



सत्यमेव जयते

GOVERNMENT OF GUJARAT
ROADS AND BUILDING DEPARTMENT

Ahmedabad City (R&B) Circle,
Ahmedabad

Name of work: Repairing and Renovation of Various Guest House & Rest House Building Under Ahmedabad City (R&B) Division, Ahmedabad (Providing, Fixing and Supplying Various furniture Works, Kitchen Equipments and Other Misc. Works at NRG Bhavan, Shahibaug, Ahmedabad)

VOLUME 5 : TECHNICAL SPECIFICATIONS

Item No - 1

Double Bed Delux Size Of 2.1x1.8m : Manufacturing, supply, arrangement and keeping in good condition until project completion of single or double bed upto 550 mm height of as per design drawings and instruction of EIC. Framing, bracing, horizontal and vertical supports and fascia shall be made of seasoned Indian teak wood, MS pipes and Urea formaldehyde free MR/BWP grade ply wood as per drawings and top shall be made of 18 / 25 mm thick ply wood confirming to Urea formaldehyde free MR/BWP grade Decorative type (BWP/MR-DEC) as per relevant IS codes using low VOC adhesive. CFC HCFC free suitable adhesive. External fascia of plywood to be covered with 10 mm solid indian teakwood as per selection. Top face of ply wood support of mattress to be covered with 1 mm thick laminate. For all edges 9 mm solid indian team wood lipping to be used. All joinery to be based on good practices such as tongue and groove joint, dovetail joint etc and using hardware such as "L" brace, Tee, corner brace, screws, nails and pocket-screw joinery etc. as per drawings, specification and instruction by EIC. Price to be inclusive of all other hardware such as adhesive, nails, screws, fasteners, clips, abro tap, ABS parts etc and all labour. All external wood to be seasoned indian teak wood. All externally visible surfaces of solid wooden surfaces shall be polished with water based low VOC PU polish in shade, finish, texture and specification as per architect including fine sanding before and after insulator (sealer) coats and first coat of PU, clear non-toxic low VOC termite control additive, 2 coat of clear epoxy insulator in 1:1 proportion of hardner and epoxy, dent filling with matching putty, wooden stainer and 2 coats of water based PU etc. and all internal surfaces of plywood/ wood to be polished using laquer polish. All externally visible MS pipes to be finished using polyster powder coating and non visible pipes to be finished with epoxy primer and satin oil paint. Rates to be for complete product as per drawings and as directed by EIC. Area to be measured in plan. All plywood/ solid wood to be treated for termite using Terminator Wood Preservative or equivalent. at all floors / all levels / all heights.

1. MATERIALS

1.1 Teak Wood

- All exposed framing members, fascia, headboard supports, horizontal and vertical members shall be manufactured from well-seasoned first-class Indian Teak Wood conforming to approved specifications.
- Timber shall be free from knots, sapwood, cracks, warping, decay and insect attack.
- Moisture content shall not exceed 12%.
- Timber shall be treated with approved anti-termite and anti-borer preservative.

1.2 Plywood

- Plywood shall be Urea Formaldehyde Free MR/BWP Grade Decorative Plywood conforming to IS 303 and IS 710.
- Thickness shall be 18 mm or 25 mm as indicated in approved drawings.
- Plywood shall be calibrated, moisture resistant and free from delamination and manufacturing defects.
- External fascia shall be finished with 10 mm thick solid Indian Teak Wood.
- All exposed edges shall be provided with 9 mm thick solid Indian Teak Wood lipping.

1.3 Mattress Support Platform

- Mattress support platform shall be formed from specified plywood thickness.
- Top surface shall be finished with minimum 1.0 mm thick decorative laminate conforming to IS 2046.
- Laminate shall be fixed using approved low VOC, CFC and HCFC free waterproof adhesive.

1.4 Mild Steel Framework

- Internal structural framework shall consist of MS pipes and supports conforming to relevant IS Standards.
- Steel sections shall be free from rust, bends and surface defects.
- Exposed MS members shall be polyester powder coated.
- Concealed members shall receive one coat epoxy primer and two coats satin oil paint.

1.5 Hardware and Fasteners

- Hardware shall include screws, nails, bolts, holdfasts, L-brackets, Tee braces, corner braces, pocket screw joinery, clips, channels, ABS fittings and all fixing accessories required for complete installation.
- Exposed hardware shall be stainless steel or rust-resistant finish.
- All fittings shall be of approved make and quality.

1.6 Adhesives

- Adhesives shall be low VOC waterproof synthetic resin adhesive conforming to IS 848.
- Adhesives shall be free from CFC and HCFC compounds.

1.7 Wood Preservative

- All plywood and timber shall be treated with approved anti-termite preservative such as Terminator Wood Preservative or equivalent before assembly.

1.8 Polishing and Finishing Materials

- Water-based low VOC PU polish, epoxy insulator, wood stain, lacquer polish and associated finishing materials shall be of approved make and compatible system.

2. WORKMANSHIP

2.1 General

- The work shall be executed strictly as per approved drawings, specifications and instructions of the Engineer-in-Charge.
- Furniture shall be factory manufactured with precision workmanship.
- All dimensions shall be verified at site before fabrication.

2.2 Framework and Joinery

- Bed framing, fascia, supports and bracing shall be fabricated true to dimensions shown in approved drawings.
- Joinery shall be executed using approved carpentry techniques such as:
 - Tongue and Groove Joints
 - Dovetail Joints
 - Mortise and Tenon Joints
 - Dowel Joints
 - Pocket Screw Joinery
- Joints shall be reinforced using approved adhesives, screws and hardware.
- No visible nail heads shall be permitted on exposed surfaces.

2.3 Plywood Fixing

- Plywood shall be fixed true to line and level without distortion.

- Boards shall be fixed using approved adhesive and screws.
- All joints shall be flush and properly aligned.

2.4 MS Fabrication

- MS framework shall be fabricated true to line, level and dimensions.
- Welding shall be continuous and properly finished.
- Welded portions shall be ground smooth and treated with anti-corrosive primer before finishing.
- Framework shall be rigid and capable of supporting design loads without deformation.

2.5 Surface Finishing

- Exposed teak wood surfaces shall receive fine sanding, dent filling with matching putty, approved wood stain, anti-termite additive, two coats of clear epoxy insulator mixed with hardener in 1:1 proportion and minimum two coats of water-based low VOC PU polish.
- Concealed plywood and timber surfaces shall receive lacquer polish.
- Exposed MS members shall receive polyester powder coating in approved shade and texture.
- Concealed MS members shall receive one coat epoxy primer and two coats satin oil paint.

2.6 Termite Treatment

- All timber and plywood shall be treated with approved anti-termite preservative before assembly.
- Treatment shall cover all faces, edges, grooves and concealed portions.

2.7 Installation

- Bed shall be installed complete in position as per approved layout and drawings.
- Finished bed shall be level, rigid, stable and free from vibration, distortion or rocking.
- Necessary protection shall be provided until completion of the project.
- Any damage during transportation or installation shall be repaired to original finish.

2.8 Cleaning and Protection

- Adhesive stains, dust and marks shall be removed after installation.
- Finished surfaces shall be protected from scratches, moisture and damage until handing over.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Each / Number** of completed bed measured in plan area.
- Plan area shall be calculated based on overall bed dimensions of 2.10 m × 1.80 m.

3.2 Payment

- Rate shall include supply of Indian Teak Wood, MR/BWP Grade Decorative Plywood, MS framework, decorative laminate, hardware, fasteners, screws, clips, ABS accessories, adhesives, termite treatment, wood preservative, PU polishing, lacquer polishing, powder coating, painting, fabrication, transportation, loading, unloading, handling and installation.
- Rate shall also include all labour, tools, plants, machinery, protection, cleaning and incidental works required for complete execution of the item.
- No separate payment shall be made for hardware, fasteners, polishing, painting, termite treatment, wastage, transportation, loading/unloading or any ancillary item required to complete the work.
- The item shall be executed complete at all floors, all levels and all heights as per approved drawings and directions of the Engineer-in-Charge.

Item No - 2

Singal Bed Delux Size Of 2.1x0.9m : Manufacturing, supply, arrangement and keeping in good condition until project completion of single or double bed upto 550 mm height of as per design drawings and instruction of EIC. Framing, bracing, horizontal and vertical supports and facia shall be made of seasoned Indian teak wood, MS pipes and Urea formaldehyde free MR/BWP grade ply wood as per drawings and top shall be made of 18 / 25 mm thick ply wood confirming to Urea formaldehyde free MR/BWP grade Decorative type (BWP/MR-DEC) as per relevant IS codes using low VOC adhesive. CFC HFCF free suitable adhesive. External facia of plywood to be covered with 10 mm solid indian teakwood as per selection. Top face of ply wood support of mattress to be covered with 1 mm thick laminate. For all edges 9 mm solid indian team wood lipping to be used. All joinery to be based on good practices such as tounge and groove joint, dovetail joint etc and using hardware such as "L" brace, Tee, corner brace, screws, nails and pocket-screw joinery etc. as per drawings, specification and instruction by EIC. Price to be inclusive of all other hardware such as adhesive, nails, screws, fasteners, clips, abro tap, ABS parts etc and all labour. All external wood to be seasoned indian teak wood. All externally visible surfaces of solid wooden surfaces shall be polished with water based low VOC PU polish in shade, finish, texture and specification as per architect including fine sanding before and after insulator (sealer) coats and first coat of PU, clear non-toxic low VOC termite control additive, 2 coat of clear epoxy insulator in 1:1 proportion of hardner and epoxy, dent filling with matching putty, wooden stainer and 2 coats of water based PU etc.and all internal surfaces of plywood/ wood to be polished using laquer polish. All externally visible MS pipes to be finished using polyester powder coating and non visible pipes to be finished with epoxy primer and satin oil paint. Rates to be for complete product as per drawings and as directed by EIC. Area to be measured in plan. All plywood/ solid wood to be treated for termite using Terminator Wood Preservative or equivalent. at all floors / all levels / all heights

- Relevant to item specification shall be followed **Item No - 1** & Item shall be Measuring & Payment paid a unit per **Each /Number** for completed item.
- Refer & Consider of manufacture or supplier except details specified for the change given in item description and Make approved as per tender.

Item No – 3

Delux Double Bed MATTERESS Size Of 2.1x1.8m : Supply and placing in position keeping in good condition until project completion of meteress height upto 150 mm depth having 3” Ortho bonded + 1” H.R foam + 2” Memory + full foam quilted jaquared cover with 5 year replacement warranty.at all floors / all levels / all heights

1. MATERIALS

1.1 Ortho Bonded Foam Layer

- Mattress core shall consist of 75 mm (3") thick high-density Ortho Bonded Foam.
- Foam shall be uniformly bonded and free from lumps, cracks, deformation and manufacturing defects.
- Density and compression characteristics shall be suitable for institutional and hospitality use.

1.2 High Resilience (HR) Foam Layer

- Mattress shall incorporate 25 mm (1") thick High Resilience (HR) Foam layer.
- HR foam shall provide enhanced comfort, resilience and durability.
- Foam shall be resistant to sagging and permanent deformation.

1.3 Memory Foam Layer

- Mattress shall incorporate 50 mm (2") thick premium Memory Foam layer.
- Memory foam shall provide pressure-relieving comfort and body contour support.
- Material shall be non-toxic and free from harmful chemicals.

1.4 Quilted Cover

- Mattress shall be provided with premium quality quilted Jacquard fabric cover.
- Cover shall be soft finish, breathable, durable and resistant to normal wear and tear.
- Quilting shall be uniform and securely stitched.
- Cover shall be removable or fixed type as approved by Engineer-in-Charge.

1.5 Stitching and Accessories

- Stitching thread shall be high-strength polyester thread.
- Edge binding and corner finishing shall be neat and durable.
- All materials used shall be free from defects and of approved quality.

1.6 Warranty

- Mattress shall be supplied with a minimum 5-year replacement warranty against manufacturing defects, sagging, foam failure and workmanship defects.
- Warranty certificate shall be submitted to the Engineer-in-Charge before handing over.

2. WORKMANSHIP

2.1 General

- Mattress shall be factory manufactured using approved machinery and quality-controlled production processes.
- Mattress dimensions shall be 2.10 m × 1.80 m with overall thickness of 150 mm.
- Finished mattress shall be uniform in thickness and density throughout.

2.2 Assembly

- Ortho Bonded Foam, HR Foam and Memory Foam layers shall be properly laminated and bonded using approved adhesive.
- Bonding shall ensure permanent adhesion without separation during service life.
- Mattress shall be free from wrinkles, air pockets, unevenness and surface irregularities.

2.3 Covering

- Quilted Jacquard cover shall be properly fitted and stitched.
- Surface shall be smooth, wrinkle-free and neatly finished.
- Corners shall be properly shaped and reinforced.

2.4 Handling and Placement

- Mattress shall be supplied, delivered, handled and placed in position complete on the bed as directed by Engineer-in-Charge.
- Necessary precautions shall be taken during transportation and handling to prevent damage or deformation.
- Mattress shall be maintained in good condition until project completion and handing over.

2.5 Cleaning and Protection

- Mattress shall be delivered in protective packing.
- Any damaged, stained or defective mattress shall be replaced at the contractor's cost.
- Mattress shall remain clean, dry and protected until final handover.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be made on **Each / Number** basis for completed mattress of specified size.
- Mattress size shall be 2.10 m × 1.80 m × 150 mm thick.

3.2 Payment

- Rate shall include supply, transportation, loading, unloading, handling, placement in position, storage, protection and maintenance until completion of the project.
- Rate shall include Ortho Bonded Foam, HR Foam, Memory Foam, quilted Jacquard cover, stitching, accessories, warranty obligations and all labour, tools and equipment required for complete execution of the item.
- No separate payment shall be made for packing, transportation, handling, protection, warranty or incidental items required for completion of the work.
- The item shall be executed complete at all floors, all levels and all heights as directed by the Engineer-in-Charge.

Item No – 4

Delux Single Bed MATTERESS Size Of 2.1x0.9m : Supply and placing in position keeping in good condition until project completion of meteress height upto 150 mm depth having 3” Ortho bonded + 1” H.R foam + 2” Memory + full foam quilted jaquared cover with 5 year replacement warranty.at all floors / all levels / all heights

- Relevant to item specification shall be followed **Item No - 3** & Item shall be Measuring & Payment paid a unit per **Each /Number** for completed item.
- Refer & Consider of manufacture or supplier except details specified for the change given in item description and Make approved as per tender.

Item No – 5

Delux Double Bed BEDSHEET PLAIN Size Of 2.5x2.2m : Manufacturing, supply, arrangement and keeping in good condition until project completion of Bed sheet having size as per approved drawing.Bedsheet finish and colour as per architect selection.Bedsheet material shall be 100% Cotton or Cotton-Polyester Blend with spun. Bedsheet having 200-300 Thread Count with 120-140 GSM and feel like Soft, breathable, durable. bedsheet shall be fully washable with percentage 3% to 5% of Shrinkage after washing.Mesurement should be consider in plan area. all item shall be done as per approved sample at all floors / all levels / all heights.

1. MATERIALS

1.1 Fabric

- Bedsheet shall be manufactured from premium quality 100% Cotton or Cotton-Polyester Blend fabric with spun yarn construction.
- Fabric shall be soft, breathable, skin-friendly and suitable for hospitality and institutional use.
- Material shall be free from weaving defects, stains, holes, loose threads and colour variations.

1.2 Thread Count

- Fabric shall have a thread count ranging between 200 and 300 TC.
- Thread count shall be uniform throughout the fabric and verified from manufacturer's test certificate if required.

1.3 Fabric Weight

- Fabric shall have a minimum GSM of 120 and maximum GSM of 140.
- Fabric shall provide adequate durability, comfort and service life under regular usage and washing conditions.

1.4 Colour and Finish

- Colour, pattern and finish shall be plain type and as approved by the Architect/Engineer-in-Charge.
- Fabric shall be colourfast to washing, rubbing and normal usage.
- Dyeing and finishing shall be uniform throughout the bedsheet.

1.5 Shrinkage

- Fabric shall be pre-shrunk and processed to limit shrinkage after washing.
- Maximum permissible shrinkage shall be between 3% and 5% after washing.

1.6 Stitching Thread

- Stitching shall be carried out using high-strength polyester or equivalent quality thread.
- Thread colour shall match the approved fabric colour.

2. WORKMANSHIP

2.1 General

- Bedsheet shall be manufactured strictly as per approved size of 2.50 m × 2.20 m and approved sample.
- Finished product shall be free from wrinkles, stains, defects and irregularities.
- Fabric cutting and stitching shall be carried out using approved machinery and standard manufacturing practices.

2.2 Stitching and Hemming

- All edges shall be neatly folded and double stitched.
- Stitching shall be straight, uniform and free from skipped stitches or loose threads.
- Corners shall be properly finished and reinforced where required.

2.3 Fabric Quality

- Fabric shall be soft to touch, breathable and comfortable for prolonged use.
- Finished bedsheet shall maintain dimensional stability and appearance after repeated washing.

2.4 Colour Fastness

- Bedsheet shall possess good colour fastness against washing, rubbing and exposure to normal indoor conditions.
- No significant fading, bleeding or discoloration shall occur during normal usage.

2.5 Supply and Placement

- Bedsheets shall be supplied, folded, packed and placed in position as directed by the Engineer-in-Charge.
- Contractor shall maintain the bedsheets in good condition until completion and handing over of the project.

2.6 Cleaning and Protection

- Bedsheets shall be supplied in clean and hygienic condition.
- Damaged, stained or defective bedsheets shall be replaced at contractor's cost.
- Necessary protection shall be provided during transportation, storage and handling.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Each / Number** based on plan area of finished bedsheet.
- Plan area shall be calculated from finished dimensions of 2.50 m × 2.20 m.

3.2 Payment

- Rate shall include cost of fabric, stitching thread, cutting, hemming, finishing, packing, transportation, loading, unloading, handling, storage, placement in position and maintenance until project completion.
- Rate shall include all labour, tools, plants, machinery, accessories and incidental works required for complete execution of the item.
- No separate payment shall be made for stitching, hemming, shrinkage allowance, wastage, packing, transportation or protection.
- The item shall be executed complete as per approved sample, approved colour and instructions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 6

Delux Single Bed BEDSHEET PLAIN Size Of 2.5x1.3m : Manufacturing, supply, arrangement and keeping in good condition until project completion of Bed sheet having size as per approved drawing. Bedsheet finish and colour as per architect selection. Bedsheet material shall be 100% Cotton or Cotton-Polyester Blend with spun. Bedsheet having 200-300 Thread Count with 120-140 GSM and feel like Soft, breathable, durable. bedsheet shall be fully washable with percentage 3% to 5% of Shrinkage after washing. Measurement should be consider in plan area. all item shall be done as per approved sample at all floors / all levels / all heights

- Relevant to item specification shall be followed **Item No - 5** & Item shall be Measuring & Payment paid a unit per **Each /Number** for completed item.
- Refer & Consider of manufacture or supplier except details specified for the change given in item description and Make approved as per tender.

Item No – 7

Deluxe Pillow With Cover : Manufacturing, supply, arrangement and keeping in good condition until project completion of pillow of Microfiber / Hollow Conjugated Siliconized Fiber minimum 430 x 680 mm with 150 mm thickness as per approved drawing. pillow cover finish and colour as per architect selection. pillow cover material shall be 100% Cotton or Cotton-Polyester Blend with spun. All pillow and covers . Measurement should be consider in plan area. all item shall be done as per approved sample. at all floors / all levels / all heights

DELUXE PILLOW WITH PILLOW COVER

1. MATERIALS

1.1 Pillow Filling

- Pillow shall be filled with premium quality Microfiber or Hollow Conjugated Siliconized Polyester Fiber.
- Filling material shall be soft, resilient, hypoallergenic and uniformly distributed throughout the pillow.
- Fiber shall be free from lumps, odour, dust and foreign particles.
- Pillow shall retain its shape and loft under normal usage conditions.

1.2 Pillow Size

- Finished pillow size shall be minimum 430 mm × 680 mm with thickness of approximately 150 mm unless otherwise specified in approved drawings.
- Tolerance in dimensions shall not exceed ±10 mm.

1.3 Pillow Outer Fabric

- Pillow shell fabric shall be made from high-quality cotton or poly-cotton fabric of approved quality.
- Fabric shall be durable, breathable and resistant to tearing under normal usage.

1.4 Pillow Cover Fabric

- Pillow cover shall be manufactured from premium quality 100% Cotton or Cotton-Polyester Blend fabric with spun yarn construction.
- Fabric shall be soft, breathable, comfortable and suitable for hospitality and institutional use.
- Fabric shall be free from weaving defects, stains, holes and colour variations.

1.5 Colour and Finish

- Pillow cover colour, texture and finish shall be as approved by the Architect/Engineer-in-Charge.
- Fabric shall be colourfast to washing and normal usage conditions.

1.6 Stitching Thread

- Stitching shall be carried out using high-strength polyester or equivalent quality thread.
 - Thread colour shall match the approved fabric colour.
-

2. WORKMANSHIP

2.1 General

- Pillow and pillow cover shall be manufactured strictly as per approved size, design and sample.
- Finished products shall be free from wrinkles, stains, loose threads, lumps and defects.

2.2 Pillow Fabrication

- Filling material shall be uniformly distributed within the pillow casing.
- Pillow shall maintain uniform thickness and shape throughout.
- Edges shall be properly stitched and securely closed.

2.3 Pillow Cover Stitching

- Pillow cover shall be neatly stitched and properly finished.
- All edges shall be double stitched and reinforced.
- Stitching shall be straight, uniform and free from skipped stitches or loose threads.

2.4 Comfort and Performance

- Pillow shall provide soft and comfortable support for head and neck.
- Filling material shall possess good resilience and recovery characteristics after compression.

2.5 Supply and Placement

- Pillows complete with pillow covers shall be supplied, packed, transported and placed in position as directed by the Engineer-in-Charge.
- Contractor shall maintain the items in good condition until project completion and handing over.

2.6 Cleaning and Protection

- Pillows and covers shall be supplied in clean, hygienic and stain-free condition.
- Damaged or defective items shall be replaced at contractor's cost.
- Necessary protection shall be provided during transportation, storage and handling.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Each / Number** based on plan area of the finished pillow.
- Plan area shall be calculated from the specified pillow dimensions of 430 mm × 680 mm.

3.2 Payment

- Rate shall include supply of pillow complete with Microfiber/Hollow Conjugated Siliconized Fiber filling, pillow cover, stitching, finishing, packing, transportation, loading, unloading, handling, storage and placement in position.
- Rate shall include all labour, materials, accessories, tools, plants and incidental works required for complete execution of the item.
- No separate payment shall be made for stitching, filling material, pillow cover, packing, transportation, protection or replacement of defective items.
- The item shall be executed complete as per approved sample and approved colour scheme at all floors, all levels and all heights as directed by the Engineer-in-Charge.

Item No – 8

Bed Suit Size Of 2.1x1.8mm : Supply, installation and placing of premium upholstered bed, complete with designer padded headboard, executed in contemporary luxury style, as per approved design and drawing. The bed shall be constructed with a robust internal framework of seasoned solid wood / BWP grade plywood, designed for long-term structural stability. The headboard shall be fully upholstered with high-density foam cushioning, ergonomically contoured and finished with premium fabric / leatherette upholstery in approved colour and texture. Upholstery shall be neatly stitched, wrinkle-free, and securely fixed. The bed base shall be upholstered to match the headboard and designed to support standard mattress size (as specified), with adequate ventilation and load-bearing capacity. Legs shall be metal / solid wood, finished in approved shade and fitted with floor-protecting bushes to prevent damage to flooring. The item shall include all materials, upholstery work, foam, internal framing, fittings, labour, handling, transportation, installation and positioning, complete in all respects, as approved by the Engineer-in-Charge. at all floors / all levels / all heights

BED SUITE (UPHOLSTERED DOUBLE BED) SIZE: 2.10 m × 1.80 m

1. MATERIALS

1.1 Structural Framework

- Internal framework shall be constructed from seasoned solid hardwood and/or BWP Grade Plywood conforming to relevant IS standards.
- Timber shall be free from knots, warping, cracks, decay and insect attack.
- Moisture content shall not exceed 12%.
- All timber and plywood components shall be treated with approved anti-termite preservative.

1.2 Plywood

- Plywood shall be BWP Grade plywood conforming to IS 710.
- Plywood shall be calibrated, moisture resistant and free from delamination and manufacturing defects.
- Thickness shall be as per approved design and structural requirements.

1.3 Upholstery Foam

- Headboard and upholstered portions shall be provided with high-density polyurethane foam of approved density and thickness.

- Foam shall be resilient, durable and free from deformation, sagging or manufacturing defects.
- Foam thickness shall be as per approved design and sample.

1.4 Upholstery Fabric / Leatherette

- Upholstery shall be premium quality fabric, leatherette or equivalent approved material.
- Colour, texture, pattern and finish shall be as selected by the Architect and approved by the Engineer-in-Charge.
- Upholstery material shall be durable, stain resistant and suitable for hospitality and residential applications.

1.5 Bed Base and Support System

- Bed platform shall be fabricated using solid wood, plywood, MS support members or a combination thereof as per approved design.
- Structure shall provide adequate ventilation, load distribution and long-term durability.

1.6 Legs and Accessories

- Bed legs shall be solid wood, stainless steel, powder-coated metal or equivalent approved material.
- Legs shall be provided with non-marking floor protectors, nylon bushes or rubber pads to prevent damage to finished flooring.
- All fittings, brackets, screws, fasteners and fixing accessories shall be of approved quality and corrosion-resistant finish.

1.7 Adhesives and Consumables

- Adhesives shall be low VOC, non-toxic and suitable for upholstery and furniture applications.
- All consumables used shall be of approved quality and compatible with the specified materials.

2. WORKMANSHIP

2.1 General

- Bed Suite shall be manufactured strictly as per approved drawings, design intent, dimensions and sample.
- The finished product shall be rigid, level, stable and free from distortion, vibration or movement.
- All dimensions shall be verified at site before fabrication.

