

**Request For Budgetary Estimate of furniture work for Medical College Block,
Government Medical College & Hospital, Jalgaon, Maharashtra**

HSCC/GMC-JALGAON/ Medical college block-Furniture/2025

Date: 29/09/2025

HSCC (India) Ltd. intends to invite on-line bids from eligible bidders, in single stage two bid systems for Supply, Installation testing and commissioning of furniture work for Medical College Block, Government Medical College & Hospital, Jalgaon, 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, 3 Years warranty and freight from warehouse to consignee location i.e. Government Medical College & Hospital, Jalgaon, 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: sk_sharma@hsccltd.co.in , l_singh@hsccltd.co.in

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

Technical Specification of furniture items for Medical College Block, Government Medical College & Hospital, Jalgaon, Maharashtra (All images are indicative only)

1. Linier Work Station



Supply Installation of linier workstation size 1500mmWX600mmD x1200-1250mmH ($\pm 5\%$ engineering variation in dimension) Providing and placing of modular partitions system coated aluminium trims and supported on Legs for better air circulation and helps in keeping floor clean. Panels Construction - Each panel consists of Vertical extrusions 2Nos and Horizontal extrusions made of 1.2mm thick aluminium with duly powder coated at every division of tile/block. Each panel have Bottom frame fabricated for 50-60mm panel comprises of L-channels made of 2mm thick CRCA steel (IS: 513), formed plates of 3mm thick HR steel (IS: 2062) & ERW steel tube of size 35x15x1.6mm thick in oval cross section (IS: 7138) welded together. The complete bottom frame shall be powder coated with an average of 50-60 microns thickness of epoxy powder coating. The Bottom Frame is bolted with the Upright verticals. Each Panel is provided with 2 Nos Legs of height 120mm are fixed at the bottom frame of the panel. Legs are fabricated by CO2 welded MS Tube of section 38mm x 25mm (± 1 mm) (IS: 7138 ERW Tube, 38mm x 25mm (± 1 mm) x 16bg) with the base plate of the MS plate of 35x22x5mm (IS: 2062, 5mm HR) over which an M8 Leveller is fitted which allows for adjustment of the height by 50mm. It will be coated with 45-50micron thickness of epoxy powder coating. Each Panel consists of 2Nos Intermediate blocks. In a 52.4mm Thick panel intermediate block shall comprise of 38mm thick paper honeycomb with 3mm MDF on each side and 0.6mm decorative laminate on both sides. Particle board framing shall be used on outer boundary of these blocks as well as intermediately at certain locations forming conduit for passing cables.

These blocks will be located in the middle bands of the panels made out of a composite construction of MDF and paper honeycomb. Each Panel consist of TOP TILES/SPLIT TILES. These tiles shall be slide in to the panels from top before fixing the top horizontal. These tiles shall be supported from top & bottom side with clips made from PP co polymer fitted in horizontal extrusion. In case of split tiles, it shall be offered in Fabric magnetic tiles, Whiteboard tiles. Each Panel consists a BOTTOM TILE. These bottom tiles shall be press fitted on to the assembly frame of the panel with the help of snap-on clips made of nylon-66 and support clips made from Polypropylene (PP). All partitions and side panels have levelling screws for adjustment in case of uneven floor to take care of +/- 40 mm of uneven flooring. Tile Finishes:

a FABRIC MAGNETIC TILES: Fabric magnetic tiles shall be fabric upholstered metal tiles in 0.6 mm thick G.I. Grade O as per IS: 277. The fabrics shall be upholstered with adhesives.

- FABRIC TACK TILES: Fabric tack able tiles shall be upholstered metal tiles in 0.6mm thick G.I. grade O as per IS: 277, with Polyurethane foam in the tile for trackability. The fabric shall be upholstered with adhesives.

- WHITE BOARD TILES: White board tiles shall be made of 8.0 mm thick particle board conforming to IS: 12823 laminated with 0.6mm thick white glossy high-pressure laminate on outer side & 0.6mm backing laminate on inner surface and will be having all its edges with minimum 0.5 mm thick PVC edging. Aluminium Trims: The top trims and end trims for 50-60 mm shall be made from aluminium extrusion. All kinds of extrusions for 52.4mm shall have average wall thickness of 1.2 mm & having finish of powder coating. Top trim in 50-60 mm thick panel shall be press fitted on the horizontal extrusion, it shall be slide fitted with the help of top trim connector made from PP copolymer 3530 grade. End trim for 50-60 mm thick panel shall be slide fitted with the help of end trim connector made from 2.0mm thick M.S. CRCA Grade D as per IS: 513. Wire Management - Wires shall be taken into the system through cable ducts from the junction boxes and it is carried up to the panels through concealed conduits inside the blocks. Wires run through the system from Bottom tile and extended to the top at various locations by the help of 2 nos. vertical Cable Ducts in each panel.

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. Telephone and Electric fitting materials for each work station:- Plate and frame 8M & 2M, 16 Amp switch 1M, 6A-3Pin socket, 6/16A Socket, Blanking plate 1M, RJ-45 CAT 6UTP, RJ-11 Telephone and electric wire 3x2.5 mm, Makes for copper wire: Havells/Polycab/RR Cable or as approved by engineer in-charge/employer, Make for Modular switches and Sockets outlet: Legrand-Myrius or anti-bacterial/ABB (Tvisha)/ Panasonic/Schneider-Livia/Philips-sleek or as approved by engineer in-charge/employer, All electric/telephone fitting with materials shall be carried out by the supplier for each work station as per client requirement. Legs - System shall also have 120 mm high powder coated welded metal legs to give the system an elevated look. Single side legs are fabricated by CO2 welded MS Tube of section 38 mm x 25mm (± 1 mm) (IS: 7138 ERW Tube, 38 mm x 25mm (± 1 mm) x 16bg) with the base plate of the MS plate of 35mm x 22mm x 5mm (IS: 2062, 5 mm HR) over which an M8 Leveller is fitted. End/Intermediate separator: partitions of 22.8mm thick including

powder coated aluminium trims and supported on Legs for better air circulation and helps in keeping floor clean. The 22.8 mm panels are only to be used as Separator/End panels to provide additional privacy. These panels have various finishes and no cable management ability. Panel Construction: The 22.8mm End/Separator panels shall be made of horizontal and vertical uprights. These uprights and horizontals shall be made of aluminium extrusion having material AL96063-T6 & have average wall thickness of 1.2mm & powder coated with epoxy-polyester powder. The Blocks for the End/Separator panels shall be of 16mm to 18mm (± 1 mm) thickness in the selected finish. The top most block in the panel shall be the top block of the panel. It shall be available in fabric, laminate, whiteboard, fabric metal, trackable and clear glass finishes. The 2Nos blocks in the intermediate bands shall be available in fabric or laminate finish and the lowermost block in the panel shall be the bottom block which shall be in fabric, metal or laminate finish. Tiles: Tile Finishes in End/Separator Partitions to be provided as per the site and layout approval. Finishes in these panels shall be

- **LAMINATE FINISH BLOCKS:**

Laminate finish blocks shall be made from 18mm (± 1 mm) thick MDF board, clad with 1mm thick laminate of approved shade.

- **FABRIC FINISH BLOCKS:**

These shall be made from 18mm (± 1 mm) thick Pre-Laminated MDF Board upholstered with 1mm thick approved shade of fabric using adhesives.

- **WHITEBOARD BLOCKS:**

These shall be made of 16mm thick MDF 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.

- **GLASS BLOCKS:**

These shall be made of 4mm thick toughened plain glass having diamond polish edge finish.

- **FABRIC TACKABLE BLOCKS:**

These shall be made from 18mm (± 1 mm) thick Pre-Laminated MDF Board battens which hold 3mm MDF in between. 6mm thick Polyurethane foam shall be pasted on 3mm thick MDF and this assembly shall be upholstered with approved shade of fabric on both sides using adhesive.

- **METAL FINISH BLOCKS:**

Metal finish blocks shall be made from two components of 0.8mm thick M.S. CRCA Grade D as per IS: 513 powder coated with epoxy polyester finish. Aluminium Trims : The top trims and end trims for 22.8mm partition shall be made from aluminium extrusion having material AL96063-T6. Top trim in 22.8mm thick panel shall be slide fitted with the help of top trim connector made from PP copolymer 3530 grade. End trim for 50-60mm thick panel shall be slide fitted with the help of end trim connector made from 2.0mm thick M.S. CRCA Grade D as per IS: 513. End trim for 22.8 mm thick panel shall slide with the help of end trim connector made from nylon-66. Work station Worktop as per the approved shape and site requirement made out of 25mm (± 1 mm) thick prelaminated MDF board. All the open edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The work surface shall be provided with circular cut out of Dia. 65mm as per the requirement, for passing of wires. These cut outs shall be provided with ABS covers. Worksurfaces are fitted to the panels by work surface

brackets. Brackets are made of 2.0mm thick CRCA grade D steel as per IS: 513-19. Brackets are slide in between end trim and vertical extrusions. Mobile Pedestal having 3 Drawers Unit having flat metal front and top with Central locking. The Drawer Unit consists of 2Box and 1File Drawers. The Overall size of the Drawer Units is 450mm(W) X 435mm(D) X 646mm(H). Construction & Material of Drawer Unit: Welded Assembled of 0.8 thick CRCA for Body Shell, Drawer Front & tray, Front Side Stiffener, Rear Side Stiffener & Bottom, 1.2mm thick CRCA Top Stiffener & Bottom stiffener. Drawer Fronts & Metal Front Straight Edge. All Drawers with Double extension precision ball slide shall be provided. For Drawer pulling, side wise tapered recess provided in shell behind Drawer Fronts. Locking: 10 lever Cam Lock & Central RH locking with actuator & lock channel mechanism. Top Panel: 0.8mm thick Metal Straight Edge Top. Castors: Swivelling non-lockable 4Nos Castors mounted below the body shell. The Total drawer unit is finished with Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10). **Work station as approved by engineer in-charge/employer**

2. Work Station chair



Supply and installation of Chair as per technical specification. Providing and Placing High Back Chair with overall size of 76.0 cm W x 76.0 cm D x 96.5 – 114 cm H x 43.0 – 53.0 cm ($\pm 5\%$ engineering variation in dimension) Seat Height. The seat is cushioned seat made of injection moulded plastic/12 mm thick Plywood. Plastic inner/12 mm thick Plywood is upholstered with leatherette and moulded high resilience polyurethane foam of density $45 \pm 2 \text{ kg/m}^3$, & hardness load of $16 \pm 2 \text{ kgf}$ as per IS:7888 for 25% compression. Seat Size is 47.0 W cm x 48.0 D cm. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size $1.9 \pm 0.03 \text{ cm} \times 0.16 \pm 0.0128 \text{ cm}$, upholstered with leatherette. The back size is 47.7 W cm x 76.4 D cm ($\pm 5\%$ engineering variation in dimension), The armrest

top is moulded from polyurethane and mounted on to a drop lift adjustable type tubular armrest support made of $\varnothing 3.81 \pm 0.03 \text{ cm} \times 0.2 \pm 0.01 \text{ cm}$ thick M.S. ERW tube having chrome plated finish. The armrest is height adjustable up to $6.5 \pm 0.5 \text{ cm}$ in 5 steps. The adjustable tilting mechanism is designed with 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 tilt ratio 1:2, The mechanism housing is made up of HPDC aluminium black powder coated. Seat depth adjustment is integrated in the seat through a sliding mechanism. Seat depth adjustment range is of $6.0 \pm 0.5 \text{ cm}$. Back frame is connected to the up/down mechanism in plastic T spine. It can be adjusted in the range of 7.42 ± 0.5 comfort the comfortable back support to suit individual need. The pneumatic height adjustment has an adjustment stroke of $10.0 \pm 0.3 \text{ cm}$. The pedestal is high pressure die cast polished aluminium & fitted with 5 nos. of twin wheel castors. The pedestal is $65.0 \pm 0.5 \text{ cm}$ pitch centre dia. ($75.0 \pm 1.0 \text{ cm}$ with castors). 5 nos. of twin wheel castors are injection moulded in plastic having $6.0 \pm 0.1 \text{ cm}$ wheel diameter and assembled to pedestal. Chair as approved by engineer in-charge/employer.

3. High Back Chair



Providing and Placing High Back Chair with overall size of 1135mm – 1310 mm H , 760mm W x 760mm D x Seat Height 440mm – 540mm ($\pm 5\%$ engineering variation in dimension) Seat Size is 460mm Wx 480mm D. ($\pm 5\%$ engineering variation in dimension) The seat is cushioned seat made of injection molded plastic outer & inner/12 mm thick Plywood. Plastic inner/12 mm thick Plywood is upholstered with leatherette and molded high resilience polyurethane foam of density $45 \pm 2 \text{ kg/m}^3$, & hardness load of $16 \pm 2 \text{ kgf}$ as per IS:7888 for 25% compression.

The back size is 465mm Wx 755mmD ($\pm 5\%$ engineering variation in dimension)

The back is cushioned made of PU foam with insitu molded M.S. ERW round tube of size $1.9 \pm 0.03\text{cm} \times 0.16 \pm 0.0128\text{cm}$, upholstered with leatherette.

