dimension: 775mm X 531mm X 915mm H. Maximum safe working load

must be 40kg Dressing Trolley with Bowl & Bucket as approved by engineer in-charge/employer.

#### 144. Instrument trolley



Supply, assembly and installation of Medicine trolley-overall dimension: - 902(L) X 532(B) X 915(H) mm. Top shelf & bottom shelf should be made of SS304 sheet with 1mm thickness & 1.2mm. Rest of the components like supporting legs, horizontal bar handle should be made of SS 304 pipe having dia 31.8, 12.7 mm respectively. The castors of high quality plastic injected molded & anti-static having the dia of 125mm should be used. Handles made of SS 304 pipe having section of 16mm & thickness of 1.2mm should be used

#### 145. Crash Cart





Supply, assembly and placement of Crash cart with overall dimension of L 1048 W x 475 H x 1555 mm . SS 304 grade made top sheet with 2mm thickness should be used. Middle & bottom sheet should be used made of SS 304 grade with thickness 1mm. SS 304 grade frame bar with section of 25.4, 19, 1.2 & 16mm should be used. SS Cylinder case should be used welded with cylinder holding unit to hook giving the curve bend at the bottom to hold the cylinder. SS 304 grade pipe of section 12mm should be used to provide provision to mount IV rod. High endurance anti static, plastic injected molded 4 swivel castors of dia 125mm should be used & should have provision for diagonal locking. SS 304 handle pipe should have section of 25.4mm with length of 365mm & should have thickness of 1.2mm giving a glossy finish. SS 304 tubular frame should have five different colored removable bins mounted on top shelf and two polystyrene lockable storage units with three drawers each. The top drawers should have containers of different sizes. Thermosetting epoxy polyester with semi gloss finish powder coating must be used. Safe working load must be 40kgs

#### 146. **Wheel Chair**



Supply, assembly and placement of Foldable wheel chair with Over all dimension should be (L) 790 x (W) 600 x (H) 870mm Foldable frame structure should be made of section 22x1.2mm A3 carbon steel with chrome finish. Cross bar should be made of A3 carbon steel with section 25.4 x 1.2mm. The Rear wheel should be made of 24 inch Solid mag wheels with alloy in the rim. Integrated handrim should be provided to drive the wheel chair of section 16x1.2mm A3 carbon steel with chrome finish. The front wheel should be of 8 inch HUB made of PA polymer and outer with solid rubber. PU molded arm rest & base should be made of ABS for better arm support .There should be Leatherite strap for calf rest &

leatherite cushion for seat. The foot rest should be Adjustable alluminium die cast foot rest with updown & swivel type mechanism and Push Handles should be made of moulded rubber grip to push the wheelchair. Hand brakes should be provided to lock the wheelchair at desired location. The finish of chair should be antirust chrome

#### **147. Mayo Trolley**



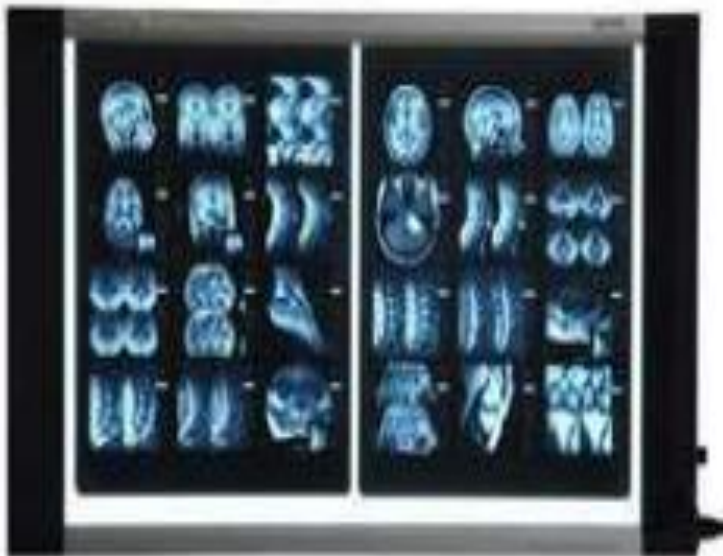
Supply, assembly and installation of Mayo trolley-overall sizes of Base rectangle 504mm X 655mm X Adjustable from 814mm to 1340 mm. Height adjustment will be achieved with screw knob mechanism. Bottom frame should be made of 1.2mm thick SS 304 tube of dimension 38 x 38mm square tube. Top frame should be of 1.2mm thick & 304 SS grade rectangular shape of dimension 30 x 30mm. Fixed tube of 3 mm thickness square in shape of 38 x 38mm telescopic tube should be used of 2 mm thickness rectangular in shape of 30 x 30mm. Locking knob should be used ergonomically designed made of SS screw & nylon knob. Tray supporting frame should be of thickness of 1mm. Castors must be injection molded type of 50mm dia having high endurance, anti-static properties. Safe working load must be 20kgs

#### 148. Stretcher Trolley



Supply , assembly and installation of Strecher on trolley with Overall dimension should be 2005 mm (L) x 666 mm (W) x 827 mm (H). It should be removable stretcher on trolley mounted on castors.. The trolley should be made of 31.75 mm & 25.5 mm dia 1.2 mm thick & 1.6 mm thick ERW tube. The casters should be 200 mm dia diagonal lockable castors. stretcher understructure should be made of 25.4 mm dia 1.6 mm thick ERW tube and the top should be made of 1.2 mm thick CRCA sheet. The stretcher should have provision to mount IV pole at four corners. The product should be pre treated and powder coated with Epoxy polyster powder coating.The maximum load bearing capacity should be 135 kg  
**Stretcher Trolley as approved by engineer in-charge/employer**

#### 149. X-Ray View Box Double



Double X Ray View Box 850mm W x 512mm H x 47mm D ( $\pm 10\%$  Engineering Variation). Adopt LED light source with life of 100,000 hours. Maximum brightness can reach up to 5000cd/m<sup>2</sup> which is suitable for different density medical films. Makes use of A-Cast viewing screen which make the light more bright and soft, the screen can be used for long time and not turn yellow and deform. The light frequency is above 50KHz, effectively relieves the fatigue of vision, Material of the Front viewing screen: High quality Polymethyl Methacrylate (PMMA), Power supply input: 220-240 volt AC, 50 Hz, Material of the Frame: Electrophoresis coated Aluminum alloy and ABS plastic, Easy insertion and removal of the films Through the X-ray film holders, On-Off function and Fully electronic continuous adjustable separate brightness control provision for each panel on the illuminator. X-ray View Box as approved by engineer in-charge/employer.

#### 150. Emergency Trolley



Supply, assembly and placement of emergency trolley, The emergency trolley is height adjustable, back rest is adjustable.

Overall Size is in-between L 2139 X W 936mm X (H) Adjustable from 680 mm to 1055 mm Bed Frame is made of ERW 25X50 tube with thickness of 1.6 mm

Base frame is made of ERW 25X50 tube with thickness Of 1.6mm

The bed frame has height adjustable by assist of Hydraulic Pump stroke of 140mm. It is smooth functioning and consistent motion during operations is required.

The trolley is Provided with detachable stretcher which have x-ray permeable top made of high pressure compact laminate of 6mm thick. The top is exceptional chemical and stain resistance. The fixed portion of the top is 1065 mm (L) x 590 mm (W) and tilted back portion is of 728 mm (l) x 590 mm (W).

There is ms made x-ray cassette holder which can move along with the top length to perform x-ray on the different position. The x-ray Cassette is top mounted.

Backrest is adjustable on ratchet for patient comfort from 0 to 70 Degree

The trolley is Provided with high end 125 mm non marking Steinco castors which is lockable diagonally.

The trolley is Safe working Load is of 135 Kg on flat top .

There should iv pole holder with ht adjustable SS made telescopic iv pole with two hooks to mount saline bags.

The trolley is Provisionided with 8 mm dia ms zinc plating urine bag holder on both the side.

The trolley is Provisionided with drop down SS made side rails which Provided shelter in more than half of the total bed length. the tube has 19 mm dia and 1.2 mm thick SS 304 made.

The trolley has 4 nos Neoprene made bumpers for Excellent Shock absorbing property.

The top frame has X ray Tray assembly made of MS CRCA sheet 1.2 thick X ray Tray can slide along the stretcher length. Provision given for changing the X ray cassette at the leg side , knob to be Provided for locking the assembly during TR operation .

Fail Safe Mechanism- the trolley has Fail Safe mechanism to avoid collapse of ERT during gas spring failure for TR & ATR Mechanism.

The trolley is Provided with 2 nos U shaped head and foot bow at both the end to drag or push the trolley for movement. the bow is covered with neoprene material for better grip and avoid cold shock during patient handling.

MS Oxygen Cylinder Holder – Provision is given to mount B type Oxygen Cylinder at the head side of trolley.

The trolley has MS file holder at the bottom to carry file and other accessories during patient movement.

The trolley is Provided with two pair of patient safety belt .

The bed is Provided with 40 density 50 mm thick PU foam mattress (optional) which is covered by heavy helium material which is water proof, flame retardant, vapour & X-ray permeable. The zip & stitches for the mattress cover is concealed

All the MS parts is treated with nine tank pre-treatment procedure with zinc phosphate and powder coated with antimicrobial and thermosetting epoxy polyester .

The welding is done by co2-argon welding and there is Synergy coat on the welded areas to minimize early rusting.

#### 151. Kick Bucket



Supply, assembly and placement of kick bucket. Overall dimension should be 517 mm dia x 210 mm (H). It should be three legged kick bucket mounted on 50 mm dia castors. The ring unit should be made of 25.4 mm dia and 12.7 mm dia, 1.2 mm thick ss304 tube. The bowl should be 0.8 mm thick . Load nearing capacity should be 10 kg.

152. Sliding Fast track U-pattern Curtain for ICU Bed



Providing and fixing/Installation of hospital cubicle track system with following specification: Track material shall in general be aluminum alloy 6063-T-6 having tensile strength 195 Mpa, shear tensile Strength 195 MPa, Shear Strength 150 Mpa. All materials shall be Corrosion resistance and shall have minimum 50 micron polyester powder coating of approved shade. The curtain track system shall have following components.

Support units consisting of ceiling suspender system and wall support unit. Ceiling suspender system shall consist of upper aluminum plates of diameter 50.4 mm and thickness 1.8 mm. Each plate shall be fixed to ceiling with 3 No. raw plugs and screws. Ceiling suspenders shall be made of Aluminum pipe of minimum dia 12.7 mm and of variable height in conformity with the ceiling height and curtain height. Minimum three suspenders shall be provided for each cubical. Wall support unit shall be made of aluminum and shall be fixed with the wall with raw plug and screws.

Curtains track shall be made of aluminum alloy of minimum size 20.4 mm x 25 mm of thickness side 1.5 mm and top 3.3 mm. it will have curtain removable point made of galvanized steel for simple loading and unloading of curtains.

7mm diameter wheel type Teflon coated plastic roller and provided with 1.8 mm dia. stainless steel (302 grade) 30mm hooks.

Bends: Track shall be bendable to a radius of 300 mm at 90 degree to cover the length and width of bed. The bend shall be joint less.

Hospital cubical curtains (Overall Height: 7.5 Feet) consisting of polyester blended fabric with 450 mm nylon mesh (net) on the top of curtain. The fabric shall be wrinkle free, shrink proof, anti-odor, stain retardant and water-repellent. Curtains shall be fitted with stainless steel grommets at 150 mm center to center. Sliding curtain facility for patient in "U" pattern



Curtain:- anti microbial & flame resistant 100 % polyester fabric. White nylon mesh at top. Fabric length to be equal to track length plus 20 % added fullness. Fabric height equals floor to ceiling height minus a 10 inch gap at bottom. Fabric is hemmed at all sides and bottom. Install tracks level and plumb, according to manufacturer's written instructions. All metal components should be pre treated with zinc phosphate in 9 tank process and then powder coated with anti microbial epoxy polyester powder coating to fulfill the requirements for bacterial protection. **Sliding curtain facility for patient in "U" pattern as approved by engineer in-charge/employer.**

### 153. Modular Overhead Storage



Overall Dimensions of Store Up shall be 900 mm W x 380 mm D x 785 mm H. The Construction shall be aesthetically appealing completely knock down construction made from 0.8 mm thick CRCA as per IS - 513 . Horizontal stiffener shall be made from 1.2 mm thick CRCA as per IS - 513 . The doors shall be made from 0.8 mm thick CRCA sheet with 8 mm thick glass as per IS - 513. Two door with single lock on Right Hand door. Locking shall be 10 lever cam lock lever at the bottom of the door. Shelving shall be Height wise adjustable shelf 1 no. Uniformly distributed load capacity of 40 Kg UDL .The finish shall be Epoxy powder coated to the thickness of 50 microns .

Overall Dimensions of DOOR shall be 448 mm W x 783 mmH RH side door with lock. 448 mm W x 783 mm H, LH side door w/o lock . it shall have two door with single lock on RH door. MODULAR OVERHEAD STORAGE as per approved sample and as per the direction of Engineer-In-charge.



154. Laboratory Single wall Side Table Unit with Bottle Rack with 750mm width



**D-FRAME SYSTEM**

All D-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from -5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. **HORIZONTAL MEMBERS**

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths. **COVER PANELS**

All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating **WELDED UNDER-BENCH STORAGE CABINETS** Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and

drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Drawer: Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. DROPPER All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm. REAGENT SHELVES Fixed-Type reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of 0.8mm thick CRCA MS with pure epoxy powder coating sheets to kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets. Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope. WELDED OVER HEAD STORAGE CABINETS Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm. Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. SERVICE FITTINGS AND ACCESSORIES Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the color coding as per DIN 12920.

LABORATORY SINK AND ACCESSORIES Polypropylene Molded Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer)

### 155. Laboratory Single wall Side Table Unit with Bottle Rack with 600mm width



#### D-FRAME SYSTEM

All D-Frames assemblies should be manufactured from standard hollow metal sections; conforming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA conforming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from -5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. HORIZONTAL MEMBERS

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal Members connected together, the skeletal structure of the workbench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths. COVER PANELS

All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating

**WELDED UNDER-BENCH STORAGE CABINETS** Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Drawer: Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. **DROPPER** All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm. **REAGENT SHELVES** Fixed-Type reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of 0.8mm thick CRCA MS with pure epoxy powder coating sheets to kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets. Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope.

**WELDED OVER HEAD STORAGE CABINETS** Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm. Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. **SERVICE FITTINGS AND ACCESSORIES** Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings

should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the color coding as per DIN 12920.

LABORATORY SINK AND ACCESSORIES Polypropylene Molded Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer)

#### 156. Laboratory Single wall Side Table Unit with Bottle Rack 900mm Width



#### D-FRAME SYSTEM

All D-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from -5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. HORIZONTAL MEMBERS

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal

Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths.

#### COVER PANELS

All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating

#### WELDED UNDER-BENCH STORAGE CABINETS

Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet.

Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening.

Drawer: Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening.

Units should be in 450mm and 600mm widths.