2.2 Framework Fabrication

- Internal framework shall be accurately fabricated and assembled to ensure long-term structural stability.
- All joints shall be securely fixed using approved carpentry methods, screws, brackets, fasteners and adhesives.
- Framework shall be capable of supporting intended loads without deflection or failure.

2.3 Headboard Upholstery

- Headboard shall be fully padded with high-density foam and upholstered in approved fabric or leatherette.
- Headboard profile shall be ergonomically shaped and uniformly padded.
- Upholstery shall be wrinkle-free, smooth and tightly stretched over the substrate.
- Stitching shall be straight, uniform and neatly finished.

2.4 Bed Base Upholstery

- Bed base shall be upholstered to match the approved headboard design and finish.
- Upholstered surfaces shall be securely fixed and free from sagging, puckering or visible defects.
- Corners and edges shall be neatly finished.

2.5 Finishing

- Visible timber or metal components shall be finished in approved shades and textures.
- Exposed metal components shall be powder coated, painted or otherwise protected against corrosion.
- All surfaces shall be smooth, clean and free from scratches, dents and blemishes.

2.6 Installation

- Bed shall be delivered, assembled and positioned at the designated location as directed by the Engineer-in-Charge.
- Necessary care shall be taken during transportation and installation to prevent damage.
- Any damaged component shall be replaced at the contractor's cost.

2.7 Cleaning and Protection

- Upon completion, all surfaces shall be cleaned and protected.
- Upholstery shall be free from dust, stains, adhesive marks and manufacturing defects.
- Bed shall be maintained in good condition until project completion and handing over.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Each / Number** based on plan area of the completed Bed Suite.
- Plan area shall be calculated using overall dimensions of 2.10 m × 1.80 m.

3.2 Payment

- Rate shall include supply of hardwood framework, BWP grade plywood, foam cushioning, upholstery fabric/leatherette, bed base, headboard, legs, hardware, fasteners, adhesives and all accessories required for complete execution.
- Rate shall include fabrication, upholstery work, stitching, finishing, transportation, loading, unloading, handling, assembly, installation, positioning, protection and cleaning.
- Rate shall include all labour, materials, tools, plants, machinery and incidental works required for completion of the item.
- No separate payment shall be made for hardware, fasteners, foam, upholstery materials, transportation, installation, protection or wastage.
- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 9

Suit MATTERESS Size Of 2.1x1.8m : Providing and placing premium quality King size mattress of approved make, made of high-density PU foam / spring or foam-spring combination, minimum 150 mm thick, finished with quilted fabric cover, complete all as per approved specification and directions of Engineer-in-Charge.at all floors / all levels / all heights

SUITE MATTRESS (KING SIZE) SIZE: 2.10 m × 1.80 m × 150 mm THICK

1. MATERIALS

1.1 Mattress Core

- Mattress shall be of premium quality King Size configuration manufactured from High Density Polyurethane (PU) Foam, Bonnell Spring, Pocket Spring, or approved Foam-Spring Combination system.
- Mattress core shall provide adequate support, durability and comfort for hospitality and residential applications.
- Foam shall be free from deformation, sagging, cracks and manufacturing defects.

1.2 Foam Layer

- High-density PU Foam shall be of approved density and quality suitable for long-term use.
- Foam shall be uniformly distributed throughout the mattress and shall possess excellent resilience and recovery properties.
- Foam shall be non-toxic and free from harmful chemicals.

1.3 Spring System (Where Specified)

- Spring system shall consist of tempered steel Bonnell Springs, Pocket Springs or approved equivalent.
- Springs shall be corrosion-resistant and properly insulated from upholstery layers.
- Spring arrangement shall provide uniform support throughout the mattress surface.

1.4 Comfort Layer

- Mattress shall be provided with additional comfort layers comprising PU foam, memory foam, fibre padding or equivalent approved material as per manufacturer's standard design.
- Comfort layers shall be uniformly bonded and free from lumps or irregularities.

1.5 Quilted Fabric Cover

- Mattress shall be finished with premium quality quilted fabric cover.
- Fabric shall be soft, breathable, durable and resistant to normal wear and tear.
- Quilting shall be uniform and securely stitched.
- Colour, texture and pattern shall be as approved by Architect and Engineer-in-Charge.

1.6 Edge Support

- Mattress shall be provided with reinforced edge support to prevent edge collapse and maintain dimensional stability.
- Edge support material shall be compatible with the mattress construction system.

1.7 Accessories

- Stitching thread, edge binding and finishing accessories shall be of approved quality and suitable for heavy-duty usage.
- All materials used shall be free from defects and conform to approved specifications.

2. WORKMANSHIP

2.1 General

- Mattress shall be factory manufactured using approved machinery and quality-controlled production processes.
- Finished mattress dimensions shall be 2.10 m × 1.80 m with minimum thickness of 150 mm.
- Mattress shall be free from wrinkles, air pockets, lumps and surface irregularities.

2.2 Fabrication

- Foam layers, spring units and comfort layers shall be properly assembled and bonded to form a stable mattress structure.
- All layers shall be evenly distributed and securely fixed.
- Mattress shall provide uniform support and comfort throughout the entire surface area.

2.3 Quilting and Covering

- Quilted cover shall be accurately fitted and neatly stitched.
- Stitching shall be straight, uniform and free from skipped stitches or loose threads.
- Corners and edges shall be properly shaped and reinforced.

2.4 Performance Requirements

- Mattress shall maintain its shape and performance under normal usage conditions.
- Mattress shall exhibit good resilience, comfort and load distribution characteristics.
- Finished mattress shall be suitable for premium guest room and suite applications.

2.5 Supply and Placement

- Mattress shall be supplied, transported, handled and placed in position complete as directed by the Engineer-in-Charge.
- Necessary precautions shall be taken during transportation and installation to prevent damage or deformation.

2.6 Cleaning and Protection

- Mattress shall be delivered in protective packing.
- Any damaged, stained or defective mattress shall be replaced at contractor's cost.
- Mattress shall be maintained in good condition until project completion and handing over.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out on **Each / Number** basis for each completed King Size Mattress supplied and placed in position.
- Mattress size shall be 2.10 m × 1.80 m with minimum thickness of 150 mm.

3.2 Payment

- Rate shall include supply of high-density PU foam, spring unit (where applicable), comfort layers, quilted fabric cover, edge support system, stitching, finishing and all accessories.

- Rate shall include packing, transportation, loading, unloading, handling, storage, placement in position and protection until project completion.
- Rate shall include all labour, materials, tools, plants, machinery and incidental works required for complete execution of the item.
- No separate payment shall be made for stitching, quilting, transportation, protection, handling, packing or replacement of defective items.
- The item shall be executed complete as per approved sample, approved specifications and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 10

Suit BEDSHEET PLAIN : Manufacturing, supply, arrangement and keeping in good condition until project completion of Bed sheet having size as per approved drawing. Bedsheet finish and colour as per architect selection. Bedsheet material shall be 100% Long-Staple Cotton with spun. Bedsheet having 300-500 Thread Count with 140-160 GSM and feel like Silky smooth, luxurious touch. bedsheet shall be fully washable with percentage 3% to 5% of Shrinkage after washing. Measurement should be consider in plan area. all item shall be done as per approved sample. (size= 2.1 x 2.2 m)at all floors / all levels / all heights

SUITE BEDSHEET (PLAIN) SIZE: 2.10 m × 2.20 m

1. MATERIALS

1.1 Fabric

- Bedsheet shall be manufactured from premium quality 100% Long-Staple Cotton fabric with spun yarn construction.
- Cotton fibres shall be of superior quality, soft texture and suitable for luxury hospitality applications.
- Fabric shall be free from weaving defects, stains, holes, slubs and colour variations.

1.2 Thread Count

- Fabric shall have a thread count ranging between 300 and 500 TC.
- Thread count shall be uniform throughout the fabric and capable of providing a smooth, luxurious finish and enhanced durability.

1.3 Fabric Weight

- Fabric shall have a minimum GSM of 140 and maximum GSM of 160.
- Fabric shall possess adequate strength, durability and dimensional stability for repeated washing and usage.

1.4 Colour and Finish

- Bedsheet shall be plain type unless otherwise specified.
- Colour, shade and finish shall be as selected by the Architect and approved by the Engineer-in-Charge.
- Fabric shall have a silky smooth, luxurious touch and premium appearance suitable for suite rooms.

1.5 Colour Fastness

- Fabric shall be colourfast to washing, rubbing and normal usage conditions.
- No noticeable fading, bleeding or discoloration shall occur during normal service life.

1.6 Shrinkage

- Fabric shall be pre-shrunk and processed to ensure dimensional stability.
- Maximum permissible shrinkage after washing shall be between 3% and 5%.

1.7 Stitching Thread

- Stitching shall be carried out using high-strength polyester or equivalent quality thread.
- Thread colour shall match the approved fabric colour and finish.

2. WORKMANSHIP

2.1 General

- Bedsheet shall be manufactured strictly as per approved dimensions of 2.10 m × 2.20 m and approved sample.
- Finished bedsheet shall be free from wrinkles, stains, weaving defects and irregularities.
- Fabric cutting and stitching shall be carried out using approved machinery and standard textile manufacturing practices.

2.2 Stitching and Hemming

- All edges shall be neatly folded and double stitched.
- Stitching shall be straight, uniform and free from skipped stitches, puckering or loose threads.
- Corners shall be properly finished and reinforced where required.

2.3 Fabric Quality and Finish

- Fabric shall provide a soft, breathable and luxurious sleeping experience.
- Finished bedsheet shall maintain appearance, dimensional stability and smooth texture after repeated laundering.
- Surface finish shall be smooth and free from defects.

2.4 Colour Fastness and Performance

- Bedsheet shall exhibit excellent colour retention and resistance to fading.
- Fabric shall withstand normal washing cycles without deterioration in appearance or performance.

2.5 Supply and Placement

- Bedsheets shall be supplied, packed, transported and placed in position as directed by the Engineer-in-Charge.
- Contractor shall maintain the bedsheets in good condition until completion and handing over of the project.

2.6 Cleaning and Protection

- Bedsheets shall be delivered in clean and hygienic condition.
- Damaged, stained or defective bedsheets shall be replaced at the contractor's cost.
- Necessary protection shall be provided during transportation, storage and handling.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Each / Number** based on plan area of the finished bedsheet.
- Plan area shall be calculated from finished dimensions of 2.10 m × 2.20 m.

3.2 Payment

- Rate shall include cost of 100% Long-Staple Cotton fabric, stitching thread, cutting, hemming, finishing, packing, transportation, loading, unloading, handling, storage, placement in position and maintenance until project completion.
- Rate shall include all labour, tools, plants, machinery, accessories and incidental works required for complete execution of the item.
- No separate payment shall be made for stitching, hemming, shrinkage allowance, wastage, packing, transportation, protection or replacement of defective items.
- The item shall be executed complete as per approved sample, approved colour, approved finish and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 11

Suit Pillow With Cover : Manufacturing, supply, arrangement and keeping in good condition until project completion of pillow of Down-Alternative / Premium Microfiber / Memory Foam Blend minimum 430 x 680 mm with 150 mm thickness as per approved drawing. pillow cover finish and colour as per architect selection. pillow cover material shall be 100% Long-Staple Cotton with spun. All pillow and covers . Measurement should be consider in plan area. all item shall be done as per approved sample. at all floors / all levels / all heights

SUITE PILLOW WITH PILLOW COVER

1. MATERIALS

1.1 Pillow Filling

- Pillow shall be filled with premium quality Down-Alternative Fiber, Premium Microfiber, Memory Foam Blend, or approved equivalent material suitable for luxury hospitality applications.
- Filling material shall be soft, resilient, hypoallergenic and capable of providing superior comfort and neck support.
- Filling shall be uniformly distributed and free from lumps, odour, dust and foreign particles.
- Pillow shall retain its loft, shape and resilience under normal usage conditions.

1.2 Pillow Size

- Finished pillow size shall be minimum 430 mm × 680 mm with thickness of approximately 150 mm unless otherwise specified in approved drawings.
- Dimensional tolerance shall not exceed ±10 mm.

1.3 Pillow Shell Fabric

- Pillow shell shall be manufactured from tightly woven premium quality cotton or equivalent approved fabric.

- Fabric shall be breathable, durable and capable of preventing migration of filling material.

1.4 Pillow Cover Fabric

- Pillow cover shall be manufactured from premium quality 100% Long-Staple Cotton fabric with spun yarn construction.
- Fabric shall be soft, breathable, luxurious and suitable for suite room applications.
- Fabric shall be free from weaving defects, stains, holes, loose threads and colour variations.

1.5 Colour and Finish

- Pillow cover colour, shade, texture and finish shall be as approved by the Architect and Engineer-in-Charge.
- Fabric shall possess a smooth, premium finish and shall be colourfast to washing and normal usage conditions.

1.6 Stitching Thread

- Stitching shall be carried out using high-strength polyester or equivalent approved thread.
- Thread colour shall match the approved fabric colour.

1.7 Accessories

- Pillow covers shall be provided with envelope closure, concealed zipper or approved closure system as per approved design.
- All accessories shall be durable and of approved quality.

2. WORKMANSHIP

2.1 General

- Pillow and pillow cover shall be manufactured strictly as per approved dimensions, design and sample.
- Finished products shall be free from wrinkles, stains, loose threads, lumps and manufacturing defects.

2.2 Pillow Fabrication

- Filling material shall be uniformly distributed within the pillow shell.
- Pillow shall maintain consistent thickness, shape and comfort throughout its service life.
- Edges shall be neatly stitched and securely closed.

2.3 Pillow Cover Stitching

- Pillow cover shall be accurately cut, stitched and finished.
- All edges shall be neatly folded and double stitched.
- Stitching shall be straight, uniform and free from skipped stitches, puckering and loose threads.
- Closure systems shall operate smoothly and securely.

2.4 Comfort and Performance

- Pillow shall provide superior softness, comfort and ergonomic support for head and neck.
- Filling material shall exhibit excellent recovery characteristics after compression.
- Pillow shall maintain loft and appearance after repeated usage.

2.5 Supply and Placement

- Pillows complete with pillow covers shall be supplied, packed, transported and placed in position as directed by the Engineer-in-Charge.
- Contractor shall maintain all items in good condition until project completion and handing over.

2.6 Cleaning and Protection

- Pillows and covers shall be supplied in clean, hygienic and stain-free condition.
- Damaged, stained or defective items shall be replaced at contractor's cost.
- Necessary protection shall be provided during transportation, storage and handling.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Each / Number** based on plan area of the finished pillow.
- Plan area shall be calculated from specified pillow dimensions of 430 mm × 680 mm.

3.2 Payment

- Rate shall include supply of Down-Alternative Fiber, Premium Microfiber, Memory Foam Blend or approved equivalent filling material, pillow shell, premium 100% Long-Staple Cotton pillow cover, stitching, finishing and all accessories.
- Rate shall include packing, transportation, loading, unloading, handling, storage, placement in position and maintenance until project completion.
- Rate shall include all labour, materials, tools, plants, machinery and incidental works required for complete execution of the item.
- No separate payment shall be made for stitching, closures, filling material, pillow cover, packing, transportation, protection or replacement of defective items.
- The item shall be executed complete as per approved sample, approved colour scheme and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 12

Delux Corner Table : Providing & Placing in position Corner table of size 600 X 600 X 450 mm made from Solid teakwood with varnish polish and Table Top made from laminet finish/Glass complete as per instruction given by engineer in charge/Architect. at all floors / all levels / all heights

- Relevant to item specification shall be followed **Item No - 13** & Item shall be Measuring & Payment paid a unit per **Each /Number** for completed item.
- Refer & Consider of manufacture or supplier except details specified for the change given in item description and Make approved as per tender.

Item No – 13

Suit Corner Table : Providing & Placing in position Corner table of size 600 X 600 X 450 mm made from Solid teakwood with varnish polish finish and Table Top made from veneer wih pu polish/ Glass complete as per instruction given by engineer in charge/Architect. at all floors / all levels / all heights

SUITE CORNER TABLE (SIZE: 600 mm × 600 mm × 450 mm)

1. MATERIALS

1.1 Solid Teak Wood

- Corner table framework, legs, apron, supports and exposed wooden members shall be manufactured from well-seasoned first-class Indian Teak Wood.
- Timber shall be free from knots, sapwood, cracks, warping, decay, insect attack and other defects.
- Moisture content shall not exceed 12%.
- All timber shall be treated with approved anti-termite and anti-borer preservative prior to fabrication.

1.2 Table Top

- Table top shall be formed from BWP Grade plywood conforming to IS 710, finished with natural wood veneer and PU polish, or approved glass top as specified in approved drawings.
- Veneer shall be premium quality natural wood veneer of approved species, shade and grain pattern.
- Glass, where specified, shall be clear, toughened or tempered glass of approved thickness with machine-polished edges.

1.3 Plywood

- Plywood used for table top substrate shall be BWP Grade, calibrated and moisture resistant.
- Plywood shall be free from delamination, swelling and manufacturing defects.

1.4 Hardware and Accessories

- Hardware shall include screws, dowels, corner blocks, connectors, fixing plates, brackets and all accessories necessary for complete assembly.
- Hardware shall be corrosion resistant and of approved make and quality.

1.5 Adhesives

- Adhesives shall be low VOC, waterproof synthetic resin adhesive conforming to relevant IS standards.
- Adhesives shall be suitable for furniture-grade joinery and veneer applications.

1.6 Polishing Materials

- Exposed teak wood surfaces shall be finished with premium quality varnish polish.
- Veneered surfaces shall be finished with water-based or solvent-based PU polish as approved by the Architect.
- All finishing materials shall be of approved make and compatible system.

2. WORKMANSHIP

2.1 General

- Corner table shall be manufactured strictly as per approved drawings, dimensions and approved sample.
- Finished dimensions shall be 600 mm × 600 mm × 450 mm unless otherwise specified.
- Table shall be rigid, stable, level and free from distortion, wobbling or defects.

2.2 Fabrication

- All teak wood members shall be machine cut, planed and accurately fabricated.
- Joinery shall be executed using approved carpentry practices such as mortise and tenon joints, dowel joints, tongue and groove joints or equivalent methods.
- Joints shall be reinforced with approved adhesive, screws and fixing accessories.
- No visible nail heads shall be permitted on exposed surfaces.

2.3 Table Top Construction

- Veneered table top shall be properly bonded over plywood substrate without bubbles, waviness or surface irregularities.
- Veneer grain pattern shall be matched and aligned uniformly.
- Glass top, where specified, shall be securely fixed with approved supports and fittings.

2.4 Surface Finishing

- Exposed teak wood surfaces shall be smoothly sanded and finished with approved varnish polish.
- Veneered surfaces shall receive sealer coats, fine sanding and minimum two coats of PU polish.
- Finished surfaces shall be smooth, uniform and free from scratches, stains, dents, brush marks and blemishes.

2.5 Installation

- Corner table shall be supplied, transported and placed in position at the designated location as directed by the Engineer-in-Charge.
- Necessary precautions shall be taken during transportation and handling to prevent damage.
- Damaged components shall be repaired or replaced to the satisfaction of the Engineer-in-Charge.

2.6 Cleaning and Protection

- Completed table shall be thoroughly cleaned after installation.
- Surfaces shall be protected from scratches, moisture and damage until project completion and handing over.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out on **Each / Number** basis for each completed Corner Table supplied and placed in position.
- Size of table shall be 600 mm × 600 mm × 450 mm.

3.2 Payment

- Rate shall include supply of solid teak wood, BWP grade plywood, veneer or glass top, hardware, adhesives, preservatives, varnish polish, PU polish and all accessories required for complete execution of the item.
- Rate shall include fabrication, polishing, finishing, transportation, loading, unloading, handling, placement in position, protection and cleaning.
- Rate shall include all labour, materials, tools, plants, machinery and incidental works necessary to complete the item.
- No separate payment shall be made for hardware, polishing, preservatives, transportation, handling, protection or wastage.

- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 14

TV Unit Delux : Providing and placing low-height TV unit made of approved quality material such as laminated plywood/MDF, including drawers, shelves, and cable management provisions as per approved design. Finished with laminate/polish/paint, complete with hardware fittings and accessories, as directed by Engineer-in-Charge, complete in all respects as per drawing and specifications.

- Relevant to item specification shall be followed **Item No - 15** & Item shall be Measuring & Payment paid a unit per **Square meter (Sq.m)** for completed item.
- Refer & Consider of manufacture or supplier except details specified for the change given in item description and Make approved as per tender.

Item No – 15

TV Unit Suit : Providing and placing low-height TV unit made of approved quality material such as Veneer With PU plywood/MDF, including drawers, shelves, and cable management provisions as per approved design. Finished with laminate/polish/paint, complete with hardware fittings and accessories, as directed by Engineer-in-Charge, complete in all respects as per drawing and specifications.

TV UNIT – SUITE ROOM

1. MATERIALS

1.1 Base Material

- TV unit shall be manufactured from approved quality BWP Grade Plywood conforming to IS 710, Moisture Resistant (MR) Grade Plywood conforming to IS 303, MDF, or a combination thereof as specified in approved drawings.
- Plywood/MDF shall be free from delamination, swelling, warping and manufacturing defects.
- Thickness of panels shall be as per approved design and structural requirements.

1.2 Veneer Finish

- Exposed surfaces shall be finished with premium quality natural wood veneer of approved species, shade and grain pattern.
- Veneer shall be free from cracks, stains, open joints and surface defects.
- Veneer thickness shall be not less than 0.6 mm unless otherwise specified.

1.3 PU Polish Finish

- Veneered surfaces shall be finished with approved PU polish system comprising sealer coats, intermediate sanding and final PU coats.
- Finish shall be smooth, uniform and of approved gloss level, shade and texture.

1.4 Internal Finish

- Internal surfaces shall be finished with approved laminate, balancing laminate, melamine finish or lacquer polish as specified in approved drawings.

1.5 Hardware and Fittings

- Hardware shall include telescopic drawer channels, hinges, handles, locks, magnetic catches, cable grommets, shelf supports, fasteners and all accessories required for complete installation.
- Hardware shall be of approved make and corrosion-resistant finish.

1.6 Cable Management Accessories

- TV unit shall be provided with concealed cable management provisions including cable holes, grommets, access panels and routing channels as shown in approved drawings.
- Accessories shall facilitate neat concealment of electrical, television and data cables.

1.7 Adhesives

- Adhesives shall be low VOC, waterproof synthetic resin adhesive conforming to relevant IS standards.
- Adhesives shall be suitable for veneer fixing and furniture manufacturing applications.

1.8 Wood Preservative

- All timber and plywood members shall be treated with approved anti-termite and anti-borer preservative prior to fabrication.

2. WORKMANSHIP

2.1 General

- TV unit shall be manufactured strictly as per approved drawings, dimensions, design details and approved sample.
- The unit shall include shelves, drawers, storage compartments and cable management provisions as shown in approved drawings.
- Finished unit shall be rigid, level, stable and free from distortion or defects.

2.2 Fabrication

- All components shall be machine cut and accurately fabricated.
- Exposed edges shall be finished with matching veneer, hardwood lipping or edge banding as approved.
- Joints shall be executed using approved carpentry practices including dowel joints, screws, connectors and adhesives.
- No visible nail heads shall be permitted on exposed surfaces.

2.3 Drawers and Shelving

- Drawers shall operate smoothly on approved telescopic channels.
- Shelves shall be properly aligned, level and capable of supporting intended loads without sagging.
- Storage compartments shall be accurately fabricated and neatly finished.

2.4 Veneering and Polishing

- Veneer shall be properly bonded to substrate without bubbles, waviness or open joints.
- Veneer grain shall be matched and aligned uniformly.
- Surfaces shall receive necessary sanding, sealer coats and minimum two coats of PU polish.
- Finished surfaces shall be smooth, uniform and free from scratches, dents, stains and blemishes.

2.5 Hardware Installation

- Hinges, drawer channels, handles, locks and fittings shall be accurately installed and adjusted.
- All moving components shall operate smoothly without noise, binding or misalignment.

2.6 Cable Management

- Cable routing provisions shall be neatly integrated into the unit.
- Openings shall be properly finished and fitted with approved grommets where required.
- Cable management system shall permit easy access for maintenance and future servicing.

2.7 Installation

- TV unit shall be supplied, transported, assembled and fixed/placed in position as shown in approved drawings and directed by the Engineer-in-Charge.
- Unit shall be securely fixed where required and aligned properly with adjoining finishes.
- Any damage occurring during transportation or installation shall be rectified at contractor's cost.

2.8 Cleaning and Protection

- Upon completion, all surfaces shall be cleaned and protected from scratches, stains and damage.
- Protective coverings shall remain in place until project handover.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in Square Metres (Sq.m.) of front elevation area of completed TV unit unless otherwise specified in the BOQ.
- Dimensions shall be measured along the finished outer faces of the installed unit.

3.2 Payment

- Rate shall include BWP/MR grade plywood, MDF, natural veneer, PU polish, internal finishes, shelves, drawers, cable management accessories, hardware fittings, adhesives, preservatives and all associated materials.
- Rate shall include fabrication, veneering, polishing, assembly, transportation, loading, unloading, handling, fixing, installation, protection and cleaning.
- Rate shall include all labour, tools, plants, machinery and incidental works required for complete execution of the item.
- No separate payment shall be made for hardware, drawer channels, hinges, handles, cable grommets, polishing, edge finishing, wastage, transportation or fixing accessories.
- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Suit Three Seater fabric Sofa : Providing, fabricating, and placing custom-made three-seater upholstered sofa of overall size 2100 × 610 × 770 mm, comprising a solid hardwood structural frame with exposed armrests and legs, finished in approved natural wood polish / PU finish.

Seating and back cushions shall be made of high-density PU foam with fibre wrap, upholstered in premium fabric / linen upholstery, ensuring comfort, durability, and uniform finish suitable for heavy-use areas.

SUITE THREE SEATER FABRIC SOFA

Size: 2100 mm × 610 mm × 770 mm

1. MATERIALS

1.1 Structural Frame

- Sofa framework shall be fabricated from well-seasoned first-class hardwood such as Indian Teak Wood, Ash Wood, Steam Beech Wood or approved equivalent.
- Timber shall be free from knots, cracks, warping, decay, insect attack and other defects.
- Moisture content of timber shall not exceed 12%.
- All timber members shall be treated with approved anti-termite and anti-borer preservative prior to fabrication.