The armrest top is molded from polyurethane and mounted on to a drop lift adjustable type tubular armrest support made of dia $3.81 \pm 0.03\text{cm} \times 0.2 \pm 0.01\text{cm}$ thick M.S. ERW tube having chrome plated finish. The armrest is height adjustable up to $6.5 \pm 0.5\text{cm}$ in 5 steps.

chair shall feature like tilting mechanism is designed with 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 tilt ratio 1:2, The mechanism housing is made up of HPDC aluminium black powder coated. Seat depth adjustment is integrated in the seat through a sliding mechanism. Seat depth adjustment range is of $6.0 \pm 0.5\text{cm}$. Back frame is connected to the up/down mechanism in plastic T spine. It can be adjusted in the range of 7.42 ± 0.5 comfort the comfortable back support to suit individual need. The pneumatic height adjustment has an adjustment stroke of $10.0 \pm 0.3\text{cm}$.

The pedestal is high pressure die cast polished aluminium & fitted with 5 nos. of twin wheel castors. The pedestal is $650 \pm 5\text{mm}$ pitch centre dia. ($750 \pm 10\text{mm}$ with castors). 5 nos. of twin wheel castors are injection molded in plastic having $6.0 \pm 0.1\text{cm}$ wheel diameter and assembled to pedestal, **chair as approved by engineer in-charge/employer**

4. Visitor Chair for Table-2



Supply and installation of visitor Chair, the overall dimensions of the chair shall be $609\text{mm} (\pm 1\text{mm}) \times 643\text{mm} \times 996\text{mm}$. ($\pm 5\%$ engineering variation in dimension) The seat height shall be 448mm . The cushioned seat and back is made of injection moulded Plastic outer & inner/12 mm thick Plywood. Plastic inner/12 mm thick Plywood inner is upholstered with stitched cover and moulded high Resilience 50 mm thick Polyurethane foam of density 45kg per meter cube. The stitched cover is made from spacer fabric and leatherette. Seat size shall be $470\text{mm} \times 480\text{mm}$. ($\pm 5\%$ engineering variation in dimension) The Back size shall be $450\text{mm} \times 605\text{mm}$. ($\pm 5\%$ engineering variation in dimension)

dimension) The armrests top is moulded from PU and mounted on to a drop lift adjustment type tubular armrest support made of 38mm diameter x 2.0mm thick MS ERW tube. The tubular frame shall be powder coated DFT 40-60 microns and is cantilever type and made of 25.4mm X 2.0mm thick MS ERW tube. The back is connected to frame through powder coated high pressure die cast connector piece. **chair as approved by engineer in-charge/employer.**

5. High End office Table with side unit and Back Unit



Providing & Fixing High end office table with Main table, Side Unit, Mobile pedestal and Back unit: -

MAIN TABLE of size 2400mmW x 1080mmD x 750mmH ($\pm 5\%$ engineering variation in dimension) with top made of 36mm (± 1 mm) thick, MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, table finished with approved shade. The gable end of 25mm (± 1 mm) thick. MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, The table has provision with Aluminium Anodized Access Flap for better electrical provision.

The Gabel and Modesty panel is made of 25mm (± 1 mm) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed 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. Top, sides and bottoms (of each product) fixed up system: By using mini fix, supporting bracket/corner and

wooden dowel in (knock down) system for interconnecting (MDF board). Design / Shape of table: Rectangular and taper inside at both side ends

Extended Return Unit: -

Extended Return Unit size 1200mmL X 600mmD X 750mmH ($\pm 5\%$ engineering variation in dimension) The Side unit top is made up of 25mm ($\pm 1\text{mm}$) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, under structure is made up of 25mm ($\pm 1\text{mm}$) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed at 200°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 side unit is combination of 1 open able shutter storage with proper locking arrangement, two open shelves and 1 CPU Storage Drawer/storage shutter pull up mechanism: Groove type,

Back Unit

Back Unit Of size 2400mmL X 480mmD X 2050mm H ($\pm 5\%$ engineering variation in dimension) The top is made up of 25mm ($\pm 1\text{mm}$) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H & under structure is made up of 18mm ($\pm 1\text{mm}$) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed at 200°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. Below storage shall be provided with wooden shutters storage with height of 750mm & the upper right side of the back unit shall also be provided with wooden shutters storage with width of 450 mm and the left end side upper part shall be provided with 3/4 storage shelf with cover of 5mm thick glass for display purpose. All shutters and drawer shall be provided with proper handle and locking arrangement.

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1 file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia's is made out of 18mm ($\pm 1\text{mm}$) thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm ($\pm 1\text{mm}$) thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer is mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit $\pm 2\text{ mm}$: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 650mm H ($\pm 5\%$ engineering variation in dimension), All Hardware: The high-quality hardware like Roller

slides, SS Hinges, Mini fix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer, MDF Board and Laminate Make: Century/Action Tesa/ Green ply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer), The high end office table shall be complete as per direction of Engineer-in-charge/employer.

6. High Back Office Chair



Supply and installation of High back Chair, Seat/ Back Assembly: The seat is made up of 1.2 ± 0.1 cm. thick hot-pressed plywood upholstered with pure leather and moulded polyurethane foam. GSM/Thickness of fabric $\pm 5\%$ (Gram/Square meter): Genuine leather of 0.8-1.0 mm thickness, the back foam is designed with contoured lumber support for extra comfort. The chair overall dimension shall be (W) 650mm X (D) 620mm X (H) 1300mm ($\pm 5\%$ engineering variation in dimension). High resilience (HR) Polyurethane foam: The HR Polyurethane foam is moulded with density $= 45 \pm \text{Kg/m}^3$ and Hardness load 16 ± 2 kgf as per IS : 7888 for 25% compression. Seat- Back Connecting Spine: the seat back arrested together with spine made of 0.8 ± 0.05 cm thick steel and is black powder-coated (DET 40-60 microns). Armrest Assy: The armrest comprises of three parts viz. The armrest support tube, P.U. armrest and the armrest top. The armrest is made of 4.54 ± 0.03 cm x 0.16 ± 0.0128 cm M.S. polyurethane with 50-70 shore 'A' hardness and reinforce with M.S insert. The arm rest top is made of ABS & upholstered with foam & leather. Front pivot synchro tilt Mech. The mechanism is designed with the following features: 360° revolving type. Front- pivot for tilt with feet resting on ground & continuous lumber support ensuring more comfort. Tilt tension adjustment can be operated in

seating position. 5 positions locking with anti-shock back mechanism, which prevents the backrest from impacting the user when the lock is released. Static seat depth adjustment = 5.0 ± 0.5 cm with position locking. Seat Base Assy: The seat base Assy is designed with following features: 360° revolving type without tilt. Pneumatic Height Adjustment: it has an adjustment stroke of 9.0 ± 0.3 cm. Pneumatic Height Adjustment: it has an adjustment stroke of 9.0 ± 0.3 cm. Blow moulded bellow: The below is piece and blow moulded in black polypropylene. Pedestal Assy: The pedestal is made of die-cast Aluminium with buffing finish. It is fitted with 5 nos. Twin wheel castor. The pedestal is 67.0 ± 0.5 cm pitch-centre dia. (77.0 ± 1.0 cm with castors). Twin wheel castors: The twin wheel castors are injection moulded in black Nylon., Overall Chair Height: 1300, Backrest Height ± 10 mm: 690 mm, Backrest Width: 550-millimetre, Seat Height: 490 mm, Seat Width ± 10 mm: 550, Seat Depth: 580 mm ($\pm 5\%$ engineering variation in dimension), **High back chair as approved by engineer in-charge/employer.**

7. Mid Back Visitor Chair



Supply and installation of Mid back Chair, Seat/ Back Assembly: The seat is made up of 1.2 ± 0.1 cm. thick hot-pressed plywood upholstered with pure leather and moulded polyurethane foam. GSM/Thickness of fabric $\pm 5\%$ (Gram/Square meter): Genuine leather of 0.8-1.0 mm thickness, the back foam is designed with contoured lumber support for extra comfort. The overall chair dimension: (W) 650 mm X (D) 560 mm X (H) 1150 mm ($\pm 5\%$ engineering variation in dimension). High resilience (HR) Polyurethane foam: The HR Polyurethane foam is moulded with density = $45 \pm \text{Kg/m}^3$ and Hardness load 16 ± 2

kgf as per IS :7888 for 25% compression. Seat- Back Connecting Spine: the seat back arrested together with spine made of 0.8 ± 0.05 cm thick steel and is black powder- coated (DET 40-60 microns). Armrest Assy: The padded armrest comprises of three parts viz. The armrest support tube, P.U. armrest and the armrest top. The armrest is made of 4.54 ± 0.03 cm x 0.16 ± 0.0128 cm M.S. polyurethane with 50-70 shore 'A' hardness and reinforce with M.S insert. The arm rest top is made of ABS & upholstered with foam & leather. Front pivot synchro tilt Mech. The mechanism is designed with the following features: 360°revolving type. Front- pivot for tilt with feet resting on ground & continuous lumber support ensuring more comfort. Tilt tension adjustment can be operated in seating position. 5 positions locking with anti-shock back mechanism, which prevents the backrest from impacting the user when the lock is released. Static seat depth adjustment= 5.0 ± 0.5 cm with position locking. Seat Base Assy: The seat base assy is designed with following features: 360°revolving type without tilt. Pneumatic Height Adjustment: it has an adjustment stroke of 9.0 ± 0.3 cm. Blow moulded bellow: The below is piece and blow moulded in black polypropylene. Pedestal Assy: The pedestal is made of die-cast Aluminium with buffing finish. It is fitted with 5 nos. Twin wheel castor. The pedestal is 67.0 ± 0.5 cm pitch- centre dia. (77.0 ± 1.0 cm with castors). 9Twin wheel castors: The twin wheel castors are injection moulded in black Nylon., Overall Chair Height: 1150mm, Backrest Height: 590mm, Backrest Width: 560mm, Seat Height: 480mm, Seat Width: 560, Seat Depth: 580mm ($\pm 5\%$ engineering variation in dimension) **Mid back chair as approved by engineer in-charge/employer.**

8. Office Table-2



Providing & Fixing High end Table with Combination of Main Table with Extended Return Unit with Pedestal Storage Unit: -

MAIN TABLE of size 1650mmW x 750mmD x 750mmH ($\pm 5\%$ engineering variation in dimension) with top made of 36mm (± 1 mm) thick, MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H. The gable end of 25mm (± 1 mm) thick. MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, The table has provision with Aluminium Anodized Access Flap for better electrical provision.

The Gabel and Modesty panel is made of 18mm (± 1 mm) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed 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. Top, sides and bottoms (of each product) fixed up system: By using mini fix, supporting bracket/corner and wooden dowel in (knock down) system for interconnecting (MDF board). Design / Shape of table: Rectangular and taper inside at both side ends.

Extended Return Unit

Extended Return Unit size 1050 mm L X 600mmD X 750mmH ($\pm 5\%$ engineering variation in dimension) The Side unit top is made up of 25mm (± 1 mm) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, under structure is made up of 18mm (± 1 mm) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed 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 side unit is combination of 1 open able shutter storage with proper locking arrangement, two open shelves and 1 CPU Storage Drawer/storage shutter pull up mechanism: Groove type,

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia is made out of 18mm (± 1 mm) thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm (± 1 mm) thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer is mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 585mm H ($\pm 5\%$ engineering variation in dimension), All Hardware: All Hardware: The high-quality hardware like Roller slides, SS Hinges, minifix, SS handles, locks, wooden dowels, screw,

shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer, MDF Board and Laminate Make: Century/Action Tesa/Greenply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer) Table to be complete as per approved sample or as per direction of Engineer-in-charge/employer.

9. Office Table-3



Supplying and placing of table with overall size of 1500mmW X 750mmD X 750mmH ($\pm 5\%$ engineering variation in dimension). The table Made of 25mm (± 1 mm) Thick prelaminated MDF board as per IS 14587: 1998 with approved shade, All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed 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.

Access Flap provided on work surface for wire management. The Gabel and Modesty panel is made of 18mm (± 1 mm) thick prelaminated MDF board as per IS 14587: 1998 with approved shade, All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed 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. Top, sides and bottoms (of each product) fixed up system: By using mini fix, supporting bracket/corner and wooden dowel in (knock down) system for interconnecting (MDF board). Design / Shape of table: Rectangular and taper inside at both side ends.

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia is made out of 18mm (± 1 mm) thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm (± 1 mm) thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer is mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 585mm H($\pm 5\%$ engineering variation in dimension), All Hardware: All Hardware: The high-quality hardware like Roller slides, SS Hinges, minifix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer, MDF Board and Laminate Make: Century/Action Tesa/ Green ply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer) Table to be complete as per approved sample or as per direction of Engineer-in-charge/employer.