#### DROPPER

All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm.

#### REAGENT SHELVES Fixed-Type reagent shelves

should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of 0.8mm thick CRCA MS with pure epoxy powder coating sheets to kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets.

Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope.

#### WELDED OVER HEAD STORAGE CABINETS

Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet.

Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm.

Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover

with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. SERVICE FITTINGS AND ACCESSORIES Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the color coding as per DIN 12920.

LABORATORY SINK AND ACCESSORIES Polypropylene Molded Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer)

#### 157. Laboratory wall side Corner Table.



#### D-FRAME SYSTEM

All D-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from -5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. HORIZONTAL MEMBERS

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be



made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths.

**COVER PANELS**  
All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating **WELDED UNDER-BENCH STORAGE CABINETS** Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. **Unit Construction :** It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

**Shelf :** Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. **Drawer:** Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. **DROPPER** All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm. **REAGENT SHELVES** Fixed-Type reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of 0.8mm thick CRCA MS with pure epoxy powder coating sheets to kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets. Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope. **WELDED OVER HEAD STORAGE CABINETS** Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. **Unit Construction :** It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm. **Shelf :** Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should

be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should be filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. SERVICE FITTINGS AND ACCESSORIES Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the color coding as per DIN 12920.

LABORATORY SINK AND ACCESSORIES Polypropylene Molded Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer)

#### 158. Laboratory Sink table Single wall Side



#### D-FRAME SYSTEM

All D-Frames assemblies should be manufactured from standard hollow metal sections; confirming to I.S. Code 7138:1973 (Indian Standard specification for steel tubes for furniture) and all sheet metal components should be of CRCA confirming to IS Code 513:1994. The suspended under-bench welded units should be supported on heavy-duty steel frames fully carrying the load of worktops. Its superior strength combined with aesthetically appealing end caps shall give maximum flexibility and modularity while making a layout. D-frame should be constructed from a square pipe with a cross section of 30mm x 30mm and should be a minimum 1.6 mm thick. The D-frame legs should be supplied with adjustable levelling screw (M-10 levelers of Nylon + MS, tolerance from -5mm to +15mm) to correct the unevenness of flooring. The tubular enclosed type construction shall discourage dust accumulation and unwanted development of bacteria & fungus.

Drainage gradient should be well adjusted throughout the length of table and should have horizontal supports for drainage systems. It should be suitable for sitting and standing nominal heights of 750mm & 900mm respectively. The nominal table depths should be 450mm, 600mm, 750 mm for wall side and 1050mm, 1200mm, 1500mm for Island tables. The Corner Units shall fit well with 750mm & 900mm table depths. All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The D-Frames structure should be for suspended storage cabinets. HORIZONTAL MEMBERS

These should be made from square pipes of 1.6 mm thickness. The cross-sectional dimensions of the pipe should be 30 x 30mm with a minimum of 1.6 mm. They should be made of CRCA MS and coated with pure epoxy powder. These connect two D-Frames

together as shown using C-clamps/U-clamps. Together with the D-Frames and Horizontal Members connected together, the skeletal structure of the work-bench is formed on which the worktop can be placed and the hanging-type storage cabinets can be suspended. Horizontal Members determine the width of the lab workbench as they form the member (distance) between two adjacent D-Frames. They should be available in various widths.

#### COVER PANELS

All leg-space panels, rear cover panels, island side panels etc. should be made from CRCA MS panels of minimum 0.8mm thickness with pure epoxy powder coating WELDED UNDER-BENCH STORAGE CABINETS Under bench cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be suspended from tubular structure. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutter and drawer are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm and drawer separator should be of 1.2mm thick.

Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Drawer: Should be welded single piece construction with over-closing sandwich drawer front filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. DROPPER All the service lines (ex. Gas lines, electrical lines, water lines etc.) are to be drawn above the false ceiling through a service dropper of hollow cross section of size : 115mm X 45mm with minimum thickness of 0.8mm. REAGENT SHELVES Fixed-Type reagent shelves should be provided. It should be complete modular design consisting of 2 stage horizontal storage shelves. 270mm gap to be maintained between two shelves. Reagent shelf post should have a cross section of 115mm x 30mm hollow structure of 1.2mm thick. Welded frames to be screw fitted between two posts and to be made of 1.2 mm thick. And, metal shelves of 0.8mm thick CRCA MS with pure epoxy powder coating sheets to kept in between the frames. The shelves can be removed for cleaning purpose. A total depth of reagent shelves to be maintained at 150mm for wall benches and 300mm for island benches. Reagent shelves modules to have electrical book and having cutouts for electrical switches and sockets. Used for housing electrical switches and sockets, its top panel, bottom panel of the trunking should be made from minimum of 0.8mm thick body. It should be available in both, single sided and double-sided configurations. It should be made from CRCA MS with pure epoxy powder coating. The front surface that houses the electrical points should have a slope. WELDED OVER HEAD STORAGE CABINETS Over head cabinets are to be Pure epoxy powder coated with thickness of 40-60 microns and should be fixed on the wall. The cabinet should have a corrosion resistance magnetic strip as shutter catch, shutters are to be equipped with 180 degree cam lock. PP constructed semi recessed handle to be screw fitted to the shutters. Hinges are to be of SS-304 knuckle overlay type with 270 degree opening and 2 nos of hinges are to be screw fitted to each shutter and cabinet. Unit Construction : It should be Welded body construction with load bearing members such as top, bottom and stiffeners should have a minimum thickness of 0.8 mm. Shelf : Should be made of 0.8mm thickness which should be adjustable to 6 steps of 50mm. Shutter should be over-closing type. It has a sandwich door construction with shutter front & shutter cover

with 1.2mm thick hinge stiffener. Empty gap should with filled with 15mm thick paper honeycomb for sound dampening. Units should be in 450mm and 600mm widths. SERVICE FITTINGS AND ACCESSORIES Service fittings should be laboratory grade, and water faucets and valve bodies should be cast red brass alloy or bronze forgings, all fittings should be powder plated unless specified otherwise. Service Indexes: Fittings should be identified with service indexes in the color coding as per DIN 12920.

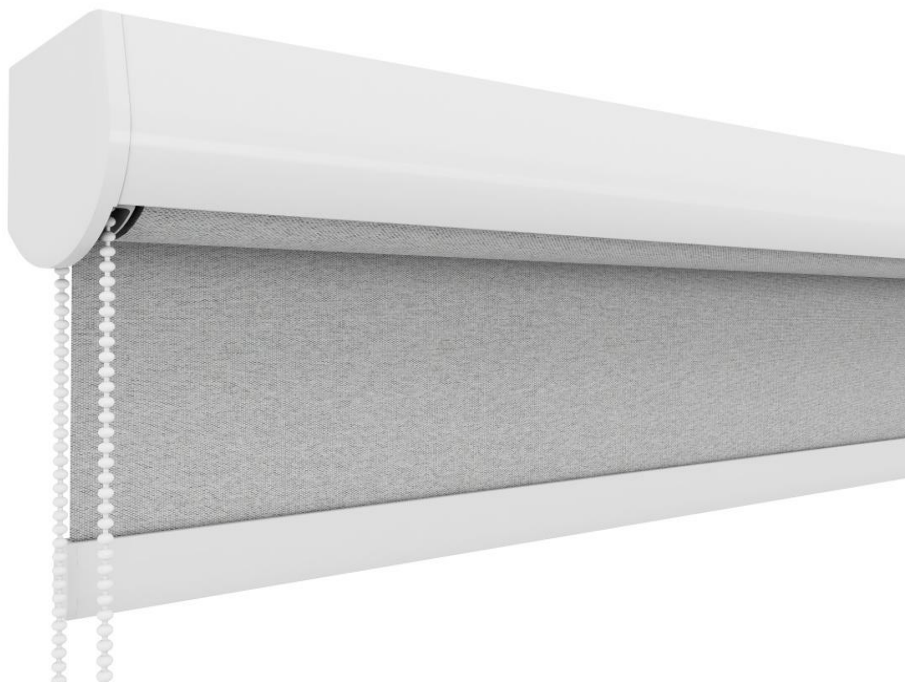
LABORATORY SINK AND ACCESSORIES Polypropylene Molded Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Bowl size to be a minimum of (L x W x D) 560 x 355 x 200 mm. Faucet should be 3-way type faucet of reputed make (Ex. Premier Polymer)

#### 159. Lab Stool



Supply, assembly and placement of Fixed SS top square stool- Overall dimension should be 411(l) x 411(w) x 522mm (h). Top should be made of SS 304 sheet with buffed matt finish. MS square flat tube of section 25 x 25mm with thickness of 2mm should be used. Thermosetting epoxy polyester powder coating must be done for all MS parts. Neoprene shoes should be provided to avoid the wear & tear of the product. All powder coating parts must be in Raal white & plastic, rubber parts in gray. Safe working load must be 135kg

#### 160. Roller Blind Curtain.



Providing & fixing up of Window curtain (Roller blind) Black out/translucent type in required sizes having the following specification:

**Mounting Bracket:** Mounting hardware brackets, universal brackets including end plug bracket should come with lock down retainer device. Metal brackets provided should come in powder coated finish. All installation brackets made of stamped and hardened steel allowing a 46mm projection from the wall, ceiling and side fitting with screws and end cap covers.

**Cassette:** It is a cover for blinds installed outside the window frame to hide tube brackets and mechanism. This is aluminium extruded rail made up of high strength aluminium alloy, which is covered with matching fabric. For 38 mm grooved roller tube cassette size should be 100mm (Width)\*100mm (Height) and having weight =1200gm/running meter ( $\pm 5\%$ ).

**Cassette Ceiling Bracket:** This is made up of carbon Steel, DIN Standard Steel, Thickness: 1.0mm, Powder Coating Thickness: 0.15mm to 0.20mm. This provides near invisible fixing of the cassette.

**Cassette system end caps:** It should have minimum 2.5mm thickness plastic end cap and should be in coordination with the blind fabric colour.

**Roller Tube:** This is made up of High Strength Aluminium Alloy Extruded grooved tube having outer diameter 38mm( $\pm 1$ mm) & thickness 1.25mm ( $\pm 5\%$ ) as per AA6063 Alloy. Tubes must come in natural anodized finish. To achieve greater reinforcement anodized tubes must have at least six internal ribs so that additional tensile strength can be achieved and allowing provision for secured placements of clutch and end plug.

**Roller tube brackets:** Spring steel metal brackets powder coated in matching finish to be used on both ends to support the roller system. Brackets can be top or face fixed.

**Control Unit:** Blinds mechanism must have the control clutch drive unit with engineered heavy duty chain drive pulley operating system consisting of gear clutch housing and locking plug containing at least 6 ribs and inserted into a minimum of 38mm dia. roller tube. Clutch has to be self-lubricating with safety pins for secure bracket installation and unlocking pin for quick manual removal. Provided clutch system must allow convenience in operation for large windows to the smallest windows. The control unit should be made up of polypropylene material using injection moulding method. Gearing Ratio: 1.75:1 to reduce operating force for larger blinds. 24nos Sprocket for 38mm diameter roller tube. Control unit is operated directionally by the use of beaded endless chain to raise and lower the blind smoothly.

**Idler:** Tube bearing plug idler should have the properties of self-lubricating spring-loaded plastic bearing end plug with positive locking wheel that allows for adjustment and provides a secure installation and removal of blinds. Tube bearing plug should contain at least 6 ribs and inserted a tube not less than 38mm roller tube. Idler is of high strength reinforced plastic, consisting of an outside sleeve and centre shaft. Sleeve provide bearing surface for centre shaft and rotate freely, providing smooth, quiet and long wearing operation. It is a Part of Control Unit Assembly.

Bottom Rail: This is made up of extruded aluminium bottom bar having powder coating of 55 microns and wall thickness of  $\pm 1.2\text{mm}$  ( $\pm 0.1$ ) and width of  $26.5\text{mm}$  ( $\pm 1\text{mm}$ ) and height of  $33.5\text{mm}$  ( $\pm 1\text{mm}$ ) and weight:  $380\text{gm/meter}$  ( $\pm 5\%$ ). All bottom rails should come with powder coated finish with an end cover perfectly in matching with the fabric.

Bottom bar also includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines and dimensions of concealed bottom bar rod specified as inner diameter:  $10.8\text{mm}$ , outer diameter:  $14.8\text{mm}$ , Weight:  $219\text{gm/meter}$ , Thickness:  $1\text{mm}$  ( $\pm 5\%$ ) should be provided with matching cover.

Concealed bottom bar rod: Bottom bar includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines. Aluminium bottom bar rod made up of AA6063 alloy having Rod I/D:  $10.8\text{mm}$ , O/D:  $14.8\text{mm}$ , Weight:  $219\text{gm/meter}$ , Thickness:  $1\text{mm}$  ( $\pm 5\%$ ) with the covered matching.

Bottom bar end caps: End caps of bottom bar should be made up of ABS material using Injection moulding method having perfect push fit with the bottom bar. The dimensions of end caps of bottom bar specified as length:  $18\text{mm}$ , width:  $27.5\text{mm}$ , height:  $34.5\text{mm}$ , thickness  $2\text{mm}$  and end caps of bottom bar should also have polyurethane bush to fit in bottom tube for smooth operation of blinds.

Operating chain: Blinds set is to be driven by a ball chain pulley and ball chain and can be positioned at Right hand or Left-hand side of the blinds set. This is made of  $4.5\text{mm}$  plastic beads moulded on  $2.0\text{mm}$  thick polyester cord. The chain drives the sprocket fixed in the end control unit to close and open the blind. The pitch of the chain corresponds to the sprocket in perfect match for trouble free operation. Average number of balls on chain should be 50 per foot length. Plastic chain should provide ease in operation with chain connector and polycarbonate stopper of O/D:  $6\text{mm}$  & I/D:  $4\text{mm}$  to avoid reverse rolling of fabric over tube and protecting damages to blind fabric.

Cord Weight: It should have suitable acrylic clear cord weight to suit the operating chain. Thickness:  $14\text{mm}$ , width:  $30\text{mm}$  and height:  $80\text{mm}$ .

Note: The control unit & cassettes shall be made with matching colour of blind with aesthetically pleasing matching look of room.

The fabric shall be selected from best quality fabric. The fabric shall have properties such as acoustic control, anti-fungal and anti-microbial. Sheer fabrics shall allow in maximum amount of light ( $20\text{-}100\%$  light transmission), whilst still preserving privacy and dim out (Privacy fabrics) ( $1\text{ - }19\%$  light transmission) allow in restricted amount of light, whilst ensuring complete privacy, even in the evening. Blackout fabric shall completely block out sunlight, for complete privacy, room darkening and temperature regulation ( $0\%$  light transmission).