1.2 Plywood and Support Members

- Internal seat, back and arm support members shall be fabricated from BWP Grade plywood conforming to IS 710 or approved equivalent.
- Plywood shall be free from delamination, swelling and manufacturing defects.
- Thickness shall be as required to achieve adequate structural strength and rigidity.

1.3 Cushioning Material

- Seat cushions shall be manufactured from high-density polyurethane foam of minimum 40 kg/m³ density or as approved.
- Back cushions shall be manufactured from high-density PU foam of suitable density for comfort and support.
- Foam shall be wrapped with polyester fibre or siliconized fibre layer to provide softness and improved comfort.
- Foam shall be resilient, non-deforming and free from manufacturing defects.

1.4 Upholstery Fabric

- Upholstery shall consist of premium quality fabric, linen fabric or approved upholstery material suitable for hospitality applications.
- Fabric shall be stain resistant, colourfast, abrasion resistant and durable under heavy-use conditions.
- Colour, texture, weave pattern and finish shall be as selected by the Architect and approved by the Engineer-in-Charge.

1.5 Exposed Wooden Components

- Exposed armrests, legs and decorative wooden elements shall be finished in approved natural wood polish, melamine polish or PU finish.
- Finish shall highlight the natural grain of the timber and provide long-term durability.

1.6 Hardware and Accessories

- Hardware shall include screws, brackets, connectors, webbing, corner blocks, fasteners and all accessories necessary for complete assembly.
- Hardware shall be of approved make and corrosion-resistant quality.

1.7 Adhesives and Consumables

- Adhesives shall be low VOC, furniture-grade adhesive suitable for timber, plywood and upholstery applications.
- All consumables shall be of approved quality and compatible with the specified materials.

2. WORKMANSHIP

2.1 General

- Sofa shall be custom manufactured strictly as per approved drawings, dimensions, design details and approved sample.
- Overall finished dimensions shall be 2100 mm × 610 mm × 770 mm unless otherwise specified.
- Finished sofa shall be stable, level, rigid and free from distortion, squeaking or structural defects.

2.2 Frame Fabrication

- Structural frame shall be accurately fabricated and assembled using approved carpentry methods.
- Joinery shall comprise mortise and tenon joints, dowel joints, screwed joints or equivalent approved methods.
- Joints shall be reinforced using approved adhesive and mechanical fasteners.
- Framework shall be capable of withstanding intended loading conditions without deformation.

2.3 Cushioning and Upholstery

- Foam cushions shall be accurately cut and securely fixed to the frame.
- Fibre wrapping shall be uniformly applied to achieve smooth contours and enhanced comfort.
- Upholstery fabric shall be stretched uniformly and fixed without wrinkles, puckering, sagging or loose areas.
- All seams shall be straight, neatly stitched and properly aligned.
- Upholstery finish shall be smooth, uniform and free from visible defects.

2.4 Wooden Surface Finishing

- Exposed timber surfaces shall be machine sanded and prepared prior to finishing.
- Surfaces shall receive necessary sealer coats, stain where required and minimum two coats of approved PU polish or equivalent finish.
- Finished surfaces shall be smooth, uniform and free from scratches, dents and blemishes.

2.5 Installation

- Sofa shall be supplied, transported and placed in position as directed by the Engineer-in-Charge.
- Necessary precautions shall be taken during transportation and handling to prevent damage to upholstery and polished surfaces.
- Any damaged component shall be repaired or replaced at the contractor's cost.

2.6 Cleaning and Protection

- Completed sofa shall be thoroughly cleaned before handing over.
- Upholstery and polished surfaces shall be protected against dust, stains, scratches and damage until project completion.
- Protective coverings shall be maintained until final handover.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out on **Each / Number** basis for each completed Three Seater Sofa supplied and placed in position.
- Sofa size shall be 2100 mm × 610 mm × 770 mm or as approved in drawings.

3.2 Payment

- Rate shall include hardwood framework, BWP grade plywood, high-density PU foam, fibre wrapping, upholstery fabric, exposed wooden armrests and legs, polishing, hardware, adhesives and all accessories required for complete execution.
- Rate shall include fabrication, upholstery work, polishing, transportation, loading, unloading, handling, placement in position, protection and cleaning.
- Rate shall include all labour, materials, tools, plants, machinery and incidental works necessary to complete the item.
- No separate payment shall be made for hardware, stitching, foam, fibre wrapping, polishing, transportation, protection, wastage or fixing accessories.
- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 17

Suit Two Seater fabric Sofa : Providing, fabricating, and placing custom-made double-seater upholstered sofa of overall size 1500 × 610 × 770 mm, comprising a solid hardwood exposed frame with continuous armrest profile and legs, finished in approved natural wood polish.

The sofa shall be provided with high-density PU foam seat and back cushions with fibre wrap, upholstered in premium fabric / linen upholstery, with neat tailoring and concealed stitching, suitable for residential / hospitality use. Item includes all materials, carpentry, upholstery, polishing, accessories, transportation, and placement at site, complete in all respects, as directed by the Architect / Engineer-in-Charge at all floors / all levels / all heights

SUITE TWO SEATER FABRIC SOFA

Size: 1500 mm × 610 mm × 770 mm

1. MATERIALS

1.1 Structural Frame

- Sofa framework shall be fabricated from well-seasoned first-class hardwood such as Indian Teak Wood, Ash Wood, Steam Beech Wood or approved equivalent.
- Timber shall be free from knots, cracks, warping, decay, insect attack and other defects.
- Moisture content of timber shall not exceed 12%.

- All timber members shall be treated with approved anti-termite and anti-borer preservative prior to fabrication.

1.2 Plywood and Support Members

- Internal seat, back and arm support members shall be fabricated from BWP Grade plywood conforming to IS 710 or approved equivalent.
- Plywood shall be free from delamination, swelling and manufacturing defects.
- Thickness shall be as required to provide adequate structural strength and durability.

1.3 Cushioning Material

- Seat cushions shall be manufactured from high-density polyurethane foam of minimum 40 kg/m³ density or approved equivalent.
- Back cushions shall be manufactured from high-density PU foam of suitable density for optimum comfort and support.
- Foam shall be wrapped with polyester fibre or siliconized fibre layer to provide additional softness and uniform contour.
- Foam shall be resilient, durable and free from sagging or deformation.

1.4 Upholstery Fabric

- Upholstery shall consist of premium quality fabric, linen fabric or approved equivalent suitable for residential and hospitality applications.
- Fabric shall be colourfast, stain resistant, abrasion resistant and durable under regular use.
- Colour, texture, weave pattern and finish shall be as approved by the Architect and Engineer-in-Charge.

1.5 Exposed Wooden Components

- Exposed frame members, continuous armrest profile and legs shall be finished in approved natural wood polish, melamine polish or PU finish.
- Finish shall provide a smooth appearance while highlighting the natural wood grain.

1.6 Hardware and Accessories

- Hardware shall include screws, brackets, connectors, webbing, corner blocks, fasteners and all accessories required for complete assembly.
- Hardware shall be of approved make and corrosion-resistant quality.

1.7 Adhesives and Consumables

- Adhesives shall be low VOC, furniture-grade adhesive suitable for timber, plywood and upholstery applications.
- All consumables shall be of approved quality and compatible with the specified materials.

2. WORKMANSHIP

2.1 General

- Sofa shall be custom manufactured strictly as per approved drawings, dimensions, design details and approved sample.
- Overall finished dimensions shall be 1500 mm × 610 mm × 770 mm unless otherwise specified.
- Finished sofa shall be stable, level, rigid and free from distortion, squeaking or structural defects.

2.2 Frame Fabrication

- Structural frame shall be accurately fabricated and assembled using approved carpentry methods.
- Joinery shall comprise mortise and tenon joints, dowel joints, screwed joints or equivalent approved methods.
- Joints shall be reinforced using approved adhesive and mechanical fasteners.
- Framework shall be capable of supporting intended loading conditions without deformation.

2.3 Cushioning and Upholstery

- Foam cushions shall be accurately cut and securely fixed to the frame.
- Fibre wrapping shall be uniformly applied to achieve smooth contours and enhanced comfort.
- Upholstery fabric shall be stretched uniformly and fixed without wrinkles, puckering, sagging or loose areas.
- Stitching shall be concealed wherever specified and neatly finished.
- All seams shall be straight, properly aligned and free from visible defects.

2.4 Wooden Surface Finishing

- Exposed timber surfaces shall be machine sanded and prepared before polishing.
- Surfaces shall receive necessary sealer coats, stain where required and minimum two coats of approved natural wood polish, melamine polish or PU finish.
- Finished surfaces shall be smooth, uniform and free from scratches, dents and blemishes.

2.5 Installation

- Sofa shall be supplied, transported and placed in position as directed by the Engineer-in-Charge.
- Necessary precautions shall be taken during transportation and handling to prevent damage to upholstery and polished surfaces.
- Any damaged component shall be repaired or replaced at the contractor's cost.

2.6 Cleaning and Protection

- Completed sofa shall be thoroughly cleaned before handing over.
- Upholstery and polished surfaces shall be protected against dust, stains, scratches and damage until project completion.
- Protective coverings shall be maintained until final handover.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out on **Each / Number** basis for each completed Two Seater Sofa supplied and placed in position.
- Sofa size shall be 1500 mm × 610 mm × 770 mm or as approved in drawings.

3.2 Payment

- Rate shall include hardwood framework, BWP grade plywood, high-density PU foam, fibre wrapping, premium upholstery fabric, exposed wooden frame, armrests and legs, polishing, hardware, adhesives and all accessories required for complete execution.
- Rate shall include fabrication, upholstery work, polishing, transportation, loading, unloading, handling, placement in position, protection and cleaning.
- Rate shall include all labour, materials, tools, plants, machinery and incidental works necessary to complete the item.

- No separate payment shall be made for hardware, stitching, foam, fibre wrapping, polishing, transportation, protection, wastage or fixing accessories.
- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 18

Center Table Suit : Providing & Placing in position Center table of size 900 X 600 X 450 mm made from Solid teakwood with Varnish Polish finish Table Top made from veneer with Pu polish/Glass complete as per instruction given by engineer in charge/Architect.at all floors / all levels / all heights

SUITE CENTER TABLE

Size: 900 mm × 600 mm × 450 mm

1. MATERIALS

1.1 Solid Teak Wood

- Center table framework, legs, apron, supports and all exposed wooden members shall be manufactured from well-seasoned first-class Indian Teak Wood.
- Timber shall be free from knots, sapwood, cracks, warping, decay, insect attack and other defects.
- Moisture content shall not exceed 12%.
- All timber shall be treated with approved anti-termite and anti-borer preservative before fabrication.

1.2 Table Top

- Table top shall be formed from BWP Grade plywood conforming to IS 710 finished with premium quality natural wood veneer and PU polish, or approved glass top as specified in approved drawings.
- Veneer shall be free from cracks, stains, open joints and surface defects.
- Glass, where specified, shall be clear toughened glass of approved thickness with machine-polished edges.

1.3 Plywood

- Plywood used as substrate for veneered top shall be BWP Grade, calibrated and moisture resistant.
- Plywood shall be free from delamination, swelling and manufacturing defects.

1.4 Hardware and Accessories

- Hardware shall include screws, dowels, corner blocks, brackets, connectors, fixing plates and all accessories necessary for complete assembly.
- Hardware shall be corrosion-resistant and of approved make and quality.

1.5 Adhesives

- Adhesives shall be low VOC, waterproof synthetic resin adhesive conforming to relevant IS standards.
- Adhesives shall be suitable for furniture-grade joinery and veneer applications.

1.6 Polishing Materials

- Exposed teak wood surfaces shall be finished with premium quality varnish polish.
- Veneered surfaces shall be finished with approved PU polish system including sealer coats and finishing coats.
- All polishing materials shall be of approved make and compatible system.

2. WORKMANSHIP

2.1 General

- Center table shall be manufactured strictly as per approved drawings, dimensions and approved sample.
- Finished dimensions shall be 900 mm × 600 mm × 450 mm unless otherwise specified.
- Table shall be rigid, level, stable and free from distortion, wobbling or defects.

2.2 Fabrication

- All teak wood members shall be accurately machine cut, planed and fabricated.
- Joinery shall be executed using approved carpentry methods such as mortise and tenon joints, dowel joints or equivalent approved systems.
- Joints shall be reinforced with approved adhesives, screws and fixing accessories.
- No visible nail heads shall be permitted on exposed surfaces.

2.3 Table Top Construction

- Veneered table top shall be properly bonded to plywood substrate without bubbles, waviness, lifting or surface irregularities.
- Veneer grain shall be matched and aligned uniformly.
- Glass top, where specified, shall be securely fixed with approved supports and fittings.
- Table top shall be level and capable of supporting intended loads without deformation.

2.4 Surface Finishing

- Exposed teak wood surfaces shall be smoothly sanded and finished with approved varnish polish.
- Veneered surfaces shall receive necessary sealer coats, fine sanding and minimum two coats of PU polish.
- Finished surfaces shall be smooth, uniform and free from scratches, stains, dents, brush marks, blemishes and polish defects.

2.5 Installation

- Center table shall be supplied, transported and placed in position at the designated location as directed by the Engineer-in-Charge.
- Necessary precautions shall be taken during transportation and handling to prevent damage.
- Damaged components shall be repaired or replaced at contractor's cost.

2.6 Cleaning and Protection

- Completed table shall be thoroughly cleaned after placement.
- Surfaces shall be protected from scratches, moisture, staining and damage until project completion and handing over.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out on **Each / Number** basis for each completed Center Table supplied and placed in position.
- Table size shall be 900 mm × 600 mm × 450 mm.

3.2 Payment

- Rate shall include supply of solid teak wood, BWP grade plywood, natural veneer or glass top, hardware, adhesives, preservatives, varnish polish, PU polish and all accessories required for complete execution of the item.
- Rate shall include fabrication, polishing, finishing, transportation, loading, unloading, handling, placement in position, protection and cleaning.
- Rate shall include all labour, materials, tools, plants, machinery and incidental works necessary to complete the item.
- No separate payment shall be made for hardware, polishing, preservatives, transportation, handling, protection, wastage or fixing accessories.
- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 19

Dressing Unit Suit Size Of 1.5x1.8m at 450mm Depth : Providing and fixing a modern dressing table unit comprising a full-length mirror with base storage cabinet, fabricated from 18mm thick commercial/marine grade plywood with 12mm plywood for internal members, finished externally with high-quality natural veneer and PU (polyurethane) polish in approved shade and finish. The unit includes a 5–6mm thick mirror fixed on plywood backing, bottom storage with drawers fitted with soft-close channels and necessary hardware of approved make, complete with all fittings, edge finishing, polishing, transportation, and installation as per design approved by the architect and directions provided by the Engineer-in-Charge

SUITE DRESSING UNIT

Size: 1.50 m × 1.80 m × 450 mm Depth

1. MATERIALS

1.1 Plywood

- Main carcass, cabinet body, drawer fronts, partitions, shelves and structural members shall be fabricated from 18 mm thick Marine Grade/BWP Grade plywood conforming to IS 710.
- Internal members, drawer boxes, backs and secondary components shall be fabricated from 12 mm thick Marine Grade/BWP Grade plywood unless otherwise specified.
- Plywood shall be free from delamination, swelling, warping and manufacturing defects.
- All plywood shall be treated with approved anti-termite and anti-borer preservative prior to fabrication.

1.2 Natural Veneer

- All exposed surfaces shall be finished with premium quality natural wood veneer of approved species, grain pattern and shade.

- Veneer shall be free from cracks, open joints, discoloration and surface defects.
- Veneer thickness shall not be less than 0.6 mm unless otherwise specified.

1.3 PU Polish Finish

- Veneered surfaces shall be finished with approved Polyurethane (PU) polish system comprising sealer coats, intermediate sanding and final finishing coats.
- Finish shall be smooth, uniform and of approved sheen level, colour and texture.

1.4 Mirror

- Mirror shall be 5 mm to 6 mm thick superior quality float glass mirror with distortion-free reflection.
- Mirror shall be fixed over plywood backing using approved mirror adhesive and fixing accessories.
- Mirror edges shall be machine polished unless concealed within framing.

1.5 Drawer Channels and Hardware

- Drawers shall be fitted with premium quality soft-close telescopic channels.
- Hardware shall include handles, knobs, hinges, locks, magnetic catches, connectors, screws, brackets and all necessary fixing accessories.
- Hardware shall be of approved make and corrosion-resistant finish.

1.6 Adhesives and Edge Finishing

- Adhesives shall be low VOC waterproof synthetic resin adhesive conforming to relevant IS standards.
- Exposed edges shall be finished with matching veneer, hardwood lipping or approved edge banding.
- Edge finish shall be smooth and free from chipping.

1.7 Accessories

- Unit shall include storage drawers, shelves, mirror fixing system and all accessories required for complete functionality.
- All accessories shall be of approved make and quality.

2. WORKMANSHIP

2.1 General

- Dressing unit shall be manufactured strictly as per approved drawings, dimensions, design details and approved sample.
- Overall size shall be 1.50 m × 1.80 m with 450 mm depth unless otherwise specified.
- Finished unit shall be rigid, level, properly aligned and free from distortion or defects.

2.2 Fabrication

- All plywood members shall be machine cut and accurately fabricated.
- Joinery shall be executed using approved woodworking methods with screws, dowels, connectors and adhesives.
- All joints shall be tight fitting, properly aligned and structurally sound.
- No visible nail heads shall be permitted on exposed surfaces.

2.3 Veneering and Finishing

- Veneer shall be properly bonded to substrate without bubbles, waviness, lifting or open joints.
- Veneer grain shall be matched and aligned uniformly.
- Surfaces shall be sanded smooth and finished with approved PU polish system.
- Finished surfaces shall be smooth, uniform and free from scratches, dents, stains and blemishes.

2.4 Mirror Installation

- Mirror shall be accurately fixed on plywood backing and securely installed.
- Mirror surface shall be free from distortion, scratches, chips and visual defects.
- Necessary cushioning and support shall be provided to prevent stress and breakage.

2.5 Drawers and Storage Cabinet

- Drawers shall operate smoothly on soft-close channels without binding or excessive movement.
- Shelves and storage compartments shall be level, properly aligned and capable of supporting intended loads.
- Drawer fronts and cabinet shutters, if provided, shall maintain uniform alignment and gaps.

2.6 Hardware Installation

- Handles, hinges, channels, locks and accessories shall be installed accurately and securely.
- All moving components shall function smoothly and silently.

2.7 Installation

- Dressing unit shall be supplied, transported, assembled and fixed/placed in position as shown in approved drawings and directed by the Engineer-in-Charge.
- Necessary precautions shall be taken during transportation and installation to prevent damage to veneer, polish and mirror surfaces.
- Any damaged component shall be repaired or replaced at contractor's cost.

2.8 Cleaning and Protection

- Upon completion, all surfaces shall be cleaned and protected.
- Veneer, polish and mirror surfaces shall be free from adhesive marks, dust, stains and scratches.
- Protective coverings shall remain until project handover.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Each / Number** of front elevation area of the completed dressing unit.
- Dimensions shall be measured along the finished outer faces of the installed unit.

3.2 Payment

- Rate shall include Marine Grade/BWP Grade plywood, natural veneer, PU polish, mirror, soft-close drawer channels, shelves, drawers, hardware fittings, adhesives, preservatives and all accessories required for complete execution.
- Rate shall include fabrication, veneering, polishing, mirror fixing, assembly, transportation, loading, unloading, handling, installation, protection and cleaning.

- Rate shall include all labour, materials, tools, plants, machinery and incidental works necessary to complete the item.
- No separate payment shall be made for hardware, drawer channels, handles, mirror fixing accessories, polishing, edge finishing, transportation, protection, wastage or fixing accessories.
- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 20

WARDROBE: Manufacturing, supply, arrangement and keeping in good condition until project completion of freestanding/ wall fixed wardrobe storage unit having drawers, shelves, hangers etc up to 600 mm deep as per drawings and instruction of EIC. Carcass, boxes, shelves, drawers and shutters made with 8/ 12 / 18 / 25 mm thick block board/ ply wood confirming to Urea formaldehyde free MR/ BWP grade Decorative type (BWP/MR-DEC) as per relevant IS codes using low VOC adhesive with 9 mm solid wood lipping having colour, shade and grain selected by architect low using VOC CFC HCFC free suitable adhesive. External facia of plywood to be covered with 4mm Thick Veneer With PU Polish as per selection and 9 mm thick solid wood batten as per design and all internal facia of ply wood for shutters, drawers, shelves to be covered with 0.8 mm thick laminate. Aluminium pipe framing for shutters as per design to be included. All joinery to be based on good practices such as tongue and groove joint, dovetail joint etc and using hardware such as "L" brace, Tee, corner brace, screws, nails and pocket-screw joinery etc. as per drawings, specification and instruction by architect. Price to be inclusive of all other such as adhesive, nails, screws, fasteners, telescopic channel, sliding channel, clips, abro tap, ABS parts, SS/ solid wooden handle, etc and all labour All external wood to be seasoned indian teak wood. All veneer/ solid wooden surfaces shall be polished with water based low VOC PU polish in shade, finish, texture and specification as per architect including fine sanding before and after insulator (sealer) coats and first coat of PU, clear non-toxic low VOC termite control additive, 2 coat of clear epoxy insulator in 1:1 proportion of hardner and epoxy, dent filling with matching putty, wooden stainer and 2 coats of water based PU etc. complete. Area to be measured in elevation. All plywood/ solid wood to be treated for termite using PIDILITE Terminator Wood Preservative or equivalent. at all floors / all levels / all heights

WARDROBE STORAGE UNIT

Freestanding / Wall Fixed Wardrobe up to 600 mm Depth

1. MATERIALS

1.1 Plywood / Block Board

- Carcass, shelves, drawers, partitions, shutters and internal storage components shall be fabricated from 8 mm, 12 mm, 18 mm and 25 mm thick Urea Formaldehyde Free MR/BWP Grade Decorative Plywood or Block Board conforming to IS 303 and IS 710, as specified in approved drawings.
- Plywood and block board shall be calibrated, moisture resistant and free from delamination, swelling, warping and manufacturing defects.
- All plywood and block board shall be treated with approved anti-termite and anti-borer preservative such as PIDILITE Terminator Wood Preservative or equivalent.

1.2 Solid Wood Lipping and Battens

- All exposed edges shall be finished with 9 mm thick seasoned solid Indian Teak Wood lipping.
- Decorative battens and design elements shall be formed from 9 mm thick solid Indian Teak Wood as per approved design.
- Timber shall be free from knots, cracks, sapwood, decay and insect attack.
- Moisture content shall not exceed 12%.

1.3 Veneer Finish

- External visible surfaces of shutters, drawer fronts, side panels and facia shall be finished with 4 mm thick natural wood veneer of approved species, colour, grain and shade.
- Veneer shall be free from cracks, open joints, stains and surface defects.
- Veneer shall be properly matched and aligned to achieve a uniform appearance.

1.4 Internal Laminate Finish

- Internal surfaces of shutters, shelves, drawers, partitions and carcass shall be finished with 0.8 mm thick decorative laminate of approved colour and texture.
- Laminate shall be scratch resistant, moisture resistant and uniformly bonded.

1.5 Aluminium Framing

- Aluminium framing for shutters shall be provided wherever specified in approved drawings.
- Aluminium sections shall be of approved size, alloy, finish and profile.
- Surface finish shall be powder coated, anodized or as approved by the Architect.

1.6 Hardware and Fittings

- Hardware shall include telescopic channels, soft-close drawer channels, sliding channels, hinges, handles, locks, magnetic catches, hanger rods, shelf supports, brackets, screws, fasteners, clips, ABS accessories, L-braces, corner braces, tee braces and all fixing accessories required for complete functionality.
- Handles shall be stainless steel, aluminium, solid wood or approved equivalent.
- Hardware shall be of approved make and corrosion-resistant finish.

1.7 Adhesives

- Adhesives shall be low VOC, waterproof synthetic resin adhesive conforming to IS 848.
- Adhesives shall be free from CFC and HCFC compounds and suitable for furniture-grade applications.

1.8 Polishing Materials

- All veneer and exposed wooden surfaces shall be finished with water-based low VOC PU polish system.
- PU polish materials, sealers, epoxy insulators, wood stains and associated finishing materials shall be of approved make and compatible system.

2. WORKMANSHIP

2.1 General

- Wardrobe shall be manufactured strictly as per approved drawings, dimensions and instructions of the Engineer-in-Charge.
- Wardrobe may be freestanding or wall fixed and shall include shelves, drawers, hanging space, shutters and accessories as shown in approved drawings.
- Finished unit shall be rigid, square, level and free from distortion or defects.

2.2 Fabrication

- All components shall be machine cut and accurately fabricated.

- Carcass and shutter assembly shall be constructed using approved carpentry techniques.
- Joinery shall include tongue and groove joints, dovetail joints, dowel joints, pocket screw joinery, mortise and tenon joints or equivalent approved methods.
- Joints shall be reinforced using approved adhesive, screws and fixing accessories.
- No visible nail heads shall be permitted on exposed surfaces.

2.3 Shelves, Drawers and Hanging Arrangement

- Shelves shall be properly aligned and capable of carrying intended loads without sagging.
- Drawers shall operate smoothly on telescopic or soft-close channels.
- Hanging rods shall be securely fixed and aligned.
- Internal storage layout shall be executed as per approved drawings.

2.4 Veneering and Lamination

- Veneer shall be properly bonded to substrate without bubbles, waviness, lifting or open joints.
- Veneer grain shall be matched and aligned uniformly.
- Laminate surfaces shall be smooth, wrinkle-free and properly bonded without air pockets.

2.5 Surface Preparation and PU Polishing

- All exposed veneer and solid wood surfaces shall receive:
 1. Surface sanding and preparation.
 2. Application of approved anti-termite additive.
 3. Dent filling using matching wood putty.
 4. Application of approved wood stain where required.
 5. Two coats of clear epoxy insulator mixed with hardener in 1:1 proportion.
 6. Intermediate sanding between coats.
 7. Minimum two coats of water-based low VOC PU polish.
 8. Final finish shall be smooth, uniform and free from scratches, stains, brush marks and blemishes.