10. Modular Reception table



Providing & placing of customized reception counter in rectangular shape with two tops. The under structure of table shall be made of 25mm (± 1 mm) thick pre laminated Marine plywood, clad with 12 mm thick Corian sheets with desired length thermoformed by using dyes and Molds and pasted and seamlessly finished over. MS pipe framework to be used for strengthening the structure. The item includes cost of 12mm thick CORIAN sheet, 25mm (± 1 mm) Marine plywood & MS square pipe, hardware, drawer units, shutter doors with laminated mica or veneers, locking mechanism, foot rest etc. as per architect's drawing and finished as per guidelines of site in charge. The entire structure shall be made of 25mm (± 1 mm) thick marine plywood with MS frame work with finish of 1 mm

thick laminate, All the edges are sealed with 2 mm thick PVC edge band all around, All the inner surfaces shall be finished with 1mm thick white laminate or as approved by engineer in charge, 6 Nos. Computer key board tray and 6 nos. drawer cabinet shall be provided in reception counter with locking arrangement, Height of all three drawers shall be 150mm, 150mm and 350mm respectively. width: 450 mm, height: 680 mm, Drawer shall be made of 18 mm thick marine plywood with finish of 1 mm thick laminate, All the edges are sealed with 2 mm thick PVC edge band all around. Each drawer shall slide on a pair of telescopic drawer sliders (Approved make). The inside portion of drawer to be finished with white laminate. provided double Front panel to mount Electrical Switches and sockets, working Top height must be 750mm. Counter top height must be 1050 to 1200mm ($\pm 5\%$ engineering variation in dimension). Depth of working top must be 650 mm to 750 mm, All Hardware: The high quality hardware used like Roller slides, Hinges, mini-fix, dowels, handle, screw etc is make of Hettich/Ebco/or equivalent/or as approved by engineer in-charge/employer, (Ply and Laminate Make: CENTURY/Action Tesa/GREENPLY or equivalent/or as approved by engineer in-charge/employer), Designee and color of reception table as approved by engineer in-charge/employer.

11. Chair of reception Table



SEAT/BACK ASSEMBLY: The Cushioned seat assembly consists of seat outer (material-30% Glass Fiber Nylon) & upholstered Seat inner (material- Poly Propylene) with moulded Polyurethane foam & polyester fabric. The Net Back should be made up of Back outer (material-Glass Fiber Filled Nylon) & Back inner (material- PP) and upholstered using Polyester Mesh fabric with high tenacity yarn.

Full Back Size: 46.5 cm. (W) x 68.0 cm. (H) ($\pm 5\%$ engineering variation in dimension)

Seat Size: 51.0 cm. (W) x 49.0 cm. (D) HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR Polyurethane foam should be moulded with density = $45 \pm 2 \text{ kg/m}^3$ and Hardness load $12 \pm 2 \text{ kgf}$ for 25% compression. BACK SPINE: The support spine should be made up of High Pressure Die cast polished had Aluminium. ARMRESTS: The armrest should be having two adjustments, Height ($6.0 \pm 0.5 \text{ cm}$) and Depth ($6.0 \pm 0.5 \text{ cm}$). Height adjustment should be provided in Aluminium structure of armrest which should be connected to Aluminium Back spine and should be operated by button. The depth adjustment should be provided in pad which should be fixed to armrest structure. Armrest Top should be made up of PU moulded over plastic inner. 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 & 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 (DFT 40 to 60 micron) Seat Depth Adjustment: Seat depth adjustment should be integrated in the seat through a sliding mechanism. Seat depth adjustment range should be of $3.75 \pm 0.1 \text{ cm}$ Lumbar Support Assembly: The Lumbar support assembly should consist of lumbar spine (material-Glass Fiber Filled Nylon) which should be fixed to aluminium Back spine. The Lumbar pad (material- Poly Propylene) should be fixed to lumbar spine through lumbar Pad support. Lumbar Support Assembly has height adjustment of $5.0 \pm 0.5 \text{ cm}$ Pneumatic Height Adjustment: The pneumatic height adjustment has an adjustment stroke of $10.0 \pm 0.3 \text{ cm}$. Pedestal Assembly with Castors: The pedestal should be High Pressure Die cast polished aluminium and fitted with 5 nos. twin wheel castors. The pedestal should be $65.0 \pm 0.5 \text{ cm}$. pitch-centre dia. ($75.0 \pm 1.0 \text{ cm}$. With castors.) Twin Wheel Castors: The twin wheel castors should be injection moulded in black PP having $6.0 \pm 0.1 \text{ cm}$ wheel Diameter.

12. Steel Almirah



Providing and placing of Steel Almirah overall size: 916mm(W)x486mm(D)x1980mm(H) ($\pm 5\%$ engineering variation in dimension) with welded construction. Almirah shall be made of CRCA 'D' grade high yield strength, CRCA sheets conforming to grade as per CRI of IS 513 (part-1):2016, It should have 4 Nos. shelves with thickness of 1.0 mm, Back thickness of 1.0 mm, Door thickness of 1.0 mm (high yield strength) and stiffener shall be provided in door up to full height, Width of stiffener: 115 mm, Stiffener sheet thickness: 0.8 mm and all other components shall have thickness of 1.0 mm. The Steel Almirah should have a Mazak handle and Three-way locking mechanism with Shooting Bolts. It should have a height wise adjustable shelf mounting which shall have a Uniformly distributed load (UDL) for shelves: 80 Kg. Almirah also have a M10 Screw type Leveller with Hex plastic base, Number of hinges (for each door): 03 Nos. Hinges sheet thickness: 2 mm, Pedestal height (± 5 mm): 125 mm, The finishing shall include Epoxy powder coated with thickness of 50 microns ($\pm 10\%$). Powder coating: Conforming to IS: 13871. The product should be complete and as per sample approved & as per direction of Engineer-in-charge/employer.

13. Small wooden Almirah



Supplying and placing of small steel almirah with size 900 mm widthX450 mm Depth and 1200 mm Height ($\pm 5\%$ engineering variation in dimension), Construction & Material Knockdown construction. Door Opening Twin door with self-closing hinges of Wood made from 18mm (± 1 mm) Thick Pre-Laminated MDF Board. Handle Aesthetically appealing recessed SS handle for & wooden Doors. Locking Mechanism Cam lock 3-point locking mechanism in Wood Door Shelving. Height wise Adjustable Shelf Mounting. Each shelf shall have Uniformly Distributed Load capacity per each shelf is 80 Kg Maximum having 2 nos. Adj. Shelves. Wooden Top shall be made from Pre-Laminated MDF Board of 25mm (± 1 mm) thick. Skirting of 125mm (± 1 mm) High shall be provided. Leveller Screw type adjustable Leveller with plastic base. Height, Back and Side panel of the storage units shall be made of 18mm (± 1 mm) thick Pre-Laminated MDF Board. Note: All partitions and side panels have levelling screws for adjustment in case of uneven floor to take care of ± 10 mm of uneven flooring. Almirah supply as approved by engineer in-charge/employer.

14. 4-seater dining table



Supply and Installation of PU Coated 4-Seater Dining Table size shall be 1200mm Width x1100mmDepth x 750mm Height ($\pm 5\%$ engineering variation in dimension). Top shall be 25mm (± 1 mm) thick base material shall be 25mm (± 1 mm) MDF board On top PU painting of minimum 2H hardness with 75% glass as per colour chart. Combination colour graphics on the centre. Brown Laminate on bottom specially profiled edges for comfort. The Under structure shall be having bend pipe structure of MS powder coated. Pipe diameter 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 under structure and table top. Glide shall be of Plastic fixed at the under structure to prevent the damage of table top during stacking, All Hardware: The high-quality hardware like Roller slides, SS Hinges, minifix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer, MDF Board and Laminate Make: Century/Action Tesa/ Greenply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer), Dining Table as approved by engineer in-charge/employer.

15. Dining Chair



Providing and placing of dining Chair, the seat and back are made up injection molded high impact strength polypropylene polymer compound with indoor grade UV Resistance. The welded Leg and tubular frame is made from stainless Steel 202 grade tube. The tube are buff polished to give shiny finish. size of stainless Steel 202 grade tube: 2.52 ± 0.03 cm x 0.16 ± 0.0128 cm thickness and 3.5 ± 0.03 cm x 0.16 ± 0.0128 cm The Shoes are made of high impact strength polypropylene polymer compound with indoor grad UV Resistance and pressed fitted with tubular frame. SIZE: over all height of chair: 900 mm, seat height of chair: 450mm, Seat Size: $525\text{mm} (\pm 1\text{mm})$ (W)x 532 mm(D), Back Size: 516

mm (W)x455mm H ($\pm 5\%$ engineering variation in dimension). Dining Chair as approved by engineer in-charge/employer.

16. Meeting room Chair



Supply and installation of Chair as per technical specification. Providing and Placing High Back Chair with overall size of 76.0 cm W x 76.0 cm D x 96.5 – 114 cm H x 43.0 – 53.0 cm ($\pm 5\%$ engineering variation in dimension) Seat Height. The seat is cushioned seat made of injection moulded plastic/12 mm thick Plywood. Plastic inner/12 mm thick Plywood is upholstered with leatherette and moulded high resilience polyurethane foam of density $45 \pm 2 \text{ kg/m}^3$, & hardness load of $16 \pm 2 \text{ kgf}$ as per IS:7888 for 25% compression. Seat Size is 47.0 W cm x 48.0 D cm. The back is cushioned made of PU foam with insitu moulded M.S. ERW round tube of size $1.9 \pm 0.03 \text{ cm} \times 0.16 \pm 0.0128 \text{ cm}$, upholstered with leatherette. The back size is 47.7 W cm x 76.4 D cm ($\pm 5\%$ engineering variation in dimension), The armrest top is moulded from polyurethane and mounted on to a drop lift adjustable type tubular armrest support made of $\varnothing 3.81 \pm 0.03 \text{ cm} \times 0.2 \pm 0.01 \text{ cm}$ thick M.S. ERW tube having chrome plated finish. The armrest is height adjustable up to $6.5 \pm 0.5 \text{ cm}$ in 5 steps. The adjustable tilting mechanism is designed with 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 tilt ratio 1:2, The mechanism housing is made up of HPDC aluminium black powder coated. Seat depth adjustment is integrated in the seat through a sliding mechanism. Seat depth adjustment range is of $6.0 \pm 0.5 \text{ cm}$. Back frame is

connected to the up/down mechanism in plastic T spine. It can be adjusted in the range of 7.42 ± 0.5 comfort the comfortable back support to suit individual need. The pneumatic height adjustment has an adjustment stroke of 10.0 ± 0.3 cm. The pedestal is high pressure die cast polished aluminium & fitted with 5 nos. of twin wheel castors. The pedestal is 65.0 ± 0.5 cm pitch centre dia. (75.0 ± 1.0 cm with castors). 5 nos. of twin wheel castors are injection moulded in plastic having 6.0 ± 0.1 cm wheel diameter and assembled to pedestal. Chair as approved by engineer in-charge/employer.

17. 3-seater Sofa



Supply and Installation of Three-Seater Sofa • SEAT FOAM: The seat is made of PU foam with Density 28 ± 2 kg/cu. meter having an additional top layer of super soft PU foam in Density 32 ± 2 kg/cu. upholstered with fabric or leatherette. Seat Cushion Thickness ± 3 (mm): 150mm

- 2) BACK FOAM: The back is made of PU foam with Density 28 ± 2 kg/cu. meter with two additional top layers of super soft foam of density 32 ± 2 kg/cu. meter, upholstered with fabric or leatherette. Backrest Cushion Thickness ± 3 (mm): 175mm

- 3) UNDERSTRUCTRE: Under structure is made up of 1.2 ± 0.1 cm. thick hot-pressed plywood (moisture resistance & termite proof as per IS: 303) & pinewood of cross section devoid of major knots & surface defects 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure for cushioning purpose 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure for cushioning purpose.

- 4) LEG ASSEMBLY: It is a welded assembly made in Stainless steel (grade SS 202) tube & plate with plastic end cap. (W) 2060mm (D) 905mm(H) 855 mm seat (H) 450 mm, Sofa Leg Height ± 2 (mm): 150 mm, Sofa Leg Width / Diameter ± 2 (mm): 40 mm, Arm

Height ± 5 (mm): 710mm, Arm Width ± 5 (mm): 120mm, Sofa: as approved by Engineer In-Charge/employer.

18. 2-Seater Sofa



Supply and Installation of Two-Seater Sofa SEAT FOAM: The seat is made of PU foam with Density 28 ± 2 kg/cu. meter having an additional top layer of super soft PU foam in Density 32 ± 2 kg/cu. meter upholstered with fabric or leatherette. Seat Cushion Thickness ± 3 (mm): 150mm

- 2) BACK FOAM: The back is made of PU foam with Density 28 ± 2 kg/cu. meter with two additional top layers of super soft foam of density 32 ± 2 kg/cu. meter, upholstered with fabric or leatherette Backrest Cushion Thickness ± 3 (mm): 175mm

- 3) UNDERSTRUCTURE: Under structure is made up of 1.2 ± 0.1 cm. thick hot pressed plywood (moisture resistance & termite proof as per IS: 303) & pinewood of cross section devoid of major knots & surface defects 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure for cushioning purpose 6 nos. per seat & 3.8 mm Dia zigzag spring assembly is mounted over under structure for cushioning purpose.

- 4) LEG ASSEMBLY: It is a welded assembly made in Stainless steel (grade SS 202) tube & plate with plastic end cap. (W) 1460mm (D) 905mm(H) 855 mm seat (H) 450 mm, Sofa Leg Height ± 2 (mm): 150 mm, Sofa Leg Width / Diameter ± 2 (mm): 40 mm, Arm Height ± 5 (mm): 710mm, Arm Width ± 5 (mm): 120mm, Sofa: as approved by Engineer In Charge/employer.

19. Single seater Sofa



Supply and Installation of single-Seater sofa, SEAT FOAM: The seat is made up of PU foam in Density 28 ± 2 kg/cu. Mtr. with an additional top layer of super soft PU foam in Density 32 ± 2 kg/cu, upholstered with fabric or leatherette.

2) BACK FOAM: The back is made up of PU foam in Density 28 ± 2 kg/cu. meter with two additional top layers of super soft foam of density 32 ± 2 kg/cu. meter, upholstered with fabric or leatherette.