The fabric colour as approved by employer The weighted composition of fabric shall be made of  $100\%$  Polyester woven fabric with a openness factor of  $3\%$ . The fabric shall have a weight of  $168\text{GSM}$  ( $\pm 5\text{GSM}$ ). The solid depth of fabric shall be  $75\text{mm}$  and sheer depth shall be  $50\text{mm}$ . Light fastness shall be 4-5 Grade tested in accordance with BS EN ISO 105-B01:1999, **Roller Blind Curtain as approved by engineer in-charge/employer.**

## 161. Optimizer storage Unit (4 Bay)



Supply installation of Optimizer storage Unit (Total set of Optimizer storage unit: 2 Set, Total Nos. of Bodies in each set: 32 Nos. (4 Bay Single Drive Unit 1 Nos., 4 Bay Last Drive Unit 1 Nos, 4 Bay Twin Mobile Unit 3 Nos.) along with Channel and Fittings (Total Nos. of bodies in 2 set: 64 Nos.)

Overall Dimensions of SD - 1 Single Static Drive Cover Unit 4 Bay (U/C + Fittings + Cover) (Total nos. of body; 4 Nos.) single body size shall be 915mm(W)x457mm(D)x1980mm(H). The Construction shall be rigid knock down made out of 1.0 mm thick CRCA steel conforming to IS: 513. Each body shall have a main unit plus add on units (1,2,3,4,5). Finish shall be Epoxy polyester powder coated thickness of 40 microns. Shelf construction shall be made from CRCA steel 1.2 mm thick with 120 mm width stiffener below the shelf as per IS :513. Uniformly distributed load capacity of 80 Kg. Undercarriage shall have construction in welded frame made of HR sheet 3.15 mm thick conforming to IS: 10748. Finish shall be epoxy polyester powder coat of approved color & shade with a dry film thickness of minimum 40 microns. The Movements shall be Drive Type configuration : In case of D2, D3, D4 & D5 movement of units is achieved mechanically through a PU Drive Wheel and Sprocket -Chain-Tensioner arrangement mounted rigidly onto body size For D2, D3, D4 & D5 each movable undercarriage shall be provided with 2 rollers on the shaft for driving, 2 antifriction ball bearing for rolling and 4 antifriction ball bearing for guiding between rail . Fittings shall be centralized locking arrangement through locking stiffener mounted onto back of single last unit so that it gets locked on channels when all the units are brought together. The Recess handle lock is of Godrej make & placed at suitable height. This arrangement occupies a space of 90.0 mm. When the last unit is twin movable, hinged doors are provided for the end bodies, so in this case locking stiffener is mounted onto drive unit cover; and with tile fascia option, it will be mounted in the recess of vertical trim.



Each Drive Type units shall have Locking Knob near the drive wheel for manual locking of individual units when a person is using those units. Knob shall be rotated to unlock position when units are to be moved. End stoppers shall be provided to prevent derailment. Door locking shall be having hinged doors of recessed die cast handle cum lock giving 3 way locking through a lever & shooting bolts. Guide channels shall have 'J' section 2 mm thick HR & 25 mm Square bright bar. fasteners shall be galvanized/blackodized/Zn plated. The label holder shall be made from 2 mm thick clear transparent acrylic sheet. Also, total no. of loading levels per understructure shall be 10 for SD2. Fascia(tiling) 3 tile pattern fascia option on drive side panel plus 3 tile pattern fascia on non-drive side panel plus 3 tile pattern fascia option on back panel of single last plus 3 tile pattern fascia option on back panel of single static. The tiles are held together by stiffeners & fasteners in 2 vertical metal trims

Overall Dimensions of LD - 1 Single Last Drive Unit 4 Bay (U/C + Fittings + Drive + Cover) (Total nos. of body; 4 Nos.) single body size shall be 915mm(W)x457mm(D)x1980mm(H). The Construction shall be rigid knock down made out of 1.0mm thick CRCA steel conforming to IS: 513. Each body shall have a main unit plus add on units (1,2,3,4,5). Finish shall be Epoxy polyester powder coated thickness of 40 microns. Shelf construction shall be made from CRCA steel 1.2 mm thick with 120 mm width stiffener below the shelf as per IS :513. Uniformly distributed load capacity of 80 Kg. Undercarriage shall have construction in welded frame made of HR sheet 3.15 mm thick conforming to IS: 10748. Finish shall be epoxy polyester powder coat of approved color & shade with a dry film thickness of minimum 40 microns. The Movements shall be Drive Type configuration : In case of D2, D3, D4 & D5 movement of units is achieved mechanically through a PU Drive Wheel and Sprocket -Chain-Tensioner arrangement mounted rigidly onto body size. For D2, D3, D4 & D5 each movable undercarriage shall be provided with 2 rollers on the shaft for driving, 2 antifriction ball bearing for rolling and 4 antifriction ball bearing for guiding between rail. Fittings shall be centralized locking arrangement through locking stiffener mounted onto back of single last unit so that it gets locked on channels when all the units are brought together. The Recess handle lock is of Godrej make & placed at suitable height. This arrangement occupies a space of 90.0 mm. When the last unit is twin movable, hinged doors are provided for the end bodies, so in this case locking stiffener is mounted onto drive unit cover; and with tile fascia option, it will be mounted in the recess of vertical trim. Each Drive Type units shall have Locking Knob near the drive wheel for manual locking of individual units when a person is using those unit. Knob shall be rotated to unlock position when units are to be moved. End stoppers shall be provided to prevent derailment. Door locking shall be having hinged doors of recessed die cast handle cum lock giving 3 way locking through a lever & shooting bolts. Guide channels shall have 'J' section 2 mm thick HR & 25 mm Square bright bar. fasteners shall be galvanized/blackodized/Zn plated. The label holder shall be made from 2 mm thick clear transparent acrylic sheet. Also, total no. of loading levels per understructure shall be 10 for LD2. Fascia(tiling) 3 tile pattern fascia option on drive side panel plus 3 tile pattern fascia on non-drive side panel plus 3 tile pattern fascia option on back panel of single last plus 3 tile pattern fascia option on back panel of single static. The tiles are held together by stiffeners & fasteners in 2 vertical metal trims.

Overall Dimensions of TD – 3 Nos. Twin Mobile Drive Unit 4 Bay (U/C+Fittings+Drive +Cover) (Total nos. of body; 24 Nos.) single body size shall be 915mm(W)x457mm(D)x1980mm(H) The Construction shall be rigid knock down made

out of 1.0 mm thick CRCA steel conforming to IS: 513. Each body shall have a main unit plus add on units (1,2,3,4,5). Finish shall be Epoxy polyester powder coated thickness of 40 microns. Shelf construction shall be made from CRCA steel 1.2 mm thick with 120 mm width stiffener below the shelf as per IS: 513. Uniformly distributed load capacity of 80 Kg. Undercarriage shall have construction in welded frame made of HR sheet 3.15 mm thick conforming to IS: 10748. Finish shall be epoxy polyester powder coat of approved color & shade with a dry film thickness of minimum 40 microns. The Movements shall be Drive Type configuration: In case of D2, D3, D4 & D5 movement of units is achieved mechanically through a PU Drive Wheel and Sprocket -Chain-Tensioner arrangement mounted rigidly onto body size. For D2, D3, D4 & D5 each movable undercarriage shall be provided with 2 rollers on the shaft for driving, 2 antifriction ball bearing for rolling and 4 antifriction ball bearing for guiding between rail. Fittings shall be centralized locking arrangement through locking stiffener mounted onto back of single last unit so that it gets locked on channels when all the units are brought together. The Recess handle lock is of Godrej make & placed at suitable height. This arrangement occupies a space of 90.0 mm. When the last unit is twin movable, hinged doors are provided for the end bodies, so in this case locking stiffener is mounted onto drive unit cover; and with tile fascia option, it will be mounted in the recess of vertical trim. Each Drive Type units shall have Locking Knob near the drive wheel for manual locking of individual units when a person is using those units. Knob shall be rotated to unlock position when units are to be moved. End stoppers shall be provided to prevent derailment. Door locking shall be having hinged doors of recessed die cast handle cum lock giving 3 way locking through a lever & shooting bolts. Guide channels shall have 'J' section 2 mm thick HR & 25 mm Square bright bar. fasteners shall be galvanized/blackodized/Zn plated. The label holder shall be made from 2 mm thick clear transparent acrylic sheet. Also, total no. of loading levels per understructure shall be 20 for TD2. Fascia(tiling) 3 tile pattern fascia option on drive side panel plus 3 tile pattern fascia on non-drive side panel plus 3 tile pattern fascia option on back panel of single last plus 3 tile pattern fascia option on back panel of single static . The tiles are held together by stiffeners & fasteners in 2 vertical metal trims.

Overall Dimensions of Channel 9'0" shall be 9 feet (L). Guide channels shall consist of 'J' section 3 mm thick & 25 mm square bright bar - both connected by screws. Prior to the embedding of the guide channels with the help of raul plug & screw, the ground has to be in proper leveled condition. The rail channels are of 3 lengths i.e., 800mm, 1600mm and 2400mm.

## 162. Optimizer storage Unit (5 Bay)



Supply installation of Optimizer storage Unit (Total set of Optimizer storage unit: 6 Set, Total Nos. of Bodies in each set: 40 Nos. (5 Bay Single Drive Unit 1 Nos., 5 Bay Last Drive Unit 1 Nos, 5 Bay Twin Mobile Unit 3 Nos.) along with Channel and Fittings (Total Nos. of bodies in 6 set: 240 Nos.)

Overall Dimensions of SD - 5 Single Static Drive Cover Unit 5 Bay (U/C + Fittings + Cover) (Total nos. of body; 5 Nos.) single body size shall be 915mm(W)x457mm(D)x1980mm(H). The Construction shall be rigid knock down made out of 1.0 mm thick CRCA steel conforming to IS: 513. Each body shall have a main unit plus add on units (1,2,3,4,5). Finish shall be Epoxy polyester powder coated thickness of 40 microns. Shelf construction shall be made from CRCA steel 1.2 mm thick with 120 mm width stiffener below the shelf as per IS :513. Uniformly distributed load capacity of 80 Kg. Undercarriage shall have construction in welded frame made of HR sheet 3.15 mm thick conforming to IS: 10748. Finish shall be epoxy polyester powder coat of approved color & shade with a dry film thickness of minimum 40 microns. The Movements shall be Drive Type configuration : In case of D2, D3, D4 & D5 movement of units is achieved mechanically through a PU Drive Wheel and Sprocket -Chain-Tensioner arrangement mounted rigidly onto body size For D2, D3, D4 & D5 each movable undercarriage shall be provided with 2 rollers on the shaft for driving, 2 antifriction ball bearing for rolling and 4 antifriction ball bearing for guiding between rail . Fittings shall be centralized locking arrangement through locking stiffener mounted onto back of single last unit so that it gets locked on channels when all the units are brought together. The Recess handle lock is of Godrej make & placed at suitable height. This arrangement occupies a space of 90.0 mm. When the last unit is twin movable, hinged doors are provided for the end bodies, so in this case locking stiffener is mounted onto drive unit cover; and with tile fascia option, it will be mounted in the recess of vertical trim.

Each Drive Type units shall have Locking Knob near the drive wheel for manual locking of individual units when a person is using those units. Knob shall be rotated to unlock position when units are to be moved. End stoppers shall be provided to prevent derailment. Door locking shall be having hinged doors of recessed die cast handle cum lock giving 3 way locking through a lever & shooting bolts. Guide channels shall have 'J' section 2 mm thick HR & 25 mm Square bright bar. fasteners shall be galvanized/blackodized/Zn plated. The label holder shall be made from 2 mm thick clear transparent acrylic sheet. Also, total no. of loading levels per understructure shall be 10 for SD2. Fascia(tiling) 3 tile pattern fascia option on drive side panel plus 3 tile pattern fascia on non-drive side panel plus 3 tile pattern fascia option on back panel of single last plus 3 tile pattern fascia option on back panel of single static. The tiles are held together by stiffeners & fasteners in 2 vertical metal trims

Overall Dimensions of LD - 5 Single Last Drive Unit 5 Bay (U/C + Fittings + Drive + Cover) (Total nos. of body; 5 Nos.) single body size shall be 915mm(W)x457mm(D)x1980mm(H). The Construction shall be rigid knock down made out of 1.0mm thick CRCA steel conforming to IS: 513. Each body shall have a main unit plus add on units (1,2,3,4,5). Finish shall be Epoxy polyester powder coated thickness of 40 microns. Shelf construction shall be made from CRCA steel 1.2 mm thick with 120 mm width stiffener below the shelf as per IS :513. Uniformly distributed load capacity of 80 Kg. Undercarriage shall have construction in welded frame made of HR sheet 3.15 mm thick conforming to IS: 10748. Finish shall be epoxy polyester powder coat of approved color & shade with a dry film thickness of minimum 40 microns. The Movements shall be Drive Type configuration : In case of D2, D3, D4 & D5 movement of units is achieved mechanically through a PU Drive Wheel and Sprocket -Chain-Tensioner arrangement mounted rigidly onto body size. For D2, D3, D4 & D5 each movable undercarriage shall be provided with 2 rollers on the shaft for driving, 2 antifriction ball bearing for rolling and 4 antifriction ball bearing for guiding between rail. Fittings shall be centralized locking arrangement through locking stiffener mounted onto back of single last unit so that it gets locked on channels when all the units are brought together. The Recess handle lock is of Godrej make & placed at suitable height. This arrangement occupies a space of 90.0 mm. When the last unit is twin movable, hinged doors are provided for the end bodies, so in this case locking stiffener is mounted onto drive unit cover; and with tile fascia option, it will be mounted in the recess of vertical trim. Each Drive Type units shall have Locking Knob near the drive wheel for manual locking of individual units when a person is using those unit. Knob shall be rotated to unlock position when units are to be moved. End stoppers shall be provided to prevent derailment. Door locking shall be having hinged doors of recessed die cast handle cum lock giving 3 way locking through a lever & shooting bolts. Guide channels shall have 'J' section 2 mm thick HR & 25 mm Square bright bar. fasteners shall be galvanized/blackodized/Zn plated. The label holder shall be made from 2 mm thick clear transparent acrylic sheet. Also, total no. of loading levels per understructure shall be 10 for LD2. Fascia(tiling) 3 tile pattern fascia option on drive side panel plus 3 tile pattern fascia on non-drive side panel plus 3 tile pattern fascia option on back panel of single last plus 3 tile pattern fascia option on back panel of single static. The tiles are held together by stiffeners & fasteners in 2 vertical metal trims.