2.6 Hardware Installation

- Hinges, channels, handles, locks and accessories shall be accurately installed and adjusted.
- Shutters shall open and close smoothly without binding.
- Drawers shall move freely and align properly in the closed position.

2.7 Installation

- Wardrobe shall be supplied, transported, assembled and fixed in position complete as per approved layout.
- Unit shall be securely anchored where required.
- Damaged components shall be repaired or replaced at contractor's cost.

2.8 Cleaning and Protection

- Upon completion, all surfaces shall be cleaned and protected.
- Adhesive marks, dust and polishing residues shall be removed.
- Wardrobe shall be protected against damage until project completion and handover.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Square Metres (Sq.m.)** of finished front elevation area of wardrobe.
- Height and width shall be measured on the finished external face of the installed wardrobe.
- No deduction shall be made for shelves, drawers, partitions or internal fittings.

3.2 Payment

- Rate shall include MR/BWP grade plywood, block board, teak wood lipping, teak wood battens, natural veneer, internal laminate finish, aluminium shutter framing, hanger rods, shelves, drawers, channels, hardware, adhesives, preservatives, PU polish and all accessories required for complete execution.
- Rate shall include fabrication, veneering, lamination, polishing, assembly, transportation, loading, unloading, handling, fixing, installation, protection and cleaning.
- Rate shall include all labour, materials, tools, plants, machinery and incidental works necessary for completion of the item.
- No separate payment shall be made for channels, handles, hinges, lippings, battens, hardware, polishing, transportation, protection, wastage or fixing accessories.
- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 21

STUDY table with WOODEN CHAIR : Providing, fabricating, and fixing custom-made wall-mounted study table Size of 500x900mm with integrated drawers, and a matching study chair Size Of 650x650x750mm, complete in all respects.

The study table shall be made from BWP grade plywood / MDF, finished with natural wood veneer with pu poish on top surface and PU-painted finish to drawer fronts, comprising a smooth working surface, floating drawers with concealed soft-close channels, and a continuous wooden back ledge. The table shall be securely fixed to the wall with concealed MS brackets / supports, complete with edge banding and finishing.

The study chair shall be provided with a solid wood / metal frame, upholstered cushioned seat, finished in approved fabric and polish, complete with floor protection pads.

The item includes all carpentry, metal work, hardware, polishing, upholstery, transportation, and installation, complete in all respects, as directed by the Architect / Engineer-in-Charge.at all floors / all levels / all heights

STUDY TABLE WITH WOODEN CHAIR

Study Table Size: 900 mm × 500 mm

Study Chair Size: 650 mm × 650 mm × 750 mm

1. MATERIALS

1.1 Study Table Base Material

- Study table, drawers, back ledge and associated components shall be fabricated from 18 mm thick BWP Grade plywood conforming to IS 710 and/or premium grade MDF as specified in approved drawings.

- Internal drawer members and secondary components shall be fabricated from 12 mm thick BWP plywood or MDF.
- All boards shall be free from warping, delamination, swelling and manufacturing defects.
- All plywood shall be treated with approved anti-termite and anti-borer preservative prior to fabrication.

1.2 Veneer Finish

- Table top and exposed wooden surfaces shall be finished with premium quality natural wood veneer of approved species, colour and grain pattern.
- Veneer shall be free from cracks, stains, open joints and other visible defects.
- Veneer thickness shall not be less than 0.6 mm unless otherwise specified.

1.3 PU Finish

- Veneered surfaces shall be finished with approved PU polish system.
- Drawer fronts and painted surfaces shall receive premium quality PU paint finish in approved colour, shade and gloss level.
- Finish shall be smooth, uniform and free from surface defects.

1.4 Concealed Brackets and Supports

- Wall-mounted study table shall be supported on concealed MS brackets or structural supports fabricated from approved mild steel sections.
- MS members shall be treated with anti-corrosive primer and finished with powder coating or enamel paint where exposed.
- Supports shall be designed to safely carry intended working loads.

1.5 Drawer Hardware

- Drawers shall be fitted with premium quality concealed soft-close telescopic channels.
- Hardware shall include handles, pull mechanisms, screws, brackets, connectors and all accessories necessary for complete operation.
- Hardware shall be of approved make and corrosion-resistant finish.

1.6 Study Chair Frame

- Chair frame shall be fabricated from seasoned solid hardwood such as Indian Teak Wood, Ash Wood, Steam Beech Wood or approved equivalent, or from approved metal framework as specified.
- Timber shall be free from cracks, knots, decay and insect attack.
- Metal members shall be free from rust, bends and manufacturing defects.

1.7 Chair Cushion and Upholstery

- Seat cushion shall be manufactured from high-density PU foam of suitable density for seating comfort.
- Upholstery shall be premium quality fabric, linen or approved upholstery material.
- Fabric shall be colourfast, abrasion resistant and suitable for regular use.
- Colour and texture shall be as approved by the Architect.

1.8 Floor Protection Pads

- Chair legs shall be fitted with approved nylon, rubber or polymer floor protection pads to prevent damage to flooring surfaces.

1.9 Adhesives and Consumables

- Adhesives shall be low VOC, waterproof synthetic resin adhesive conforming to relevant IS standards.
- All consumables shall be of approved quality and compatible with the specified materials.

2. WORKMANSHIP

2.1 General

- Study table and chair shall be manufactured strictly as per approved drawings, dimensions and approved sample.
- Finished units shall be rigid, level, stable and free from distortion, vibration and defects.
- All dimensions shall be verified at site prior to fabrication.

2.2 Study Table Fabrication

- Table top, drawers and back ledge shall be machine cut and accurately fabricated.
- Exposed edges shall be finished with matching veneer, hardwood lipping or approved edge banding.
- Joinery shall be executed using approved woodworking methods including dowels, screws, connectors and adhesives.
- No visible nail heads shall be permitted on exposed surfaces.

2.3 Drawer Installation

- Drawers shall be installed on concealed soft-close channels.
- Drawers shall operate smoothly without binding, rattling or excessive movement.
- Drawer alignment and gaps shall be uniform throughout.

2.4 Wall Mounting

- Study table shall be securely fixed to wall using concealed MS brackets or approved structural support system.
- Fixing arrangement shall be capable of supporting intended loads without deflection or movement.
- All fasteners shall be concealed wherever possible.

2.5 Veneering and Finishing

- Veneer shall be properly bonded to substrate without bubbles, waviness or lifting.
- Veneer grain shall be matched and aligned uniformly.
- Surfaces shall receive sanding, sealer coats and minimum two coats of PU polish or PU paint finish as specified.
- Finished surfaces shall be smooth, uniform and free from scratches, dents, stains and blemishes.

2.6 Chair Fabrication

- Chair frame shall be accurately fabricated and assembled using approved joinery and fastening methods.
- Cushion shall be securely fixed and upholstered with wrinkle-free fabric finish.
- Upholstery stitching shall be neat, straight and properly aligned.
- Chair shall remain stable without rocking or deformation during use.

2.7 Installation

- Study table and chair shall be supplied, transported and installed/placed in position as directed by the Engineer-in-Charge.
- Necessary precautions shall be taken during handling and installation to prevent damage to finishes and upholstery.
- Damaged components shall be repaired or replaced at contractor's cost.

2.8 Cleaning and Protection

- Upon completion, all surfaces shall be cleaned and protected.
- Adhesive marks, dust, stains and polishing residues shall be removed.
- Furniture shall be protected against damage until final handover.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Study Table With Wooden Chair shall be carried out in **Each / Number**

3.2 Payment

- Rate shall include BWP plywood/MDF, natural veneer, PU polish, PU painted finish, concealed MS brackets, soft-close drawer channels, hardware, adhesives, chair framework, upholstery, cushion, floor protection pads and all accessories required for complete execution.
- Rate shall include fabrication, polishing, painting, metal work, upholstery work, assembly, transportation, loading, unloading, handling, fixing, installation, protection and cleaning.
- Rate shall include all labour, materials, tools, plants, machinery and incidental works necessary to complete the item.
- No separate payment shall be made for brackets, channels, handles, fasteners, polishing, upholstery, transportation, protection, wastage or fixing accessories.
- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 22

Veneer Wall Panelling: Providing and fixing Veneer wall panelling and false ceiling work as per drawing and as per following: 1) Providing and fixing of Close stud type wall panelling framing system of approved make, which includes good quality framing like Gypsteel ULTRA CLOSED STUD partition of Saint Gobain or as per approved make. 48x0.6mm Gypsteel ULTRA CLOSED STUD should be placed at 600mm c/c in 50x0.5mm Gypsteel ULTRA floor and ceiling channel including bracing, noggin channel, necessary accessories rawl plug, SS 304 fastner, angle cleat has to be provided at the horizontal joints of the two ply. 2) Providing and fixing 12 mm thick water resistant ply confirming IS 303 BWR on installed wall panelling framing, with SS 304 screw, fastner as suggested by framing vendor. 3) Providing and fixing 3.5 to 4 mm thick Veneer of approved make and shade on ply panelling work, fixed partition, ceiling work, any ply surface etc with necessary nails, screws, adhesives as per drawings and approved sample. Veneer shall be selected and sorted for uniform straight lined, light colored from matching group. 4) Polishing work shall be carried out as specified of approved make, shade and texture. 5) For the false ceiling work, the veneer panelling should be done on th3e surface of gypsum false ceiling by the help of drilling and screwing by desired dimensions of screws. And veneer should be applied and fixed similarly as that in the wall panelling by the help of any bonding agent or glue and polished accordingly. 5) The rate shall be for all heights, all places, all places, etc complete as directed by engineer in charge. Actual laid area shall be measured and paid without considering any westage. Provide and install as per the directions provided by the Engineer-in-Charge

VENEER WALL PANELLING & VENEER FALSE CEILING CLADDING

1. MATERIALS

1.1 Metal Framing System

- Framing for wall panelling shall consist of approved make close-stud partition system such as Gypsteel ULTRA Closed Stud System of Saint-Gobain Gyproc or equivalent approved system.
- Vertical studs shall be 48 mm × 0.60 mm thick galvanized steel closed studs placed at maximum 600 mm centre-to-centre.
- Studs shall be fixed within 50 mm × 0.50 mm thick galvanized steel floor and ceiling channels.
- Additional bracing members, noggin channels, angle cleats, connectors and reinforcement members shall be provided wherever required.
- Framing members shall be manufactured from corrosion-resistant galvanized steel conforming to relevant IS standards.

1.2 Fasteners and Accessories

- Fixing accessories shall include SS 304 screws, fasteners, rawl plugs, anchor fasteners, cleats, brackets, clips and all accessories required for complete installation.
- Angle cleats shall be provided at horizontal joints and other locations as recommended by the framing manufacturer.
- All exposed metal accessories shall be corrosion resistant.

1.3 Plywood Backing

- Backing surface shall consist of 12 mm thick Water Resistant (BWR) Grade plywood conforming to IS 303.
- Plywood shall be free from delamination, warping, swelling and manufacturing defects.
- Plywood shall be treated with approved anti-termite and anti-borer preservative before installation.

1.4 Natural Veneer

- Veneer shall be 3.5 mm to 4.0 mm thick premium quality natural wood veneer of approved make, species, colour and grain pattern.
- Veneer shall be carefully selected and matched to provide uniform straight grain appearance and consistent shade.
- Veneer shall be free from cracks, stains, open joints, discoloration and other defects.
- Veneer shall be suitable for application on wall panelling, fixed furniture surfaces and false ceiling cladding.

1.5 Adhesives

- Adhesives shall be low VOC, waterproof synthetic resin adhesive conforming to IS 848.
- Adhesives shall be suitable for veneer bonding over plywood and gypsum-based substrates.
- Adhesives shall be free from CFC and HCFC compounds.

1.6 Polishing Materials

- Veneer surfaces shall be finished with approved water-based or solvent-based PU polish system.
- Finishing system shall include wood filler, sealer, stain (where required), PU base coats and finishing coats.
- Materials shall be of approved make and compatible with the veneer system.

1.7 False Ceiling Substrate

- Veneer cladding over ceiling shall be fixed on completed gypsum board false ceiling system as shown in approved drawings.
- Gypsum board substrate shall be properly aligned, level and structurally sound before commencement of veneer cladding work.

2. WORKMANSHIP

2.1 General

- Work shall be executed strictly as per approved drawings, specifications, approved samples and directions of the Engineer-in-Charge.
- Veneer grain, joints, panel sizes and layout pattern shall be coordinated and approved prior to execution.
- Finished surfaces shall be true to line, level and free from distortion.

2.2 Framing Installation

- Floor and ceiling channels shall be securely fixed using approved anchors and fasteners.
- Closed studs shall be installed at maximum 600 mm centre-to-centre spacing.
- Additional bracing, noggin channels and reinforcement members shall be provided wherever required to ensure rigidity.
- Framing shall be plumb, level and capable of supporting the finished panelling system without deflection.

2.3 Plywood Fixing

- 12 mm thick BWR plywood shall be fixed to the framing system using SS 304 screws and approved fixing accessories.
- Joints shall be properly aligned and staggered where required.
- Plywood surface shall be even, rigid and free from undulations.

2.4 Veneer Application

- Veneer shall be fixed over plywood substrate using approved adhesive system.
- Veneer sheets shall be selected, matched and arranged to achieve uniform grain pattern and colour consistency.
- All joints shall be tight, straight and neatly aligned.
- Veneer shall be properly pressed and bonded without bubbles, lifting, waviness or open joints.

2.5 Veneer False Ceiling Cladding

- Veneer panelling over gypsum false ceiling shall be fixed using approved screws, fasteners, bonding agents and adhesive systems as recommended by the manufacturer.
- Ceiling veneer panels shall be aligned accurately and securely fixed to prevent sagging or detachment.
- Necessary reinforcement and support arrangements shall be provided wherever required.
- Finished ceiling surface shall be level, properly aligned and free from visible fixing marks.

2.6 Surface Preparation and Polishing

- Veneer surfaces shall be sanded smooth before polishing.
- Surface imperfections shall be filled with matching wood filler.
- Approved sealer coats shall be applied followed by intermediate sanding.

- Wood stain shall be applied where required to achieve approved shade.
- Minimum two coats of PU polish shall be applied over the prepared surface.
- Finished surface shall be smooth, uniform and free from scratches, stains, brush marks, dull patches or blemishes.

2.7 Quality Requirements

- Veneer joints shall be properly matched and aligned.
- Grain direction shall be maintained as shown in approved drawings.
- No visible nail heads, screw heads, gaps or adhesive marks shall be permitted.
- Finished work shall be free from cracks, warping, bubbling or discoloration.

2.8 Cleaning and Protection

- Completed surfaces shall be thoroughly cleaned after finishing.
- Protective coverings shall be provided to prevent damage during subsequent works.
- Damaged portions shall be repaired or replaced to the satisfaction of the Engineer-in-Charge.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Square Metres (Sq.m.)** of actual finished veneer panelling and veneer-clad false ceiling area measured along the finished surface.
- Openings, recesses and deductions shall be measured as per standard measurement practices.
- No allowance shall be made for wastage, laps, overlaps, cut-outs, grain matching or pattern matching.

3.2 Payment

- Rate shall include galvanized steel framing system, floor and ceiling channels, closed studs, bracing members, noggin channels, angle cleats, SS 304 screws, fasteners, rawl plugs and all accessories.
- Rate shall include 12 mm thick BWR plywood backing, veneer, adhesives, preservatives, PU polishing system and all finishing materials.
- Rate shall include veneer application on wall panelling, fixed surfaces and false ceiling cladding complete.
- Rate shall include fabrication, fixing, polishing, transportation, loading, unloading, handling, scaffolding, protection, cleaning and all labour, tools, plants and machinery required for complete execution.
- No separate payment shall be made for framing accessories, grain matching, polishing materials, fasteners, scaffolding, wastage or incidental works.
- The item shall be executed complete as per approved drawings, approved samples and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 23

Fluted Panneling :

Manufacturing, supply, arrangement and keeping in good condition until project completion slatted panels which have Low VOC and formaldehyde free containt as per the GRIHA 3star/IGBC gold rating of 12 mm thickness of any height as required to be fitted at all heights/all levels with also Fixing with edge wooden batten, necessary arrangement like plywood which have Low VOC and formaldehyde free containt as per the GRIHA 3star/IGBC gold rating or similar etc with the help of fixtures such as bonding agents such as fevicols which have LOW-VOC containt as per the GRIHA 3star/IGBC gold rating, screws of any diameter or similar complete of design provided by the architect and should be

installed as per the directions provided by the Engineer-in-Charge. at all floors / all levels / all heights

FLUTED PANELLING

Decorative Fluted / Slatted Wall Panelling

1. MATERIALS

1.1 Fluted Panels

- Fluted decorative panels shall be factory-manufactured slatted panels of 12 mm minimum thickness or as specified in approved drawings.
- Panels shall be manufactured from engineered wood, MDF, HDF, WPC, composite board or approved equivalent material.
- Material shall be Low VOC and Urea Formaldehyde Free or Low Formaldehyde Emission type complying with GRIHA 3-Star, IGBC Gold Rating requirements or equivalent green building standards.
- Panels shall be uniform in profile, thickness, texture and finish and free from warping, cracks, delamination and manufacturing defects.

1.2 Backing Surface

- Backing substrate shall consist of approved grade plywood, MDF, gypsum board or other approved backing system as shown in drawings.
- Plywood shall be MR/BWP Grade and Low VOC, Formaldehyde-Free or compliant with GRIHA/IGBC requirements.
- Backing surface shall be true, level and capable of supporting the panelling system.

1.3 Edge Battens and Trims

- Exposed edges shall be finished with approved hardwood battens, matching trims, aluminium trims or equivalent finishing members as approved by the Architect.
- Battens shall be straight, properly seasoned and free from defects.

1.4 Adhesives

- Adhesives shall be Low VOC synthetic resin adhesive conforming to green building requirements and approved by the Engineer-in-Charge.
- Adhesives shall be suitable for bonding decorative panelling systems to the specified substrate.
- Adhesives shall be free from CFC and HCFC compounds.

1.5 Fasteners and Accessories

- Fasteners shall include screws, concealed clips, anchors, fixing brackets, mounting accessories and all necessary hardware required for complete installation.
- Screws and metallic accessories shall be corrosion resistant.
- Fixing accessories shall be of approved make and quality.

1.6 Surface Finish

- Fluted panels shall be supplied in factory-finished veneer, laminate, melamine, PU-coated, painted or approved decorative finish as specified in approved drawings.

- Colour, shade, texture and profile shall be selected by the Architect and approved by the Engineer-in-Charge.

2. WORKMANSHIP

2.1 General

- Work shall be carried out strictly in accordance with approved drawings, specifications, approved samples and directions of the Engineer-in-Charge.
- Panelling layout, joint locations, profile orientation and finishing details shall be approved before commencement of work.
- Finished work shall be true to line, level and plumb.

2.2 Surface Preparation

- Supporting wall or substrate surface shall be cleaned and prepared before installation.
- Necessary backing arrangement using plywood, framework or approved support system shall be provided wherever required.
- Uneven surfaces shall be corrected prior to fixing.

2.3 Fixing of Fluted Panels

- Panels shall be installed vertically, horizontally or in the approved pattern as indicated in drawings.
- Fixing shall be carried out using approved low VOC adhesive, screws, concealed clips or combination fixing system as recommended by the manufacturer.
- Panels shall be fixed firmly without visible distortion, waviness or movement.
- All joints shall be straight, aligned and uniformly spaced.

2.4 Edge Finishing

- Exposed edges shall be finished with matching wooden battens, trims or approved edge profiles.
- Edge members shall be securely fixed and neatly finished.
- Exposed corners shall be properly aligned and protected against damage.

2.5 Alignment and Tolerances

- Fluted profiles shall be aligned continuously without offset between adjacent panels.
- Finished surface shall be free from gaps, bulging, misalignment, cracks or visible fixing marks.
- Dimensional tolerance shall not exceed ± 3 mm.

2.6 Installation at All Levels

- Panelling shall be installed at any height, level, location and configuration shown in approved drawings.
- Necessary scaffolding, access arrangements and safety measures shall be provided by the contractor.

2.7 Cleaning and Protection

- Completed panelling shall be cleaned and protected from scratches, stains and physical damage.
- Protective covering shall be maintained until project handover.
- Damaged panels shall be repaired or replaced to the satisfaction of the Engineer-in-Charge.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Square Metres (Sq.m.)** of actual finished fluted panelling area measured along the exposed face of the installed surface.
- No separate measurement shall be made for grooves, flutes, edge battens, trims, backing arrangements or fixing accessories.
- No allowance shall be made for wastage, cutting losses or overlaps.

3.2 Payment

- Rate shall include supply of fluted panels, backing substrate, edge battens, trims, low VOC adhesives, screws, clips, fasteners and all accessories required for complete execution.
- Rate shall include fabrication, cutting, fixing, alignment, finishing, transportation, loading, unloading, handling, scaffolding, protection and cleaning.
- Rate shall include all labour, materials, tools, plants, machinery and incidental works necessary to complete the item.
- No separate payment shall be made for battens, trims, backing arrangements, adhesives, fasteners, scaffolding, wastage or finishing accessories.
- The item shall be executed complete as per approved drawings, approved samples and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 24

Coffee Unit Delux : Providing, fabricating, supplying, and placing premium outdoor rattan lounge seating set, comprising two (2) single lounge chairs Size Of 650x650x750mm and one (1) center side table size of Dimension at 600x ht at 600mm, made from high-quality synthetic rattan / PE wicker handwoven on powder-coated MS / aluminium / seasoned hardwood frame, suitable for outdoor and semi-outdoor use. Each lounge chair shall be ergonomically designed with curved woven backrest and arm support, mounted on sturdy tapered legs, complete with loose seat and back cushions made from high-resilience PU foam, upholstered in outdoor-grade, water-resistant, UV-stable fabric in approved colour.at all floors / all levels / all heights

Center table shall be circular in shape with woven rattan base structure and solid top

COFFEE UNIT DELUX

Outdoor Rattan Lounge Seating Set (2 Single Chairs + 1 Center Table)

1. MATERIALS

1.1 Structural Frame

- Chair and center table framework shall be fabricated from powder-coated Mild Steel (MS), Aluminium, or seasoned hardwood as specified in approved drawings.
- Metal members shall conform to relevant IS standards and be free from rust, bends, cracks and manufacturing defects.
- Exposed metal surfaces shall be treated with anti-corrosive coating and finished with polyester powder coating of approved shade.
- Timber members, where used, shall be well-seasoned, free from knots, cracks, decay and insect attack, with moisture content not exceeding 12%.

1.2 Synthetic Rattan / PE Wicker

- Rattan weaving shall consist of premium quality weather-resistant synthetic PE (Polyethylene) wicker specially manufactured for outdoor applications.
- Material shall be UV stabilized, colourfast, moisture resistant, crack resistant and suitable for exposure to varying climatic conditions.
- Weaving pattern, colour and texture shall be as approved by the Architect.
- Rattan strands shall be uniformly woven without gaps, loose ends or visible defects.

1.3 Lounge Chair

- Each lounge chair shall be of size 650 mm × 650 mm × 750 mm or as specified in approved drawings.
- Chair shall be ergonomically designed with curved backrest, arm support and comfortable seating profile.
- Chair legs shall be structurally adequate to withstand intended loads and regular use.

1.4 Cushions

- Seat and back cushions shall be manufactured from high-resilience PU foam of suitable density.
- Cushion covers shall be fabricated from outdoor-grade, water-resistant, UV-stable upholstery fabric.
- Fabric shall be resistant to fading, mildew and moisture.
- Colour, texture and finish shall be as approved by the Architect.
- Cushion covers shall be removable where specified and provided with concealed zipper arrangement.

1.5 Center Table

- Center table shall be circular in shape having overall dimensions approximately 600 mm diameter × 600 mm height or as shown in approved drawings.
- Base structure shall be fabricated from synthetic rattan woven over structural frame.
- Table top shall be solid wood, compact laminate, tempered glass, stone composite or approved equivalent material as specified in approved drawings.
- Top surface shall be smooth, level and resistant to outdoor environmental conditions.

1.6 Hardware and Accessories

- Hardware shall include stainless steel screws, bolts, inserts, connectors, fixing brackets, protective caps and all accessories necessary for complete assembly.
- Exposed hardware shall be corrosion resistant and suitable for outdoor use.
- Chair and table legs shall be provided with floor protection pads or bushes.

1.7 Finishing Materials

- Powder coating, protective coatings, preservatives, adhesives and finishing materials shall be of approved make and suitable for exterior applications.
- All exposed surfaces shall receive uniform finish free from scratches, dents and surface defects.

2. WORKMANSHIP

2.1 General

- Furniture shall be manufactured strictly in accordance with approved drawings, specifications, approved samples and directions of the Engineer-in-Charge.
- Finished furniture shall be stable, rigid and free from distortion, wobbling or manufacturing defects.
- All dimensions shall be verified prior to fabrication.

2.2 Frame Fabrication

- Structural framework shall be accurately cut, assembled and fabricated to approved dimensions.
- Welded joints shall be continuous, smooth and properly finished.
- Welded areas shall be cleaned and treated before application of protective coatings.
- Timber joints, where applicable, shall be executed using approved joinery techniques and reinforced with adhesives and mechanical fasteners.

2.3 Rattan Weaving

- Synthetic rattan shall be tightly handwoven over the frame to achieve a uniform appearance and adequate strength.
- Weaving shall be free from sagging, loose strands or irregular spacing.
- Ends shall be neatly secured and concealed.

2.4 Cushion Fabrication

- Foam cushions shall be accurately cut and shaped.
- Upholstery fabric shall be neatly tailored and fitted without wrinkles, puckering or loose stitching.
- Stitching shall be straight, uniform and durable.

2.5 Surface Finishing

- Powder coating shall be applied uniformly to the specified thickness.
- Finished surfaces shall be free from peeling, blistering, pinholes or visible imperfections.
- Exposed timber surfaces, if any, shall receive approved PU polish or protective finish.

2.6 Assembly and Placement

- Furniture shall be transported, assembled and placed in position as directed by the Engineer-in-Charge.
- All components shall fit properly and function as intended.
- Furniture shall remain stable and level after installation.