3) UNDERSTRUCTRE: Under structure is made up of 1.2 ± 0.1 cm. thick hot-pressed plywood [moisture resistance & termite proof as per IS:303] & pinewood of cross sections devoid of major knots & surface defects. 6 nos. per seat & 3.8mm Diameter zigzag spring assembly is mounted over under structure for cushioning purpose.

4) LEG ASSEMBLY : It is a welded Assembly made in Stainless steel (grade SS 202) tube & plate with plastic end cap. Size : Width (W): 910mm, Depth (D): 905 mm, Height (H): 855 mm Seat Height (SH): 450mm. Sofa Leg Height ± 2 (mm): 150 mm, Sofa Leg Width / Diameter ± 2 (mm): 40 mm, Arm Height ± 5 (mm): 710mm, Arm Width ± 5 (mm): 120mm
Sofa: as approved by Engineer In Charge/employer.

20. CENTER TABLE



Supply and installation of centre table of size: 1200mmW X600mmD X400mmH, top made of 32mm ($\pm$ 1mm) thick Ply Board with both side 1 mm thick laminate veneer with PU finish having scratch resistance of 2H, E1 grade laminate with zero urea formaldehyde emissions ($\leq$ 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992) with all exposed edges sealed with 2mm thick PVC edge banding tape and unexposed edges sealed with 0.8 mm thick PVC edge banding tape pressed at 200o C with hot melt glue on special machines. Frame and Leg material: Stainless steel (SS 304), size of Frame and Leg material 55mm X 55mm with 1.6 mm thickness, Center Table: as approved by Engineer In-Charge/employer.

21. Corner Table



Supply and installation of corner table of size: 500mmW X500mmD X400mmH, top made of 32mm ($\pm$ 1mm) thick Ply Board with both side 1 mm thick laminate veneer with PU

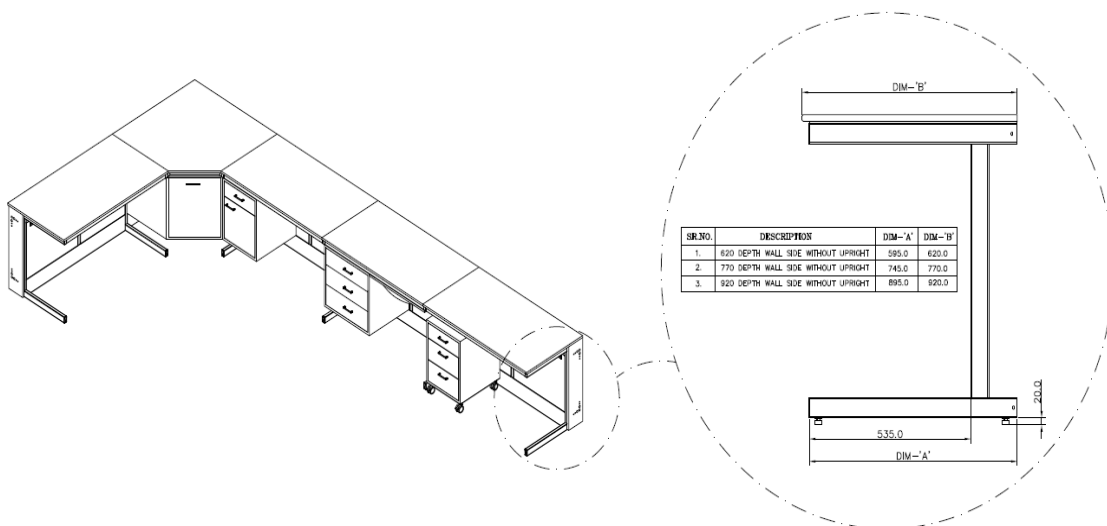
finish having scratch resistance of 2H, E1 grade laminate with zero urea formaldehyde emissions ($\leq 8\text{mg}/100\text{ g}$ oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992) with all exposed edges sealed with 2mm thick PVC edge banding tape and unexposed edges sealed with 0.8 mm thick PVC edge banding tape pressed at 200o C with hot melt glue on special machines. Frame and Leg material: Stainless steel (SS 304), size of Frame and Leg material 55mm X 55mm with 1.6 mm thickness, side Table: as approved by Engineer In-Charge/employer.

22. Stainless steel revolving Stool



Overall Dimension: Overall Sizes Diagonal Leg Dia 538 mm H 470 min-655max. Top plate made of SS 304 made sheet with spin section of thickness 1mm & non corrosive. It has a diameter of 305mm, seat base made of MS ring and rectangular tube. EN8 Screw having diameter of 22 mm is used for height adjustment of the seat base. The round hub made of MS ERW tube having dia of 38mm and thickness 2 mm. The Hub is welded with the legs and it accommodate and cover the lead screw mechanism. The under-structure consists of 4 legs made up of MS ERW tube of diameter 25.4 mm and 1.6mm thick. The press formed pipe leg give a round & clean look. All the legs is Provided with 4 nos. of Nylon-6 bush. All metal components are pre-treated with zinc phosphating in 7 tank process and then powder coated with epoxy polyester powder coating. Safe working load is 135kg.

23. Wall side laboratory bench



C-FRAME SYSTEM

All C-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. C-frame should be constructed from a rectangular pipe with a cross section of 60mm x 30mm and should be 2 mm thick and should be without a vertical front leg to give a clean look. This shall provide more knee space or leg space and would facilitate uninterrupted lateral movement of the under-bench units within the bench run. The C-frame legs should be supplied with adjustable feet (tolerance from -5mm to

+20mm) 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. The structure should have a removable back panel to provide access for maintenance throughout the length of table. The C-frame shall also have skirting at back bottom side. It should be suitable for sitting and standing nominal heights of 750-900 mm ($\pm 5\%$ Engineering Variation) The nominal table depths should 750 mm to 850 mm ($\pm 5\%$ Engineering Variation) for wall side tables. Length of table 750 to 900 mm, ($\pm 5\%$ Engineering Variation) All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The C-Frames should be for suspended storage cabinets or for cabinets that can slide through-and-through from one end of the workbench to the other through C-Frames (configuration depends upon the Schedule of Quantities)

HORIZONTAL MEMBERS

These should be made from rectangular pipes of 2mm thickness. Cross-sectional dimensions of the pipe should be 60mmx30mmx2 mm. ($\pm 10\%$ Engineering Variation) They should be made of CRCA MS and coated with pure epoxy powder. These connect two C-Frames together as shown using C-clamps/Unclamps. Together with the C-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 C-Frames. The widths : 750-800 mm Approx ($\pm 10\%$ Engineering Variation).

Removable Back Panels

These cover panels cover the service lines that run behind them. These should be easily removable (unclipped) and the service line be accessed for maintenance. This allows the equipment on workbench to remain undisturbed They should be made of CRCA MS with pure epoxy powder coating and are of 1mm thickness

COVER PANELS

All side cover panels and back panels, filler panels should be made from CRCA MS panels of 1.0 mm thickness with pure epoxy powder coating

MASTER UPRIGHT

Master Upright should be of the dimensions: 300 x 150 x 1.2 mm. ($\pm 10\%$ Engineering Variation) It should be made from 1.2mm thick CRCA MS with pure epoxy powder coating. It should have an open-able door for easy service maintenance and should extend till the false ceiling

VERTICAL UPRIGHT

The Upright system will form the back-bone for internal distribution of GDS, Electrical supply systems Shelves and Top Units and should be constructed from 16 gauge CRCA formed steel panels with removable covers. Shelf height should be adjusted with an increment of 1inch / 25mm ($\pm 1\text{mm}$) . Upright should also provide support to Top Units for hanging thus eliminating the danger of fixing the Top Units on non-rigid partition wall / panels. Uprights should be supplied with adjustable feet from -5mm to +20mm.

WELDED UNDER-BENCH STORAGE CABINETS

Welded cabinet body should be of flush face construction with intersection of vertical and horizontal members like LH and RH side panel along with front horizontal channel, back panel and bottom panel. It should be relocated anywhere easily as it is an independent unit. Cabinet should be of square non-sharp edge construction. Doors should be assembled with SS-304 hinge assembly. Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer. Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction. Drawer should be well supported on LH and RH ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside. Doors should be easily removable and hinges should be easily replaceable. Knee space panel should be in 22-gauge construction. Storage Units to be of the Suspended Type
Dimensions: W=750 mm, D = 530mm, H = 635 mm. ($\pm$ 10% Engineering Variation)
Configurations:

2 Shutters 1 Drawer MOC: MS CRCA: IS – 513 (1994), Thickness: LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel should be of 1.2mm thick. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel should be of 1.0 mm thick. Finish: Powder coating pure epoxy, thickness 40-50 microns.

Handle:

Anodized Aluminium Recessed-Type, CTC: 160.0mm. Lock: Units have a locking facility with 180° and 10 lever cam lock mechanism (except for sink and corner unit). Hinge: Knuckle-butt type SS Hinge. Screw: SS 304. Shutter should be of twin-type construction with sound dampening effect using pro feel. Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter should have provision of roller catch

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 colour coding as per DIN 12920.

ELECTRICAL TRUNKING Used for housing electrical switches and sockets, data and voice points, its top panel, bottom panel of the trunking should be made from 1.0 mm thick CRCA MS panel. 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

LABORATORY SINK AND ACCESSORIES

LABORATORY SINK AND ACCESSORIES shall be fitted in laboratory as per direction of engineer in-charge/employer.

Ceramic Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Standard bowl size (L x W x D) is 500mm x 400mm x 350 mm. Faucet should be 3-way type faucet of approved make.



Reagent shelf: - Regent Shelves Height shall be 750 mm with complete modular design consists of horizontal 2 stage storage shelves. The end vertical support and horizontal shelves are made up of 2 mm thick CRCA MS Sheet with screwed, riveted, welded including all cross-link members, with adequate stiffeners for designed capacity of 100 kg per reagent shelves per tier with zinc phosphate and epoxy powder coated to 60 to 80 micron's thickness to pass the required ASTM standard complete as per technical specification. reagent shelves shall have suitable arrangement to be attached with vertical uprights with adequate height adjustment hook systems with grooves available on the uprights. The horizontal shelf has a provision for fixing the service panel to it. The service panels carry electrical switches and socket cut-outs. T. The structure of the unit is epoxy powder coated with powder coating thickness as 60-80 microns. Regent shelf size: 750mm-900 mmWx415mm(D) x 750mmH.

Granite work Top: It should be 19mm (± 1 mm) (+/- 2mm) thick Jet Black Granite worktop. The exposed edges of the worktop should be chamfered and smoothened. The bottom of the worktop should be polished and there should be a V-groove throughout the length of the exposed edges to protect the cabinets from coming in contact with the spillages. The overhang on the storage cabinet is 25mm (± 1 mm) at the front side and 30 mm at the sides. The backing material used is a neoprene mat of 6 mm thickness.

Scope of Work

-Supply and Installation of Laboratory Workbenches, Regent shelf, Storage units, Sink Unit, Corner unit, including granite worktops and other supporting structures/hardware's based on the specified Make List. - Supply & Installation of all utility service outlets and accessory fittings, electrical receptacles, plumbing and electrical switches & fittings identified on drawings as mounted on the laboratory furniture or as per engineer in-charge/client direction.

- Supply & Installation of all laboratory sinks, bottle traps, drain troughs etc.

- Supply & Installation of service structures where specified and setting in place reagent shelves of the type shown in the drawings.

-Removal of debris, dirt and rubbish accumulated as a result of installation/commissioning of the laboratory furniture and accessories and leaving the premises broom clean and orderly.

List of approve makes: -

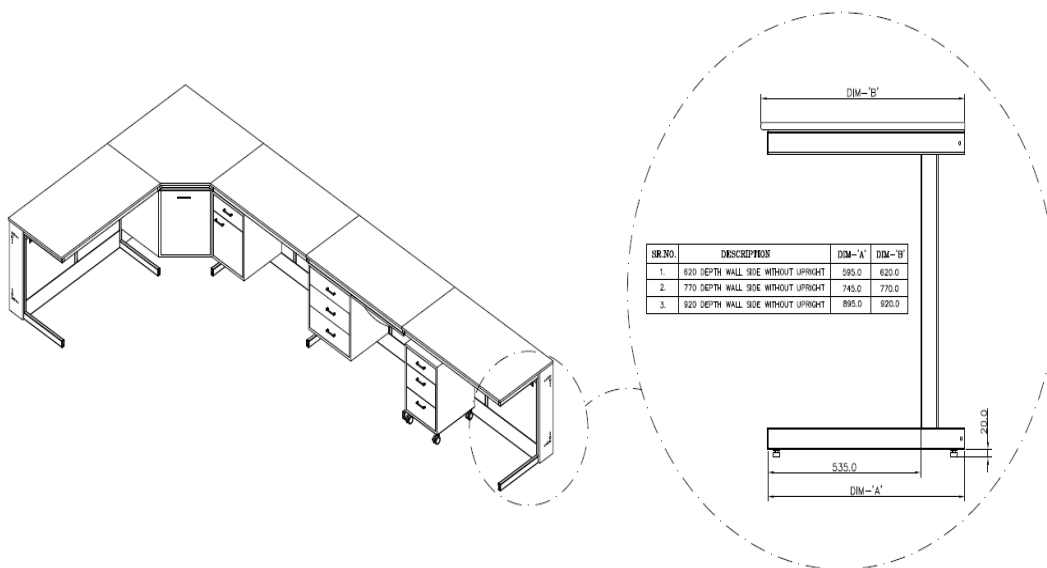
Steel: TATA Steel, JINDAL Steel/Equivalent or better or As approved by engineer in-charge/employer.