Overall Dimensions of TD - 3 Twin Mobile Drive Unit 5 Bay (U/C+Fittings+Drive +Cover) (Total nos. of body; 30 Nos.) single body size shall be 915mm(W)x457mm(D)x1980mm(H) The Construction shall be rigid knock down made out of 1.0 mm thick CRCA steel

conforming to IS: 513. Each body shall have a main unit plus add on units (1,2,3,4,5). Finish shall be Epoxy polyester powder coated thickness of 40 microns. Shelf construction shall be made from CRCA steel 1.2 mm thick with 120 mm width stiffener below the shelf as per IS: 513. Uniformly distributed load capacity of 80 Kg. Undercarriage shall have construction in welded frame made of HR sheet 3.15 mm thick conforming to IS: 10748. Finish shall be epoxy polyester powder coat of approved color & shade with a dry film thickness of minimum 40 microns. The Movements shall be Drive Type configuration: In case of D2, D3, D4 & D5 movement of units is achieved mechanically through a PU Drive Wheel and Sprocket -Chain-Tensioner arrangement mounted rigidly onto body size. For D2, D3, D4 & D5 each movable undercarriage shall be provided with 2 rollers on the shaft for driving, 2 antifriction ball bearing for rolling and 4 antifriction ball bearing for guiding between rail. Fittings shall be centralized locking arrangement through locking stiffener mounted onto back of single last unit so that it gets locked on channels when all the units are brought together. The Recess handle lock is of Godrej make & placed at suitable height. This arrangement occupies a space of 90.0 mm. When the last unit is twin movable, hinged doors are provided for the end bodies, so in this case locking stiffener is mounted onto drive unit cover; and with tile fascia option, it will be mounted in the recess of vertical trim. Each Drive Type units shall have Locking Knob near the drive wheel for manual locking of individual units when a person is using those units. Knob shall be rotated to unlock position when units are to be moved. End stoppers shall be provided to prevent derailment. Door locking shall be having hinged doors of recessed die cast handle cum lock giving 3 way locking through a lever & shooting bolts. Guide channels shall have 'J' section 2 mm thick HR & 25 mm Square bright bar. fasteners shall be galvanized/blackodized/Zn plated. The label holder shall be made from 2 mm thick clear transparent acrylic sheet. Also, total no. of loading levels per understructure shall be 20 for TD2. Fascia(tiling) 3 tile pattern fascia option on drive side panel plus 3 tile pattern fascia on non-drive side panel plus 3 tile pattern fascia option on back panel of single last plus 3 tile pattern fascia option on back panel of single static. The tiles are held together by stiffeners & fasteners in 2 vertical metal trims.

Overall Dimensions of Channel 9'0" shall be 9 feet (L). Guide channels shall consist of 'J' section 3 mm thick & 25 mm square bright bar - both connected by screws. Prior to the embedding of the guide channels with the help of raul plug & screw, the ground has to be in proper leveled condition. The rail channels are of 3 lengths i.e., 800mm, 1600mm and 2400mm.

# Technical Specification for Medical Office Block (BOQ item No. 163 to 183)

## 163. Work Station



Providing and placing WISH spine based modular workstation, with partition .thickness as 52.4 mm thk and ht - 1200 including powder coated aluminium trims.SPLIT Tiles on main spine: Combination of two finishes for the top tiles on the user side shall be split fabric tackable along with split white board. • FABRIC TACKABLE BLOCKS:

These shall be made from 18mm thick PLB battens which hold 3mm MDF in between. 6mm thick PE foam shall be pasted on 3mm thick MDF and this assembly shall be upholstered with approved shade of fabric on both sides using adhesive. • WHITEBOARD BLOCKS:

These shall be made of 16mm thick particle board laminated with 0.6mm thick white glossy high pressure laminate on both sides and having all its edges with minimum 0.5 mm thick PVC edging. INTERMEDIATE BLOCKS on main spine Intermediate blocks are given in fabric + DL finish. • LAMINATE FINISH BLOCKS:Laminate finish blocks shall be made from 18mm thick particle board (PLT), clad with 1mm thk laminate of approved shade.These shall be made from 18mm thick ppb/plb upholstered with 1mm thk approved shade of fabric using adhesives. Bottom Tile plain metal. • METAL FINISH BLOCKS:

Metal finish blocks shall be made from two components of 0.8 mm thick M.S. CRCA Grade D as per IS: 513 powder coated with epoxy polyester finish.WORKTOP 25 MM THICK LAMINATED (with PVC edge band):

Work top shall be made of 25mm thick Plain particle board of interior grade (As per IS: 12823) as a Substrate. The top shall be laminated with laminate of 0.6 mm thickness of approved shade as per IS: 2046-1995. Bottom shall have a backing laminate of 0.6 mm thickness. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC edge band glued with hotmelt EVA glue.The single side legs shall be used for supporting panels & work surface on one side only. Single side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm. this shall be coated with

min. 45-micron thickness of epoxy powder coating. The double side legs shall be used for supporting panels & work surface on both sides. Double side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm and coated with min. 45-micron thickness of epoxy powder coating. Cable duct shall be made from 0.8 mm thick M.S. CRCA Grade D as per IS: 513 - 1994. It is constructed with two parts; one is body & another is cover. It holds the cables & gives aesthetic appearance by covering all cables entry, which are moving upward to the panels. Size of Cable duct is 107mm W X 154 mm H X 21 mm D.  
**Work station as approved by engineer in-charge/employer**

164. 164.. Office Table for Director Finance Room Cabin Table for Principal Room



Supplying and placing in position Main Table, ERU & pedestal of the following specifications. The Main table shall be of size 3600 Width mm x 1080 mm Depth x 750 mm height. Top surface of the table shall be made up of MDF (Medium density fibre) board duly finished with Veneer and final coating of PU. The Main desk should contain in Smart Case - space slides effortlessly in style. The mobile Pedestal shall be of size 480 Width mm x 640 Depth mm x 600 Height mm. Mobile pedestal shall be coated of MDF (medium density fiber) with veneer coating and PU coating. The ERU Top shall be of MDF (medium density fiber) board duly finished with veneer and final PU coating. Size of ERU top 1900 Width mm x 480 Depth mm x 550 (not from ground with castors). The main desk is provided with the wire management system also there is perfect storage side unit. Supplying and placing in position Back unit of the following specifications. The Size of the Back unit shall be 1000 mm width x 480 mm Depth x 2035 mm height. The back unit shall be made up of MDF board duly finished with veneer & final finish by PU coating. The mobile unit can be bought in multiples. PU coating hardness 1.5H.



165. Cabin Table for Director Student Affairs/ Director Admission/ Director It/  
Director Security It/ Librarian Office



Supplying and placing in position Main Table,ERU & pedestal of the following specifications. 1800x2100x750 Primary Work Surface Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top Soft closing access flap with in-build power box are provided on work surface for wire management

Secondary Work Surface Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top.

Modesty Panel Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top.

Under structure Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

Integrated Pedestal Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade

confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

Drawer fronts made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top

Pedestal construction is BOX-BOX-FILE type which Uses powder coated 400 MM long metal Panel Drawer Slides. Drawer extension is 325 MM.

Drawers have a soft closing & anti slam mechanism.

Handles are provided for ease of opening.

Pedestals are provided with lock for security.

## 166. Cabin Table- (Pa Office Room)



Supplying and placing in position Main table of the following specifications. Its size shall be 1800 Width mm x 900 Depth mm x 740 Height mm. Table top shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick backing laminate (bdl). Flat edge Duly sealed with 2 mm thick PVC beading. The modesty shall be 18 mm thick plain particle board ( ) PPB Clad with 1.0 mm thick decorative laminate (DL) on both sides. Edge Sealed with 2 mm thick PVC beading..

Supplying and placing in position ERU of the following specifications. Its size shall be 1550 Width x 450 Depth x 705 Height. The top of ERU shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick Backing Laminate (BDL). Flat Edge duly sealed with 2 mm thick PVC beading. The Modesty shall be 18 mm thick plain particle board (PPB) Clad with 1.0 mm thick Decorative Laminate (DL) on both sides. Edge sealed with 2 mm thick PVC Beading.

Supplying and placing in position Free Standing Pedestal of the following specifications with Overall Dimensions shall be 390mm(W)x440mm(D)x646mm(H). The construction & Material used shall be welded assembled, 0.8 mm thick CRCA for body shell, drawer front & tray, front side stiffener, rear aide stiffener and 1.2 mm thick CRCA Top stiffener & Bottom stiffener. The drawer fronts shall be metal front straight edge. Locking shall be 10 lever cam lock & Central RH locking with actuator & lock channel mechanism for box-box-file Pedestal. The top panel shall be metal straight edge top. Castor should be swiveling non-lockable castors mounted below the body shell for free standing full height mobile pedestal and M8 Leveling stud for free standing pedestal. The anti-tipping mechanism shall have fifth roller arrangement mounted below file drawer to avoid toppling of unit when file drawer is pulled out. Partition in drawer shall be 1 no. Partition in box drawers with lock mounted. Plastic pencil tray shall be optional accessory. Finish shall be epoxy polyester powder coated to the thickness of 50 microns. Application shall be suitable for pushing below work surface which has got a clear height of 725 mm from below. For drawer pulling side wise tapered recess provided in shell behind drawer fronts.

### 167. Work Table



Supplying and placing in position office table of the following specifications. Its size shall be 1200 Width x 600 Depth x 740 Height . The top shall be made from 25 mm thick pre-laminated board. All the edges are sealed with 2 mm thick PVC edge band all around . Side panels shall be made from 25 mm thick pre- laminated particle board. All the edges are sealed with 2 mm thick PVC edge band on the user side and 0.8 mm on the top and bottom side .The side panels have 2 glide screws each for levelling of the desk. Modesty panel shall be made from 18 mm thick pre- laminated particle board . All the edges are sealed with 0.8 mm thick PVC edge band all around. Freestanding Pedestal shall be made from 18 mm pre-laminated particle board with a combination of 2 mm and 0.8 mm PVC edge band on all the exposed surfaces as per requirement. The drawers are provided with suitable slides for smooth operation . All the pedestal drawers are centrally locked with a single key .Drawer slides are of Hettich.

### 168. High Back Chair For Director Finance And Director Student Affairs



Providing, supplying and placing of High Back Chair.SEAT ASSEMBLY: The seat is made up of 12mm thick MR Grade plywood, layered with pocket spring coms, super soft foam of 32 kg/m<sup>3</sup> density and edging foam of 28 kg/m<sup>3</sup> dormity. A 200GSM soft touch fibre

fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

**BACK ASSEMBLY:** The back assembly is made up of a combination of pinewood members, 12mm thick MR Grade plywood and 2mm thick cardboard, layered with slab stock foam of 28 kg/m<sup>3</sup> density. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette

**ARMPAD ASSEMBLY:** The armpad assembly is made up of 6mm thick MR Grade plywood fixed with MS powder-coated brackets, layered with foam of 60 kg/m<sup>3</sup> density, A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

**CENTER TILT WITH MULTI POSITION LOCK MECHANISM:** The mechanism is designed with the following features:

360 revolving type

3 position locking

Tilt tension adjustment

**PNEUMATIC HEIGHT ADJUSTMENT:** The Class 4 pneumatic height adjustment has stroke of 100.3 cm

**PEDESTAL ASSEMBLY:** The pedestal is made of high-pressure die-cast polished aluminum with a buffed outside surface and black color-coated internal surface, it is fitted with 5 castors and has a pitch-center diameter of 67.5/10.5 cm (77.5/10 cm with castors).

**TWIN WHEEL CASTORS:** The twin wheel castors are injection moulded in Black polyamide.

WIDTH (W) - 69.0cm

DEPTH (D) - 77.8cm

HEIGHT (H) - 123.5-133.5cm

SEAT HEIGHT (SH) - 49.5-59.5 cm.

#### 169. Mid Back Chair for Principal, Director Room



Providing, supplying and placing of Full Back Chair. **SEAT ASSEMBLY:** The seat is made up of 12mm thick MR Grade plywood, layered with pocket spring coms, super soft foam of 32

kg/m<sup>3</sup> density and edging foam of 28 kg/m<sup>3</sup> density. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

**BACK ASSEMBLY:** The back assembly is made up of a combination of pinewood members, 12mm thick MR Grade

plywood and 2mm thick cardboard, layered with slab stock foam of 28 kg/m<sup>3</sup> density. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette

**ARMPAD ASSEMBLY:** The armrest assembly is made up of 6mm thick MR Grade plywood fixed with MS powder-coated

brackets, layered with foam of 60 kg/m<sup>3</sup> density, A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

**CENTER TILT WITH MULTI POSITION LOCK MECHANISM:** The mechanism is designed with the following features:

360 revolving type

3 position locking

Tilt tension adjustment

**PNEUMATIC HEIGHT ADJUSTMENT:** The Class 4 pneumatic height adjustment has stroke of 100.3 cm

**PEDESTAL ASSEMBLY:** The pedestal is made of high-pressure die-cast polished aluminum with a buffed outside surface and black color-coated internal surface, it is fitted with 5 castors and has a pitch-center diameter of 67.5x10.5 cm (77.5x10 cm with castors).

**TWIN WHEEL CASTORS:** The twin wheel castors are injection moulded in Black polyamide.

**WIDTH (W) - 69.0cm**

**DEPTH (D) - 77.8cm**

**HEIGHT (H) - 105.0-115.0 cm**

**SEAT HEIGHT (SH) - 49.5-59.5 cm..**

#### 170. High Back Chair for Director Student Affairs



Providing, supplying and placing of High Back Chair. SEAT/BACK ASSEMBLY : The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette

Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

HIGH BACK SIZE: 47.7 cm. (W) x 76.4 cm

ARMRESTS : The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

ACTIVE BIO-SYNCHRO MECHANISM : The adjustable tilting mechanism should be designed with the following features:

- 360° revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminium black powder coated.

SEAT DEPTH ADJUSTMENT : Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm.

ADJUSTABLE BACK SUPPORT: Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.

PNEUMATIC HT. ADJUSTMENT: The pneumatic ht adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

PEDESTAL ASSEMBLY: The pedestal should be High Pressure Die cast polished Aluminium and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$  cm. pitch-center dia. ( $75.0 \pm 1.0$  cm. With castors.)

TWIN WHEEL CASTORS: The twin wheel castors should be injection moulded in black PP having  $6.0 \pm 0.1$  cm wheel Diameter.

Overall Dimensions of Chair

Seat Height -43.1-53.1cm

Height -112.7-130.2cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm **High back chair as approved by engineer in-charge/employer.**

171. MID Back Chair 2 for PA office, Work table



Providing, supplying and placing of Mid Back Chair. SEAT/BACK ASSEMBLY : The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette.

Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

MID BACK SIZE: 47.7 cm. (W) x 60.1 cm. (D)

ARMRESTS : The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

ACTIVE BIO-SYNCHRO MECHANISM : The adjustable tilting mechanism should be designed with the following features:

- 360' revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminum black powder coated.

SEAT DEPTH ADJUSTMENT: Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm.

ADJUSTABLE BACK SUPPORT: Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.



**PNEUMATIC HT. ADJUSTMENT:** The pneumatic ht adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

**PEDESTAL ASSEMBLY:** The pedestal should be High Pressure Die cast polished Aluminum and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$ cm. pitch-center dia. ( $75.0 \pm 1.0$ cm. With castors.)

**TWIN WHEEL CASTORS:** The twin wheel castors should be injection molded in black PP having  $6.0 \pm 0.1$ cm wheel Diameter.

