

Annexure-I

1. Computer table with modesty panel

Specification:

Modular workstation for 1 person Recta work surface of size (1200W X 600D) mm with panel
Ht – 1200 mm. Fabric Magnetic, whiteboard & Metal tiles used with Raceway below work surface including
pedestal KBPT, CPU Trolley.

THE PANEL STRUCTURE:

UPRIGHTS & HORIZONTALS (for 52.4mm): These uprights and horizontals shall be made of aluminum extrusion & have average wall thickness of 1.2 mm & powder coated with epoxy-polyester powder.

BOTTOM FRAME ASSEMBLY: Fabricated bottom frame for 52.4mm shall comprise of L- Channels made of 2mm thick Cold Rolled Closed Annealed steel (IS:513), formed plates of 3mm thick HR steel (IS:2062) & ERW(Electric resistance welding) steel tube of size 35x15x1.6mm in oval cross section (IS:7138) welded together. This shall be coated with average 50 to 60 micron thickness of epoxy powder coating. This shall be bolted to the uprights with M6 screws.

BLOCKS FOR 52.4mm: A block for 52.4mm panel's thickness shall comprise of 38mm thick paper honeycomb with 3mm MDF on each sides and 0.6mm decorative laminate or fabric 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.

- **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.
- **LAMINATED TILES:** Laminated tiles shall be 9.0 to 9.5 mm thick pre-laminated particle board conforming to IS: 12823 having all its edges with minimum 0.5 mm thick PVC edging.

ALUMINUM EXTRUSIONS: The top trims and end trims for 52.4 mm shall be made from aluminum extrusion having material AL96063-T6. All kinds of extrusions for 52.4 mm shall have average wall thickness of 1.2 mm & having finish of powder coating.

WORKTOPS:

WORKTOP 25 MM THICK PRELAMINATED (with PVC edge band): Work top shall be made of 25mm thick Prelaminated particle board interior grade (As per IS: 12823). Bottom shall have a backing laminate of minimum 0.6mm thickness. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC Edge band glued with hot melt Ethylene Vinyl Acetate glue.

- Work top shall be mounted onto the partition panels for work stations by means of cantilever brackets made from 2.0 mm thick Cold Rolled Closed Annealed grade D steel as per IS:513-1994 duly pretreated and powder coated.

CERTIFICATION: Modular workstation should have ISO certifications along with products certifications like BIFMA level 3 conforms to ANSI/BIFMA e3-2014e Furniture Sustainability Standard issued by BIFMA (www.bifma.org); GreenPro Standard that the product qualifies as Green product; Indoor Advantage Gold Conforms to the ANSI/BIFMA Furniture Emissions Standard and ANSI/BIFMA e.3-2019 for the open plan and private office workstation parameters.

ISO certificates ISO 9001:2015, ISO 14001:2015, ISO 50001:2011, OHSAS 18001:2007 is mandatory.

2. Student chairs

Overall Dimensions of Chair: Seat Height - 47.5 cm.(Loaded Condition), Height - 89.0cm., Width & Depth of Chair as measured from base - Width-71.0cm and Depth-82.0 cm.

SEAT / BACK: The seat sub-assembly should be made up of 1.2±0.1cm thk Plywood upholstered with moulded foam and polyester fabric and covered with an injection-moulded polypropylene outer cover. The seat can tip-up when not in use and this feature can be used while stacking the chairs horizontally. The back sub-assembly should be made up of injection-moulded polypropylene inner upholstered with moulded foam and polyester fabric and covered with an injection-moulded polypropylene outer cover. The contoured back with width extension at the bottom should be designed to give comfort to lower back. The back flexing features allows the back to tilt by 9'±2' to aid the user in adopting a comfortable reclining posture. Both these sub-assemblies should be fixed to the tubular structure, **BACK SIZE:** 45.2cm (W) X 44.6cm (H) **SEAT SIZE:** 47.0cm (W) X 50.0cm (D)

API

TUBULAR FRAME STRUCTURE: The powder-coated 4 leg structure should be made of 2.2 \pm 0.03cm dia x 0.25 \pm 0.02cm thk M.S. E.R.W. Tube front and rear leg welded along with connecting tube made of 1.9 \pm 0.02cm dia x 0.2 \pm 0.016cm thk M.S. E.R.W. Tube to form the tubular frame assembly. The legs should be provided with injection-moulded adopter bush in black Nylon and brake-loaded castors enabling easy maneuvering while not in use and stable sitting while in use. **The chairs can be stacked horizontally when not in use.**

POLYURETHANE FOAM: The Polyurethane foam should be moulded with density = 70.0 \pm 8.0 kg/m³ and Hardness = 20 \pm 2 for Seat & 16 \pm 2 for back at 25% compression.

ARMRESTS: The armrest structure should be made up of 2.2 \pm 0.03cm dia x 0.25 \pm 0.02cm thk M.S. E R.W. Tube welded to the Tubular Frame structure and having a scratch-resistant ABS Arm top.

FULL DESKLET: The Full Desk let assembly should be Flip-up type and should be made up of extension tube of 1.9 \pm 0.02cm dia x 0.2 \pm 0.016cm thk PAS. E.R.W. Tube and a support tube on L.H. side of 1.6 \pm 0.02cm dia x 0.2 \pm 0.016cm thk M.S. E.R.W. Tube on which a scratch resistant ABS desk let top should be fixed and covered on bottom side with a cover.

BRAKE-LOADED CASTORS: The brake-loaded castors should be assembled to the chair legs, to give a free movement for maneuvering the chair when not in use and it will break the movement when load should be applied (while in use) to give a stable feel. The twin wheel castors should be injection moulded in black Polypropylene.