Powder Coating Kansai Nerolac, Berger Paints, Asian Paints/ Equivalent or better or As approved by engineer in-charge/employer.

Water Faucets and Gas Valves: As approved by engineer in-charge/employer.

Switches and Sockets, Data and LAN points: As approved by engineer in-charge.

24. Island type laboratory bench



C-FRAME SYSTEM

All C-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. C-frame should be constructed from a rectangular pipe with a cross section of 60mm x 30mm and should be 2 mm thick and should be without a vertical front leg to give a clean look. This shall provide more knee space or leg space and would facilitate uninterrupted lateral movement of the under-bench units within the bench run. The C-frame legs should be supplied with adjustable feet (tolerance from -5mm to +20mm) 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. The structure should have a removable back panel to provide access for maintenance throughout the length of table. The C-frame shall also have skirting at back bottom side. It should be suitable for sitting and standing nominal heights of 750-900 mm. ($\pm 5\%$ Engineering Variation) The nominal table depths should 1500 mm to 1800 mm ($\pm 5\%$ Engineering Variation) for Island Type. Length of table 2150 to 2250 mm, with cabinet bench, leg space bench and Sink Unit ($\pm 5\%$ Engineering Variation), All frame-work is should be pre-treated with superior pure epoxy powder coated finish. The C-Frames should be for suspended storage cabinets or for cabinets that can slide through-and-through from one end of the workbench to the other through C-Frames (configuration depends upon the Schedule of Quantities)

HORIZONTAL MEMBERS

These should be made from rectangular pipes of 2mm thickness. Cross-sectional dimensions of the pipe should be 60mmx30mmx2 mm. ($\pm 10\%$ Engineering Variation) They should be made of CRCA MS and coated with pure epoxy powder. These connect two C-Frames together as shown using C-clamps/Unclamps. Together with the C-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 C-Frames. The widths: 1500mm-1800 mm Approx ($\pm 10\%$ Engineering Variation).

Removable Back Panels

These cover panels cover the service lines that run behind them. These should be easily removable (unclipped) and the service line be accessed for maintenance. This allows the equipment on workbench to remain undisturbed They should be made of CRCA MS with pure epoxy powder coating and are of 1mm thickness

COVER PANELS

All side cover panels and back panels, filler panels should be made from CRCA MS panels of 1.0 mm thickness with pure epoxy powder coating

MASTER UPRIGHT

Master Upright should be of the dimensions: 300 x 150 x 1.2 mm. ($\pm 10\%$ Engineering Variation) It should be made from 1.2mm thick CRCA MS with pure epoxy powder coating.

It should have an open-able door for easy service maintenance and should extend till the false ceiling

VERTICAL UPRIGHT

The Upright system will form the back-bone for internal distribution of GDS, Electrical supply systems Shelves and Top Units and should be constructed from 16 gauge CRCA formed steel panels with removable covers. Shelf height should be adjusted with an increment of 1inch / 25mm (± 1 mm) . Upright should also provide support to Top Units for hanging thus eliminating the danger of fixing the Top Units on non-rigid partition wall / panels. Uprights should be supplied with adjustable feet from -5mm to +20mm.

WELDED UNDER-BENCH STORAGE CABINETS

Welded cabinet body should be of flush face construction with intersection of vertical and horizontal members like LH and RH side panel along with front horizontal channel, back panel and bottom panel. It should be relocated anywhere easily as it is an independent unit. Cabinet should be of square non-sharp edge construction. Doors should be assembled with SS-304 hinge assembly. Removable back panel should be provided to easily access the service lines running behind the cabinet benches. Intermediate horizontal channels should be provided between door and drawer. Shelf should be eight bend panel with 20mm height. Drawer tray should be of single piece construction. Drawer should be well supported on LH and RH ball slide suspension system. Steel door and drawer front is of double wall construction with sound dampening material filled inside. Doors should be easily removable and hinges should be easily replaceable. Knee space panel should be in 22-gauge construction. Storage Units to be of the Suspended Type
Dimensions: W=600 mm, D = 530mm, H = 635 mm. ($\pm 10\%$ Engineering Variation)
Configurations:

2 Shutters 1 Drawer MOC: MS CRCA: IS – 513 (1994), Thickness: LH/RH side panels, shutter front, Bottom panel, Top front, Drawer separator, shelf, Alignment channel should be of 1.2mm thick. Removable Back panel, Shutter cover, Fr. Rack strip, Top cover panel should be of 1.0 mm thick. Finish: Powder coating pure epoxy, thickness 40-50 microns.

Handle:

Anodized Aluminium Recessed-Type, CTC: 160.0mm. Lock: Units have a locking facility with 180° and 10 lever cam lock mechanism (except for sink and corner unit). Hinge: Knuckle-butt type SS Hinge. Screw: SS 304. Shutter should be of twin-type construction with sound dampening effect using pro feel. Shutter cover should be equipped with Bump on for sound dampening. Ball Slide: 500mm Length (required only for drawer unit). Shutter should have provision of roller catch

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 colour coding as per DIN 12920.

ELECTRICAL TRUNKING Used for housing electrical switches and sockets, data and voice points, its top panel, bottom panel of the trunking should be made from 1.0 mm thick CRCA MS panel. 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

LABORATORY SINK AND ACCESSORIES.

LABORATORY SINK AND ACCESSORIES shall be fitted in laboratory as per direction of engineer in-charge/employer.

Ceramic Sinks: Made up of 5 mm thick high density and elastic poly propylene with good resistance to organic solvents. Standard bowl size (L x W x D) is 500mm x 400mm x 350 mm. Faucet should be 3-way type faucet of approved make.



Reagent shelf: - Regent Shelves of Height 750 mm with complete modular design consists of horizontal 2 stage storage shelves. The end vertical support and horizontal shelves are made up of 2 mm thick CRCA MS Sheet with screwed, riveted, welded including all cross-link members, with adequate stiffeners for designed capacity of 100 kg per reagent shelves per tier with zinc phosphate and epoxy powder coated to 60 to 80 micron's thickness to pass the required ASTM standard complete as per technical specification. reagent shelves shall have suitable arrangement to be attached with vertical uprights with adequate height adjustment hook systems with groves available on the uprights. The horizontal shelf has a provision for fixing the service panel to it. The service panels carry electrical switches and socket cut-outs. T. The structure of the unit is epoxy powder coated with powder coating thickness as 60-80 microns. Regent shelf size: 750mmW x 415mm(D) x 750mmH.

Granite work: It should be 19mm ($\pm$ 1mm) thick Jet Black Granite worktop. The exposed edges of the worktop should be chamfered and smoothened. The bottom of the worktop should be polished and there should be a V-groove throughout the length of the exposed edges to protect the cabinets from coming in contact with the spillages. The overhang on the storage cabinet is 25mm ($\pm$ 1mm) at the front side and 30 mm at the sides. The backing material used is a neoprene mat of 6 mm thickness.

Scope of Work

-Supply and Installation of Laboratory Workbenches, Regent shelf, Storage units, Sink Unit, Corner unit, including granite worktops and other supporting structures/hardware's based on the specified Make List. - Supply & Installation of all utility service outlets and accessory fittings, electrical receptacles, plumbing and electrical switches & fittings identified on drawings as mounted on the laboratory furniture or as per engineer in-charge/client direction.

-Supply & Installation of all laboratory sinks, bottle traps, drain troughs etc.

-Supply & Installation of service structures where specified and setting in place reagent shelves of the type shown in the drawings.

-Removal of debris, dirt and rubbish accumulated as a result of installation/commissioning of the laboratory furniture and accessories and leaving the premises broom clean and orderly.

List of approve makes: - Steel: TATA Steel, JINDAL Steel/Equivalent or better or As approved by engineer in-charge/employer.

Powder Coating Kansai Nerolac, Berger Paints, Asian Paints/ Equivalent or better or As approved by engineer in-charge/employer.

Water Faucets and Gas Valves: As approved by engineer in-charge/employer.

Switches and Sockets, Data and LAN points: As approved by engineer in-charge.

25. Library Reading Table



Providing and placing of Reading table size 1800mmLx1200mmWx750mmH/1200mmH ($\pm$ 5% Engineering Variation), Worktop shall be made of 32 mm thick Pre-Laminated MDF Board conforming to as per IS 14587: 1998, Grade II corresponding to IS 12406:2003, with E1 grade laminate with zero urea formaldehyde emissions ($\leq$ 8mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All the edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The height of Worktop shall be 750 mm from ground level.

Under structure: Leg and under structure shall be made of MS square tube of size: 60mm x 50mm x 2.0 mm thickness with well supported MS beams under table top & connected leg to leg. Table side panel shall be cover with 1.2 mm thick CRCA sheet. all metal component shall be powder coated, Middle Partition will be made of 12 mm thick Acrylic Sheet of approved shade, Wire management: Access Flap and Switch Mounting Tray is provided in the table top. It is Made from Matt silver Anodized Aluminium extrusion and plastic moulded components to facilitate access of Electrical/Data/Voice sockets access from Top. Powder coated switch mounting tray made from 0.8mm and 1.2mm MS sheet (IS:513) which is powder coated 80-90micron. Switches to be mounted on tray as per requirement. Provision for mounting 8 Module Switch plate on switch mounting tray shall be provided. The product should be complete and as per approved sample and as per the direction of Engineer-In-charge. Completely consoled wire management with vertical wire uptake from floor via middle leg having removable cover one side and wire separator for data and wire separation, segregates to horizontal cable tray below Access Flap. All Hardware: The high-quality hardware like Roller slides, SS Hinges, minifix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer, MDF Board and Laminate Make: Century/Action Tesa/ Greenply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer). Reading table as approved by engineer in-charge/employer

26. Meeting Table



Supply and Installation of Meeting table with size: 2700 mmLx1150mmWX740mmH ($\pm$ 5% Engineering Variation), Work Top-Made of Work top shall be made up of 32mm ($\pm$

1mm) thick E-1 grade (Environmental Friendly) pre-laminated MDF board conforming to as per IS 14587: 1998, Grade II corresponding to IS 12406:2003 with 1.0 mm thick laminate E1 grade laminate with zero urea formaldehyde emissions ($\leq 8\text{mg}/100\text{ g}$ oven dry board-perforated method) for better in-house air quality. This should comply with (EN 120-1992), all the edges of worktop shall be provided with machine pressed 1.5-2 mm thick PVC edge banding tape pressed at 200°C with hot melt glue on special machines. Access panels provided with soft closing hinges.

Under structure-The Under-structure consists of mixture of 25mm ($\pm 1\text{mm}$) thick E-1 grade (Environmental Friendly) pre-laminated MDF board conforming to as per IS 14587: 1998, Grade II corresponding to IS 12406:2003 with 1.0 mm thick laminate E1 grade laminate. 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 tray in with integrated power box made with a combination of 0.8 mm thick CRCA sheet and 0.8 mm thick CRCA switch plate, auto flip up electric box with dimension: 300mm x 158mm x 70 mm shall be provided at table top with includes unit: 2 Universal Power Socket, 2 USB Fast Charger (Type A + Type C) and 2 HDMI. Meeting table as approved by engineer in-charge/employer. **All Hardware:** The high-quality hardware like Roller slides, SS Hinges, minifix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer, **MDF Board and Laminate Make:** Century/Action Tesa/Greenply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer)

27. Book Rack single sided



Providing and fixing of Library book storage Linear & Back-to-Back Cantilever shelving Module size: Size: 915mm(W) X 500mm(D) 2175mm(H) ($\pm 5\%$ Engineering Variation) Single Sided. Back-to-Back Cantilever shelving Module Welded Frame Upright with base shelf and adjustable shelves. Canopy brackets fixed to welded frame upright. Module having one base shelf and 5 adjustable shelves with clear height between each shelf to be 400 mm. Welded Frame Upright (915mmx2175mm) to be made of 2.5 mm thick fully welded superior quality MS powder coated rolled from section 60mmx40mm or standard closed section with slots at pitch of 25 mm. Frame having intermediate tie member for extra strength. Base shelf Tray to be made of 1.2 mm thick superior quality MS CRCA powder coated sheet with bottom stiffener made of 1.2 mm thick MS CRCA powder coated sheet skirting to be made of 1 mm thick superior quality MS CRCA powder coated sheet end bracket to be made out of 1.6 mm thick MS CRCA powder coated sheet. Base support is made out of 1.6 mm thick MS CRCA powder coated sheet.

Adjustable Shelf Tray to be made of 1.2 mm thick superior quality MS CRCA powder coated sheet with bottom stiffener made of 1.2 mm thick MS CRCA powder coated sheet end bracket is made out of 1.6 mm thick MS CRCA powder coated sheet. Each shelf to have an index plate in polycarbonate. - Canopy bracket made up of 1.6 mm thick MS CRCA powder coated sheet, fixed to welded frame upright.