2.7 Cleaning and Protection

- Upon completion, all furniture shall be cleaned thoroughly.
- Protective coverings shall be maintained until project handover.

- Any damaged or defective component shall be replaced at no additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Each / Number** of finished curtain area.

3.2 Payment

- Rate shall include structural frame, synthetic rattan weaving, cushions, upholstery fabric, center table, table top, powder coating, polishing, hardware, accessories and all materials required for complete execution.
- Rate shall include fabrication, weaving, upholstery work, finishing, transportation, loading, unloading, handling, assembly, placement, protection and cleaning.
- Rate shall include all labour, tools, plants, machinery and incidental works necessary to complete the item.
- No separate payment shall be made for hardware, cushions, upholstery, powder coating, fasteners, floor protection pads, transportation, wastage or installation accessories.
- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 25

Coffee Unit Suit : Supply, Installation & Placement of Premium Handcrafted Outdoor Seating Set

Providing and placing premium-quality handcrafted natural rattan/cane outdoor seating furniture set, comprising two (2) lounge chairs Size Of 650x650x750mm with ergonomically curved backrests, one (1) central round coffee table size of Dimension at 600x ht at 600mm, and one (1) matching side table size of Dimension at 600x ht at 600mm, suitable for verandah, balcony, lounge, or semi-open spaces.

The furniture shall be manufactured from seasoned, treated natural rattan/cane, handwoven by skilled craftsmen, ensuring high durability, structural stability, and superior finish. All joints shall be securely fixed and reinforced. The surface shall be smooth, splinter-free, and uniformly finished in a natural matte tone.

Lounge chairs shall be provided with high-density foam seat and back cushions, upholstered in premium, removable, and washable fabric, suitable for indoor and covered outdoor use. Cushions shall be neatly tailored with concealed stitching for a refined appearance.at all floors / all levels / all heights

The coffee table and side table shall be matching in material, texture, and finish, with a sturdy woven top and stable base, designed to complement the seating aesthetically and functionally. Item includes all materials, labour, tools, handling, transportation, installation, and positioning, complete in all respects, as directed by the Architect / Engineer-in-Charge.

COFFEE UNIT SUIT

Premium Handcrafted Natural Rattan/Cane Outdoor Seating Set

1. MATERIALS

1.1 Natural Rattan / Cane Framework

- Furniture shall be manufactured from premium quality seasoned, treated natural rattan, cane or approved equivalent natural material suitable for indoor and covered outdoor applications.
- Rattan/cane shall be properly seasoned, chemically treated against fungus, termites and insect attack, and free from cracks, splits, decay and defects.
- Material shall possess adequate strength, flexibility and durability for long-term use.
- Surface shall be smooth, splinter-free and uniformly finished.

1.2 Structural Support Framework

- Internal supporting framework shall consist of seasoned hardwood, treated timber or approved structural support members concealed within the furniture assembly.
- Framework shall provide adequate rigidity, stability and load-bearing capacity.
- All joints shall be reinforced using approved fasteners, adhesives and traditional joinery techniques where required.

1.3 Lounge Chairs

- Lounge chairs shall be of size 650 mm × 650 mm × 750 mm or as shown in approved drawings.
- Chairs shall be ergonomically designed with curved backrests and comfortable seating profile.
- Chairs shall be handcrafted and woven to achieve a uniform appearance and superior finish.
- Chair base shall remain stable without rocking or distortion during use.

1.4 Cushions

- Seat and back cushions shall be manufactured from high-density PU foam of suitable density and resilience.
- Cushion covers shall be fabricated from premium quality removable and washable upholstery fabric.
- Fabric shall be durable, colourfast and suitable for indoor and covered outdoor applications.
- Colour, texture and pattern shall be as approved by the Architect.
- Cushions shall be neatly tailored with concealed stitching and concealed zipper arrangement where specified.

1.5 Central Coffee Table

- Coffee table shall be circular in shape with overall dimensions approximately 600 mm diameter × 600 mm height or as shown in approved drawings.
- Table shall be fabricated from matching natural rattan/cane construction with woven top and stable structural base.

- Table top shall be rigid, level and suitable for regular use.

1.6 Side Table

- Side table shall be of size approximately 600 mm diameter × 600 mm height or as specified in approved drawings.
- Side table shall match the coffee table and lounge chairs in material, texture, weaving pattern and finish.
- Table shall be structurally stable and suitable for intended use.

1.7 Adhesives and Fasteners

- Adhesives shall be waterproof, low VOC synthetic resin adhesive of approved make.
- Fasteners shall include screws, bolts, connectors, fixing accessories and reinforcement members required for complete fabrication.
- Metallic accessories shall be corrosion resistant.

1.8 Surface Finish

- All exposed rattan/cane surfaces shall receive protective clear matte finish, lacquer coating or approved natural finish.
- Finish shall enhance durability while maintaining the natural appearance of the material.
- Finished surfaces shall be uniform in colour and free from visible defects.

2. WORKMANSHIP

2.1 General

- Furniture shall be manufactured strictly as per approved drawings, approved samples and directions of the Engineer-in-Charge.
- All dimensions shall be verified prior to fabrication.
- Finished furniture shall be rigid, stable, level and free from distortion or manufacturing defects.

2.2 Fabrication of Rattan/Cane Furniture

- Rattan/cane members shall be carefully bent, shaped and woven by skilled craftsmen.
- Weaving shall be uniform, tightly secured and free from loose strands.
- Joints shall be accurately formed and reinforced to ensure structural stability.
- Exposed edges shall be smooth and properly finished.

2.3 Chair Fabrication

- Lounge chairs shall be fabricated with ergonomically designed curved backrests and comfortable arm support profiles where indicated.
- Chairs shall be capable of supporting normal occupancy loads without deformation.
- Finished chairs shall remain stable and wobble-free.

2.4 Cushion Fabrication

- Cushions shall be accurately cut and shaped.
- Upholstery fabric shall be tightly fitted without wrinkles, puckering or visible defects.
- Stitching shall be straight, neat and uniform throughout.
- Cushion covers shall be removable for cleaning and maintenance.

2.5 Table Fabrication

- Coffee table and side table shall be fabricated with matching woven construction and finish.
- Table tops shall be level, smooth and securely fixed to supporting framework.
- Tables shall remain stable without rocking during use.

2.6 Surface Finishing

- All exposed surfaces shall be thoroughly sanded and cleaned before application of protective finish.
- Finish shall be applied uniformly and free from stains, blotches, scratches or discoloration.
- Natural grain and texture of the rattan/cane shall remain visible after finishing.

2.7 Installation and Placement

- Furniture shall be transported, handled and placed in position as directed by the Engineer-in-Charge.
- All items shall be installed complete and ready for use.
- Necessary precautions shall be taken to avoid damage during transportation and placement.

2.8 Cleaning and Protection

- Completed furniture shall be cleaned thoroughly after installation.
- Furniture shall be protected from damage until project completion and handover.
- Damaged or defective components shall be repaired or replaced at no additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Each / Number** of finished curtain area.

3.2 Payment

- Rate shall include natural rattan/cane material, internal framework, cushions, upholstery fabric, coffee table, side table, protective finish, adhesives, fasteners and all accessories required for complete execution.
- Rate shall include fabrication, weaving, upholstery work, finishing, transportation, loading, unloading, handling, placement, protection and cleaning.
- Rate shall include all labour, materials, tools, plants, machinery and incidental works necessary to complete the item.
- No separate payment shall be made for cushions, upholstery, fasteners, adhesives, protective coatings, transportation, wastage or installation accessories.

- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 26

Arabian Curtain - providing and fixing areabian curtain including installation, fabric, operation system complete. Arabian curtains as per given size on a heavy-duty channel with fabric weighing 250 GSM in mix of cotton/polyester 55% with different designs and colours available to choose from with Blackout fabric in Lining material.at all floors / all levels / all heights

1. MATERIALS

1.1 Curtain Fabric

- Curtain fabric shall be premium quality Arabian style fabric of approved make, colour, texture and design as selected by Architect / Engineer-in-Charge.
- Fabric shall be minimum 250 GSM and composed of cotton/polyester blend with minimum 55% polyester content or as approved.
- Fabric shall be wrinkle resistant, durable and suitable for interior furnishing applications.
- Fabric shall be free from stains, weaving defects, fading and visible imperfections.

1.2 Blackout Lining Fabric

- Curtain lining shall consist of blackout fabric suitable for blocking external light and enhancing privacy.
- Blackout lining shall be properly stitched with curtain fabric and compatible with selected curtain design.
- Lining material shall be durable, dimensionally stable and resistant to shrinkage.

1.3 Curtain Channel / Track System

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Curtain channel / track shall be heavy-duty aluminium or powder-coated metal section of approved make.
- Track system shall be capable of smooth and noiseless curtain operation.
- Channels shall be straight, rigid and corrosion resistant.

1.4 Curtain Operation System

- Curtain operation mechanism shall include rollers, runners, brackets, gliders, pulleys, cords or accessories as required for smooth manual operation.
- System shall permit easy opening and closing without obstruction.
- All moving components shall be durable and of approved quality.

1.5 Hooks, Brackets and Fasteners

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Curtain hooks, wall brackets, screws, rawl plugs and fixing accessories shall be corrosion resistant and of approved make.
- Fasteners shall securely support curtain load without deformation.

1.6 Stitching Thread and Accessories

- Stitching thread shall be high-strength polyester thread matching approved fabric shade.
- Eyelets, pleating tape and stitching accessories shall be durable and suitable for curtain applications.

1.7 Paints and Protective Coating

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

- Exposed metal accessories, where required, shall be provided with protective coating or powder coating finish.

1.8 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Arabian curtain work shall be executed strictly as per approved drawings, approved sample and instructions of Architect / Engineer-in-Charge.
- Curtains shall be installed at all floors, levels and heights as specified.
- Finished installation shall provide smooth operation, elegant appearance and proper light control.

2.2 Fabric Preparation

- Curtain fabric and blackout lining shall be properly checked before stitching.
- Fabric patterns and colours shall be matched uniformly.
- Fabric shall be free from shrinkage, wrinkles or distortions before fabrication.

2.3 Stitching Work

- Curtains shall be neatly stitched using high-quality stitching thread.
- Side hems, top folds and bottom hems shall be properly finished.
- Stitching lines shall be straight, uniform and free from loose threads.
- Blackout lining shall be securely attached with curtain fabric.
- Pleats, folds or eyelet arrangements shall be executed uniformly as per approved design.

2.4 Curtain Channel Installation

- Heavy-duty curtain channels shall be properly aligned and securely fixed to wall or ceiling.
- Brackets and supports shall be fixed using approved screws and fasteners.
- Channels shall remain level and rigid without sagging.

2.5 Operation System

- Rollers, runners and accessories shall be installed correctly to ensure smooth and noiseless operation.
- Curtain movement shall be free from jamming or obstruction.
- Opening and closing arrangement shall function properly throughout full length.

2.6 Finishing

- Installed curtains shall hang uniformly without sagging or uneven folds.
- Fabric shall be wrinkle free and aesthetically arranged.
- Exposed accessories shall be neatly aligned and properly finished.

2.7 Cleaning and Protection

- Completed curtain installation shall be protected from stains, dust and damage until handing over.
- Final cleaning and adjustment shall be carried out before completion.
- Damaged fabric, stitching or accessories shall be replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **square metre** of finished curtain area.

Item No -27

Luxture Texture: Providing and applying Luxture Texture with basecoat 2 mm thick with durabond 1 bag 1.5 litre and top coat upto 5 mm thick on Interior Walls & Exterior walls with with different style, shade, finish and texture coat including all material, labour , Transportation and all accessories, scaffolding & support system. Design as per Architect's Selection and as per the direction of Engineer-in-charge at all floors / all levels / all heights including all lead and lift

1. MATERIALS

1.1 Luxture Texture Material

- Texture coating material shall be approved make “Luxture Texture” or equivalent approved decorative textured coating system suitable for interior and exterior applications.
- Texture material shall be weather resistant, durable and suitable for application on plastered masonry/concrete surfaces.
- Finish shall be available in approved style, shade, pattern and texture as selected by Architect.
- Material shall possess good adhesion, crack resistance and colour stability.

1.2 Base Coat Material

Cement : Shall Conform M3 page no-9 in General Technical Specification Booklet.

Sand : Shall Conform M6 page no-10 in General Technical Specification Booklet.

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Base coat shall be minimum 2 mm thick prepared using approved texture base material with Durabond additive.
- Durabond additive shall be mixed in proportion of approximately 1.5 litre per bag or as recommended by manufacturer.
- Base coat material shall provide proper bonding and uniform substrate preparation.

1.3 Top Coat Texture

- Top coat texture shall be applied up to 5 mm thickness or as per approved texture design.

- Texture coat shall be suitable for desired decorative finish such as rough, linear, wave, stucco, patterned or designer texture.
- Final texture shall match approved sample and architect's selection.

1.4 Bonding Agents and Primers

- Primer and bonding agents shall be compatible with texture system and approved by manufacturer.
- Materials shall improve adhesion and durability of coating system.

1.5 Scaffolding and Support Materials

- Necessary scaffolding, platforms, ladders and support systems shall be provided for safe execution at all heights and levels.
- Scaffolding shall be stable and properly secured.

1.6 Paints and Pigments

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

- Colour pigments and finishing materials shall be UV resistant and suitable for exterior/interior applications.
- Finish shall be uniform without fading or patchiness.

2. WORKMANSHIP

2.1 General

- Luxture texture work shall be executed strictly as per approved drawings, approved samples and instructions of Architect and Engineer-in-Charge.
- Texture application shall be carried out at all floors, levels and heights as specified.
- Finished surface shall be aesthetically uniform, durable and free from defects.

2.2 Surface Preparation

- Surface shall be thoroughly cleaned and made free from dust, loose particles, oil, grease, laitance or efflorescence.
- Uneven surfaces, cracks and depressions shall be repaired before application.
- Surface shall be properly cured and dry prior to texture application.
- Necessary primer coat shall be applied where recommended.

2.3 Base Coat Application

- Base coat of approved texture material shall be applied uniformly to approximately 2 mm thickness.
- Durabond additive shall be mixed in specified proportion as per manufacturer's recommendation.
- Base coat shall be levelled properly to create sound substrate for texture finish.
- Surface shall be allowed to dry adequately before application of top coat.

2.4 Top Coat Texture Application

- Top coat texture shall be applied uniformly up to 5 mm thickness or as required for approved pattern.
- Texture finish shall be created using approved tools, rollers, trowels or texture applicators.
- Texture pattern shall remain consistent throughout the work area.
- Shade, design and texture shall match approved sample.

2.5 Finishing

- Finished texture surface shall be free from cracks, peeling, uneven patches, stains or visible joint marks.
- Edges, corners and junctions shall be neatly finished.
- Texture transitions at adjoining surfaces shall be smooth and aesthetically aligned.

2.6 Scaffolding and Safety

- Proper scaffolding and support systems shall be erected for safe execution.
- Necessary precautions shall be taken during work at heights.
- Scaffolding shall not damage completed work or adjacent surfaces.

2.7 Cleaning and Protection

- Completed texture work shall be protected from rain, dust, impact and damage until fully cured.
- Adjacent surfaces shall be protected during application.
- Final cleaning shall be carried out after completion.
- Defective or damaged texture areas shall be repaired without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **square metre** of actual finished textured surface area

Item No – 29

General Dining Hall Table : Providing, fabricating, supplying and placing dining table made from first-class seasoned hardwood / teak wood/ approved engineered wood with solid wood framework, kiln dried and chemically treated for termite and moisture resistance. The table shall have a thick laminated tabletop with rounded edges and uniform thickness, supported on sturdy central solid wood pedestal legs or panel legs as per approved design, ensuring strength and stability. All exposed surfaces shall be finished with melamine polish finish in approved shade, complete all as per approved drawings, specifications and directions of Engineer-in-Charge.at all floors / all levels / all heights

1. MATERIALS

1.1 Hardwood / Teak Wood

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Dining table framework, pedestal supports and structural members shall be made from first-class seasoned hardwood / teak wood of approved quality.
- Timber shall be kiln dried and chemically treated against termite, borers and moisture attack.
- Wood shall be free from knots, cracks, sapwood, warping and other defects.
- Moisture content of timber shall be suitable for interior furniture applications.

1.2 Engineered Wood / Plywood

Plywood : Shall Conform M37 page no-18 in General Technical Specification Booklet.

- Engineered wood / plywood used for tabletop substrate or internal members shall conform to relevant IS standards.
- Material shall be dimensionally stable and free from delamination, swelling or manufacturing defects.

1.3 Decorative Laminate Finish

- Table top shall be finished with thick decorative laminate of approved shade, texture and finish conforming to IS 2046.
- Laminate shall be scratch resistant, moisture resistant and suitable for heavy-use dining applications.
- Surface finish shall be smooth and easy to maintain.

1.4 Melamine Polish Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

French Polish : Shall Conform M45 page no-21 in General Technical Specification Booklet.

- All exposed wooden surfaces shall receive melamine polish finish in approved shade and sheen.
- Finish shall provide smooth, durable and stain-resistant surface suitable for dining furniture.
- Polish shall be uniformly applied over properly prepared wooden surfaces.

1.5 Adhesives

- Adhesives used for laminate fixing and assembly shall conform to IS 848.
- Adhesives shall be suitable for furniture application and provide durable bonding.

1.6 Fixtures and Fastenings

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Screws, bolts, brackets, connectors and fasteners shall be of approved make and corrosion resistant quality.
- Hardware shall provide rigid and durable assembly.

1.7 Chemical Treatment

- Wood preservative treatment shall be applied for termite and moisture resistance.
- Treatment chemicals shall be approved type suitable for furniture application.

1.8 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Dining table shall be fabricated and installed strictly as per approved drawings, approved sample and instructions of Engineer-in-Charge.
- Finished table shall be structurally stable, aesthetically finished and suitable for heavy-use dining hall applications.
- Work shall include all fabrication, finishing, transportation and placement complete in all respects.

2.2 Timber Preparation

- Timber shall be properly seasoned, kiln dried and treated before fabrication.
- Wooden members shall be machine cut true to required dimensions.
- Surfaces shall be planed smooth and accurately finished.

2.3 Table Framework

- Structural framework shall be fabricated using solid hardwood/teak wood sections of approved size.
- Joints shall be executed using approved carpentry methods with screws, dowels, adhesive and reinforcement where necessary.
- Framework shall be rigid and capable of supporting intended loads without deformation.

2.4 Tabletop

- Tabletop shall consist of thick laminated surface with rounded edges and uniform thickness.
- Laminate shall be properly bonded over prepared substrate surface without bubbles, wrinkles or lifting.
- Edges and corners shall be smoothly rounded and finished for safe use.

2.5 Pedestal / Panel Legs

- Table shall be supported on sturdy central pedestal legs or panel legs as per approved design.
- Support system shall ensure stability and balanced load distribution.
- Legs shall be properly aligned and securely fixed to tabletop framework.

2.6 Surface Finishing

- All exposed wooden surfaces shall be sanded smooth before application of melamine polish.
- Necessary sealer coats and finishing coats shall be uniformly applied.
- Final finish shall be smooth, even and free from stains, scratches, brush marks or unevenness.

2.7 Edge and Corner Finishing

- Exposed edges and corners shall be smooth and safe in handling.
- No sharp projections, rough surfaces or visible fixing marks shall be permitted.

2.8 Placement and Installation

- Dining table shall be carefully transported and placed at designated location.
- Table shall remain level, stable and free from wobbling after placement.
- Necessary precautions shall be taken to avoid damage during transportation and handling.

2.9 Cleaning and Protection

- Completed furniture shall be protected from scratches, moisture, stains and dust until handing over.
- Final cleaning shall be carried out before completion.
- Damaged surfaces or defective finishes shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Squire Meter** of completed dining tables

Item No – 30

General Dining Hall Chair : Providing, supplying and placing premium quality dining chair Size Of 500x550x950mm made from seasoned hardwood / teak wood / approved material, kiln dried and chemically treated for termite resistance, with ergonomically designed backrest and seat. The seat and back shall be upholstered with high-density foam and finished with premium quality fabric in approved colour and texture, neatly stitched and fixed. Chair shall be stable, comfortable and suitable for regular dining use. The item includes all materials, fittings, upholstery, finishing, transportation and placing in position complete all as per approved specification and directions of Engineer-in-Charge.at all floors / all levels / all heights

All exposed surfaces shall be finished with melamine polish finish as approved. The chair shall be sturdy, well-balanced and suitable for regular institutional use, complete with protective PVC / nylon bushes at bottom.

Chair Size: 500 mm × 550 mm × 950 mm

1. MATERIALS

1.1 Timber Framework

- Chair framework shall be manufactured from well-seasoned hardwood, Indian Teak Wood or other approved timber species as specified in approved drawings.
- Timber shall be kiln-dried with moisture content not exceeding 12%.
- Wood shall be free from knots, cracks, warping, sapwood, decay, insect attack and other defects.
- All timber members shall be chemically treated against termite and borer attack prior to fabrication.

1.2 Structural Components

- Chair legs, seat rails, stretchers, back supports and structural members shall be adequately sized to withstand institutional and hospitality usage.
- Joints shall be designed to provide rigidity and long-term structural stability.

1.3 Cushioning Material

- Seat and backrest shall be provided with high-density PU foam of suitable density and resilience.
- Foam shall be uniform in thickness and free from defects.
- Cushioning shall provide adequate comfort for prolonged seating.

1.4 Upholstery Fabric

- Upholstery shall be premium quality fabric, linen, leatherette or approved equivalent material.

- Fabric shall be durable, colourfast, abrasion resistant and suitable for institutional dining use.
- Colour, pattern and texture shall be selected by the Architect and approved by the Engineer-in-Charge.
- Upholstery shall be free from wrinkles, stains, tears and manufacturing defects.

1.5 Adhesives and Fasteners

- Adhesives shall be low VOC, waterproof synthetic resin adhesive conforming to relevant IS standards.
- Fasteners shall include screws, dowels, brackets, connectors and all accessories required for complete fabrication.
- Hardware shall be corrosion resistant and of approved make.

1.6 Surface Finishing Materials

- All exposed timber surfaces shall be finished with premium quality melamine polish system.
- Finishing materials shall include wood filler, stain, sealer and melamine polish of approved make.
- Finish shall be smooth, uniform and resistant to normal wear and tear.

1.7 Protective Bushes

- Chair legs shall be provided with PVC, nylon or approved polymer bushes.
- Bushes shall protect flooring from scratches and reduce noise during movement.

2. WORKMANSHIP

2.1 General

- Chair shall be manufactured strictly in accordance with approved drawings, specifications, approved sample and directions of the Engineer-in-Charge.
- Finished chair shall be sturdy, stable, comfortable and suitable for regular institutional dining use.
- All dimensions shall be verified before fabrication.

2.2 Timber Fabrication

- Timber members shall be accurately cut, machined and assembled to required dimensions.
- Joinery shall be executed using approved carpentry techniques including mortise and tenon joints, dowel joints, tongue and groove joints or equivalent approved methods.
- Joints shall be reinforced using adhesives and mechanical fasteners.
- Exposed nail heads shall not be permitted.

2.3 Chair Assembly

- Chair frame shall be assembled accurately and securely.
- Legs shall be properly aligned to ensure stability without rocking.
- Seat and back supports shall be firmly fixed to the structural framework.

- Completed chair shall be capable of withstanding intended service loads without deformation.

2.4 Upholstery Work

- High-density foam shall be accurately cut and fixed over seat and back support surfaces.
- Upholstery fabric shall be stretched uniformly and securely fixed.
- Stitching shall be neat, straight and uniform throughout.
- Upholstered surfaces shall be wrinkle-free and free from visible defects.

2.5 Surface Finishing

- Timber surfaces shall be sanded smooth and prepared before application of finish.
- Surface imperfections shall be filled using matching wood filler.
- Approved stain and sealer coats shall be applied where required.
- Minimum required coats of melamine polish shall be applied to achieve approved finish.
- Finished surfaces shall be smooth, uniform and free from brush marks, stains, scratches or discoloration.

2.6 Installation and Placement

- Chairs shall be supplied, transported and placed in position as directed by the Engineer-in-Charge.
- Necessary precautions shall be taken during handling to avoid damage to upholstery and finished surfaces.
- Damaged components shall be repaired or replaced at contractor's cost.

2.7 Cleaning and Protection

- Completed chairs shall be thoroughly cleaned before handover.
- Protective covering shall be provided until project completion.
- All dust, stains, adhesive marks and handling marks shall be removed.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out on **Number (Nos.) basis** for each completed dining chair of size 500 mm × 550 mm × 950 mm supplied and placed in position.

3.2 Payment

- Rate shall include hardwood/teak wood framework, foam cushioning, upholstery fabric, adhesives, fasteners, PVC/nylon bushes, melamine polish and all accessories required for complete execution.
- Rate shall include fabrication, carpentry work, upholstery work, polishing, transportation, loading, unloading, handling, placement, protection and cleaning.
- Rate shall include all labour, tools, plants, machinery and incidental works necessary to complete the item.

- No separate payment shall be made for hardware, adhesives, fasteners, upholstery accessories, polishing materials, transportation, wastage or protective bushes.
- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 31

Meeting Table : Providing, fabricating, supplying and placing premium quality conference table of approved design and size, made from first-class seasoned hardwood / engineered wood framework, kiln dried and chemically treated for termite and moisture resistance. The tabletop shall be of solid/veneered wood with smooth edges, supported on robust wooden or panel legs, designed to accommodate multiple seating as per approved layout. All exposed surfaces shall be finished with premium PU / melamine / polish finish in approved shade. The item includes all materials, fabrication, finishing, fittings, transportation and installation complete in all respects as per approved drawings, specifications and directions of Engineer-in-Charge.at all floors / all levels / all heights.

MEETING TABLE

1. MATERIALS

1.1 Timber and Engineered Wood

- The conference table shall be manufactured from first-class seasoned hardwood, engineered wood, BWP/BWR grade plywood, MDF, particle board or approved equivalent material as specified in approved drawings.
- Timber shall be kiln-dried with moisture content not exceeding 12%.
- All timber shall be free from knots, cracks, warping, decay, insect attack and other defects.
- Timber and wood-based products shall be chemically treated against termite and moisture attack.