CERTIFICATION: Desk let Chair should be **GREENGUARD GOLD, GREENPRO, SCS Indoor Air Quality, India Design Mark certified product.**

3. Sofa & Centre table

Specification of sofa:

3 Seater Sofa (Size: 1820W x 920D x 890H) mm :

UPHOLSTERY MATERIAL: Half Leather -Touch point: Pure Leather. Non Touch Point: Syn. Lth• Shade: Tan Brown • Pure Leather Thickness: 1.2 mm• Syn. Leather Thickness: 1 mm. Color Fastness to Rubbing (Dry/Wet) (scale 1- 5): Dry = 4 Wet = 34.

FRAME: Material: Combination of plywood and Solid Wood• Plywood thickness: 12 mm (moisture resistance and treated) • Moisture content: 10 -12 %.

FOAM SEAT MATERIAL: Slab stock foam • Density: Super soft 32 kg/m³.

BACK: Recron (Denier: 15, Fiber hollowness: 100%).

WEBBING: Double webbing: S - spring and nylon belt.

LEGS: PVC.

Specification of Centre table:

Coffee Table,(Size: 1200W X 600D X 378H) mm:

TABLE TOP: MDF top with rubber wood understructure.

COLOUR: Lacquered in cappuccino Shade.

LEGS: Tapered legs.

4. Classroom table with chair

Specification of Table:

Office Table (Size: 1350W X 600D X 750H)mm

WORK SURFACE: Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top. Grommet provided on work surface for wire management.

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

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

HINGE DOOR STORAGE: Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Drawer fronts made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top. Pedestal construction is BOX-BOX-FILE type which Uses powder coated 400 MM long metal Panel Drawer Slides. Drawer extension is 325 MM. Drawers have a soft closing & anti slam mechanism. Handles are provided for ease of opening. Pedestal is provided with lock for security.

CERTIFICATION: Office Table should be **GREENGUARD UL Certified Product.**

Specification of chair:

HIGH BACK CHAIR WITH SEAT DEPTH ADJUSTMENT -SEAT ASSEMBLY: The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with foam laminated fabric and moulded High Resilience Polyurethane foam of Density 45 ± 2 kg/m³, and hardness load 16 ± 2 kgf as per IS:7888 for 25% compression. *Seat SIZE: 46.0 cm. (W) x 48.0 cm (D), Back SIZE : 46.6 cm. (W) x 75.6 cm (D).

BACK ASSEMBLY: The Cushioned back should be made of PU Foam with insitu molded MS E.R.W. Round Tube of size 1.9 ± 0.03 cm x 0.16 ± 0.0128 cm. It upholstered with foam laminated fabric. The armrest top should be moulded from polyurethane (PU) and mounted on to a drop lift adjustable type tubular armrest support made of 03.81 ± 0.03 cm x 0.2 ± 0.01 cm thk MS E.R.W tube. The Armrest structure should be powder coated (DFT 40-60 micron).

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

- * 360degree 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 viable tilt angle to the chair.
- * Seat/back tilting ratio of 1:2.
- * The mechanism housing should be made up of HPDC Aluminum black powder coated.

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

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

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

PEDESTAL ASSEMBLY: The pedestal should be injection moulded in black 33% glass-filled Nylon 66 and fitted with 5 nos. twin wheel castors. The pedestal should be 66.0 ± 0.5 cm. pitch-center dia. (76.1 ± 1.0 cm. with castors.)

TWIN WHEEL CASTOR 5 Nos: Twin wheel castors shall be injection moulded in plastic having 6.0 ± 0.1 cm wheel Diameter and assembled to pedestal.

CERTIFICATION: High Back Chair should be **GREENGUARD GOLD, GREENPRO, BIFMA LEVEL, SCS Indoor Air Quality, India Design Mark certified product.**

5. Computer chair

Overall Dimensions of Chair-Seat Height - $44.2-54.2$ cm. Height - $96.3-113.8$ cm. Width- 76.1 cm and Depth- 76.1 cm.

SEAT ASSEMBLY/BACK ASSEMBLY: The Cushioned seat should be made of Injection molded Plastic outer & inner. Plastic Inner should be upholstered with foam laminated fabric and moulded High Resilience Polyurethane foam of Density 45 ± 2 kg/m³, and hardness load 16 ± 2 kgf for 25% compression. The Cushioned back should be made of PU Foam with insitu molded MS E.R.W Round Tube of size 1.9 ± 0.03 cm x 0.16 ± 0.0128 cm. It upholstered with foam laminated fabric. Seat SIZE : 46.0 cm. (W) x 48.0 cm. (D). BACK SIZE : 46.6 cm. (W) x 59.6 cm. (D)

ARMRESTS: The armrest top should be moulded from polyurethane(PU) and mounted on to a drop lift adjustable type tubular armrest support made of 03.81 ± 0.03 cm x 0.2 ± 0.01 cm thk MS E.R.W tube. The armrest height adjustable up to 6.5 ± 0.5 cm in 5 steps. The Armrest structure should be powder coated (DFT 40-60 micron)

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

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

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

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

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

PEDESTAL ASSEMBLY: The pedestal should be injection moulded in black 33% glass-filled Nylon 66 and fitted with 5 nos. twin wheel castors. The pedestal should be 66.1 ± 0.5 cm. pitch-center dia. (76.1 ± 1.0 cm. With castors.)

TWIN WHEEL CASTOR: 5 Nos. twin wheel castors should be injection moulded in plastic having 6.0 ± 0.1 cm wheel Diameter and assembled to pedestal.

High Back Chair should be GREENGUARD GOLD, GREENPRO, BIFMA LEVEL, SCS Indoor Air Quality, India Design Mark certified product.