Metal finish: All metal components are colour with powder coating more than 60 micron. Top and cover side panel made of 25mm (± 1 mm) thick Pre-Laminated MDF Board conforming to as per IS 14587: 1998, Grade II corresponding to IS 12406:2003, with E1 grade laminate with zero urea formaldehyde emissions (≤ 8 mg/100 g oven dry board-perforated method) for better in-house quality. This should comply with (EN 120-1992). All the edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. All Hardware: The high-quality hardware like Roller slides, SS Hinges, Mini fix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer, MDF Board and Laminate Make: Century/Action Tesa/Green ply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer) Steel Make : TATA Steel/ Sail Steel or Equivalent, Book rack as **approved by engineer in-charge/employer.**

28. Book Rack double sided.



Supplying and placing double side steel Library Racks in perfectly upright and straight position. The overall size of the rack shall be 900mm (W) X 680mm (D) X 2150mm (H) ($\pm$ 5% Engineering Variation). Back-to-Back Cantilever shelving Module Welded Frame Upright with base shelf and adjustable shelves. Canopy brackets fixed to welded frame upright. Module having one base shelf and 5 adjustable shelves with clear height between each shelf to be 400 mm. Welded Frame Upright (915mmx2150mm) to be made of 2.5 mm thick fully welded superior quality MS powder coated rolled from section or standard closed section with slots at pitch of 25 mm. Frame having intermediate tie member for extra strength.

Base shelf Tray to be made of 1.2 mm thick superior quality MS CRCA powder coated sheet with bottom stiffener made of 1.2 mm thick MS CRCA powder coated sheet skirting to be made of 1.2 mm thick superior quality MS CRCA powder coated sheet end bracket to be made out of 1.6 mm thick MS CRCA powder coated sheet. Base support is made out of 1.6 mm thick MS CRCA powder coated sheet.

Adjustable Shelf Tray to be made of 1.2 mm thick superior quality MS CRCA powder coated sheet with bottom stiffener made of 1.2 mm thick MS CRCA powder coated sheet end bracket is made out of 1.6 mm thick MS CRCA powder coated sheet. Each shelf to have an index plate in polycarbonate. - Canopy bracket made up of 1.6 mm thick MS CRCA powder coated sheet, fixed to welded frame upright.

Metal finish: All metal components are colour with powder coating with 60 micron.

top and side panel made of 25mm (± 1 mm) thick Pre-Laminated MDF Board conforming to as per IS 14587: 1998, Grade II corresponding to IS 12406:2003, with 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 the edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The add on units can be stacked width wise to form a bank of racks having common side panel. The shelves shall be folded constructions which have intrinsic rigidity and high load carrying capacity. Uniformly Distributed load capacity per each shelf shall be 80 kg minimum. Each shelf shall be provided with stiffener at bottom for strength and back stiffener for separator between front and rear shelf. All steel components shall be epoxy polyester powder coated to the thickness of 50-60 micron. Adjustable levellers shall be provided with metal insert to resist scratches on the floor and also level & support structure, All Hardware: The high-quality hardware like Roller slides, SS Hinges, minifix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer, MDF Board and Laminate Make: Century/Action Tesa/ Greenply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer). Steel Make : TATA Steel/ Sail Steel/ or Equivalent, Double sided book Rack as **approved by engineer in-charge/employer**.

29. Chair With Desk let.



Supply and Installation of Desk-let chair, the seat and back are made PU injection moulded high impact strength polypropylene polymer compound with indoor grade UV Resistance. The Powder coated (DFT50+ microns) welded tubular frame is made from $2.52 + 0.03\text{ cm} \times 0.16 \pm 0.0128\text{ cm}$ and $3.5 \pm 0.03\text{ cm} \times 1.5 \pm 0.03\text{ cm} \times 0.16 \pm 0.0128\text{ cm}$ M.S.E.R.W tube. The powder coated welded beam M.S. Structure is made from $5.08 \pm 0.03\text{ cm} \times 0.16 \pm 0.0128\text{ cm}$. The Shoes are made of high impact

strength polypropylene polymer compound with indoor grad UV Resistance and pressed fitted with tubular frame. The Armrest made of high impact strength polypropylene polymer compound with indoor grad UV resistance and assembly over the tubular frame. The "L" Shape Desk let is made of 1.8+/- 0.05cm thick. pre - laminated MDF Board with 0.2+/- 0.05 cm thick injection polypropylene polymer all around Front & Back (outer Dimension - 31.5+/- (W) x 47.0+/- 0.1 cm (D)) An Upholstery cover be retro fitted on seat and back. the seat cover is made from high abrasion resistance with fabric with foam laminated and 2.5cm PU Foam insert. the back cover is made from High Abrasion Resistance fabric with foam lamination and 0.1 cm PU foam. SIZE: (W)57.5cm*(D)67.8cm*(H)84.5cm*(seat H) 45.0 cm, Seat Size 52.5cm(W)*53.2 cm(D), Back Size 51.6 cm(W)*40.5 cm (H) ($\pm$ 5% Engineering Variation).

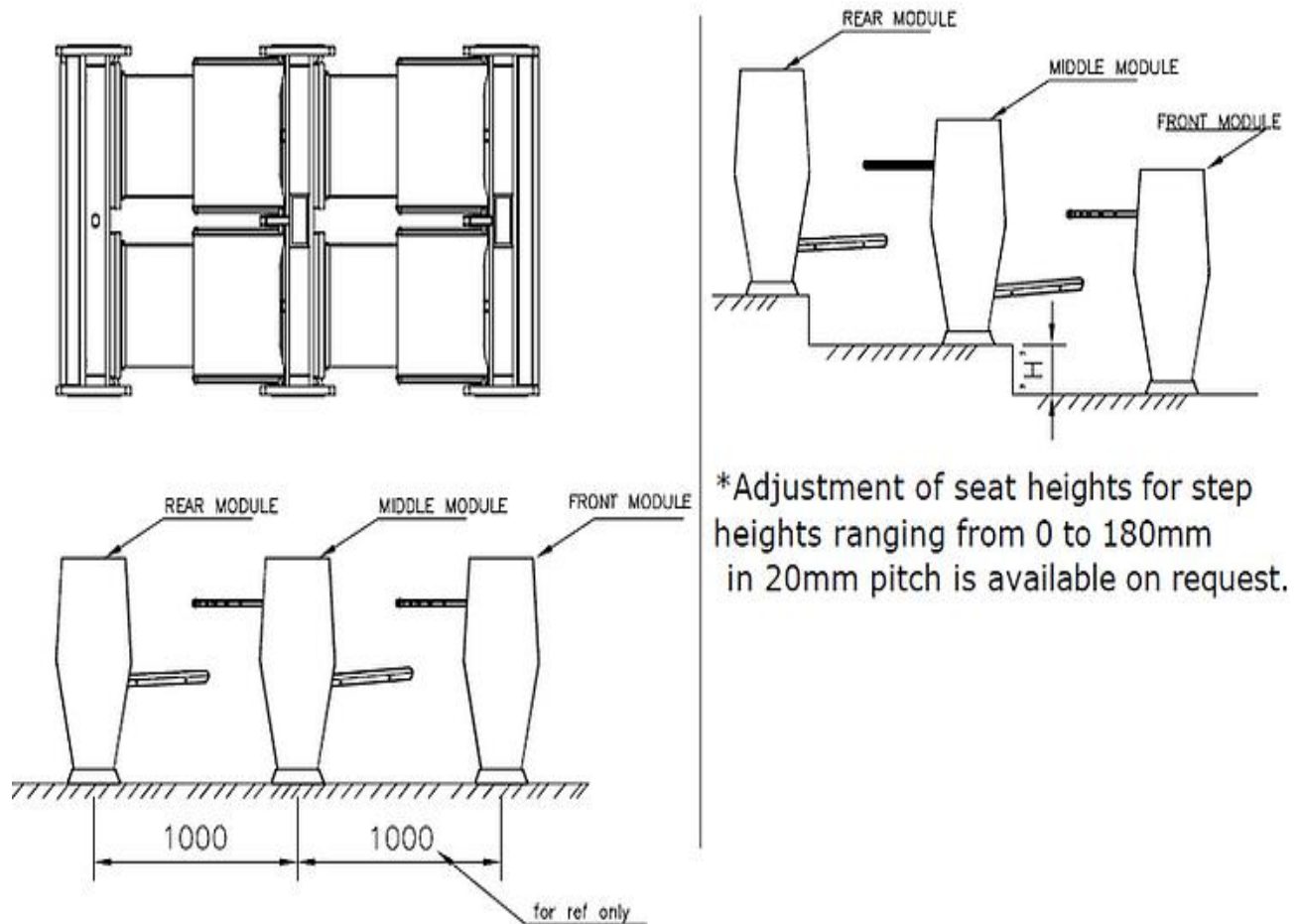
30. 2-seater Dual desk with Cushion





Supply and Installation of 2-seater with desk for front module, 2-seater with seat & desk for middle module and 2-seater with seat for rear module

- Desk with its unique form, offers foldable desks and seats that are easy to operate.
- Foldable desks and seats are designed for space saving by creating walking aisle space when folded in. Ergonomic design maintains the correct distance between desk and seat that ensures correct posture while writing or using a laptop etc.
- Easy plug and play feature built into the product enables use of laptops, LCDs, audio visual equipment more easily, facilitating interactive learning.
- Dual desk is offered as a set of fronts, middle & rear units. Middle unit can be offered in multiples as per seating capacity requirements. The Front Unit comes with a modesty panel for a uniform look. The Middle Unit is a combination of desk and seat with a common panel that helps optimize space. Also, the rear unit sports a back support for additional comfort.
- Available in two trendy and lively color combinations to give the seminar room or lecture hall a youthful yet mature look.
- Available in 2-, 3- & 4-seater configurations.



Product Specifications:

A) Under structure:

- The under structure is made with steel ERW tube section (IS:228) of size 80x40x2.5mm thick with powder coat finish .
- Under structure consists of two welded leg assemblies connected by means of welded seat side tube assy and welded desk side tube assy on both sides.
- Sturdy anchoring by anchor bolts on to base of 10mm thick plate for proper resting of structure**.
- Plastic clad & shoe main clad made of glass filled 30% nylon-6 for covering anchor bolts.

B) Side clads:

Two side clads made of 35 mm thick pre laminated MDF Board with All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge band and 0.8mm thick PVC edge-banding tape pressed at 200o C 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

Desk side clad made of 18mm (± 1 mm) thick pre laminated MDF Board & seat side clad & connecting clad made of 25mm (± 1 mm) thick pre laminated MDF Board.

C) Desklet:



- Desk has opening & closing mechanism by means of desk slider and slider sleeve made of 30% glass filled nylon-6.
- Desk comprises of pre laminated MDF Board desk with aluminium section anodized finish on to sides and TPE rubber on to aluminium section outer side for cushioning effect for desk opening closing.
- Desk and under storage made of 18mm (± 1 mm) thick pre laminated MDF Board fixed with aluminium extrusion on sides for desk opening closing. pre laminated MDF Board Make: (Century/Action Tesa/Merino/Greenlam or equivalent)

D)Seat:

Seat has self closing mechanism which will operate by means of spring.

-Seat understructure is a combination of welded fabricated structure made of $\varnothing 25$ X2mmthk ERW tube with powder coated finish which is covered by 0.8mm thick sheet metal cover and upholster with molded foam inside and leatherite cover.

-Seat back comprises of ply with molded foam upholster inside & leatherite cover. moulded foam 50 mm thickness and **Foam density** 55 kg/Cu. Mtr. (± 5 kg/cubic meter) upholster inside & leatherite cover.

E) Wire carrier:

Wire carrier made of 0.8mm thick CRCA metal sheet for holding wire passing.

F) Switch box:

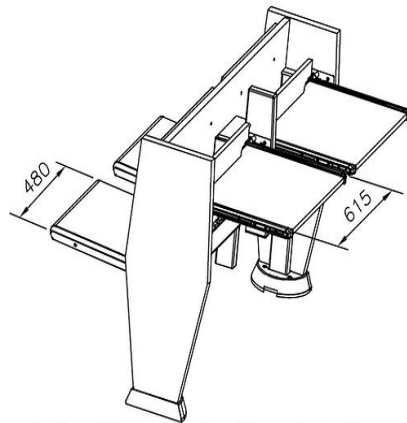
Switch box made of 1.2mm thick CRCA metal sheet for switch plate mounting suitable for anchor roma plates.

G) Front clad Mounting:

Front clad mounting made of 18 MM thick pre laminated MDF Board with sheet metal cover and bracket for holding on to top and mounting box for holding of clad with seat side clad.



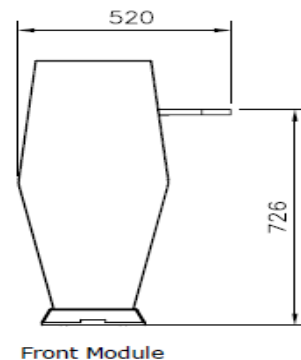
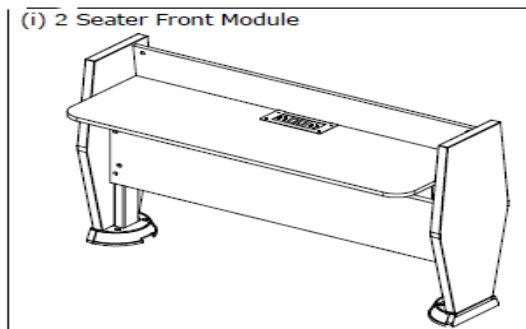
- **Foldable Seat** The unique design offers fixed desks and foldable seats that are easy to operate, have a neat open look and save aisle space when folded in.
- **Plug and Play** Easy in-built plug and play feature facilitates interactive learning, thus making the use of laptops, LCDs and audio-visual equipment easier.
- **Grouted Under structure** Grouted under structure assures you of sturdiness and fixed position thus ensuring organized lecture halls.
- **Cushioned Seats** Comfort is assured through long hours of information sharing with cushioned seats that keep fatigue at bay.
- **Hooks For More Utility** Hooks on the side of the desk allow for bags to be hung beside each desk for storage and easy access.