Overall Dimensions of Chair

Seat Height -43.1-53.1cm

Height -96.5-114.0.cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm, **Mid back chair as approved by engineer in-charge/employer.**

172. Chair for Work table/work station.



Providing, supplying and placing of High Back Chair. **SEAT/BACK ASSEMBLY:** The back is made up of  $1.2 \pm 0.1$ cm. thick hot-pressed plywood & seat is made up of  $1.5 \pm 0.1$ cm. thick hot-pressed plywood measured and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam is designed with contoured foam lumbar support. The seat has extra thick foam on front edge to give comfort to popliteal area.

The chair seat & back size are

HIGH BACK SIZE 51.5 cm. (W) x 82.0 cm. (H)

SEAT SIZE 53.5 cm. (W) x 51.0 cm. (D)

**HIGH RESILIENCE (HR) POLYURETHANE FOAM:** The HR polyurethane foam is moulded with density =  $45 \pm 2$  kg/m<sup>3</sup> and hardness load  $14 \pm 2$  kgf as per IS:7888 for 25% compression.

**ARMRESTS :** The adjustable armrest is designed with the following features

- Up-Down adjustment- 6 steps ( $7.2 \pm 0.5$ cm range)
- Armrest top is mounted on Armrest structure made of glass filled Nylon.
- Armrest Top is PU moulded over glass filled Nylon insert.

CENTER TILT SYNCHRO MECHANISM WITH MULTI LOCK : The mechanism is designed with the following features:

- 360° revolving type.
- 3 position locking with anti shock mechanism.
- Tilt tension adjustment

PNEUMATIC HEIGHT ADJUSTMENT : The pneumatic height adjustment has an adjustment stroke of  $9.5 \pm 0.3$  cm

PEDESTAL ASSEMBLY : The pedestal is injection moulded in black glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal is  $66.1 \pm 0.5$ cm. pitch-center dia. ( $76.1 \pm 1.0$ cm with castors).

TWIN WHEEL CASTORS : The twin wheel castors are injection moulded in Black Nylon.

WIDTH (W): 76.1 CM.

DEPTH (D): 76.1 CM.

HEIGHT (H): 113.5-123.5 CM.

SEAT HEIGHT (SH): 46.0-56.0 CM. **Chair as approved by engineer in-charge/employer.**

### 173. Demonstration Chair With Tablet (Demo Room)



compound which is upholstered with fabric upholstery covers and moulded Polyurethane foam.

The Back is injection moulded in glass filled Polypropylene compound which is upholstered with

Mesh fabric (Refer colour chart for seat & Back upholstery in product catalog).

\* SEAT SIZE : 50.0cm. (W) x 48.0 cm. (D)

\* BACK SIZE : 53.0 cm. (W) x 39.0cm. (H)

HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane seat foam is moulded with density  $45 \pm 2$  kg/m<sup>3</sup> and hardness  $16 \pm 2$  kgf as per IS:7888 for 25% compression.

3. M.S. POWDER COATED FRAMES FOR 4 LEG CHAIRS :The powder coated ( DFT  $50 \pm 10$  microns) welded tubular main frame is made from  $\varnothing 2.54 \pm 0.03$  cm x  $0.2 \pm 0.016$  cm and

$\varnothing 1.6 \pm 0.3$ mm x  $0.16 \pm 0.0128$ cm M.S. E.R.W tube. The  $\varnothing 1.9 \pm 0.3$ mm x  $0.12 \pm 0.0096$  cm

M.S.E.R.W. tube used as connecting member between LH & RH frames.

Desklet support frame is made from  $\varnothing 2.22 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm and welded to main frame.

ARMREST : The Armrest are made of glass filled Polypropylene compound and assembled over the tubular frame.

QUARTER DESKLET: The 'L' shape desklet is made of  $1.8 \pm 0.05$ cm. thk. pre-laminated particleboard with  $0.2 \pm 0.05$ cm. thk. injection moulded PolyPropylene all around. Desklet has

Front and back adjustment of  $8.0$  cm  $\pm 0.5$  cm

OUTER DIMENSION:  $31.5 \pm 0.1$ cm. (W) X  $47.0 \pm 0.1$ cm. (D) WIRE TRAY: The paper tray is made of  $\varnothing 0.5 +0/-0.005$ cm. M.S. rod which is welded to

form a mesh-type structure. It is powder coated ( DFT  $50 \pm 10$  microns ). It will retro fit to Relax

with desklet chair.

SIZE:  $40.5$ cm. (W) X  $29.8$ cm. (D) X  $18.0$  cm (H).

TWIN WHEEL CASTORS: The twin wheel castors are injection moulded in Black Poly Amide.

WIDTH (W):  $59.0$  CM.

DEPTH (D):  $76.0$  CM.

HEIGHT (H):  $86.5$  CM.

SEAT HEIGHT (SH):  $46.0$  CM.

#### 174. 3-Seater Waiting Chair



Providing, supplying and placing of waiting chair. SEAT SHELL :The seat shell should be a welded assembly of seat,back and side frame. The seat and back should be made of  $0.12 \pm 0.013$ cm thk CR steel sheet with oblong perforations.They should be welded to sideframe of size  $3.2 \pm 0.05$ cm x  $0.5 \pm 0.05$  cm thk HR steel.The welded assembly should be powder coated ( DFT  $40-60$  microns ).

The seat has a front water fall edge to provide popliteal clearance for comfortable seating. It also has a buttock support curve that not only provides rear support but also prevents small children from falling through the gap between seat and back. Clean and flat surfaces

of seat and back aids in easy maintenance. \* SEAT SIZE : 47.8 cm (W) x 44.6 cm (D) \* BACK SIZE : 41.6 cm (W) x 23.0 cm (H) Understructure assembly should be made of connecting beam and leg assembly made of M.S. E.R.W. oblong tube of size  $7.5 \pm 0.03$  cm x  $2.5 \pm 0.03$  cm x  $0.2 \pm 0.016$  cm thk. The welded structure assembly should be powder coated ( DFT 40-60 microns ). The leg assembly should be fitted with shoes and levellers in Nylon. The leg structure should be designed with minimal contact close to ground providing easy access for cleaning purposes. The shoes fitted to leg assembly help in aligning the structure for back to back arrangements. Levellers take care of uneven flooring. Connecting beam should be fitted with snap locking end cap. It also aids in side-by-side understructure alignment.

Armrest assembly should be made of armrest frame and armrest pad. The armrest frame should be made up of size  $3.175 \pm 0.05$  cm x  $0.47 \pm 0.027$  cm thk HR steel and it should be powder coated ( DFT 40-60 microns ). Armrest pad should be injection molded in Nylon and should be fitted onto the armrest frame.

Overall Dimensions of Chair

Seat Height - 44.1 cm.

Height - 78.5 cm.

Width & Depth of Chair as - Width-169.5cm and Depth-63.8 cm.

The cushions for seat and back should be made up of  $1.5 \pm 0.1$  cm thk foam on a flat MR grade ply  $0.8 \pm 0.04$  cm thk and should be upholstered with leatherite.

#### 175. Two-seater Sofa



Supply and Installation of Two-Seater Sofa Providing, supplying and placing of 2 Seater Sofa.

Dimensions W x H x D (cm)-132.5 x 83.5 x 81.5

Upholstery

- Material : PVC
- Shade : Coffee Brown
- Thickness : 1 mm

Frame :

- Material : Pine Wood
- Moisture content : 10 - 12 %
- Thickness of Plywood used : 12 mm & 18 mm

Seat Foam :

- Material : Slab stock

- Density : 32 kg/m<sup>3</sup> at seat
- Back cushion :
- Conjugated hollow fiber (recron)
- Armrest :
- Conjugated hollow fiber (recron)
- Webbing :
- Material : Nylon
- Legs :
- Material : PVC

### 176. Three-Seater Sofa



Providing, supplying and placing of 3 Seater Sofa.

Dimensions W x H x D (cm)-176.5 x 83.5 x 81.5

Upholstery

- Material : PVC
- Shade : Coffee Brown
- Thickness : 1 mm

Frame :

- Material : Pine Wood
- Moisture content : 10 - 12 %
- Thickness of Plywood used : 12 mm & 18 mm

Seat Foam :

- Material : Slab stock
- Density : 32 kg/m<sup>3</sup> at seat

Back cushion :

- Conjugated hollow fiber (recron)

Armrest :

- Conjugated hollow fiber (recron)

Webbing :

- Material : Nylon

Legs :

- Material : PVC

177. Central table. Center Table



Providing and supplying center table Providing, supplying and placing of Coffee Table

Dimensions W x H x D (cm)

Overall Size : Width : 119.9cm Depth : 59.9cm Height : 45cm

Primary Material - Plywood

Finish Color - Walnut

Maximum Load Capacity (kg) - 50

Wheels Included - **No center table as approved by engineer in-charge/employer.**

178. Corner Table



Providing and supplying center table Providing, supplying and placing of Coffee Table.

Overall Size :

Width : 60cm

Depth : 60cm  
Height : 45cm  
Primary Material - Plywood  
Finish Color - Walnut  
Net Weight (kg) - 12  
Warranty - 1 Year  
Maximum Load Capacity (kg) - 30  
Style - Contemporary & Modern **corner table as approved by engineer in-charge/employer.**

#### 179. Steel Almirah



Providing, supplying and placing of storage unit.  
Overall size shall be 900mm(W)x450mm(D)x1830mm(H) . The construction shall be rigid knock down construction and Material used shall be prime quality CRCA steel - panels from 0.6 mm thick & front frame . Shelf shall be 0.8 mm thick .Configuration (Door) shall be full height steel hinged door . Locking shall be Plastic Recessed Handle cum Cam lock with 3 way locking mechanism with shooting bolt arrangement . Height wise adjustable shelf mounting , Uniformly distributed load capacity per each full shelf shall be 80 Kg maximum . For Plain 4 Nos. of adjustable full shelves . The top shall be metal and Epoxy Powder coated finish to the thickness of 50 microns .



## 180. Steel Almirah with glass door



Providing, supplying and placing of full height storage.

Overall Dimensions of VSDU - 8 shall be 900mm(W)x450mm(D)x1830mm(H). The top shall be Metal top (1 mm add in unit height ) .The Rigid Knock Down Construction , Back , Sides and Door shall be made from 0.7 mm high yield strength CRCA ,rest in 0.8 mm CRCA . CRCA - 'D' Grade as per IS-513 . Sliding door arrangement shall have sliding door wth top hanging arrangement to prevent derailment . Each door shall be provided with 2 plastic roller having steel ball bearing for smooth movement of door & less noise .VSDU 8 shall have glass door for visibility of the content . Locking shall be 5 lever cam lock for safe locking . Handle shall be plastic flush & recessed handle . Shelving shall have Height wise adjustable shelf mounting . Uniformly Distributed Load Capacity of the shelf is 40 Kg maximum . VSDU - 8 shall have 4 no. of adjustable full shelves . Accessories optional shall be cradle with pipes for hanging godrej instadex files . Leveler shall be screw type leveler with hex plastic base and overall finish shall be epoxy polyester coated to the thickness of 50 microns . For VSDU 8 - A4 size box file can be stored vertically on four shelves and clear space above fifth shelf is 220 mm. Almirah as **approved by engineer in-charge/employer**

181. Stainless steel Dustbin



Supply and Installation of SS Dustbin with Lid and Handel- Dimension to be 10"X 14 " Weight to be 1.2 KG and capacity 15 Liter. Material Non-Magnetic stainless steel 202, Thickness of wall is 0.8 mm, leg operated or as approved by Engineer/Employer.

182. Dustbin Large



Supply and installation of large dustbin (100 Liters) shall be

Heat resistant

UV stabilized

Made of High-Density Polyethylene (HDPE) material Injection molded

- Leg Operated

-Dead weight approx. (kg) -10.5

-Useful load (kg)- 60

- Overall height (mm)- 940

- Overall width (mm) 480

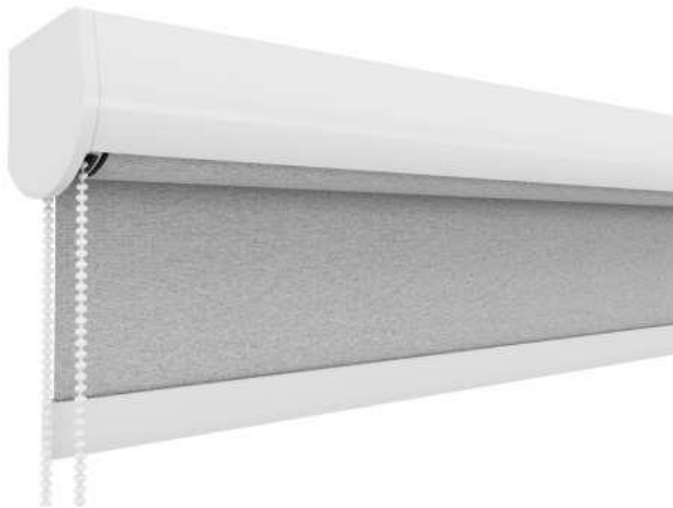
- Overall depth (mm)-550

- Upper edge comb (mm)-870

- Wheel diameter (mm)-200

or as approved by Engineer/Employer.

183. Roller Blind Curtain.



Providing & Fixing up of Window curtain (Roller blind) Black out/translucent type in required sizes having the following specification:

Mounting Bracket: Mounting hardware brackets, universal brackets including end plug bracket should come with lock down retainer device. Metal brackets provided should come in powder coated finish. All installation brackets made of stamped and hardened steel allowing a 46mm projection from the wall, ceiling and side fitting with screws and end cap covers.

Cassette: It is a cover for blinds installed outside the window frame to hide tube brackets and mechanism. This is aluminum extruded rail made up of high strength aluminum alloy, which is covered with matching fabric. For 38 mm grooved roller tube cassette size should be 100mm (Width)\*100mm (Height) and having weight =1200gm/running meter ( $\pm 5\%$ ).

Cassette Ceiling Bracket: This is made up of carbon Steel, DIN Standard Steel, Thickness: 1.0mm, Powder Coating Thickness: 0.15mm to 0.20mm. This provides near invisible fixing of the cassette.

Cassette system end caps: It should have minimum 2.5mm thickness plastic end cap and should be in coordination with the blind fabric color.

Roller Tube: This is made up of High Strength Aluminum Alloy Extruded grooved tube having outer diameter 38mm(+/-1mm) & thickness 1.25mm (+/-5%) as per AA6063 Alloy. Tubes must come in natural anodized finish. To achieve greater reinforcement anodized tubes must have at least six internal ribs so that additional tensile strength can be achieved and allowing provision for secured placements of clutch and end plug.

Roller tube brackets: Spring steel metal brackets powder coated in matching finish to be used on both ends to support the roller system. Brackets can be top or face fixed.

Control Unit: Blinds mechanism must have the control clutch drive unit with engineered heavy duty chain drive pulley operating system consisting of gear clutch housing and locking plug containing at least 6 ribs and inserted into a minimum of 38mm dia. roller tube. Clutch has to be self-lubricating with safety pins for secure bracket installation and unlocking pin for quick manual removal. Provided clutch system must allow convenience in operation for large windows to the smallest windows. The control unit should be made up of polypropylene material using injection molding method. Gearing Ratio: 1.75:1 to reduce operating force for larger blinds. 24nos Sprocket for 38mm diameter roller tube. Control unit is operated directionally by the use of beaded endless chain to raise and lower the blind smoothly.