1.2 Table Top

- Table top shall be fabricated from solid wood, natural veneer-finished plywood, engineered wood panel or approved equivalent material.
- Table top thickness shall be as specified in approved drawings and designed to withstand intended loading conditions.
- Exposed edges shall be smooth, rounded or profile-finished as approved by the Architect.
- Veneer, where specified, shall be premium quality natural veneer free from defects and properly matched for grain and shade.

1.3 Structural Framework and Supports

- Internal framework and supporting members shall be adequately designed to ensure rigidity and long-term structural stability.
- Legs may consist of hardwood members, veneered panel supports, engineered wood structures or approved equivalent systems.
- Additional stiffeners, supports and reinforcement members shall be provided wherever required.
- The complete assembly shall be capable of supporting intended service loads without deformation.

1.4 Hardware and Accessories

- Hardware shall include screws, connectors, brackets, fixing plates, bolts, inserts, levelling pads and all accessories required for complete assembly.
- All hardware shall be of approved make and corrosion-resistant finish.
- Concealed fittings shall be provided wherever possible for a neat appearance.

1.5 Adhesives

- Adhesives shall be low VOC, waterproof synthetic resin adhesive conforming to relevant IS standards.
- Adhesives shall be suitable for furniture-grade joinery and veneering applications.

1.6 Surface Finishing Materials

- Exposed surfaces shall be finished with premium quality PU polish, melamine polish, polyester polish or approved equivalent finish.
- Finishing materials shall include wood filler, stain, sealer, primer and finishing coats as required.
- Colour, texture and gloss level shall be as approved by the Architect.

1.7 Floor Protection Accessories

- Table legs shall be provided with adjustable levelling feet, nylon bushes or protective pads where required.
- Accessories shall prevent damage to finished flooring surfaces.

2. WORKMANSHIP

2.1 General

- Work shall be executed strictly in accordance with approved drawings, specifications, approved sample and directions of the Engineer-in-Charge.
- Finished table shall be rigid, level, stable and free from distortion, vibration or manufacturing defects.
- All dimensions shall be verified prior to fabrication.

2.2 Fabrication of Structural Framework

- Structural framework shall be accurately fabricated and assembled to approved dimensions.
- Joinery shall be executed using approved carpentry techniques including dowel joints, mortise and tenon joints, mechanical connectors and reinforced adhesive joints.
- Joints shall be tight fitting and properly reinforced to ensure long-term stability.

2.3 Table Top Fabrication

- Table top panels shall be accurately cut and assembled.
- Surface shall be perfectly level and free from waviness, depressions or visible joints.
- Edge profiles shall be neatly finished as shown in approved drawings.
- Veneer grain, where applicable, shall be matched uniformly throughout the table surface.

2.4 Assembly

- Legs, supports and table top shall be securely assembled using approved hardware and fixing methods.
- All connections shall be concealed wherever practical.
- Completed table shall remain stable without rocking or movement.

2.5 Surface Preparation and Finishing

- All exposed timber surfaces shall be machine sanded smooth.
- Surface defects shall be filled using matching wood filler.
- Approved stain shall be applied where required.
- Sealer coats shall be applied followed by intermediate sanding.
- Minimum two coats of approved PU polish, melamine polish or equivalent finish shall be applied.
- Finished surfaces shall be smooth, uniform and free from scratches, brush marks, stains, dents or discoloration.

2.6 Installation and Placement

- Table shall be transported, handled and placed in position as directed by the Engineer-in-Charge.
- Necessary precautions shall be taken to avoid damage during transportation and installation.
- Any damaged component shall be repaired or replaced at no additional cost.

2.7 Cleaning and Protection

- Upon completion, all surfaces shall be cleaned thoroughly.
- Protective covering shall be maintained until project handover.
- Adhesive marks, dust and finishing residues shall be removed completely.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out on **Squire Meter** for each completed Meeting Table / Conference Table supplied, installed and placed in position.
- Size and seating capacity shall be as shown in approved drawings and BOQ schedule.

3.2 Payment

- Rate shall include hardwood/engineered wood framework, table top, veneer, supports, hardware, adhesives, levelling accessories, polishing materials and all accessories required for complete execution.
- Rate shall include fabrication, carpentry work, veneering, polishing, assembly, transportation, loading, unloading, handling, placement, protection and cleaning.
- Rate shall include all labour, tools, plants, machinery and incidental works necessary to complete the item.
- No separate payment shall be made for brackets, connectors, fasteners, adhesives, polishing materials, levelling pads, transportation, wastage or installation accessories.

- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 32

Meeting Chairs : Providing, supplying and placing premium quality conference chair Size Of 650x650x750mm of approved design, made from seasoned hardwood / metal frame as approved, with ergonomic seat and backrest. The chair shall be upholstered with high-density foam and premium quality fabric / leatherette in approved colour and texture, neatly stitched and fixed. The base shall include swivel / fixed support with adequate stability for long-duration seating. The item includes all materials, upholstery, fittings, finishing, transportation and placing in position complete in all respects as per approved specifications and directions of Engineer-in-Charge.at all floors / all levels / all heights.

MEETING CHAIRS

Chair Size: 650 mm × 650 mm × 750 mm

1. MATERIALS

1.1 Structural Frame

- Chair framework shall be fabricated from well-seasoned hardwood, powder-coated metal frame, stainless steel frame or approved equivalent material as specified in approved drawings.
- Timber members shall be kiln-dried with moisture content not exceeding 12% and shall be free from cracks, knots, decay, warping and insect attack.
- Metal members shall conform to relevant IS standards and shall be free from rust, dents, bends and manufacturing defects.
- Exposed metal surfaces shall be powder coated, PU painted, chrome plated or otherwise finished as approved by the Architect.

1.2 Seat and Back Support

- Seat and backrest shall be ergonomically designed to provide comfort during prolonged meetings and conference use.
- Structural seat and back support shall be fabricated from moulded plywood, engineered wood, reinforced polymer or approved equivalent material.
- Supports shall be adequately designed to withstand intended service loads.

1.3 Cushioning Material

- Seat and back cushions shall be manufactured from high-density PU foam of approved density and resilience.
- Foam shall be uniform in thickness and free from defects, sagging or deformation.
- Cushioning shall provide adequate support and comfort for extended seating duration.

1.4 Upholstery

- Upholstery shall consist of premium quality fabric, leatherette, PU leather or approved equivalent material.

- Upholstery material shall be durable, colourfast, abrasion resistant and suitable for institutional use.
- Colour, pattern, texture and finish shall be selected by the Architect and approved by the Engineer-in-Charge.
- Upholstery shall be free from wrinkles, tears, stains and visible defects.

1.5 Base and Support System

- Chair shall be provided with fixed base or swivel base arrangement as specified in approved drawings and furniture schedule.
- Base shall be designed to provide stability and safe operation.
- Swivel mechanism, where specified, shall operate smoothly and silently.
- Necessary support members, brackets and reinforcement components shall be provided.

1.6 Hardware and Accessories

- Hardware shall include screws, bolts, inserts, brackets, connectors, armrest supports, swivel mechanism, fixing accessories and all components necessary for complete assembly.
- Hardware shall be of approved make and corrosion-resistant finish.
- All moving parts shall operate smoothly without noise or vibration.

1.7 Floor Protection Pads

- Chair legs or base shall be fitted with nylon, PVC, rubber or approved floor protection pads.
- Pads shall prevent damage to flooring and reduce noise during movement.

1.8 Surface Finishing Materials

- Exposed timber surfaces shall receive melamine polish, PU polish or approved finish.
- Exposed metal surfaces shall receive powder coating, PU paint or approved protective finish.
- Finishing materials shall be of approved make and quality.

2. WORKMANSHIP

2.1 General

- Chair shall be manufactured strictly in accordance with approved drawings, specifications, approved sample and directions of the Engineer-in-Charge.
- Finished chair shall be sturdy, stable, comfortable and suitable for conference and meeting room applications.
- All dimensions shall be verified before fabrication.

2.2 Frame Fabrication

- Timber or metal framework shall be accurately cut, fabricated and assembled to approved dimensions.
- Timber joints shall be executed using approved carpentry techniques and reinforced with adhesives and mechanical fasteners.
- Welded metal joints shall be continuous, smooth and properly finished.

- Completed framework shall be rigid and free from distortion.

2.3 Seat and Back Assembly

- Seat and back support systems shall be securely fixed to the structural frame.
- Ergonomic contours shall be maintained as per approved design.
- Components shall remain stable without excessive movement during use.

2.4 Upholstery Work

- High-density foam shall be accurately cut and fixed to seat and backrest surfaces.
- Upholstery material shall be tightly stretched and neatly fixed.
- Stitching shall be straight, uniform and properly aligned.
- Upholstered surfaces shall be smooth and wrinkle-free.

2.5 Base and Mechanism Installation

- Fixed or swivel base assemblies shall be securely installed.
- Swivel mechanisms, where provided, shall operate freely and smoothly.
- Chair shall remain balanced and stable under normal usage conditions.

2.6 Surface Finishing

- Timber surfaces shall be sanded smooth before polishing.
- Surface imperfections shall be filled with matching filler material.
- Approved stain, sealer and finishing coats shall be applied as specified.
- Metal surfaces shall receive approved protective coating system.
- Finished surfaces shall be uniform and free from scratches, dents, stains or discoloration.

2.7 Placement and Installation

- Chairs shall be supplied, transported and placed in position as directed by the Engineer-in-Charge.
- Necessary precautions shall be taken to prevent damage during handling and placement.
- Damaged components shall be repaired or replaced at contractor's cost.

2.8 Cleaning and Protection

- Completed chairs shall be cleaned thoroughly before handover.
- Protective covering shall be maintained until completion of the project.
- All dust, stains and installation marks shall be removed.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out on **Number (Nos.) basis** for each completed Meeting Chair / Conference Chair of size 650 mm × 650 mm × 750 mm supplied and placed in position.

3.2 Payment

- Rate shall include structural frame, seat and back supports, high-density foam cushioning, upholstery, swivel/fixed base mechanism, hardware, accessories, floor protection pads and all materials required for complete execution.
- Rate shall include fabrication, metal work, carpentry work, upholstery work, polishing, painting, assembly, transportation, loading, unloading, handling, placement, protection and cleaning.
- Rate shall include all labour, tools, plants, machinery and incidental works necessary to complete the item.
- No separate payment shall be made for fasteners, brackets, upholstery accessories, swivel mechanisms, polishing materials, transportation, wastage or installation accessories.
- The item shall be executed complete as per approved drawings, approved sample and directions of the Engineer-in-Charge at all floors, all levels and all heights.

Item No – 33

Three Seater Sofa : Providing & Fixing Three Seated sofa of size 2100 x 610 x 770mm having artificial leather upholster finish using tropical seasoned hardwood and partical board legs material comes in MDF wooden facia with melemine coating comes in synthetic leather with nylon polyster stiching seat and back foam come in 28d polyurithine slab stock foam with 1" recron layer and bonding solution will be bolting glue. at all floors / all levels / all heights

1. MATERIALS

1.1 Hardwood Framework

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Structural framework of sofa shall be made from tropical seasoned hardwood of approved quality.
- Timber shall be properly seasoned, kiln dried and chemically treated against termite and moisture attack.
- Wood shall be free from knots, cracks, sapwood and warping.
- Framework shall possess adequate strength and dimensional stability for long-term use.

1.2 Particle Board / MDF Components

Plywood : Shall Conform M37 page no-18 in General Technical Specification Booklet.

- MDF facia and particle board components shall be of approved grade and quality suitable for furniture applications.
- Boards shall be dimensionally stable and free from swelling, delamination or manufacturing defects.
- MDF facia shall be finished with melamine coating as specified.

1.3 Upholstery Material

- Sofa upholstery shall consist of premium quality synthetic/artificial leather of approved shade, texture and finish.
- Upholstery material shall be durable, stain resistant and suitable for regular use.
- Artificial leather shall be wrinkle resistant and easy to maintain.

1.4 Foam Cushioning

- Seat and back cushioning shall consist of 28 density polyurethane slab stock foam.

- Foam shall conform to IS 7888 and provide proper resilience and comfort.
- Cushioning shall additionally include 1 inch thick recron layer for enhanced comfort and smooth finish.
- Foam shall be free from shrinkage, deformation and cracks.

1.5 Stitching Thread

- Upholstery stitching shall be carried out using nylon polyester stitching thread of approved quality.
- Thread shall provide durable and neat stitching finish.

1.6 Adhesives and Bonding Solution

- Bonding solution/bolting glue used for upholstery and assembly shall conform to IS 848.
- Adhesives shall provide durable bonding suitable for furniture applications.

1.7 Melamine Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

French Polish : Shall Conform M45 page no-21 in General Technical Specification Booklet.

- MDF facia and exposed wooden surfaces shall receive approved melamine coating/finish.
- Finish shall be smooth, durable and aesthetically uniform.

1.8 Hardware and Fasteners

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Screws, brackets, connectors, fasteners and fixing accessories shall be of approved make and corrosion resistant quality.
- Hardware shall provide rigid and durable assembly.

1.9 Protective Bushes

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Sofa legs/base shall be provided with protective PVC/nylon bushes where required to avoid floor damage.

1.10 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Three seater sofa shall be fabricated, supplied and placed strictly as per approved drawings, approved sample and instructions of Engineer-in-Charge.
- Finished sofa shall be structurally stable, comfortable and aesthetically finished suitable for institutional/residential use.

- Work shall include fabrication, upholstery, finishing, transportation and placement complete in all respects.

2.2 Timber and Framework Preparation

- Hardwood members shall be properly seasoned and chemically treated before fabrication.
- Wooden members shall be machine cut and accurately shaped true to required dimensions.
- Structural framework shall be rigidly assembled using approved joinery techniques, screws, adhesive and reinforcement.
- Sofa frame shall remain free from wobbling or deformation under regular use.

2.3 MDF and Particle Board Work

- MDF facia and particle board members shall be accurately fixed over framework.
- Boards shall be properly aligned and securely fixed.
- Exposed surfaces shall be finished with approved melamine coating.

2.4 Upholstery and Foam Work

- Polyurethane foam cushioning and recron layer shall be accurately cut and fixed uniformly.
- Artificial leather upholstery shall be neatly stretched and fixed without wrinkles or sagging.
- Upholstery stitching shall be straight, uniform and neatly finished using nylon polyester thread.
- Concealed fixing arrangement shall be adopted wherever possible.

2.5 Seat and Backrest

- Seat and backrest shall be ergonomically proportioned for comfortable seating.
- Cushioning shall provide proper support and uniform comfort throughout seating area.

2.6 Surface Finishing

- Exposed wooden/MDF surfaces shall be sanded smooth before application of melamine finish.
- Final finish shall be smooth, even and free from stains, scratches or surface defects.
- Shade and finish shall match approved sample.

2.7 Edge and Corner Finishing

- All exposed edges and corners shall be smooth and safe in handling.
- No sharp edges, visible nails or rough surfaces shall be permitted.

2.8 Transportation and Placement

- Sofa shall be carefully transported and placed at designated location.
- Necessary precautions shall be taken to avoid damage during handling and installation.
- Sofa shall remain level and stable after placement.

2.9 Cleaning and Protection

- Completed sofa shall be protected from stains, dust, scratches and damage until handing over.
- Final cleaning shall be carried out before completion.
- Damaged upholstery, polish or structural members shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **number** of completed three seater sofas

Item No – 34

Providing & Placing in Position Table of Any size with modesty panel having 1mm Laminate finish, Top & Side made from 19mm (2 Layer) and Modesty Panel made from made from 18mm and 12mm BWR calibrated plywood of standard make, teakwood batten, PU Polish on Batten Patti, Footrest etc. complete as per instruction given by engineer in charge/Architect.

1. MATERIALS

1.1 Plywood

Plywood : Shall Conform M37 page no-18 in General Technical Specification Booklet.

- Table top and side panels shall be made from 19 mm thick double-layer BWR calibrated plywood of approved make.
- Modesty panel shall be made from combination of 18 mm and 12 mm thick BWR calibrated plywood.
- Plywood shall conform to relevant IS codes and shall be free from delamination, swelling, warping or manufacturing defects.
- Plywood shall possess adequate strength and dimensional stability for furniture applications.

1.2 Decorative Laminate

- Exposed surfaces of tabletop, side panels and modesty panel shall be finished with 1 mm thick decorative laminate conforming to IS 2046.
- Laminate shall be scratch resistant, moisture resistant and of approved shade, texture and finish as selected by Architect.
- Laminate surface shall be smooth and easy to maintain.

1.3 Teak Wood Batten

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Edge battens, patti and exposed wooden members shall be made from seasoned teak wood.
- Teak wood shall be free from knots, cracks and insect attack.
- Wood shall be properly seasoned and dimensionally stable.

1.4 PU Polish Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

French Polish : Shall Conform M45 page no-21 in General Technical Specification Booklet.

- Exposed teak wood battens and patti shall be finished with approved PU polish finish.
- Finish shall provide smooth, durable and aesthetically pleasing appearance.
- PU polish shall be resistant to stains and regular wear.

1.5 Footrest

- Footrest shall be fabricated from approved quality teak wood / metal section as per approved design.

- Footrest shall be rigidly fixed and properly aligned with table structure.

1.6 Adhesives

- Adhesives used for laminate pasting and assembly shall conform to IS 848.
- Adhesives shall provide durable bonding suitable for furniture applications.

1.7 Hardware and Fasteners

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Screws, brackets, connectors, fasteners and fixing accessories shall be of approved make and corrosion resistant quality.
- Hardware shall ensure rigid and durable assembly.

1.8 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Office table with modesty panel shall be fabricated and installed strictly as per approved drawings, approved sample and instructions of Architect / Engineer-in-Charge.
- Finished table shall be structurally stable, aesthetically finished and suitable for office/institutional use.
- Work shall include fabrication, laminate work, polishing, transportation and installation complete in all respects.

2.2 Plywood Work

- BWR calibrated plywood members shall be machine cut true to dimensions and accurately assembled.
- Tabletop, side panels and modesty panel shall be rigidly fixed and properly aligned.
- All joints shall be executed using approved carpentry methods with screws, adhesive and reinforcement where necessary.
- Framework shall remain free from deformation or wobbling.

2.3 Laminate Work

- Decorative laminate shall be properly bonded over prepared plywood surface using approved adhesive.
- Laminate finish shall be free from bubbles, wrinkles, undulations or lifting.
- Joints in laminate shall be minimum and neatly finished.
- Exposed edges shall be properly aligned and finished.

2.4 Teak Wood Batten and Patti

- Teak wood battens and patti shall be accurately fixed on exposed edges as per approved design.
- Battens shall be properly seasoned and smoothly finished.
- Exposed wooden members shall receive approved PU polish finish.

2.5 Footrest Installation

- Footrest shall be securely fixed in proper alignment and position.
- Footrest shall be rigid, stable and free from sharp edges.

2.6 Surface Finishing

- Exposed wooden surfaces shall be sanded smooth before application of PU polish.
- Necessary sealer coats and finishing coats shall be uniformly applied.
- Final finish shall be smooth, even and free from stains, scratches or uneven appearance.
- Shade and texture shall match approved sample.

2.7 Edge and Corner Finishing

- All exposed edges and corners shall be smooth and safe in handling.
- No sharp edges, splinters, exposed nails or visible fixing marks shall be permitted.

2.8 Installation and Placement

- Table shall be carefully transported and placed at designated location.
- Table shall remain level, stable and properly aligned after installation.
- Necessary precautions shall be taken to avoid damage during handling and placement.

2.9 Cleaning and Protection

- Completed table shall be protected from dust, scratches, stains and damage until handing over.
- Final cleaning shall be carried out before completion.
- Damaged laminate, polish or plywood members shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **square metre** of tabletop plan area

Item No – 35

Providing & fixing in position Storage Unit of size having any Height and Depth - 450mm with 1 mm Laminate finish made from 18mm BWR Calibrated Plywood of standard make along with batten patti at sides and edge with PU polish complete as per instruction given by engineer in charge/Architect.

1. MATERIALS

1.1 Plywood

Plywood : Shall Conform M37 page no-18 in General Technical Specification Booklet.

- Storage unit carcass, shutters, shelves, vertical partitions and other components shall be made from 18 mm thick BWR calibrated plywood of approved make.
- Plywood shall conform to relevant IS standards and shall be free from delamination, swelling, warping and manufacturing defects.
- Plywood shall possess adequate strength and dimensional stability suitable for storage furniture applications.

1.2 Decorative Laminate

- Exposed surfaces shall be finished with 1 mm thick decorative laminate conforming to IS 2046.
- Laminate shall be of approved shade, texture and finish as selected by Architect.
- Laminate shall be scratch resistant, moisture resistant and suitable for interior furniture applications.
- Surface finish shall be smooth and easy to maintain.

1.3 Teak Wood Batten / Patti

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Batten patti provided at edges and sides shall be made from seasoned teak wood of approved quality.
- Teak wood shall be free from cracks, knots and insect attack.
- Timber shall be properly seasoned and dimensionally stable.

1.4 PU Polish Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

French Polish : Shall Conform M45 page no-21 in General Technical Specification Booklet.

- Exposed teak wood battens and edge patti shall receive approved PU polish finish.
- Finish shall be smooth, durable and aesthetically pleasing.
- PU coating shall be resistant to stains and normal wear.

1.5 Hardware and Fittings

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Hinges, handles, screws, brackets, telescopic channels, connectors, locks and other hardware fittings shall be of approved make and corrosion resistant quality.
- Hardware shall provide smooth operation and durable performance.

1.6 Adhesives

- Adhesives used for laminate fixing and assembly shall conform to IS 848.
- Adhesives shall provide durable bonding suitable for furniture applications.

1.7 Termite Treatment

- Timber and plywood surfaces shall be treated with approved preservative against termite and borer attack.
- Treatment chemicals shall be suitable for interior furniture applications.

1.8 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Storage unit shall be fabricated and installed strictly as per approved drawings, approved sample and instructions of Architect / Engineer-in-Charge.
- Unit shall be of approved height and depth of 450 mm unless otherwise specified.
- Finished unit shall be structurally stable, aesthetically finished and suitable for storage applications.
- Work shall include fabrication, laminate work, polishing, transportation and installation complete in all respects.

2.2 Plywood Fabrication

- BWR calibrated plywood shall be machine cut true to required dimensions.
- Shelves, side panels, shutters and partitions shall be accurately assembled and rigidly fixed.
- Joints shall be executed using approved carpentry methods, screws, adhesive and reinforcement where required.
- Structure shall remain stable and free from deformation or wobbling.

2.3 Laminate Work

- Decorative laminate shall be properly bonded over prepared plywood surfaces using approved adhesive.
- Laminate surface shall be free from bubbles, wrinkles, lifting or unevenness.
- Laminate joints shall be neatly aligned and minimally visible.
- Exposed edges shall be properly finished.

2.4 Batten Patti and Edge Finishing

- Teak wood battens and edge patti shall be accurately fixed on exposed sides and edges.
- Battens shall be smoothly finished and properly aligned.
- Exposed wooden members shall receive approved PU polish finish.

2.5 Hardware Installation

- Hinges, handles, channels, locks and other fittings shall be securely fixed in correct alignment.
- Shutters and drawers shall operate smoothly without friction or misalignment.
- Shelves and partitions shall be rigid and properly supported.

2.6 Surface Finishing

- Exposed wooden surfaces shall be sanded smooth before application of PU polish.
- Necessary sealer coats and finishing coats shall be uniformly applied.
- Final finish shall be smooth, even and free from stains, scratches or visible defects.
- Shade and texture shall match approved sample.

2.7 Edge and Corner Finishing

- All exposed edges and corners shall be smooth and safe in handling.
- No sharp edges, exposed nails or rough surfaces shall be permitted.

2.8 Installation and Placement

- Storage unit shall be carefully transported and fixed/placed at designated location.

- Unit shall remain level, properly aligned and securely fixed after installation.
- Necessary precautions shall be taken to avoid damage during handling and installation.

2.9 Cleaning and Protection

- Completed storage unit shall be protected from dust, stains, scratches and damage until handing over.
- Final cleaning shall be carried out before completion.
- Damaged laminate, polish or plywood members shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **square metre** of front elevation area of completed storage unit unless otherwise specified in BOQ.

Item No – 36

Providing and fixing High Back Revolving Chair of avg dimension 700x700x1100 mm (WxDxH) having artificial leather upholster finish and shall be selected by Engineer In Charge / Architect

1. MATERIALS

1.1 Chair Framework

Structural Steel : Shall Conform M22 page no-14 in General Technical Specification Booklet.

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Chair internal framework and support structure shall be made from approved quality metal frame and/or hardwood members as per approved design.
- Metal components shall be fabricated from approved quality MS/steel sections with adequate strength and rigidity.
- Wooden components, wherever used, shall be properly seasoned and chemically treated against termite and moisture attack.

1.2 Upholstery Material

- Chair shall be upholstered with premium quality artificial/synthetic leather in approved shade, colour and texture as selected by Engineer-in-Charge / Architect.
- Upholstery material shall be durable, wrinkle resistant and suitable for office use.
- Artificial leather shall be easy to clean and resistant to normal wear and tear.

1.3 Foam Cushioning

- Seat, backrest and head support cushioning shall be made from high-density polyurethane foam conforming to IS 7888.
- Foam shall provide ergonomic comfort and proper lumbar support for prolonged seating.
- Foam shall be free from shrinkage, cracks and deformation.

1.4 Revolving Base and Mechanism

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Chair shall be provided with revolving base assembly of approved make with smooth rotation mechanism.
- Base shall be sturdy, balanced and suitable for office seating applications.
- Gas lift mechanism, tilt mechanism and height adjustment arrangement, wherever provided, shall function smoothly.

1.5 Armrests

- Armrests shall be made from approved quality polymer, metal or upholstered material as per approved design.
- Armrests shall be rigidly fixed and ergonomically designed.

1.6 Castors / Wheels

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Chair base shall be provided with durable nylon/PVC castors suitable for smooth floor movement.
- Castors shall rotate freely without damaging flooring surfaces.