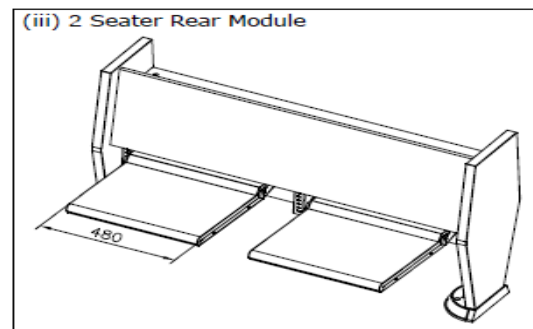
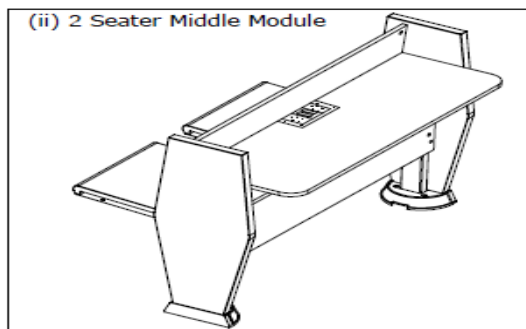
*The representative shown here is of 2 seater unit.
*Refer to DMX for further details of other modules.



A platform-based design with user assisted closing seat & **fixed desk** system for lecture theatre rooms, auditoriums as well as corporate training rooms. The Seat will be Auto Tip



Front Module



Size of 2-Seater Desk Front type: Width: 1374mm, Depth: 698.5mm, Height: 890mm, Working Top Height: 726 mm, 2-Seater Middle type: Width: 1374mm, Depth: 1080 mm, Height: 890 mm, 2-Seater Rear type: Width: 1378mm, Depth: 751 mm, Height: 890mm ($\pm 5\%$ Engineering Variation in dimension), Installation type: Grouted under structure (for sturdiness and fixed position). Shoe made up of: Polyamides based on PA6, Supplied as per seat in Choco Colour



31. 4-seater discussion table for skill Lab

Talk 4 Seater Round



Membrane 4-Seater Round POD 1200 Dia size shall be 1200 diameter x 750mm ($\pm 5\%$ Engineering Variation). Top shall be 25mm ($\pm 1\text{mm}$) thick base material shall be 25mm ($\pm 1\text{mm}$) thick MDF board with 2 mm PVC membrane foil using wrap technology. The foil shall be pre-coated with PU layer for better scratch and wear resistant. 0.6 mm balancing laminate on bottom surface. The vertical cladding shall be 18 mm thick base material shall be 18 mm MDF board. 0.4 mm PVC membrane foil using wrap technology. The foil shall be pre-coated with PU layer for better scratch and wear resistant. 0.6 mm balancing laminate on bottom surface. Legs and Top /Bottom plate shall be made from 1.6 mm Matt silver Anodized Aluminium extrusion. Legs Assembled together with 8 mm thick MS powder coated sheet at bottom and 3 mm thick MS powder sheet coated at the top. The MS base shall be having provision for wire entry and glide fixing. Access Flap and Switch Mounting Tray made from matt silver anodized aluminium extrusion and plastic moulded components to facilitate access of electrical / data/voice sockets access from top. All Hardware: The high-quality hardware like Roller slides, SS Hinges, minifix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer; MDF Board and Laminate Make: Century/Action Tesa/ Greenply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer). Discussion table as approved by engineer in-charge/employer.

32. Dissection Table



Supply and Installation of Stainless-steel dissection table with Dimension - 1820mmL*600mmW*900mmH ($\pm 5\%$ Engineering Variation), 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 25 Liter,

Headrest,

Body support shims,

Foot 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.

Facility to fix stands & stands for lithotomy strapping

33. Museum Wooden Racks



Supply and Installation of Museum Rack with size 2130mm(H)x 900 mm(W)x480mm(D) ($\pm 5\%$ Engineering Variation) with lockable doors. Storage shall be made up of 25mm ($\pm 1\text{mm}$) thick commercial plywood (MR grade plywood) with 1.0 mm thick High Gloss Laminate of approved make and Colour, 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 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 wooden storage shall

have 2 openable door storage with One adjustable shelf with uniform load carrying capacity of 80 kg. To protect the wall from kicks, abrasion and serve as a decorative moulding, skirting shall be provided at bottom. The two openable Door storage shall be provided in upper portion with two adjustable shelves, the door Panel shall be made of 18 mm thick commercial plywood (MR grade plywood) with 1.0 mm thick High Gloss Laminate on both side of approved make and Colour and 8 mm thick transparent glass fitted in all doors, All Hardware: The high-quality hardware like Roller slides, SS Hinges, Mini fix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer, ply Board and Laminate Make: Century/Action Tesa/ Green ply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer)Museum Glass Rack design and colour as approved by Engineer In-charge/employer.

34. 4 Door Book case



4 Door Book Case shall have the configuration of 914mm(W)x380mm(D)x1842mm(H) ($\pm$ 5% Engineering Variation). 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 Panel, Back Panel and Side Panel are made up of 0.8 mm thick high yield CRCA sheet and other components from 0.8 mm CRCA sheet. Each door shall have a 6 Lever Cam Lock with Common Key. 5 mm thick glass should be used in each door for clear inside vision which 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. Steel Make: TATA Steel/ Sail Steel or equivalent, Book case as **approved by engineer in-charge/employer**.

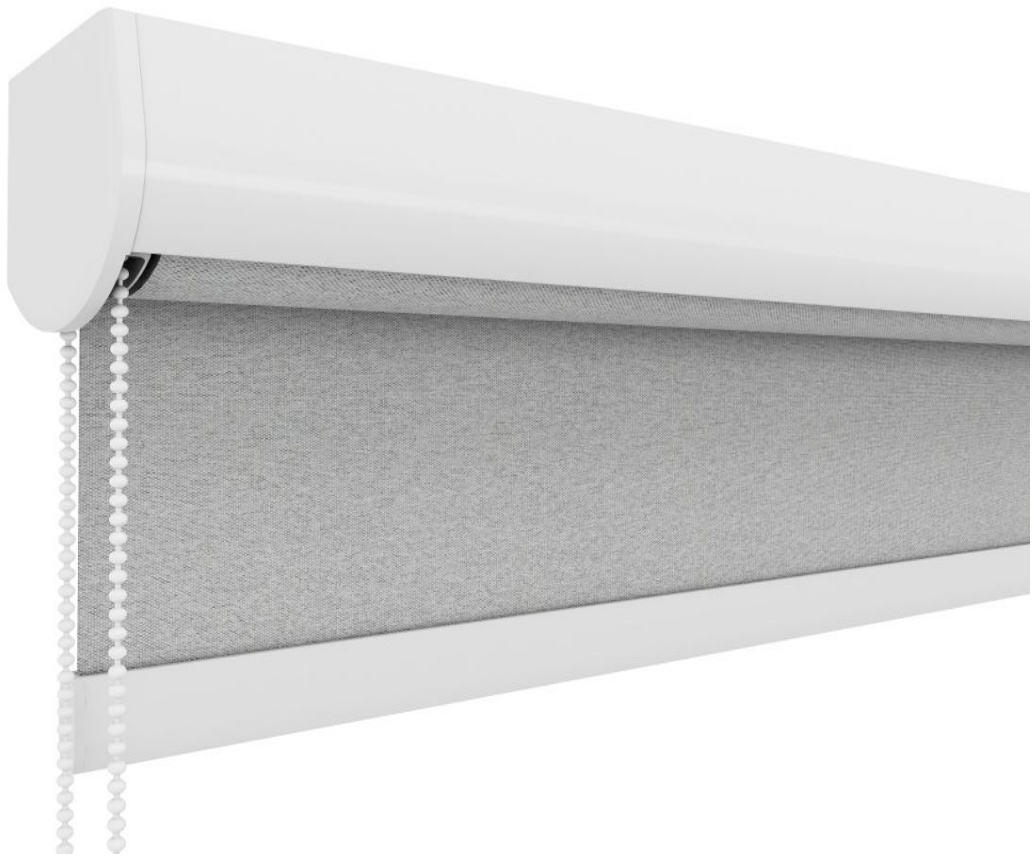
35. Wooden Podium



Supply and Installation of Podium with institute Logo, Podium made up of 25mm (± 1 mm) (± 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 (≤ 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 25mm (± 1 mm) (± 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 25mm (± 1 mm) (± 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 25mm (± 1 mm) (± 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 (± 30 mm) (W) x 600 mm(± 30 mm) (B) x 1200 /1050 (± 30 mm) mm(H) ($\pm 5\%$ Engineering Variation). All Hardware: The high-quality hardware like Roller slides, SS Hinges, Mini fix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/EBCO make or equivalent or as approved by engineer in charge/employer, Ply Board and Laminate Make: Century/Action Tesa/ Green ply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer)Podium as approved by Engineer In-charge/Employer.

36. 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(± 1 mm) & thickness 1.25mm (± 1 mm) ($\pm 5\%$) 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 ± 1.2 mm (± 0.1) and width of 26.5mm(± 1 mm) and height of 33.5mm(± 1 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. Aluminium bottom bar rod made up of AA6063 alloy 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 moulding method having perfect push fit with the bottom bar. The dimensions of end caps of bottom bar specified as length: 18mm (± 1 mm) , 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 moulded 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 (± 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.**

37. Stainless Steel Dustbin



Supply and Installation of Stainless-steel Dustbin with Lid and Handel- Dimension of dustbin shall be 10"X 14 ", capacity of dustbin: 15 Liter. Material Non-Magnetic stainless steel 304 Grade, Thickness of wall is 1.0 mm, Dustbin shall be Leg operated or as approved by Engineer/Employer.

38. Library reading Chair



Supply Installation of Study chair, under structure Frame: - MS ERW oval tube with 32mm (± 1 mm) diameter with wall thickness of 2.0 mm in Nickel chrome plated finish and provided with a base plate for seat fixing. Seat: - The Seat shall be moulded with 12mm thick ISI marked hot-pressed commercial plywood upholstered with black colour Leatherette upholstery covers and moulded Polyurethane foam, The High Resilience polyurethane foam shall be moulded with density= 45 ± 2 kg per meter cube and hardness load 16 ± 2 kgf as. per IS:7888 for 25% compression. The dimensions of seat shall be

51.0cm(W) x 48.0cm(D) ($\pm 5\%$ Engineering Variation). Thickness of seat foam shall be 60 mm.

Back: - The back shall be moulded with 12mm thick ISI marked hot-pressed commercial plywood upholstered with black colour Leatherette upholstery covers and moulded Polyurethane foam, The HR polyurethane foam shall be moulded with density= 45 ± 2 kg per meter cube load 16 ± 2 kgf as. per IS:7888 for 25% compression. The Back size shall be 45cm W x 60.5cm H, The armrests top is moulded from PU and tubular armrest support made of 3.2 cm diameter x 0.2 cm thick MS ERW tube with Nickel chrome plated finish, Thickness of foam shall be 50 mm, Over all dimensions of study Chair: Height from ground 92.5cm. Seat height- 45.0 cm. Dimensions tolerance/variations shall be within ± 1 cm, **Study Chair as approved by engineer in-charge/employer.**

39. Over-head storage cabinet for Laboratory



Providing & Fixing of Modular over-head storage cabinet of 600mm (W) X 380mm (D) x 600mm (H) ($\pm 5\%$ Engineering Variation), Wall mounted Storage Cabinets to be of complete modular design consisting of Cabinet Frame, metal shutters, and plastic recess handles. Cabinet frame to be of 0.8 mm CRCA MS sheet, with horizontal stiffeners of 1.2mm thick. Metal Shutters are of 0.8mm thick CRCA MS sheet with profile insert to provide rigidity to the doors. 1 Shelf is provided made from CRCA, shelf is adjustable to have a load carrying capacity of 40 kg Uniformly Distributed Load (UDL). Plastic Recess Handles to provide extra corrosion resistance. Hinges to be spring loaded with CED coating with self-closing mechanism of Hettich/Hafelle or equivalent make. Complete Storage using to be Flush design with no protruding handles for better safety of the users to be provided. The complete M.S. material of cabinet to be pre-treated (degreased, Zinc phosphate) and epoxy powder coated for better corrosion resistance. The thickness of powder coat to be 45-50 microns as per Specification, which passes the test of Salt Spray

for 1000 hours and having the Scratch Hardness of 3Kgs. Each unit should have a locking facility with 180°, cam lock mechanism as per approved make. Complete and as per approved sample and as per the direction of Engineer-In-charge.

40. Lab Stool



Supply and Installation of Laboratory Stool, the SEAT ASSEMBLY: The seat should be made up of 1.2 ± 0.1 cm thick flat plywood and with moulded Polyurethane foam and should be upholstered with replaceable synthetic leather covers.

SEAT SIZE: Diameter 40.0 cm ADJUSTMENTS: 360° Revolving type

BACK ASSEMBLY: The back foam should be designed with contoured Lumbar support for extra comfort. The upholstery should be available in synthetic leather. *BACK SIZE: 45.0 cm (W) covered with polyurethane foam.