Idler: Tube bearing plug idler should have the properties of self-lubricating spring-loaded plastic bearing end plug with positive locking wheel that allows for adjustment and provides a secure installation and removal of blinds. Tube bearing plug should contain at least 6 ribs and inserted a tube not less than 38mm roller tube. Idler is of high strength reinforced plastic, consisting of an outside sleeve and center shaft. Sleeve provide bearing surface for center shaft and rotate freely, providing smooth, quiet and long wearing operation. It is a Part of Control Unit Assembly.

Bottom Rail: This is made up of extruded aluminum bottom bar having powder coating of 55 microns and wall thickness of  $\pm 1.2\text{mm}$  ( $\pm 0.1$ ) and width of 26.5mm( $\pm 1\text{mm}$ ) and height of 33.5mm( $\pm 1\text{mm}$ ) and weight: 380gm/mtr ( $\pm 5\%$ ). All bottom rails should come with powder coated finish with an end cover perfectly in matching with the fabric.

Bottom bar also includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines and dimensions of concealed bottom bar rod specified as inner diameter: 10.8mm, outer diameter: 14.8mm, Weight: 219gm/mtr, Thickness: 1mm ( $\pm 5\%$ ) should be provided with matching cover.

Concealed bottom bar rod: Bottom bar includes concealed bottom bar rod to allow fabric to roll as per duplex guidelines. Aluminum bottom bar rod made up of AA6063alloy having Rod I/D: 10.8mm, O/D:14.8mm, Weight: 219gm/mtr, Thickness: 1mm ( $\pm 5\%$ ) with the covered matching.

Bottom bar end caps: End caps of bottom bar should be made up of ABS material using Injection molding method having perfect push fit with the bottom bar. The dimensions of end caps of bottom bar specified as length: 18mm, width: 27.5mm, height: 34.5mm, thickness 2mm and end caps of bottom bar should also have polyurethane bush to fit in bottom tube for smooth operation of blinds.

Operating chain: Blinds set is to be driven by a ball chain pulley and ball chain and can be positioned at Right hand or Left-hand side of the blinds set. This is made of 4.5 mm plastic beads molded on 2.0 mm thick polyester cord. The chain drives the sprocket fixed in the end control unit to close and open the blind. The pitch of the chain corresponds to the sprocket in perfect match for trouble free operation. Average number of balls on chain should be 50 per foot length. Plastic chain should provide ease in operation with chain connector and polycarbonate stopper of O/D:6mm & I/D: 4mm to avoid reverse rolling of fabric over tube and protecting damages to blind fabric.

Cord Weight: It should have suitable acrylic clear cord weight to suit the operating chain. Thickness: 14mm, width: 30mm and height: 80mm.

Note: The control unit & cassettes shall be made with matching color of blind with aesthetically pleasing matching look of room.

The fabric shall be selected from best quality fabric. The fabric shall have properties such as acoustic control, anti-fungal and anti-microbial. Sheer fabrics shall allow in maximum amount of light (20-100% light transmission), whilst still preserving privacy and Dim out (Privacy fabrics) (1 – 19% light transmission) allow in restricted amount of light, whilst ensuring complete privacy, even in the evening. Blackout fabric shall completely block out sunlight, for complete privacy, room darkening and temperature regulation (0% light transmission).

The fabric color as approved by employer, The weighted composition of fabric shall be made of 100% Polyester woven fabric with a openness factor of 3%. The fabric shall have a weight of 168 GSM ( $\pm 5$  GSM). The solid depth of fabric shall be 75mm and sheer depth shall be 50mm. Light fastness shall be 4-5 Grade tested in accordance with BS EN ISO 105-B01:1999, **Roller Blind Curtain as approved by engineer in-charge/employer.**

## Technical Specification for IMA Office and Autopsy Block (BOQ item No. 184 to 200)

### 184. Steel Almirah



Providing, supplying and placing of storage unit.

Overall size shall be 900mm(W)x450mm(D)x1830mm(H) . The construction shall be rigid knock down construction and Material used shall be prime quality CRCA steel - panels from 0.6 mm thick & front frame . Shelf shall be 0.8 mm thick .Configuration (Door) shall be full height steel hinged door . Locking shall be Plastic Recessed Handle cum Cam lock with 3 way locking mechanism with shooting bolt arrangement . Height wise adjustable shelf mounting , Uniformly distributed load capacity per each full shelf shall be 80 Kg maximum . For Plain 4 Nos. of adjustable full shelves . The top shall be metal and Epoxy Powder coated finish to the thickness of 50 microns .

### 185. Three-Seater Sofa



Providing, supplying and placing of 3 Seater Sofa.

Dimensions W x H x D (cm)-176.5 x 83.5 x 81.5

Upholstery

- Material : PVC
- Shade : Coffee Brown
- Thickness : 1 mm

Frame :

- Material : Pine Wood
- Moisture content : 10 - 12 %
- Thickness of Plywood used : 12 mm & 18 mm

Seat Foam :

- Material : Slab stock
- Density : 32 kg/m<sup>3</sup> at seat

Back cushion :

- Conjugated hollow fiber (recron)

Armrest :

- Conjugated hollow fiber (recron)

Webbing :

- Material : Nylon

Legs :

- Material : PVC



## 186. Two-seater Sofa



Supply and Installation of Two-Seater Sofa Providing, supplying and placing of 2 Seater Sofa.

Dimensions W x H x D (cm)-132.5 x 83.5 x 81.5

Upholstery

- Material : PVC
- Shade : Coffee Brown
- Thickness : 1 mm

Frame :

- Material : Pine Wood
- Moisture content : 10 - 12 %
- Thickness of Plywood used : 12 mm & 18 mm

Seat Foam :

- Material : Slab stock
- Density : 32 kg/m<sup>3</sup> at seat

Back cushion :

- Conjugated hollow fiber (recron)

Armrest :

- Conjugated hollow fiber (recron)

Webbing :

- Material : Nylon

Legs :

- Material : PVC

187. Center Table



Providing and supplying center table Providing, supplying and placing of Coffee Table

Dimensions W x H x D (cm)

Overall Size : Width : 119.9cm Depth : 59.9cm Height : 45cm

Primary Material - Plywood

Finish Color - Walnut

Maximum Load Capacity (kg) - 50

Wheels Included - **No center table as approved by engineer in-charge/employer.**

188. Corner Table



Providing and supplying center table Providing, supplying and placing of Coffee Table.

Overall Size :

Width : 60cm

Depth : 60cm

Height : 45cm

Primary Material - Plywood

Finish Color - Walnut

Net Weight (kg) - 12

Warranty - 1 Year

Maximum Load Capacity (kg) - 30

Style - Contemporary & Modern **corner table as approved by engineer in-charge/employer.**

189. Stainless steel Dustbin



Supply and installation of Stainless steel Dustbin with Lid and foot operated- Dimension to be 10" X 14" Weight to be 1.2 KG and capacity 15 Liter. Material Non Magnetic Stainless steel (SS 202 grade), Thickness of wall 1.2 mm, or **Stainless steel Dustbin approved by Engineer/Employer.**

190. Work Station



Providing and placing WISH spine based modular workstation, with partition .thickness as 52.4 mm thk and ht - 1200 including powder coated aluminium trims.SPLIT Tiles on main

spine: Combination of two finishes for the top tiles on the user side shall be split fabric tackable along with split white board. • FABRIC TACKABLE BLOCKS:

These shall be made from 18mm thick PLB battens which hold 3mm MDF in between. 6mm thick PE foam shall be pasted on 3mm thick MDF and this assembly shall be upholstered with approved shade of fabric on both sides using adhesive. • WHITEBOARD BLOCKS:

These shall be made of 16mm thick particle board laminated with 0.6mm thick white glossy high pressure laminate on both sides and having all its edges with minimum 0.5 mm thick PVC edging. INTERMEDIATE BLOCKS on main spine Intermediate blocks are given in fabric + DL finish. • LAMINATE FINISH BLOCKS: Laminate finish blocks shall be made from 18mm thick particle board (PLT), clad with 1mm thick laminate of approved shade. These shall be made from 18mm thick ppb/plb upholstered with 1mm thick approved shade of fabric using adhesives. Bottom Tile plain metal. • METAL FINISH BLOCKS:

Metal finish blocks shall be made from two components of 0.8 mm thick M.S. CRCA Grade D as per IS: 513 powder coated with epoxy polyester finish. WORKTOP 25 MM THICK LAMINATED (with PVC edge band):

Work top shall be made of 25mm thick Plain particle board of interior grade (As per IS: 12823) as a Substrate. The top shall be laminated with laminate of 0.6 mm thickness of approved shade as per IS: 2046-1995. Bottom shall have a backing laminate of 0.6 mm thickness. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC edge band glued with hotmelt EVA glue. The single side legs shall be used for supporting panels & work surface on one side only. Single side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm. This shall be coated with min. 45-micron thickness of epoxy powder coating. The double side legs shall be used for supporting panels & work surface on both sides. Double side legs shall be fabricated by CO2 welding MS Tube of section 38 mm x 25 mm (IS: 7138 ERW Tube) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5 mm HR) over which an M8 Leveler shall be fitted, which shall allow for adjustment of the height by 50mm and coated with min. 45-micron thickness of epoxy powder coating. Cable duct shall be made from 0.8 mm thick M.S. CRCA Grade D as per IS: 513 - 1994. It is constructed with two parts; one is body & another is cover. It holds the cables & gives aesthetic appearance by covering all cables entry, which are moving upward to the panels. Size of Cable duct is 107mm W X 154 mm H X 21 mm D.

**Work station as approved by engineer in-charge/employer**

## 191. IMA Office Cabin Table



Supplying and placing in position Main table of the following specifications. Its size shall be 1800 Width mm x 900 Depth mm x 740 Height mm .Table top shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick backing laminate (bdl) .Flat edge Duly sealed with 2 mm thick PVC beading. The modesty shall be 18 mm thick plain particle board ( ) PPB Clad with 1.0 mm thick decorative laminate (DL) on both sides. Edge Sealed with 2 mm thick PVC beading..

Supplying and placing in position ERU of the following specifications. Its size shall be 1550 Width x 450 Depth x 705 Height. The top of ERU shall be 25 mm thick plain particle board (PPB) Clad with 0.6 mm thick post formed laminate and 1 mm thick Backing Laminate ( BDL). Flat Edge duly sealed with 2 mm thick PVC beading. The Modesty shall be 18 mm thick plain particle board (PPB) Clad with 1.0 mm thick Decorative Laminate (DL) on both sides. Edge sealed with 2 mm thick PVC Beading.

Supplying and placing in position Free Standing Pedestal of the following specifications with Overall Dimensions shall be 390mm(W)x440mm(D)x646mm(H). The construction & Material used shall be welded assembled , 0.8 mm thick CRCA for body shell , drawer front & tray , front side stiffener , rear aide stiffener and 1.2 mm thick CRCA Top stiffener & Bottom stoffener . The drawer fronts shall be metal front straight edge . Locking shall be 10 lever cam lock & Central RH locking with actuator & lock channel mechanism for box-box-file Pedestal . The top panel shall be metal straight edge top . Castor should be swiveling non - lockable castors mounted below the body shell for free standing full height mobile pedestal and M8 Leveling stud for free standing pedestal . The anti-tipping mechanism shall have fifth roller arrangement mounted below file drawer to avoid toppling of unit when file drawer is pulled out . Partition in drawer shall be 1 no. Partition in box drawers with lock mounted . Plastic pencil tray shall be optional accessory . Finish shall be epoxy polyester

powder coated to the thickness of 50 microns . Application shall be suitable for pushing below work surface which has got a clear height of 725 mm from below . For drawer pulling side wise tapered recess provided in shell behind drawer fronts .

#### 192. Mid Back chair



Providing, supplying and placing of High Back Chair. SEAT/BACK ASSEMBLY: The back is made up of  $1.2 \pm 0.1$ cm. thick hot-pressed plywood & seat is made up of  $1.5 \pm 0.1$ cm. thick hot-pressed plywood measured and upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam is designed with contoured foam lumbar support. The seat has extra thick foam on front edge to give comfort to popliteal area.

The chair seat & back size are

HIGH BACK SIZE 51.5 cm. (W) x 82.0 cm. (H)

SEAT SIZE 53.5 cm. (W) x 51.0 cm. (D)

HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam is moulded with density =  $45 \pm 2$  kg/m<sup>3</sup> and hardness load  $14 \pm 2$  kgf as per IS:7888 for 25% compression.

ARMRESTS : The adjustable armrest is designed with the following features

- Up-Down adjustment- 6 steps ( $7.2 \pm 0.5$ cm range)
- Armrest top is mounted on Armrest structure made of glass filled Nylon.
- Armrest Top is PU moulded over glass filled Nylon insert.

CENTER TILT SYNCHRO MECHANISM WITH MULTI LOCK : The mechanism is designed with the following features:

- 360° revolving type.
- 3 position locking with anti shock mechanism.
- Tilt tension adjustment

PNEUMATIC HEIGHT ADJUSTMENT : The pneumatic height adjustment has an adjustment stroke of  $9.5 \pm 0.3$  cm

PEDESTAL ASSEMBLY : The pedestal is injection moulded in black glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal is  $66.1 \pm 0.5$ cm. pitch-center dia. ( $76.1 \pm 1.0$ cm with castors).

TWIN WHEEL CASTORS : The twin wheel castors are injection moulded in Black Nylon.

WIDTH (W): 76.1 CM.

DEPTH (D): 76.1 CM.

HEIGHT (H): 113.5-123.5 CM.

SEAT HEIGHT (SH): 46.0-56.0 CM. **Chair as approved by engineer in-charge/employer.**

### 193. Office table 1800 mm



Supplying and placing in position Main Table,ERU & pedestal of the following specifications. 1800x2100x750 Primary Work Surface Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top Soft closing access flap with in-built power box are provided on work surface for wire management

Secondary Work Surface Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top.

Modesty Panel Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top.

Under structure Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

Integrated Pedestal Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade

confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.

Drawer fronts made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top

Pedestal construction is BOX-BOX-FILE type which Uses powder coated 400 MM long metal Panel Drawer Slides. Drawer extension is 325 MM.

Drawers have a soft closing & anti slam mechanism.

Handles are provided for ease of opening.

Pedestals are provided with lock for security.