1.7 Hardware and Fasteners

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Screws, bolts, brackets, connectors and fixing accessories shall be of approved make and corrosion resistant quality.
- Hardware shall ensure rigid and durable assembly.

1.8 Adhesives

- Adhesives used for upholstery and assembly shall conform to IS 848.
- Adhesives shall provide durable bonding suitable for furniture applications.

1.9 Paint and Protective Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

- Metal components shall receive approved powder coating, paint or protective finish.
- Finish shall be smooth, durable and resistant to corrosion and regular wear.

1.10 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- High back revolving chair shall be fabricated, supplied and placed strictly as per approved sample, specifications and instructions of Engineer-in-Charge / Architect.
- Average chair size shall be approximately 700 × 700 × 1100 mm (W × D × H).
- Finished chair shall be ergonomically designed, structurally stable and suitable for office/conference use.

- Work shall include fabrication, upholstery, finishing, transportation and placement complete in all respects.

2.2 Framework Fabrication

- Metal and/or wooden framework shall be accurately fabricated true to required dimensions.
- Framework members shall be rigidly assembled using approved joinery and fastening methods.
- Chair structure shall remain stable and free from wobbling during use.

2.3 Seat and Backrest

- High backrest shall be ergonomically contoured to provide proper lumbar and upper back support.
- Seat profile shall provide comfortable seating posture for prolonged duration.
- Foam cushioning shall be uniformly fixed without sagging or unevenness.

2.4 Upholstery Work

- Artificial leather upholstery shall be neatly stretched and fixed over foam cushioning.
- Upholstery shall be wrinkle free with concealed fixing arrangement wherever possible.
- Stitching shall be straight, uniform and neatly finished.
- Upholstery finish shall match approved sample.

2.5 Revolving and Adjustment Mechanism

- Revolving mechanism shall rotate smoothly without obstruction or noise.
- Height adjustment and tilt mechanisms, wherever provided, shall operate properly.
- Chair base shall remain balanced and stable under normal operating conditions.

2.6 Armrests and Base Assembly

- Armrests shall be securely fixed and properly aligned.
- Base assembly and castors shall be rigidly installed.
- Chair movement shall remain smooth without instability.

2.7 Surface Finishing

- Metal surfaces shall receive approved powder coating or paint finish.
- Final finish shall be smooth, uniform and free from scratches, dents or uneven coating.
- All exposed surfaces shall be aesthetically finished.

2.8 Edge and Corner Finishing

- All exposed edges and corners shall be smooth and safe in handling.
- No sharp edges, exposed screws or rough surfaces shall be permitted.

2.9 Transportation and Placement

- Chairs shall be carefully transported and placed at designated locations.
- Necessary precautions shall be taken to avoid damage during handling and placement.
- Chairs shall remain level and stable after positioning.

2.10 Cleaning and Protection

- Completed chairs shall be protected from dust, scratches, stains and damage until handing over.

- Final cleaning and inspection shall be carried out before completion.
- Damaged upholstery, finish or structural members shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Number** of completed high back revolving chairs.

Item No – 37

Providing and fixing Medium Back Revolving Chair of avg dimension 670x670x1010 mm (WxDxH) having fabric + NET / Mesh finish and shall be selected by Engineer In Charge / Architect

1. MATERIALS

1.1 Chair Framework

Structural Steel : Shall Conform M22 page no-14 in General Technical Specification Booklet.

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Chair structural frame shall be made from approved quality metal frame and/or hardwood members as per approved design.
- Metal components shall be fabricated from approved quality MS/steel sections with adequate rigidity and strength.
- Wooden members, wherever used, shall be properly seasoned and chemically treated against termite and moisture attack.

1.2 Upholstery Fabric

- Seat upholstery shall consist of premium quality fabric of approved shade, texture and finish selected by Engineer-in-Charge / Architect.
- Upholstery fabric shall be durable, breathable and suitable for office seating applications.
- Fabric shall be wrinkle resistant and colour fast.

1.3 Net / Mesh Back

- Chair backrest shall be provided with premium quality breathable net/mesh material of approved make and shade.
- Mesh shall provide ergonomic back support and adequate ventilation during prolonged seating.
- Mesh material shall be tear resistant and tightly fixed over frame.

1.4 Foam Cushioning

- Seat cushioning shall be made from high-density polyurethane foam conforming to IS 7888.
- Foam shall provide comfortable seating and adequate resilience.
- Foam shall be free from deformation, shrinkage and cracks.

1.5 Revolving Base and Mechanism

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Chair shall be provided with revolving base assembly of approved make with smooth rotation mechanism.
- Base shall be sturdy, balanced and suitable for office use.
- Gas lift and tilt adjustment mechanism, wherever provided, shall function properly and smoothly.

1.6 Armrests

- Armrests shall be made from approved polymer, metal or upholstered material as per approved design.
- Armrests shall be ergonomically designed and securely fixed.

1.7 Castors / Wheels

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Chair base shall be provided with durable nylon/PVC castors suitable for smooth floor movement.
- Castors shall move freely without damaging flooring surfaces.

1.8 Hardware and Fasteners

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Screws, bolts, brackets, connectors and fixing accessories shall be of approved make and corrosion resistant quality.
- Hardware shall ensure rigid and durable assembly.

1.9 Paint and Protective Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

- Metal components shall receive approved powder coating, paint or protective finish.
- Finish shall be smooth, durable and resistant to corrosion and regular wear.

1.10 Adhesives

- Adhesives used for upholstery and assembly shall conform to IS 848.
- Adhesives shall provide durable bonding suitable for furniture applications.

1.11 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Medium back revolving chair shall be fabricated, supplied and placed strictly as per approved sample, specifications and instructions of Engineer-in-Charge / Architect.
- Average chair size shall be approximately 670 × 670 × 1010 mm (W × D × H).
- Finished chair shall be ergonomically designed, structurally stable and suitable for office/conference use.

- Work shall include fabrication, upholstery, finishing, transportation and placement complete in all respects.

2.2 Framework Fabrication

- Metal and/or wooden framework shall be accurately fabricated true to required dimensions.
- Framework shall be rigidly assembled using approved fastening methods and joinery.
- Chair structure shall remain stable and free from wobbling during use.

2.3 Seat Cushioning

- Seat cushioning shall be uniformly fixed using high-density polyurethane foam.
- Fabric upholstery shall be neatly stitched and tightly fixed without wrinkles or sagging.
- Seat shall provide comfortable posture for prolonged seating.

2.4 Mesh Backrest

- Mesh/net backrest shall be tightly stretched and securely fixed over supporting frame.
- Backrest shall provide ergonomic support and proper ventilation.
- Mesh shall remain wrinkle free and properly tensioned.

2.5 Revolving and Adjustment Mechanism

- Revolving mechanism shall rotate smoothly without noise or obstruction.
- Gas lift and tilt adjustment mechanisms, wherever provided, shall function efficiently.
- Chair base shall remain balanced and stable during operation.

2.6 Armrests and Base Assembly

- Armrests shall be securely fixed and properly aligned.
- Base assembly and castors shall be rigidly installed and smoothly functional.
- Chair movement shall remain smooth and stable.

2.7 Surface Finishing

- Metal components shall receive approved powder coating or paint finish.
- Final finish shall be smooth, uniform and free from scratches, dents or coating defects.
- Exposed surfaces shall be aesthetically finished.

2.8 Edge and Corner Finishing

- All exposed edges and corners shall be smooth and safe in handling.
- No sharp edges, exposed screws or rough surfaces shall be permitted.

2.9 Transportation and Placement

- Chairs shall be carefully transported and placed at designated locations.
- Necessary precautions shall be taken to avoid damage during handling and placement.
- Chairs shall remain level and stable after positioning.

2.10 Cleaning and Protection

- Completed chairs shall be protected from dust, scratches, stains and damage until handing over.
- Final cleaning and inspection shall be carried out before completion.

- Damaged upholstery, mesh, finish or structural members shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Number** of completed medium back revolving chairs.

Item No – 38

Providing & Placing in position Corner table of size 600 X 600 X 450 mm with Varnish Polish finish made from Solid teakwood and Table Top made from Teakwood/Glass complet as per instruction given by engineer in charge/Architect.

1. MATERIALS

1.1 Teak Wood

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Corner table framework, legs, apron members and tabletop (where specified) shall be made from solid seasoned teak wood of approved quality.
- Teak wood shall be kiln dried and chemically treated against termite and moisture attack.
- Timber shall be free from knots, cracks, warping, sapwood and other defects.
- Wood shall possess adequate strength and dimensional stability suitable for furniture applications.

1.2 Glass Top (Where Specified)

Glass : Shall Conform M38 page no-18 in General Technical Specification Booklet.

- Glass tabletop, wherever specified, shall be clear/tinted toughened glass of approved thickness and quality.
- Glass edges shall be machine polished and smooth finished.
- Glass shall be free from scratches, bubbles, waviness or visible defects.

1.3 Varnish Polish Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

French Polish : Shall Conform M45 page no-21 in General Technical Specification Booklet.

- All exposed teak wood surfaces shall receive approved varnish polish finish.
- Finish shall provide smooth, durable and aesthetically pleasing appearance.
- Varnish coating shall be resistant to stains and regular wear.

1.4 Adhesives

- Adhesives used for assembly work shall conform to IS 848.
- Adhesives shall provide durable bonding suitable for furniture applications.

1.5 Hardware and Fasteners

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Screws, brackets, connectors, fasteners and fixing accessories shall be of approved make and corrosion resistant quality.
- Hardware shall ensure rigid and durable assembly.

1.6 Protective Bushes

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Table legs shall be provided with PVC/nylon bushes where required to protect finished flooring surfaces.

1.7 Termite Treatment

- Timber shall be treated with approved preservative against termite and borer attack.
- Treatment chemicals shall be suitable for furniture applications.

1.8 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Corner table shall be fabricated, supplied and placed strictly as per approved drawings, approved sample and instructions of Engineer-in-Charge / Architect.
- Table size shall be 600 × 600 × 450 mm unless otherwise specified.
- Finished table shall be structurally stable, aesthetically finished and suitable for residential/institutional use.
- Work shall include fabrication, polishing, transportation and placement complete in all respects.

2.2 Timber Preparation

- Teak wood shall be properly seasoned, kiln dried and chemically treated before fabrication.
- Wooden members shall be machine cut true to dimensions and smoothly planed.
- Timber surfaces shall be free from cracks, roughness and visible defects.

2.3 Table Framework

- Structural framework, legs and supports shall be fabricated from solid teak wood sections of approved size.
- Joints shall be rigidly assembled using approved carpentry methods, screws, adhesive and reinforcement where necessary.
- Table structure shall remain stable and free from wobbling during use.

2.4 Tabletop Work

- Tabletop shall be made from solid teak wood or glass as specified in approved design.
- Wooden top surface shall be level, smooth and properly aligned.
- Glass top, where provided, shall be securely fixed using approved supports or fittings.
- Glass edges shall be polished smooth and safe in handling.

2.5 Surface Finishing

- Exposed wooden surfaces shall be sanded smooth before application of varnish polish.
- Necessary sealer coats and finishing coats shall be uniformly applied.
- Final finish shall be smooth, even and free from scratches, stains, brush marks or uneven appearance.
- Shade and finish shall match approved sample.

2.6 Edge and Corner Finishing

- All exposed edges and corners shall be smooth and safe in handling.
- No sharp edges, splinters, exposed nails or visible fixing marks shall be permitted.

2.7 Protective Bushes

- PVC/nylon bushes shall be securely fixed at bottom of legs wherever required.
- Bushes shall prevent damage to flooring surfaces and reduce noise during movement.

2.8 Transportation and Placement

- Corner table shall be carefully transported and placed at designated location.
- Necessary precautions shall be taken to avoid damage during handling and placement.
- Table shall remain level and stable after positioning.

2.9 Cleaning and Protection

- Completed table shall be protected from dust, scratches, stains and damage until handing over.
- Final cleaning shall be carried out before completion.
- Damaged polish, glass or wooden members shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Number** of completed corner tables.

Item No – 39

Providing & Placing in position Center table of size 900 X 600 X 450 mm with Varnish Polish finish made from Solid teakwood Table Top made from Teakwood/Glass complet as per instruction given by engineer in charge/Architect.

1. MATERIALS

1.1 Teak Wood

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Center table framework, legs, apron members and tabletop (where specified) shall be made from solid seasoned teak wood of approved quality.
- Timber shall be kiln dried and chemically treated against termite, borers and moisture attack.
- Wood shall be free from knots, cracks, sapwood, warping and other defects.
- Timber shall possess adequate strength and dimensional stability suitable for furniture applications.

1.2 Glass Top (Where Specified)

Glass : Shall Conform M38 page no-18 in General Technical Specification Booklet.

- Glass tabletop, wherever specified, shall be clear/tinted toughened glass of approved thickness and quality.
- Glass edges shall be machine polished and smoothly finished.
- Glass shall be free from scratches, waviness, bubbles and visible defects.

1.3 Varnish Polish Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

French Polish : Shall Conform M45 page no-21 in General Technical Specification Booklet.

- All exposed teak wood surfaces shall receive approved varnish polish finish.
- Finish shall provide smooth, durable and aesthetically pleasing appearance.
- Varnish coating shall be resistant to stains and regular wear.

1.4 Adhesives

- Adhesives used for assembly work shall conform to IS 848.
- Adhesives shall provide durable bonding suitable for furniture applications.

1.5 Hardware and Fasteners

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Screws, brackets, connectors, fasteners and fixing accessories shall be of approved make and corrosion resistant quality.
- Hardware shall ensure rigid and durable assembly.

1.6 Protective Bushes

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Table legs shall be provided with PVC/nylon bushes where required to protect finished flooring surfaces.

1.7 Termite Treatment

- Timber shall be treated with approved preservative against termite and borer attack.
- Treatment chemicals shall be suitable for furniture applications.

1.8 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Center table shall be fabricated, supplied and placed strictly as per approved drawings, approved sample and instructions of Engineer-in-Charge / Architect.
- Table size shall be $900 \times 600 \times 450$ mm unless otherwise specified.
- Finished table shall be structurally stable, aesthetically finished and suitable for residential/institutional use.
- Work shall include fabrication, polishing, transportation and placement complete in all respects.

2.2 Timber Preparation

- Teak wood shall be properly seasoned, kiln dried and chemically treated before fabrication.
- Wooden members shall be machine cut true to dimensions and smoothly planed.
- Timber surfaces shall be free from cracks, roughness and visible defects.

2.3 Table Framework

- Structural framework, legs and supports shall be fabricated from solid teak wood sections of approved size.
- Joints shall be rigidly assembled using approved carpentry methods, screws, adhesive and reinforcement where necessary.
- Table structure shall remain stable and free from wobbling during use.

2.4 Tabletop Work

- Tabletop shall be made from solid teak wood or glass as specified in approved design.
- Wooden top surface shall be level, smooth and properly aligned.
- Glass top, where provided, shall be securely fixed using approved supports or fittings.
- Glass edges shall be polished smooth and safe in handling.

2.5 Surface Finishing

- Exposed wooden surfaces shall be sanded smooth before application of varnish polish.
- Necessary sealer coats and finishing coats shall be uniformly applied.
- Final finish shall be smooth, even and free from scratches, stains, brush marks or uneven appearance.
- Shade and finish shall match approved sample.

2.6 Edge and Corner Finishing

- All exposed edges and corners shall be smooth and safe in handling.
- No sharp edges, splinters, exposed nails or visible fixing marks shall be permitted.

2.7 Protective Bushes

- PVC/nylon bushes shall be securely fixed at bottom of legs wherever required.
- Bushes shall prevent damage to flooring surfaces and reduce noise during movement.

2.8 Transportation and Placement

- Center table shall be carefully transported and placed at designated location.
- Necessary precautions shall be taken to avoid damage during handling and placement.

- Table shall remain level and stable after positioning.

2.9 Cleaning and Protection

- Completed table shall be protected from dust, scratches, stains and damage until handing over.
- Final cleaning shall be carried out before completion.
- Damaged polish, glass or wooden members shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Number** of completed center tables.

Item No – 40

Pelmet Work: Providing and fixing AC Pelmet of Wooden .Design as per selection of Architect and as per direction of Engineer -in-charge.

1. MATERIALS

1.1 Teak Wood / Wooden Members

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- AC pelmet framework, fascia, supports and exposed wooden members shall be made from seasoned teak wood or approved hardwood as per approved design.
- Timber shall be kiln dried and chemically treated against termite and moisture attack.
- Wood shall be free from knots, cracks, sapwood, warping and other defects.
- Timber shall possess adequate strength and dimensional stability suitable for interior decorative work.

1.2 Plywood

Plywood : Shall Conform M37 page no-18 in General Technical Specification Booklet.

- Plywood used for pelmet base, backing or fascia panels shall be of approved quality and thickness conforming to relevant IS standards.
- Plywood shall be free from delamination, swelling and manufacturing defects.
- Material shall be dimensionally stable and suitable for interior applications.

1.3 Decorative Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

French Polish : Shall Conform M45 page no-21 in General Technical Specification Booklet.

- Exposed wooden surfaces shall receive approved polish, paint, laminate or PU finish as selected by Architect.
- Finish shall be smooth, durable and aesthetically pleasing.
- Shade, texture and finish shall match approved sample.

1.4 Adhesives

- Adhesives used for assembly and laminate/polish work shall conform to IS 848.

- Adhesives shall provide durable bonding suitable for interior furniture and decorative applications.

1.5 Hardware and Fasteners

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Screws, brackets, cleats, anchors, fasteners and fixing accessories shall be of approved make and corrosion resistant quality.
- Hardware shall ensure rigid and durable fixing of pelmet work.

1.6 Termite Treatment

- Timber and plywood surfaces shall be treated with approved preservative against termite and borer attack.
- Treatment chemicals shall be suitable for interior woodwork applications.

1.7 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- AC pelmet work shall be fabricated and installed strictly as per approved drawings, approved sample and instructions of Architect / Engineer-in-Charge.
- Design, profile and dimensions shall be as selected by Architect.
- Finished pelmet shall be structurally stable, aesthetically finished and properly aligned.
- Work shall include fabrication, finishing, transportation and fixing complete in all respects.

2.2 Timber and Plywood Preparation

- Timber shall be properly seasoned and chemically treated before fabrication.
- Wooden and plywood members shall be machine cut true to required dimensions.
- Surfaces shall be smoothly planed and free from visible defects.

2.3 Pelmet Framework

- Pelmet framework and supports shall be rigidly fabricated using approved wooden sections and plywood members.
- Joints shall be executed using approved carpentry methods, screws, adhesive and reinforcement where required.
- Framework shall remain free from deformation, sagging or misalignment.

2.4 Fixing Arrangement

- Pelmet shall be securely fixed to wall, ceiling or supporting surface using approved brackets, cleats and fasteners.
- Fixing arrangement shall ensure proper alignment and long-term stability.
- Concealed fixing arrangement shall be adopted wherever possible for neat appearance.

2.5 Surface Finishing

- Exposed surfaces shall be sanded smooth before application of finish.
- Necessary sealer coats and finishing coats shall be uniformly applied.
- Final finish shall be smooth, even and free from stains, scratches, brush marks or uneven appearance.
- Shade and texture shall match approved sample and Architect's selection.

2.6 Edge and Corner Finishing

- All exposed edges and corners shall be smoothly finished and safe in handling.
- No sharp edges, exposed nails, rough surfaces or visible fixing marks shall be permitted.

2.7 Alignment and Appearance

- Pelmet shall be installed perfectly level, plumb and aligned with adjoining surfaces.
- Completed work shall present neat and uniform appearance throughout.

2.8 Cleaning and Protection

- Completed pelmet work shall be protected from scratches, dust, stains and damage until handing over.
- Final cleaning shall be carried out before completion.
- Damaged finish or defective members shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Squre metre** of completed pelmet work

Item No – 41

Providing and fixing Zebra blind roller curtain with superior quality Acmeda Mechanism including all necessities fitting like breaket chain etc. complete as per instruciton of Engineer in charge.

1. MATERIALS

1.1 Zebra Blind Fabric

- Zebra blind fabric shall be of premium quality alternating sheer and opaque striped polyester fabric suitable for interior roller blind applications.
- Fabric shall be dust resistant, wrinkle resistant and capable of smooth rolling operation.
- Fabric shade, pattern and texture shall be as approved by Engineer-in-Charge / Architect.
- Fabric shall provide controlled light filtration and privacy functions.

1.2 Roller Mechanism

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Roller blind mechanism shall be superior quality Acmeda mechanism or approved equivalent.
- Mechanism shall consist of roller tube, clutch system, chain operation unit and control assembly suitable for smooth and noiseless operation.
- Roller tube shall be of rigid aluminium/metal section resistant to bending and corrosion.

1.3 Brackets and Accessories

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Mounting brackets, chain system, side caps, stoppers, bottom rail and accessories shall be of approved make and compatible with blind mechanism.
- Brackets and accessories shall be corrosion resistant and durable.
- Chain mechanism shall operate smoothly without jamming.

1.4 Bottom Rail

- Bottom rail shall be made from aluminium or approved rigid material with smooth finished edges.
- Bottom rail shall maintain proper tension and alignment of blind fabric.

1.5 Fasteners

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Screws, anchor fasteners, rawl plugs and fixing accessories shall be of approved make and corrosion resistant quality.
- Fasteners shall ensure rigid and durable fixing of curtain system.

1.6 Paint and Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

- Exposed metal components shall receive factory finished coating/powder coating/anodized finish as applicable.
- Finish shall be smooth, durable and aesthetically acceptable.

1.7 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning purposes shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Zebra blind roller curtain shall be supplied and fixed strictly as per approved sample, approved design and instructions of Engineer-in-Charge.
- Blind system shall provide smooth operation, proper alignment and neat appearance.
- Work shall include supply, fabrication, fitting, fixing, transportation and installation complete in all respects.

2.2 Fabric Preparation

- Blind fabric shall be accurately cut to required dimensions without frayed edges or defects.
- Fabric stripes shall remain properly aligned throughout full height of blind.
- Fabric shall be free from stains, wrinkles, tears or colour variation.

2.3 Roller Mechanism Installation

- Acmeda mechanism and roller assembly shall be properly installed to ensure smooth rolling operation.
- Roller tube shall remain level and free from vibration or bending during operation.
- Chain control mechanism shall function smoothly without slipping or jamming.

2.4 Bracket and Support Fixing

- Brackets shall be securely fixed to wall, ceiling or window frame using approved fasteners.
- Fixing arrangement shall provide adequate support to complete blind system.
- Alignment of brackets shall ensure smooth and balanced operation.

2.5 Blind Installation

- Blind fabric shall be neatly fixed on roller mechanism with proper tension.
- Bottom rail shall remain straight and aligned during operation.
- Blind shall move smoothly in upward and downward direction without obstruction.

2.6 Alignment and Finish

- Installed blinds shall be perfectly level, plumb and uniformly aligned.
- Fabric pattern and appearance shall remain uniform throughout installation.
- Exposed accessories and fittings shall present neat and aesthetically pleasing appearance.

2.7 Cleaning and Protection

- Completed blind installation shall be cleaned and protected from dust, stains and damage until handing over.
- Damaged fabric, mechanism or accessories shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Squre metre** of finished blind area.

Item No – 42

Polyester Fiber Panelling : Providing and Fixing Polyster fiber sheet on Base Layer of plywood sheet with necessary Glue, screw etc. required accessories with all labour, scaffolding and support system, as per selection of Architect and in the direction of Engineer-in-Charge.

1. MATERIALS

1.1 Polyester Fiber Panel

- Polyester fiber acoustic/decorative panels shall be of approved make, density, thickness and finish suitable for interior wall/ceiling applications.
- Panels shall be manufactured from recycled polyester fiber material with good acoustic and decorative properties.
- Panels shall be free from warping, cracks, edge damage and surface defects.
- Colour, pattern, texture and design shall be as approved by Architect.
- Material shall possess good dimensional stability and shall be suitable for indoor applications.

1.2 Plywood Base Layer

Plywood : Shall Conform M37 page no-18 in General Technical Specification Booklet.

- Base layer shall be made from approved quality plywood of specified thickness as required for proper support and fixing of polyester fiber panels.
- Plywood shall conform to relevant IS standards and shall be free from delamination, swelling and manufacturing defects.
- Plywood shall provide rigid and stable backing surface.

1.3 Adhesives

- Adhesives used for fixing polyester fiber sheets shall conform to IS 848.
- Glue/adhesive shall be suitable for bonding fiber panels to plywood surfaces.
- Adhesive shall provide durable bonding and shall not affect finish or performance of panel.

1.4 Screws and Fasteners

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Screws, anchor fasteners, clips and fixing accessories shall be of approved make and corrosion resistant quality.
- Fasteners shall ensure rigid and durable fixing of panel system.

1.5 Supporting Framework (Where Required)

Structural Steel : Shall Conform M22 page no-14 in General Technical Specification Booklet.

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Supporting framework, where required, shall be made from approved wooden battens or metal sections.
- Framework members shall be rigid, properly aligned and adequately anchored to supporting surface.

1.6 Paint and Protective Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

- Exposed supporting members, where visible, shall receive approved protective finish or paint coating.
- Finish shall be smooth and aesthetically acceptable.

1.7 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning purposes shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Polyester fiber panelling work shall be carried out strictly as per approved drawings, approved sample and instructions of Architect / Engineer-in-Charge.

- Panels shall be installed true to line, level and pattern.
- Work shall include supply, fabrication, backing preparation, fixing, scaffolding and installation complete in all respects.

2.2 Surface Preparation

- Base surface shall be cleaned and prepared before installation.
- Supporting framework and plywood backing shall be securely fixed and properly aligned.
- Surface shall be level, rigid and free from undulations before panel fixing.

2.3 Plywood Base Layer Fixing

- Plywood backing sheets shall be machine cut true to required dimensions.
- Plywood shall be fixed rigidly to supporting framework/wall using approved screws and fasteners.
- Joints shall be properly aligned and finished.

2.4 Polyester Fiber Panel Installation

- Polyester fiber panels shall be accurately cut to required dimensions and profiles.
- Panels shall be fixed over plywood base using approved adhesive and screws/accessories wherever required.
- Adhesive application shall ensure uniform and durable bonding.
- Panels shall be installed without visible gaps, warping or uneven joints.