HIGH RESILIENCE (HR) POLYURETHANE FOAM: the HR polyurethane foam should be moulded with density = $45 \pm 1-2$ kg/m³ and Hardness load 16 ± 2 kgf for 25% compression.

HEIGHT ADJUSTMENT: The manual height adjustment should be very easy to operate with a help of a knob. It can be easily locked at the most comfortable position.

PEDESTAL ASSEMBLY: The five-prong pedestal should be fabricated from 0.2 ± 0.02 cm thick HR sheet (should be: DD 10791 HR), powder coated (DFT 40-60 microns) and fitted with an injection moulded black Polypropylene Hub Cap and 5 nos. twin wheel castors. The pedestal should be 55.0 ± 0.5 cm pitch-circle diameter (65.0 ± 1.0 cm with castors).

TWIN WHEEL CASTORS: The twin wheel castors should be injection moulded in Black Nylon. Overall dimensions shall be Width- 65.0cm, Depth- 65.0 cm, Height- 66.0cm to 77.5cm, Seat Height- 45.0 to 56.5cm ($\pm 5\%$ Engineering Variation), stool as approved by engineer in-charge/employer.

41. Work Table



Supply and installation of table as per technical specification. Work table size: 1200mm Width x 600mm Depth x 750mm Height($\pm 5\%$ Engineering Variation), The table top shall be made from 25mm (± 1 mm) thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, side panel made from 25mm (± 1 mm) thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, the side panels have 2 glide screws each for levelling of the desk and Modesty panel shall be made from 18 mm thick Pre-laminated MDF Board conforming to Grade SBG II of IS 12406/2003, thickness of laminate is 1 mm thick, E1 grade Pre-laminated MDF Board and 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 pre-laminated MDF 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.

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascias is made out of 18mm (± 1 mm) thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm (± 1 mm) thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer are mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit $\pm 2\text{ mm}$: Diameter 40 mm and

height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 585mm H, All Hardware (Handles, Slides, Hinges, locks, sliding channel etc) Hettich/Ebco Make or equivalent or as approved by engineer in-charge/employer. MDF Board/laminate Make: (Century/Action Tesa/Merino/Greenlam or equivalent or as approved by engineer in-charge/employer). **Table as approved by engineer in-charge/employer.**

42. Metal Open Rack



Supply and Installation of Slotted Angel Rack (Size: 910mmW x480mmDx2100mmH ($\pm$ 5% Engineering Variation) (OPEN RACK), Rack shall be provided with 6 nos. of adjustable shelves with 5 compartments.

Racks shall be manufactured from Slotted M.S angle size 40mmx60mmx 4.0 mm.

Shelves shall be manufactured from 1.6 mm thick CRCA sheet and Shelves shall be provided with stiffener for better durability and load capacity.

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. Slotted Angel Rack as approved by engineer in-charge/employer.

43. Steel Almirah with glass shutter.



Supply Installation of Steel storage with Glass Shutter of size: Almirah 910mmWx 486mmDx 2150mmH ($\pm 5\%$ Engineering variation) – Having 4 shelves making 5 compartments for full Height, Whole body, doors frame and shelf made of 0.8mm CRCA sheet, 8 mm thick Clear glass fitted in door frame, Shelves and doors should have stiffener for better strength and load bearing capacity. Auto closing CED Coated “HETTICH”/ “HAEFFLE” / equivalent Hinges for better adjustment of doors. Chrome plated three way Recess type spring loaded rectangular snap shut handle cum lock with duplicate keys Highly durable – Made of 100% virgin Epoxy Powder Coated CRCA confirming to IS: 513 CR2 (Cold Reduced Carbon Steel Sheets & Strips (Part 1), 2016, procured from TATA/Jindal Steel (Test Certificate available on request). Furthermore, Complete material passes through 7 stage, ultra-modern NANO-TECHNOLOGY based Pre-treatment plant prior to powder coating, making it highly corrosive resistant. Superior Finish – Powder coating done on Fully Automatic Powder Coating Plant with world leader GEMA™ spray booth and World Leader AkzoNobel Powder ensures smooth, uniform and highest quality levels of Powder Coating Modern Technology - Rigid Know Down Construction done out of complete 0.8 mm thick CRCA sheet. Each Compartment Shelf has uniformly distributed

load capacity per shelf is 35 kg. The rigid construction gives extra strength and durability, whereas the epoxy-polyester adds the finishing touch to the unit. Logistic Friendly – 100% Knock Down product makes transportation a very easy and SAFE, product gets assembled at site only. Design Simplicity -Simplistic Design with “PEDESTAL” at bottom makes for an aesthetic look and seamless finish, apart from offers large storage capacity that makes sure you have enough space for storage steel Make : TATA Steel/ Sail Steel/Jindal Steel or Equivalent. Almirah as **approved by engineer in-charge/employer**

44. 8-seater meeting table



Supply and Installation of Meeting Table 8-Seater Size: 2400mmLx 1200mmWx 750mmH ($\pm 5\%$ Engineering Variation) Made of 25mm ($\pm 1\text{mm}$) thick commercial plywood (MR grade plywood) with 0.8 mm thick High Gloss Laminate on both side of approved make and Colour, 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 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. Soft closing dual access flap provided for access to power supply and data cables. Under structure: the Under-structure consists of mixture of 25mm ($\pm 1\text{mm}$) thick commercial plywood (MR grade plywood) with 0.8 mm thick High Gloss Laminate on both side of approved make and Color, 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 side 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), All Hardware: The high-quality hardware like Roller slides, SS Hinges, minifix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer, MDF Board and Laminate Make: Century/Action Tesa/ Green ply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer). Table **as approved by engineer in-charge/employer**.

45. High End office table (2100mm)



Providing & Fixing High end office table with Main table, Side Unit, Mobile pedestal and Back unit: -

MAIN TABLE of size 2100mmW x 900mm D x 750mmH ($\pm 5\%$ Engineering Variation) with top made of 36mm (± 1 mm) thick, MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, table finished with approved shade. The gable end of 25mm (± 1 mm) thick. MDF board as per IS 12406 and veneer with PU finish having

scratch resistance of 2H, The table has provision with Aluminium Anodized Access Flap for better electrical provision.

The Gabel and Modesty panel is made of 25mm (± 1 mm) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed 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. Top, sides and bottoms (of each product) fixed up system: By using mini fix, supporting bracket/corner and wooden dowel in (knock down) system for interconnecting (MDF board). Design / Shape of table: Rectangular and taper inside at both side ends

Extended Return Unit: -

Extended Return Unit size 1200mmL X 600mmD X 750mmH ($\pm 5\%$ Engineering Variation) The Side unit top is made up of 25mm (± 1 mm) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, under structure is made up of 25mm (± 1 mm) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed 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 side unit is combination of 1 open able shutter storage with proper locking arrangement, two open shelves and 1CPU Storage Drawer/storage shutter pull up mechanism: Groove type,

Back Unit

Back Unit Of size 2100mmL X 480mmD X 1850mm H ($\pm 5\%$ Engineering Variation): The top is made up of 25mm (± 1 mm) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H & under structure is made up of 18mm (± 1 mm) thick MDF board as per IS 12406 and veneer with PU finish having scratch resistance of 2H, All Exposed edges of pre-laminated MDF board to be sealed with 2mm thick PVC edge banding tape pressed 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. Below storage shall be provided with wooden shutters storage with height of 750mm & the upper right side of the back unit shall also be provided with wooden shutters storage with width of 450 mm and the left end side upper part shall be provided with 3/4 storage shelf with cover of 5mm thick glass for display purpose. All shutters and drawer shall be provided with proper handle and locking arrangement.

Mobile Pedestal Drawer Unit: Each Table should be provided with 3 drawer Wooden Mobile Pedestal having of 2 sliding Drawer and 1 file Box mounted on 4 castors with front 2 castors lockable. The drawer top, and side panels including the drawer fascia's is made out of 18mm (± 1 mm) thick Pre-laminated MDF board as per IS 14587(1998), the back of the drawer unit is made from 9mm (± 1 mm) thick Pre-laminated MDF board as per IS 14587(1998). The units are assembled by knockdown fittings such as Mini fix & dowels. The drawer is mounted on rollers slides to enable smooth operation of the drawer. The pedestals shall have central locking mechanism. D/C type slim Handle for Drawer and Shutter. Size of lockable castors for pedestal storage unit ± 2 mm: Diameter 40 mm and height 55 mm, Mobile Pedestal size shall be 400mm W x 550mm D x 650mm H ($\pm 5\%$ Engineering Variation), All Hardware: The high-quality hardware like Roller slides, SS Hinges, Mini fix, SS handles, locks, wooden dowels, screw, shall be used of Hettich/Ebco make or equivalent or as approved by engineer in charge/employer, MDF Board and Laminate Make: Century/Action Tesa/ Green ply/Merino/Greenlam or equivalent/or as approved by engineer in-charge/employer). The high end office table shall be complete as per direction of Engineer-in-charge/employer.

46. 3-seater Waiting Chair



The seat and back to be made up of high-density self-skin 25-30mm thick PU Foam reinforced with 1.2 mm thick MS perforated sheet insert the PU Foam having density of 680+/-10Kg/m³ with hardness of 55 +/-5. Seat Size :52.0 cm (W) X 50.5 cm (D). Back Size: 52.0 cm (W) X 53.5 cm (H), seat height (front): 42.50cm, Overall length: 165.5 cm, depth: 66.5 Cm, height: 87 Cm, Cross Beam made from Die-cast Aluminium black powder coated square tube of size 6.0+/- 0.05cm X 6.0+/- 0.05cm X 0.4+/-0.016 cm thick fitted with

polypropylene end caps. Thickness of the seat support and lumber support (minimum): 23 mm, Legs & Armrest Made from Die-cast Aluminium with Powder coated 60 microns. Number of armrests: 04 Nos. Thickness of material of Arms 1.8 mm, Thickness of material of Legs 2.0 mm, Legs are fitted with soft grip PVC level adjusting shoes. Main frame finish with Powder coated of minimum 50-70microns, 3-seater waiting chair as approved by engineer in-charge/employer.

47. 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

<u>BUDGETARY QUOTATION</u>					
(Package-II) Supply, Installation testing and commissioning of furniture work for Medical College Block, Government Medical College & Hospital, Jalgaon, Maharashtra					
Reference No.		HSCC/GMC-JALGAON/ Medical college block-Furniture/2025			
Name of Manufacturer/Bidder					
Address & Contact Details of the Manufacturer/Bidder submitting the Budgetary Quotation:					
S. No.	Name of Items	Unit	Total Quantity	Rate Per Unit (In Rs.) with inclusive of All Taxes & Duties and 3 Years Warranty	Amount (In Rs)with inclusive of All Taxes & Duties and 3 Years Warranty
1	Linier Work Station	Each	147		
2	Work station chair	Each	150		
3	High Back Chair for office table 2 & 3	Each	75		
4	Mid Back Visitor Chair	Each	102		
5	High End office table (2400mm)	Each	1		
6	High back chair -2	Each	12		
7	Revolving visitor chair	Each	48		
8	Office Table-2 with ERU (1650)	Each	51		
9	Office table -3 (1500)	Each	24		
10	Reception table	SQMT	50		
11	Reception/library counter Chair	Each	12		
12	Steel Almirah	Each	251		
13	Small wooden Almirah	Each	140		
14	4-seater dining table	Each	23		
15	Dining Chair	Each	92		
16	Meeting room Chair/counsling room chair	Each	256		
17	3 seater Sofa	Each	8		
18	2 seater Sofa	Each	89		
19	1 seater Sofa	Each	2		
20	Center Table	Each	29		
21	Corner table	Each	82		
22	Stainless steel revolving Stool	Each	100		
23	Wall side laboratory bench	Each	425		
24	Covalent Island in running mtr	Each	251		
25	Library Reading Table 1500x1200	Each	64		

<u>BUDGETARY QUOTATION</u>					
(Package-II) Supply, Installation testing and commissioning of furniture work for Medical College Block, Government Medical College & Hospital, Jalgaon, Maharashtra					
Reference No.		HSCC/GMC-JALGAON/ Medical college block-Furniture/2025			
Name of Manufacturer/Bidder					
Address & Contact Details of the Manufacturer/Bidder submitting the Budgetary Quotation:					
26	Meeting Table 2700x1200	Each	1		
27	Book Rack double sided	Each	163		
28	Book Rack single sided	Each	93		
29	Chair With Desk let.	Each	278		
30	2-seater Duel desk with Cushion	Each	384		
31	4-seater discussion table for skill Lab	Each	40		
32	Dissection Table	Each	25		
33	Museum Display Racks (900mm)	Each	99		
34	4 Door Book case	Each	20		
35	Wooden Podium	Each	4		
36	Roller Blind Curtain	Sqmt	1000		
37	Stainless Steel Dustbin	Each	223		
38	Library Reading Chair	Each	256		
39	Over-head storage cabinet for Laboratory	Each	212		
40	Lab Stool	Each	400		
41	Work Table	Each	26		
42	Metal Open Rack	Each	66		
43	Steel Almirah with glass shutter	Each	40		
44	8 seater meeting table	Each	1		
45	High End office table (2100mm)	Each	9		
46	3 seater Waiting Chair	Each	25		
47	Dustbin Large (100 Litre)	Each	10		
48	Total Amount In RS.				