## 194. Director Office High Back Chair



Providing, supplying and placing of High Back Chair. SEAT ASSEMBLY: The seat is made up of 12mm thick MR Grade plywood, layered with pocket spring coms, super soft foam of 32 kg/m<sup>3</sup> density and edging foam of 28 kg/m<sup>3</sup> dormity. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

BACK ASSEMBLY: The back assembly is made up of a combination of pinewood members, 12mm thick MR Grade plywood and 2mm thick cardboard, layered with slab stock foam of 28 kg/m<sup>3</sup> density. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette

ARMPAD ASSEMBLY: The amped assembly is made up of 6mm thick MR Grade plywood fixed with MS powder-coated brackets, Inyered with foam of 60 kg/m<sup>3</sup> density, A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

CENTER TILT WITH MULTI POSITION LOCK MECHANISM: The mechanism is designed with the following features:

360 revolving type

3 position locking

Till tension adjustment

PNEUMATIC HEIGHT ADJUSTMENT: The Class 4 pneumatic height adjustment has stroke of 100.3 cm

PEDESTAL ASSEMBLY: The pedestal is made of high-pressure die-cast polished aluminum with a buffed outside surface and black color-coated internal surface, it is fitted with 5 castors and has a pitch-center diameter of 67.510.5 cm (77.5 10 cm with castors).

TWIN WHEEL CASTORS: The twin wheel castors are injection moulded in Black polyamide.

WIDTH (W) - 69.0cm

DEPTH (D) - 77.8cm  
HEIGHT (H) - 123.5-133.5cm

SEAT HEIGHT (SH) - 49.5-59.5 cm.

195. Mid Back Chair for Principal, Director Room



Providing, supplying and placing of Full Back Chair. SEAT ASSEMBLY: The seat is made up of 12mm thick MR Grade plywood, layered with pocket spring coms, super soft foam of 32 kg/m<sup>3</sup> density and edging foam of 28 kg/m<sup>3</sup> dormity. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

BACK ASSEMBLY: The back assembly is made up of a combination of pinewood members, 12mm thick MR Grade plywood and 2mm thick cardboard, layered with slab stock foam of 28 kg/m<sup>3</sup> density. A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette

ARMPAD ASSEMBLY: The amped assembly is made up of 6mm thick MR Grade plywood fixed with MS powder-coated

brackets, Inyered with foam of 60 kg/m<sup>3</sup> density, A 200GSM soft touch fibre fill sheet is placed over foam sub-assembly and upholstered in natural leather or leatherette.

CENTER TILT WITH MULTI POSITION LOCK MECHANISM: The mechanism is designed with the following features:

360 revolving type

3 position locking

Till tension adjustment

**PNEUMATIC HEIGHT ADJUSTMENT:** The Class 4 pneumatic height adjustment has stroke of 100.3 cm

**PEDESTAL ASSEMBLY:** The pedestal is made of high-pressure die-cast polished aluminum with a buffed outside surface and black color-coated internal surface, it is fitted with 5 castors and has a pitch-center diameter of 67.510.5 cm (77.5 10 cm with castors).

**TWIN WHEEL CASTORS:** The twin wheel castors are injection moulded in Black polyamide.

**WIDTH (W) - 69.0cm**

**DEPTH (D) - 77.8cm**

**HEIGHT (H) - 105.0-115.0 cm**

**SEAT HEIGHT (SH) - 49.5-59.5 cm..**

#### 196. office Table



Supplying and placing in position Main table of the following specifications. The Main table shall be of size 2100 Width mm x 1050 mm Depth x 750 mm height. Top surface of the table shall made up of MDF (Medium density fibre ) board duly finished with Veneer and final coating of PU. The Main desk should contain in built key board pull out tray for keeping keyboard of computer. The front modesty panel of the table shall be made up of MDF board of size 1640 mm x 600 mm x 16mm which shall also be duly finished with Veener and PU coating. For personal storage one mobile pedestal (3 drawer unit) shall be provided of size 510 mm Width x 635 mm Height and 445 mm Depth. The storage pedestal shall also be made up of MDF duly finished with veener & final coating of PU. The Side shall be of size 1200mm Width x 445mm Depth x 660 mm Height. The side unit shall be made up of MDF board duly finshed with Veneer and final finish by PU Coating. The design of the side unit shall be such that it can be placed on either side of the main table. The side unit shall contain open space for keeping cpu in extreme right side, one closed storage shutter at extreme left end & open space in the middle with one shelf for keeping files. The thickness of the top of the side unit shall be 25mm. Supplying and placing in position Back

unit of the following specifications. The Size of the Back unit shall be 2215mm width x 410 mm Depth x 2000mm height. The back unit shall be made up of MDF board duly finished with veneer & final finish by PU coating. Below storage shall be provided with wooden shutters & the upper left & right side of the back unit shall also be provided with wooden shutters. The middle 3 door shutters should be of glass of minimum 5mm thick for display purpose. The hardness of the PU coating shall be 1.5H

#### 197. Worktable with pedestal



Supplying and placing in position office table of the following specifications. Its size shall be 1200 Width x 600 Depth x 740 Height . The top shall be made from 25 mm thick pre-laminated board . All the edges are sealed with 2 mm thick PVC edge band all around . Side panels shall be made from 25 mm thick pre- laminated particle board . All the edges are sealed with 2 mm thick PVC edge band on the user side and 0.8 mm on the top and bottom side .The side panels have 2 glide screws each for levelling of the desk. Modesty panel shall be made from 18 mm thick pre- laminated particle board . All the edges are sealed with 0.8 mm thick PVC edge band all around. Freestanding Pedestal shall be made from 18 mm pre-laminated particle board with a combination of 2 mm and 0.8 mm PVC edge band on all the exposed surfaces as per requirement . The drawers are provided with suitable slides for smooth operation . All the pedestal drawers are centrally locked with a single key .Drawer slides are of Hettich.. **Work Table as approved by engineer in-charge/employer.**

## 198. Demonstration Chair with Tablet



compound which is upholstered with fabric upholstery covers and moulded Polyurethane foam.

The Back is injection moulded in glass filled Polypropylene compound which is upholstered with

Mesh fabric (Refer colour chart for seat & Back upholstery in product catalog).

\* SEAT SIZE : 50.0cm. (W) x 48.0 cm. (D)

\* BACK SIZE : 53.0 cm. (W) x 39.0cm. (H)

HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane seat foam is moulded with density  $45 \pm 2 \text{ kg/m}^3$  and hardness  $16 \pm 2 \text{ kgf}$  as per IS:7888 for 25% compression.

3. M.S. POWDER COATED FRAMES FOR 4 LEG CHAIRS :The powder coated ( DFT  $50 \pm 10$  microns) welded tubular main frame is made from  $\varnothing 2.54 \pm 0.03 \text{ cm} \times 0.2 \pm 0.016 \text{ cm}$  and

$\varnothing 1.6 \pm 0.3 \text{ mm} \times 0.16 \pm 0.0128 \text{ cm}$  M.S. E.R.W tube. The  $\varnothing 1.9 \pm 0.3 \text{ mm} \times 0.12 \pm 0.0096 \text{ cm}$  M.S.E.R.W. tube used as connecting member between LH & RH frames.

Desklet support frame is made from  $\varnothing 2.22 \pm 0.03 \text{ cm} \times 0.16 \pm 0.0128 \text{ cm}$  and welded to main frame.

ARMREST : The Armrest are made of glass filled Polypropylene compound and assembled over the tubular frame.

QUARTER DESKLET: The 'L' shape desklet is made of  $1.8 \pm 0.05 \text{ cm}$ . thk. pre-laminated particleboard with  $0.2 \pm 0.05 \text{ cm}$ . thk. injection moulded PolyPropylene all around. Desklet has

Front and back adjustment of  $8.0 \text{ cm} \pm 0.5 \text{ cm}$

OUTER DIMENSION:  $31.5 \pm 0.1 \text{ cm}$ . (W) X  $47.0 \pm 0.1 \text{ cm}$ . (D) WIRE TRAY: The paper tray is made of  $\varnothing 0.5 +0/-0.005 \text{ cm}$ . M.S. rod which is welded to

form a mesh-type structure. It is powder coated ( DFT  $50 \pm 10$  microns ). It will retro fit to Relax

with desklet chair.

SIZE:  $40.5 \text{ cm}$ . (W) X  $29.8 \text{ cm}$ . (D) X  $18.0 \text{ cm}$  (H).

**TWIN WHEEL CASTORS:** The twin wheel castors are injection moulded in Black Poly Amide.

**WIDTH (W):** 59.0 CM.

**DEPTH (D):** 76.0 CM.

**HEIGHT (H):** 86.5 CM.

**SEAT HEIGHT (SH):** 46.0 CM.

### 199. High Back Chair



Providing, supplying and placing of High Back Chair. **SEAT/BACK ASSEMBLY :** The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette

Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

HIGH BACK SIZE: 47.7 cm. (W) x 76.4 cm

**ARMRESTS :** The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

**ACTIVE BIO-SYNCHRO MECHANISM :** The adjustable tilting mechanism should be designed with the following features:

- 360° revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminium black powder coated.

SEAT DEPTH ADJUSTMENT : Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm.

ADJUSTABLE BACK SUPPORT: Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.

PNEUMATIC HT. ADJUSTMENT: The pneumatic ht adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

PEDESTAL ASSEMBLY: The pedestal should be High Pressure Die cast polished Aluminium and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$ cm. pitch-center dia. ( $75.0 \pm 1.0$ cm. With castors.)

TWIN WHEEL CASTORS: The twin wheel castors should be injection moulded in black PP having  $6.0 \pm 0.1$ cm wheel Diameter.

Overall Dimensions of Chair

Seat Height -43.1-53.1cm

Height -112.7-130.2cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm

200. Mid Back Chair



Providing, supplying and placing of Mid Back Chair. SEAT/BACK ASSEMBLY : The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with leatherette and moulded High Resilience (HR) Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It upholstered with Leatherette.

Seat SIZE : 47.0 cm. (W) x 48.0 cm. (D)

MID BACK SIZE: 47.7 cm. (W) x 60.1 cm. (D)

ARMRESTS : The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

ACTIVE BIO-SYNCHRO MECHANISM : The adjustable tilting mechanism should be designed with the following features:

- 360° revolving type.
- Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.
- Tilt tension adjustment can be operated in seating position.
- 5-position Tilt limiter giving option of variable tilt angle to the chair.
- Seat/back tilting ratio of 1: 2
- The mechanism housing should be made up of HPDC Aluminium black powder coated.

SEAT DEPTH ADJUSTMENT: Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of  $6.0 \pm 0.5$  cm.

ADJUSTABLE BACK SUPPORT : Back Frame should be connected to the Up/Dn mechanism housed in Plastic T spine. It can be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.

PNEUMATIC HT. ADJUSTMENT : The pneumatic ht adjustment has an adjustment stroke of  $10.0 \pm 0.3$  cm.

PEDESTAL ASSEMBLY: The pedestal should be High Pressure Die cast polished Aluminium and fitted with 5 nos. twin wheel castors. The pedestal should be  $65.0 \pm 0.5$  cm. pitch-center dia. ( $75.0 \pm 1.0$  cm. With castors.)

TWIN WHEEL CASTORS: The twin wheel castors should be injection moulded in black PP having  $6.0 \pm 0.1$  cm wheel Diameter.

Overall Dimensions of Chair

Seat Height -43.1-53.1cm

Height -96.5-114.0.cm.

Width & Depth of Chair as measured from base - Width-76.1 cm and Depth-76.1 cm



**Material Test:** Tests of all materials will be carried out as per BIS. In case it is not available in BIS the same shall be carried out as per decision given by engineer in-charge/client based on existing general practice which will be binding to the agency. The material which is not passing to BIS or any other test will be rejected. **All charges for Material Testing shall be borne by the supplier/seller.**

**Mandatory Tests to be done by Manufacturer for all Chairs:**

1. Backrest Strength Test.
3. Seating Impact test
4. Caster/Chair Base – Durability Test
5. Leg Strength Test
6. Tilt Mechanism Test
7. Footrest Durability Test
8. Arm Strength Test

**Mandatory Tests to be done by Manufacturer for all Office Table**

1. Stability Tests
2. Unit Strength Test (Distributed Proof Load Test)
3. Top Load Ease Cycle Test
4. Leg/Gabel end Strength Test
5. Durability Test for Desks and Tables with Casters
6. Wear and Fatigue Test for Hinged, Horizontal Sliding, Vertical and Horizontal Receding Doors and Tambour Doors.

**Mandatory Tests to be done By Manufacturer for all types of Storage Units**

1. Unit Strength Test
2. Racking Resistance Test
3. Vertical Load Durability Tests
4. Storage Unit Drop Test
5. Movement Durability Test for Mobile Storage Units
6. Locking Mechanism Cycle Test

**Mandatory Tests to be done By Manufacturer for work station Panel Systems**

1. Stability Tests for Panel Systems Products
2. Mechanical Strength Tests for Panel Systems Products
3. Panel Component Static Load Tests

**Mandatory Tests to be done By Manufacturer for Educational Seating (Dual Desk, Class Room Chair, Auditorium Chair, Lecture Hall Seating etc.)**

1. Stability Tests
2. Backrest Strength Test

3. Seat Static Load Test for Chair Desks and Fixed-Tablet Arm Chairs.
4. Arm Strength Test
5. Arm Durability Test
6. Leg Strength Tests
7. Tablet Arm Static Load Test
8. Chair Desk and Table Top Horizontal Surface Vertical Load Tests

**Mandatory Tests to be done By Manufacturer for Powder Coating.**

All MS components shall be epoxying polyester powder coated using the seven-chamber pre-treatment process with the powder thickness greater than 50-60 microns Dry Film Thickness.

Tests to Be Carried Out on Powder Coating: -

- Cross Cut Test- To check Adhesion
- Impact Resistance Test – To 150 kg/cm as per BS 3900/E3.
- Scratch Hardness- Up to 4 kg as per BS 3900/E2.
- Salt Spray Test.

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items           | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|-------------------------|------|----------|---|-----------------|
| 1      | Steel Almirah           | Each | 1037     |   |                 |
| 2      | Metal Single Bed        | Each | 805      |   |                 |
| 3      | Single bed Mattress     | Each | 805      |   |                 |
| 4      | Steel Study Table       | Each | 805      |   |                 |
| 5      | Study Chair             | Each | 805      |   |                 |
| 6      | Warden Cabin Table      | Each | 4        |   |                 |
| 7      | High Back Chair         | Each | 4        |   |                 |
| 8      | Visitor Chair           | Each | 8        |   |                 |
| 9      | Three Seater Sofa       | Each | 1        |   |                 |
| 10     | Two Seater Sofa         | Each | 10       |   |                 |
| 11     | Single Seater Sofa      | Each | 12       |   |                 |
| 12     | Center Table            | Each | 11       |   |                 |
| 13     | Corner Table            | Each | 12       |   |                 |
| 14     | Dining Table six-seater | Each | 32       |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items                  | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|--------------------------------|------|----------|---|-----------------|
| 15     | Dining Chair                   | Each | 710      |   |                 |
| 16     | Stainless steel Dustbin        | Each | 817      |   |                 |
| 17     | Roller Blind curtain           | Sqmt | 2350     |   |                 |
| 18     | Granite Work                   | Sqmt | 245      |   |                 |
| 19     | Kitchen Under Counter Storage  | Sqmt | 377      |   |                 |
| 20     | Kitchen Overhead Storage       | Sqmt | 313      |   |                 |
| 21     | Curtain Rod with pendent       | Rmt  | 1200     |   |                 |
| 22     | Dining Table 10 Seater         | Each | 51       |   |                 |
| 23     | Mid Back Chair                 | Each | 20       |   |                 |
| 24     | Director bungalow Office table | Each | 1        |   |                 |
| 25     | Twelve Seater Meeting Table    | Each | 1        |   |                 |
| 26     | Three Seater Sofa              | Each | 2        |   |                 |
| 27     | Two Seater Sofa                | Each | 1        |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items                    | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|----------------------------------|------|----------|---|-----------------|
| 28     | One Seater Sofa                  | Each | 2        |   |                 |
| 29     | Center Table                     | Each | 1        |   |                 |
| 30     | Corner Table                     | Each | 4        |   |                 |
| 31     | Dining Table Eight Seater        | Each | 1        |   |                 |
| 32     | Dining Chair                     | Each | 8        |   |                 |
| 33     | King size Double Bed             | Each | 4        |   |                 |
| 34     | Double Bed Mattress              | Each | 4        |   |                 |
| 35     | Bed Side Table                   | Each | 8        |   |                 |
| 36     | Wooden TV Unit                   | Each | 3        |   |                 |
| 37     | Premium Sofa Chairs for Bed Room | Each | 8        |   |                 |
| 38     | Round Table for Bed Room         | Each | 4        |   |                 |
| 39     | High Back Chair                  | Each | 2        |   |                 |
| 40     | Mid back Visitor chair           | Each | 6        |   |                 |
| 41     | Office table                     | Each | 30       |   |                 |
| 42     | Work Table for Office            | Each | 48       |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items                                       | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|---|------|----------|---|-----------------|
| 43     | High Back Chair for Cabin Table                     | Each | 30       |   |                 |
| 44     | Mid Back Chair for Cabin Table                      | Each | 188      |   |                 |
| 45     | Demo Chair with Tablet                              | Each | 832      |   |                 |
| 46     | Three Seater Waiting Chair                          | Each | 23       |   |                 |
| 47     | 2 Seater Dual desk with Cushion for Lecture Theater | Each | 240      |   |                 |
| 48     | Three Seater Sofa                                   | Each | 3        |   |                 |
| 49     | Centre Table for Ante Room                          | Each | 2        |   |                 |
| 50     | Corner Table  | Each | 3        |   |                 |
| 51     | 6-Seater Reading Table                              | Each | 76       |   |                 |
| 52     | Reading Chairs                                      | Each | 456      |   |                 |
| 53     | Steel Almirah                                       | Each | 61       |   |                 |
| 54     | Library double side Book Rack                       | Each | 69       |   |                 |
| 55     | Steel Almirah with glass shutter                    | Each | 384      |   |                 |
| 56     | Stainless Steel Dissection Table                    | Each | 22       |   |                 |
| 57     | Laboratory Stool                                    | Each | 1053     |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items  | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|--|------|----------|---|-----------------|
| 58     | Stainless Steel Dustbin  | Each | 130      |   |                 |
| 59     | Over-head storage cabinet for Laboratory                                 | Each | 1053     |   |                 |
| 60     | Roller Blind Curtain   | Sqmt | 1400     |   |                 |
| 61     | Dustbin Large  | Each | 35       |   |                 |
| 62     | Laboratory Table with Bottle Rack Single wall Side Unit with 600mm width | Each | 218      |   |                 |
| 63     | Laboratory Table with Bottle Rack Single wall Side Unit with 750mm Width | Each | 240      |   |                 |
| 64     | Laboratory Table with Bottle Rack Single wall Side Unit with 900mm Width | Each | 40       |   |                 |
| 65     | Laboratory Furniture Corner Table Single wall Side Unit                  | Each | 35       |   |                 |
| 66     | Laboratory Sink table Single wall Side                                   | Each | 168      |   |                 |
| 67     | Laboratory Island Table with Bottle Rack and storage                     | Each | 260      |   |                 |
| 68     | Laboratory Island Sink Table Both Side                                   | Each | 250      |   |                 |
| 69     | Wooden Podium  | Each | 5        |   |                 |
| 70     | Linier Work Station  | Each | 107      |   |                 |
| 71     | Cabin Table for Principal Room   | Each | 1        |   |                 |
| 72     | Cabin Table for Director Financial Room                                  | Each | 1        |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items  | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|--|------|----------|---|-----------------|
| 73     | Cabin Table For Director Student Affairs, Director Admission | Each | 7        |   |                 |
| 74     | Cabin Table for PA Office Room                               | Each | 2        |   |                 |
| 75     | High Back Chair for Principal and Director Room              | Each | 9        |   |                 |
| 76     | Mid Back Chair for Principal and Director Room               | Each | 27       |   |                 |
| 77     | High Back Chair for Director Student Affairs                 | Each | 2        |   |                 |
| 78     | MID Back Chair for PA office, Work table                     | Each | 6        |   |                 |
| 79     | Chair for Work table   | Each | 107      |   |                 |
| 80     | Three Seater Waiting Chair                                   | Each | 42       |   |                 |
| 81     | 18-Seater Meeting Table                                      | Each | 1        |   |                 |
| 82     | 23-Seater Meeting Table                                      | Each | 1        |   |                 |
| 83     | Meeting Chair  | Each | 41       |   |                 |
| 84     | Two Seater Sofa  | Each | 20       |   |                 |
| 85     | Central table  | Each | 7        |   |                 |
| 86     | Corner Table   | Each | 15       |   |                 |
| 87     | Dining Table 4 seater  | Each | 28       |   |                 |



Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items                    | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|----------------------------------|------|----------|---|-----------------|
| 88     | Dining Table 6 Seater            | Each | 10       |   |                 |
| 89     | Dining Chair                     | Each | 172      |   |                 |
| 90     | Metal Shelving Rack              | Each | 29       |   |                 |
| 91     | Personal Locker Unit             | Each | 6        |   |                 |
| 92     | Steel storage with Glass Shutter | Each | 68       |   |                 |
| 93     | Library Reading Table 4 Seater   | Each | 2        |   |                 |
| 94     | Library Reading Table 6 Seater   | Each | 52       |   |                 |
| 95     | Library Reading Chair            | Each | 320      |   |                 |
| 96     | 4 Door Bookcase                  | Each | 14       |   |                 |
| 97     | Library Rack Single Sided        | Each | 91       |   |                 |
| 98     | Library Rack Double Sided        | Each | 137      |   |                 |
| 99     | Stainless steel Dustbin          | Each | 53       |   |                 |
| 100    | Dustbin Large                    | Each | 5        |   |                 |
| 101    | Roller Blind Curtain.            | Sqmt | 500      |   |                 |
| 102    | Linier Work Station              | Each | 267      |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items  | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|--|------|----------|---|-----------------|
| 103    | L Shape work Station                                       | Each | 5        |   |                 |
| 104    | Cabin Table for Dean Room                                  | Each | 3        |   |                 |
| 105    | Cabin Table for Professor Room                             | Each | 15       |   |                 |
| 106    | Cabin Table for Security Room and Consultation Room        | Each | 36       |   |                 |
| 107    | Cabin Table for Assistant Professor Room and Store Manager | Each | 68       |   |                 |
| 108    | Work Table   | Each | 206      |   |                 |
| 109    | High Back Chair for Dean Room                              | Each | 18       |   |                 |
| 110    | MID Back Chair for Dean Room                               | Each | 57       |   |                 |
| 111    | High Back Chair for security Room and Consultation Room    | Each | 104      |   |                 |
| 112    | Mid Back Visitor Chair security Room and Consultation Room | Each | 208      |   |                 |
| 113    | Chair for Work table and work station                      | Each | 478      |   |                 |
| 114    | Demonstration Chair with Tablet                            | Each | 986      |   |                 |
| 115    | 3-Seater Waiting Chair                                     | Each | 1027     |   |                 |
| 116    | 8 Seater Meeting Table                                     | Each | 2        |   |                 |
| 117    | 18 Seater Meeting Table                                    | Each | 1        |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items                          | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|--|------|----------|---|-----------------|
| 118    | 20 Seater Meeting Table                | Each | 1        |   |                 |
| 119    | Chair for Meeting Room                 | Each | 54       |   |                 |
| 120    | 2 seater Duel Desk for Lecture theater | Each | 78       |   |                 |
| 121    | Metal Single Bed for Duty Room         | Each | 46       |   |                 |
| 122    | Single Bed Mattress                    | Each | 46       |   |                 |
| 123    | Three-Seater Sofa                      | Each | 91       |   |                 |
| 124    | Two Seater Sofa                        | Each | 206      |   |                 |
| 125    | One Seater Sofa                        | Each | 3        |   |                 |
| 126    | Center Table                           | Each | 107      |   |                 |
| 127    | Corner Table                           | Each | 176      |   |                 |
| 128    | Dining Table                           | Each | 67       |   |                 |
| 129    | Dining Chair                           | Each | 268      |   |                 |
| 130    | Steel Almirah                          | Each | 679      |   |                 |
| 131    | Metal Shelving Rack                    | Each | 203      |   |                 |
| 132    | Almirah with Glass Shutter             | Each | 196      |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items                         | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|---------------------------------------|------|----------|---|-----------------|
| 133    | 4 Drawer Personal Locker Unit         | Each | 138      |   |                 |
| 134    | Stainless steel Dustbin               | Each | 377      |   |                 |
| 135    | Dustbin Large                         | Each | 40       |   |                 |
| 136    | Fully Motorized ICU Bed With Mattress | Each | 140      |   |                 |
| 137    | Mechanical Fowler Bed with Mattress   | Each | 532      |   |                 |
| 138    | Bedside Locker                        | Each | 672      |   |                 |
| 139    | Over Bed Table                        | Each | 672      |   |                 |
| 140    | Stainless steel Stool                 | Each | 767      |   |                 |
| 141    | Saline Stand                          | Each | 532      |   |                 |
| 142    | Examination Couch                     | Each | 95       |   |                 |
| 143    | Dressing Trolley                      | Each | 68       |   |                 |
| 144    | Instrument trolley                    | Each | 68       |   |                 |
| 145    | Crash Cart                            | Each | 68       |   |                 |
| 146    | Wheel Chair                           | Each | 68       |   |                 |
| 147    | Mayo Trolley                          | Each | 20       |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items  | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|--|------|----------|---|-----------------|
| 148    | Stretcher Trolley  | Each | 24       |   |                 |
| 149    | X-Ray View Box Double  | Each | 35       |   |                 |
| 150    | Emergency Trolley  | Each | 30       |   |                 |
| 151    | Kick Bucket  | Each | 68       |   |                 |
| 152    | Sliding Fast track U pattern Curtain for ICU Bed                         | Sqmt | 1960     |   |                 |
| 153    | Modular Overhead Storage   | Each | 124      |   |                 |
| 154    | Laboratory Single wall Side Table Unit with Bottle Rack with 750mm width | Each | 50       |   |                 |
| 155    | Laboratory Single wall Side Table Unit with Bottle Rack with 600mm width | Each | 3        |   |                 |
| 156    | Laboratory Single wall Side Table Unit with Bottle Rack 900mm Width      | Each | 23       |   |                 |
| 157    | Laboratory wall side Corner Table  | Each | 17       |   |                 |
| 158    | Laboratory Sink table Single wall Side                                   | Each | 10       |   |                 |
| 159    | LAB Stool  | Each | 100      |   |                 |
| 160    | Roller Blind Curtain   | Sqmt | 2000     |   |                 |
| 161    | Optimizer storage Unit 4 Bay   | Each | 64       |   |                 |
| 162    | Optimizer storage Unit 5 Bay   | Each | 240      |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items  | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|--|------|----------|---|-----------------|
| 163    | Linier Work Station  | Each | 90       |   |                 |
| 164    | Office Table for Director Finance Room                           | Each | 8        |   |                 |
| 165    | Cabin Table for Director Student Affairs and Director Admission  | Each | 2        |   |                 |
| 166    | Cabin Table for PA Office Room                                   | Each | 29       |   |                 |
| 167    | Work Table   | Each | 1        |   |                 |
| 168    | High Back Chair For Director Finance                             | Each | 10       |   |                 |
| 169    | MID Back Chair For Director Finance And Director Student Affairs | Each | 30       |   |                 |
| 170    | High Back Chair For Director Student Affairs                     | Each | 29       |   |                 |
| 171    | MID Back Chair For Director Student Affairs                      | Each | 87       |   |                 |
| 172    | Chair for Work table and work station                            | Each | 91       |   |                 |
| 173    | Demonstration Chair  | Each | 90       |   |                 |
| 174    | 3-Seater Waiting Chair   | Each | 83       |   |                 |
| 175    | Two Seater Sofa  | Each | 33       |   |                 |
| 176    | Three Seater Sofa  | Each | 6        |   |                 |
| 177    | Central table  | Each | 4        |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No. | Name of Items                 | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|--------|-------------------------------|------|----------|---|-----------------|
| 178    | Corner Table                  | Each | 15       |   |                 |
| 179    | Steel Almirha                 | Each | 17       |   |                 |
| 180    | Steel Almirha with glass door | Each | 142      |   |                 |
| 181    | Stainless steel Dustbin       | Each | 88       |   |                 |
| 182    | Dustbin Large                 | Each | 5        |   |                 |
| 183    | Roller Blind Curtain.         | Sqmt | 600      |   |                 |
| 184    | Steel Almirah                 | Each | 20       |   |                 |
| 185    | Three Seater Sofa             | Each | 12       |   |                 |
| 186    | Two Seater Sofa               | Each | 10       |   |                 |
| 187    | Center Table                  | Each | 6        |   |                 |
| 188    | Corner Table                  | Each | 18       |   |                 |
| 189    | Stainless steel Dustbin       | Each | 18       |   |                 |
| 190    | Work Station                  | Each | 11       |   |                 |
| 191    | IMA Office Cabin Table        | Each | 6        |   |                 |
| 192    | Mid Back Chair                | Each | 12       |   |                 |

Budgetary Quotation for Supply, Installation, testing and commissioning of furniture work for Government Medical College & Hospital,  
Chandrapur, Maharashtra

| S. No.              | Name of Items                   | Unit | Quantity | Rates per Unit including of all taxes with 5 years Warranty | Amount (In Rs.) |
|---------------------|---------------------------------|------|----------|---|-----------------|
| 193                 | Office Table 1800 mm            | Each | 3        |   |                 |
| 194                 | Director Office High Back Chair | Each | 1        |   |                 |
| 195                 | Mid back Visitor Chair          | Each | 4        |   |                 |
| 196                 | Office Table 2100mm W           | Each | 1        |   |                 |
| 197                 | work Table with Pedestal        | Each | 1        |   |                 |
| 198                 | Demonstration Chair with Tablet | Each | 70       |   |                 |
| 199                 | High Back Chair                 | Each | 6        |   |                 |
| 200                 | Mid back chair                  | Each | 18       |   |                 |
| Total Amount IN Rs. |                                 |      |          |   |                 |