2.5 Joint and Edge Finishing

- Panel joints shall be straight, neat and properly aligned.
- Exposed edges and corners shall be smoothly finished without sharp projections or damage.
- Pattern and alignment shall remain continuous throughout installation.

2.6 Alignment and Appearance

- Installed panels shall be true to line, level and plumb.
- Finished surface shall be smooth, aesthetically uniform and free from stains, dents, scratches or visible fixing marks.
- Colour and texture variation beyond approved sample shall not be permitted.

2.7 Scaffolding and Support System

- Necessary scaffolding, staging and support arrangements shall be provided for execution of work at all heights and levels.
- Scaffolding shall be stable and safe during execution.

2.8 Cleaning and Protection

- Completed panelling work shall be protected from dust, moisture, stains and physical damage until handing over.
- Final cleaning shall be carried out before completion.
- Damaged panels or defective portions shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **square metre** of finished polyester fiber panelling area.

Item No – 43

Supply and execution of Acrylic Handmade painting on canvas and fixed on wooden and glass frames using traditional or custom designs as per approved patterns. Includes surface preparation, carving, finishing, sealing, and protective coating if required. Complete in all respects

1. MATERIALS

1.1 Canvas

- Canvas used for handmade painting shall be premium quality artist-grade cotton/linen canvas of approved thickness and texture.
- Canvas shall be stretched uniformly over rigid wooden frame without wrinkles or sagging.
- Surface shall be suitable for acrylic painting applications and capable of long-term dimensional stability.

1.2 Acrylic Paint

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

- Acrylic colours shall be artist-grade, non-fading, water-resistant and of approved quality.
- Paints shall provide rich colour finish, durability and resistance against cracking or peeling.
- Shades, colour combinations and artwork style shall be as approved by Architect / Engineer-in-Charge.

1.3 Wooden Frame

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Supporting and outer decorative frame shall be made from seasoned teak wood or approved hardwood.
- Timber shall be kiln dried and chemically treated against termite and moisture attack.
- Wooden frame shall be free from cracks, knots, warping and visible defects.
- Frame profile and finish shall be as approved by Architect.

1.4 Glass

Glass : Shall Conform M38 page no-18 in General Technical Specification Booklet.

- Protective glass, wherever specified, shall be clear/toughened/float glass of approved thickness and quality.
- Glass shall be free from scratches, waviness, bubbles and visible defects.
- Glass edges shall be machine polished and smoothly finished.

1.5 Adhesives and Sealants

- Adhesives used for fixing canvas, frame assembly and mounting shall conform to IS 848.
- Adhesives shall provide durable bonding suitable for artwork framing applications.

- Protective sealants/coatings used over painting surface shall be compatible with acrylic paint.

1.6 Hardware and Fasteners

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Screws, clips, hanging hooks, brackets, fasteners and fixing accessories shall be of approved make and corrosion resistant quality.
- Hanging system shall safely support complete framed artwork.

1.7 Protective Coating

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

- Protective coating/varnish, wherever required, shall be transparent, non-yellowing and suitable for acrylic paintings.
- Coating shall protect artwork from dust, moisture and surface damage.

1.8 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for surface preparation and cleaning shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Acrylic handmade painting work shall be executed strictly as per approved artwork, design pattern, colour scheme and instructions of Architect / Engineer-in-Charge.
- Finished artwork shall be aesthetically superior, properly framed and suitable for interior decorative applications.
- Work shall include painting, framing, finishing, transportation and fixing complete in all respects.

2.2 Canvas Preparation

- Canvas shall be properly stretched and fixed over rigid wooden stretcher frame.
- Surface shall be clean, smooth and properly primed before painting work.
- Canvas tension shall remain uniform without sagging or distortion.

2.3 Painting Work

- Handmade acrylic painting shall be executed by skilled artists using approved traditional or custom designs.
- Painting shall be neat, detailed and aesthetically balanced.
- Colours shall be uniformly applied with proper blending, shading and finishing techniques.
- Finished artwork shall be free from smudges, cracks, stains or unfinished portions.

2.4 Wooden Framing

- Wooden frame shall be accurately fabricated true to required dimensions and profile.
- Joints shall be rigidly assembled and neatly finished.
- Frame surface shall receive approved polish/paint/PU finish as specified.
- Exposed surfaces shall be smooth and aesthetically finished.

2.5 Glass Fixing

- Protective glass, wherever specified, shall be securely fixed within frame using approved beading and accessories.
- Glass shall be properly aligned without rattling or movement.
- Exposed glass edges shall not remain sharp.

2.6 Protective Coating and Sealing

- Approved protective coating/varnish shall be uniformly applied wherever specified.
- Coating shall not alter artwork appearance or colour tone.
- Finished surface shall remain smooth and free from brush marks or unevenness.

2.7 Mounting and Fixing

- Framed artwork shall be securely fixed at designated location using approved hanging system and accessories.
- Fixing arrangement shall ensure proper alignment, safety and stability.
- Artwork shall be level and aesthetically positioned.

2.8 Cleaning and Protection

- Completed artwork shall be protected from dust, scratches, stains and damage until handing over.
- Final cleaning shall be carried out before completion.
- Damaged painting, frame or glass shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **square metre** of finished visible painting area

Item No – 44

Constructing Sandwich Platform of 18 mm thick Polished Black Granite at top and 30 mm thick Kota stone slab flooring fitting at bottom with cementing Materials / adhesives including macking necessary grooves in walls with Vertical Kotastone 30 mm x 2 No sandwich thick every 60 cm centre to centre including all labour material of approved quality incl. full moulded round front edge fixed in wall for partition and jointed with grey cement slurry including rubbing and polishing etc. complete

1. MATERIALS

1.1 Black Granite Stone

Granite Stone Slab : Shall Conform M52 page no-23 in General Technical Specification Booklet.

- Top platform slab shall be made from 18 mm thick polished black granite of approved quality, colour and texture.
- Granite shall be hard, dense, durable and free from cracks, pin holes, waviness and visible defects.
- Exposed edges shall be machine cut and polished smooth.
- Granite surface shall possess uniform shade and mirror finish polish.

1.2 Kota Stone

Polished Kota Stone : Shall Conform M49 page no-23 in General Technical Specification Booklet.

- Bottom flooring/support slab and vertical sandwich supports shall be made from 30 mm thick approved quality Kota stone slabs.
- Kota stone shall be hard, sound, dense and free from cracks, laminations and visible defects.
- Stone surface shall be properly dressed and machine cut true to required dimensions.

1.3 Cement

Cement : Shall Conform M3 page no-9 in General Technical Specification Booklet.

- Cement used for fixing and jointing work shall be of approved quality conforming to relevant IS standards.

1.4 Cement Mortar

Cement Mortar : Shall Conform M11 page no-11 in General Technical Specification Booklet.

- Cement mortar used for bedding and fixing shall be of approved proportion suitable for stone fixing applications.
- Mortar shall provide rigid and durable support.

1.5 Grey Cement Slurry

Cement : Shall Conform M3 page no-9 in General Technical Specification Booklet.

- Grey cement slurry shall be prepared using approved quality cement and water for joint filling and finishing work.

1.6 Adhesives

- Adhesives used for granite/kota stone fixing shall be approved stone fixing adhesive suitable for heavy stone applications.
- Adhesives shall provide durable bonding and moisture resistance.

1.7 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for mortar, slurry, polishing and cleaning shall be clean and free from harmful impurities.

1.8 Fixtures and Accessories

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Necessary fixing accessories, clamps, supports and fasteners wherever required shall be of approved make and corrosion resistant quality.

2. WORKMANSHIP

2.1 General

- Sandwich platform work shall be carried out strictly as per approved drawings, approved sample and instructions of Engineer-in-Charge.
- Platform shall consist of 18 mm thick polished black granite top supported over 30 mm thick Kota stone bottom and vertical sandwich supports.

- Completed work shall be structurally stable, aesthetically finished and suitable for intended use.
- Work shall include cutting, grooving, fixing, polishing and finishing complete in all respects.

2.2 Surface Preparation

- Supporting wall and floor surfaces shall be cleaned and prepared before installation.
- Necessary grooves/chases shall be accurately made in wall for proper anchoring and support of stone members.
- Surface shall be level, firm and capable of supporting complete assembly.

2.3 Kota Stone Support Work

- Vertical Kota stone supports of 30 mm thickness shall be fixed in sandwich form at 600 mm centre-to-centre spacing or as approved.
- Kota stone members shall be properly aligned, plumb and securely fixed using cement mortar/adhesive.
- Supports shall provide adequate load-bearing capacity and stability to platform.

2.4 Granite Top Installation

- Granite slab shall be machine cut true to required dimensions.
- Granite top shall be properly seated and fixed over supports using approved cementing material/adhesive.
- Top surface shall remain level and free from rocking or movement.
- Front exposed edge shall be full moulded round edge finished as approved.

2.5 Jointing Work

- Joints between slabs shall be minimum possible width and neatly finished.
- Joints shall be filled with grey cement slurry matching adjoining surface.
- Finished joints shall be smooth, flush and watertight.

2.6 Rubbing and Polishing

- Granite and Kota stone surfaces shall be properly rubbed and polished after fixing.
- Finished surfaces shall be smooth, even and free from scratches, stains or uneven patches.
- Polished finish shall provide uniform appearance throughout.

2.7 Alignment and Finishing

- Platform shall be perfectly level, aligned and securely fixed.
- Exposed edges and corners shall be smooth and safe in handling.
- No chipped edges, visible cracks or defective portions shall be permitted.

2.8 Cleaning and Protection

- Completed platform shall be protected from stains, scratches and damage until handing over.
- Final cleaning shall be carried out after polishing work.
- Damaged stone members shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Square metre** of finished top platform area measured in plan.

Item No – 45

Providing and fixing approved make and quality machine cut polished granite stone cladding of approved shade, colour and texture for lift (elevator) wall cladding, lift jambs, architraves, soffits and fascia, in required size and pattern, having minimum thickness of 18 mm to 20 mm, fixed with approved adhesive / cement mortar and stainless steel cramps as specified, including cutting, moulding, groove making, edge polishing, rubbing, machine polishing, holes, notches, cut-outs for lift indicators, call buttons and other fixtures, complete in all respects as per drawings and directions of Engineer-in-Charge.

1. MATERIALS

1.1 Granite Stone Slab

Granite Stone Slab : Shall Conform M52 page no-23 in General Technical Specification Booklet.

- Granite stone slabs shall be machine cut, polished and of approved make, shade, colour and texture.
- Granite thickness shall be minimum 18 mm to 20 mm unless otherwise specified.
- Granite shall be hard, dense, durable and free from cracks, pin holes, waviness, laminations and visible defects.
- Stone shall possess uniform shade, grain and polished finish throughout.
- Exposed edges shall be machine cut and polished smooth.

1.2 Cement

Cement : Shall Conform M3 page no-9 in General Technical Specification Booklet.

- Cement used for fixing and backing mortar shall conform to relevant IS standards and be of approved quality.

1.3 Cement Mortar

Cement Mortar : Shall Conform M11 page no-11 in General Technical Specification Booklet.

- Cement mortar used for bedding and fixing shall be of approved proportion suitable for stone cladding applications.
- Mortar shall provide durable adhesion and adequate load-bearing capacity.

1.4 Adhesives

- Approved stone fixing adhesive shall be used wherever specified for granite cladding work.
- Adhesive shall be suitable for vertical stone fixing applications and compatible with granite surfaces.
- Adhesive shall provide durable bonding and moisture resistance.

1.5 Stainless Steel Cramps and Anchors

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Stainless steel cramps, anchors, dowels and fixing accessories shall be made from SS 304 grade or approved equivalent.
- Cramps shall possess adequate strength and corrosion resistance suitable for stone cladding applications.
- Fixing system shall securely hold granite slabs in proper position.

1.6 Joint Filling Material

Cement : Shall Conform M3 page no-9 in General Technical Specification Booklet.

- Joints shall be filled using approved coloured/grey cement slurry or approved joint filler matching stone shade.
- Joint material shall provide smooth and durable finish.

1.7 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for mortar, slurry, polishing and cleaning shall be clean and free from harmful impurities.

1.8 Protective Coating (Where Required)

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

- Protective sealer/coating, wherever specified, shall be suitable for granite surfaces and shall not alter natural appearance of stone.

2. WORKMANSHIP

2.1 General

- Granite cladding work shall be executed strictly as per approved drawings, approved sample and instructions of Engineer-in-Charge.
- Cladding shall be provided for lift walls, lift jambs, architraves, soffits and fascia as specified.
- Finished work shall be true to line, level, plumb and aesthetically uniform.
- Work shall include cutting, moulding, groove making, polishing, fixing and finishing complete in all respects.

2.2 Surface Preparation

- Background wall surfaces shall be properly cleaned and prepared before fixing cladding.
- Surface shall be sound, level and free from loose particles, dust and laitance.
- Necessary grooves, recesses and anchoring locations shall be accurately prepared.

2.3 Granite Cutting and Fabrication

- Granite slabs shall be machine cut true to required dimensions and profiles.
- Necessary moulding, grooves, edge profiles, notches, holes and cut-outs for lift indicators, call buttons and fixtures shall be accurately executed.
- Exposed edges shall be machine polished smooth and uniform.

2.4 Fixing of Granite Cladding

- Granite slabs shall be fixed using approved adhesive/cement mortar and stainless steel cramps as specified.
- SS cramps and anchors shall be securely fixed in proper alignment.
- Cladding shall remain firmly fixed without looseness, displacement or hollow sound.
- Adequate expansion gaps and joints shall be maintained wherever required.

2.5 Alignment and Jointing

- Granite slabs shall be aligned properly maintaining uniform joints and pattern continuity.
- Joints shall be straight, neat and of uniform width.
- Joint filling shall be carried out using matching coloured/grey cement slurry or approved filler material.
- Finished joints shall be smooth and flush with adjoining surface.

2.6 Polishing and Finishing

- Exposed granite surfaces shall be machine polished to approved finish.
- Finished surface shall be smooth, glossy and free from scratches, stains or polishing marks.
- Colour and texture variation beyond approved sample shall not be permitted.

2.7 Openings and Fixture Accommodation

- Necessary cut-outs and openings for lift indicators, buttons, control panels and other fixtures shall be neatly executed.
- Edges around openings shall be smoothly finished without cracks or chipping.

2.8 Edge and Corner Finishing

- All exposed corners, returns and edges shall be properly moulded and polished.
- No chipped edges, visible defects or uneven surfaces shall be permitted.

2.9 Cleaning and Protection

- Completed cladding work shall be protected from stains, scratches and physical damage until handing over.
- Final cleaning and polishing shall be carried out before completion.
- Damaged slabs or defective portions shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Square metre** of finished granite cladding area actually fixed and approved.

Item No – 46

Providing and fixing 12 mm thick glass partition wall with 2"x2" wooden framework and 1.5 m high frosted film of all heights and 6" SS Legs as per design provided by the architect including all required accessories and fixtures such as fasteners, screws, etc. fix as per required IS code and as per the direction of Engineer-in-Charge.

1. MATERIALS

1.1 Glass

Glass : Shall Conform M38 page no-18 in General Technical Specification Booklet.

- Partition glass shall be 12 mm thick clear toughened glass of approved make and quality.
- Glass shall be free from bubbles, waviness, scratches and visible defects.
- Glass edges shall be machine cut, polished and smoothly finished.
- Toughened glass shall conform to relevant IS standards suitable for partition applications.

1.2 Wooden Framework

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Framework shall be made from 2" × 2" seasoned teak wood or approved hardwood sections.
- Timber shall be kiln dried and chemically treated against termite and moisture attack.
- Wooden members shall be free from knots, cracks, warping and visible defects.

1.3 Frosted Film

- Frosted film of approved quality and finish shall be provided up to 1.5 metre height or as specified.
- Film shall be evenly applied without wrinkles, bubbles or peeling.
- Shade, opacity and pattern shall be as approved by Architect.

1.4 Stainless Steel Legs

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Partition shall be supported on 6" high stainless steel legs of approved design and quality.
- SS legs shall be made from SS 304 grade stainless steel with brushed/mirror finish as approved.
- Legs shall possess adequate strength and corrosion resistance.

1.5 Hardware and Accessories

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Fasteners, screws, clamps, channels, brackets, anchors, rubber gaskets and fixing accessories shall be of approved make and corrosion resistant quality.
- Hardware shall ensure rigid and safe fixing of partition system.

1.6 Adhesives and Sealants

- Silicone sealant and adhesives used for glass fixing shall be approved quality neutral cure sealant suitable for glazing applications.
- Sealants shall provide durable bonding and proper weather/acoustic sealing.

1.7 Paint and Polish Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

French Polish : Shall Conform M45 page no-21 in General Technical Specification Booklet.

- Wooden framework shall receive approved polish/paint/PU finish as specified by Architect.

- Finish shall be smooth, durable and aesthetically pleasing.

1.8 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Glass partition work shall be executed strictly as per approved drawings, approved sample and instructions of Architect / Engineer-in-Charge.
- Partition shall be installed true to line, level and plumb at all heights and levels.
- Finished work shall be structurally stable, aesthetically finished and safe in use.
- Work shall include fabrication, fixing, polishing, glazing and installation complete in all respects.

2.2 Wooden Framework Fabrication

- Wooden framework shall be fabricated from 2" × 2" seasoned teak wood sections.
- Members shall be accurately cut, jointed and rigidly assembled.
- Framework shall be securely anchored to floor, ceiling and adjoining walls as required.
- Joints shall be neatly finished and free from gaps or misalignment.

2.3 Glass Fixing

- Toughened glass panels shall be accurately cut true to required dimensions.
- Glass shall be fixed carefully using approved channels, clamps, rubber packing and sealants.
- Glass panels shall remain firmly secured without vibration or looseness.
- Necessary edge clearances and expansion gaps shall be maintained.

2.4 Frosted Film Application

- Frosted film shall be applied uniformly up to 1.5 metre height or as specified.
- Surface shall be properly cleaned before application.
- Film shall remain free from air bubbles, wrinkles, peeling or visible joints.

2.5 Stainless Steel Leg Fixing

- SS legs shall be securely fixed and properly aligned.
- Legs shall provide stable and rigid support to partition assembly.
- Stainless steel finish shall remain smooth and free from scratches or dents.

2.6 Sealant and Joint Treatment

- Silicone sealant shall be neatly applied at glass joints and interfaces.
- Joints shall be smooth, watertight and aesthetically finished.
- Excess sealant shall be cleaned properly after application.

2.7 Surface Finishing

- Wooden surfaces shall be sanded smooth before application of finish.
- Necessary polish/paint coats shall be uniformly applied.

- Final finish shall be smooth, even and free from brush marks, scratches or uneven appearance.

2.8 Alignment and Appearance

- Installed partition shall be perfectly level, plumb and aligned.
- Glass surfaces shall be clean, transparent and free from stains or defects.
- Entire installation shall present neat and uniform appearance.

2.9 Cleaning and Protection

- Completed partition work shall be protected from scratches, stains and damage until handing over.
- Final cleaning of glass, framework and accessories shall be carried out before completion.
- Damaged glass, hardware or finish shall be replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Square metre** of finished glass partition area.

Item No – 47

Glass Partition with Slim Alluminium Framed: Providing and fixing High-grade aluminum powder coated profile frame Dimensions: 25mm x 45mm and with 10mm to 12mm thickness of Glass with, clear, frosted, laminated, or mesh glass, catering to various privacy and aesthetic preferences with Some systems offer acoustic performance and Require height Options include fixed panels, Glass shutter Door, sliding doors, and foldable systems, allowing customization to fit specific spatial needs of Achitect/EIC.

1. MATERIALS

1.1 Glass

Glass : Shall Conform M38 page no-18 in General Technical Specification Booklet.

- Glass used for partition system shall be 10 mm to 12 mm thick toughened/laminated glass of approved make and quality.
- Glass type shall be clear, frosted, laminated or mesh glass as specified in approved drawings.
- Glass shall be free from bubbles, waviness, scratches and visible defects.
- Exposed edges shall be machine cut and polished smooth.
- Toughened and laminated glass shall conform to relevant IS standards suitable for partition applications.

1.2 Aluminium Frame

Aluminium Doors, Windows, Hold Fast : Shall Conform M31 page no-17 in General Technical Specification Booklet.

- Slim aluminium framing sections shall be high-grade extruded aluminium profiles of size 25 mm × 45 mm or approved equivalent.
- Aluminium sections shall be powder coated/anodized in approved shade and finish.
- Sections shall be straight, true to profile and free from dents, twists and surface defects.
- Aluminium shall possess adequate strength and rigidity suitable for partition applications.

1.3 Powder Coating Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

- Powder coating finish shall be factory applied of approved colour, texture and thickness.
- Finish shall be smooth, uniform, durable and resistant to scratches and corrosion.

1.4 Acoustic Insulation Materials (Where Specified)

- Acoustic sealing strips, gaskets or insulation materials shall be of approved make suitable for acoustic partition systems.
- Materials shall provide effective sound insulation and vibration control.

1.5 Hardware and Accessories

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Hinges, sliding tracks, rollers, handles, locks, floor springs, stoppers, pivots, channels, brackets, screws and accessories shall be of approved make and quality.
- Hardware shall be suitable for fixed panels, glass doors, sliding systems and foldable partition systems as specified.
- All hardware shall be corrosion resistant and durable.

1.6 Sealants and Gaskets

- Silicone sealants, EPDM/rubber gaskets and glazing accessories shall be of approved make suitable for glass partition applications.
- Sealants shall provide airtight, watertight and vibration-free fixing.

1.7 Stainless Steel Accessories (Where Required)

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Stainless steel fittings and connectors, wherever required, shall be SS 304 grade with approved finish.

1.8 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Glass partition system shall be executed strictly as per approved drawings, approved sample and instructions of Architect / Engineer-in-Charge.
- Partition system may include fixed panels, glass shutter doors, sliding doors and foldable systems as specified.
- Completed work shall be structurally stable, aesthetically finished and suitable for intended acoustic and functional performance.
- Work shall include fabrication, glazing, hardware fixing and installation complete in all respects.

2.2 Aluminium Frame Fabrication

- Aluminium profiles shall be accurately cut, machined and assembled true to required dimensions.
- Frame joints shall be properly mitred, mechanically fixed and neatly finished.
- Frames shall be rigidly anchored to floor, wall and ceiling supports.
- Alignment shall be true to line, level and plumb.

2.3 Glass Installation

- Glass panels shall be accurately cut and installed carefully without edge damage.
- Glass shall be fixed using approved glazing channels, rubber gaskets, sealants and fixing accessories.
- Necessary expansion gaps and tolerances shall be maintained.
- Glass shall remain firmly fixed without vibration or looseness.

2.4 Door and Sliding System Installation

- Glass shutter doors, sliding doors and foldable systems shall be installed using approved hardware and track systems.
- Door shutters shall operate smoothly without obstruction or excessive friction.
- Sliding and foldable systems shall move freely and align properly in closed position.
- Locks, handles and stoppers shall function properly.

2.5 Acoustic Treatment

- Acoustic seals, gaskets and insulation accessories shall be installed wherever specified.
- Joints shall be sealed properly to minimize sound transmission.
- Partition system shall provide required acoustic performance as approved.

2.6 Sealant and Joint Finishing

- Silicone sealants shall be neatly applied at glass-to-frame interfaces and joints.
- Excess sealant shall be cleaned properly after application.
- Finished joints shall be smooth, airtight and aesthetically acceptable.

2.7 Surface Finish

- Powder coated aluminium surfaces shall remain free from scratches, dents or coating damage.
- Glass surfaces shall be clean, transparent and stain free.
- Entire installation shall present uniform and premium finish.

2.8 Alignment and Appearance

- Installed partition system shall be perfectly level, plumb and aligned.
- Panel joints and frame lines shall remain straight and consistent.
- No visible gaps, distortions or defective workmanship shall be permitted.

2.9 Cleaning and Protection

- Completed partition work shall be protected from scratches, stains and damage until handing over.
- Final cleaning of glass, aluminium frame and hardware shall be carried out before completion.
- Damaged glass panels, hardware or finishes shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Square metre** of finished glass partition area actually installed and approved.

Item No – 49

Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily. Double charge vitrified tile polished finish of size Of Tile 600x1200mm

1. MATERIALS

1.1 Vitrified Tiles

Flooring Tiles : Shall Conform M47 page no-22 in General Technical Specification Booklet.

- Vitrified tiles shall be double charge polished vitrified tiles of size 600 mm × 1200 mm of approved make, shade, colour and texture.
- Tiles shall conform to IS 15622.
- Water absorption shall not exceed 0.08%.
- Tiles shall be rectified, machine finished and free from cracks, chips, warpage and manufacturing defects.
- Tile thickness shall be as specified by manufacturer and suitable for heavy-duty floor applications.
- Tiles shall possess uniform shade, smooth polished finish and accurate dimensions.

1.2 Cement

Cement : Shall Conform M3 page no-9 in General Technical Specification Booklet.

- Cement used for bedding mortar, slurry and grouting shall be of approved quality conforming to relevant IS standards.

1.3 Sand

Sand : Shall Conform M6 page no-10 in General Technical Specification Booklet.

- Sand used for cement mortar shall be clean, coarse and free from silt, organic matter and harmful impurities.

1.4 Cement Mortar

Cement Mortar : Shall Conform M11 page no-11 in General Technical Specification Booklet.

- Bedding mortar shall consist of 20 mm thick cement mortar in proportion 1:4 (1 cement : 4 coarse sand).
- Mortar shall be mixed uniformly and used fresh.

1.5 Grey Cement Slurry

Cement : Shall Conform M3 page no-9 in General Technical Specification Booklet.

- Grey cement slurry shall be prepared using approved quality cement at the rate of 3.3 kg/sqm for proper bonding of tiles.

1.6 White Cement and Pigments

White Cement : Shall Conform M4 page no-9 in General Technical Specification Booklet.

- White cement used for grouting shall be of approved quality.
- Matching colour pigments shall be added to achieve approved joint shade.

1.7 Tile Adhesive (Where Required)

- Approved tile adhesive, wherever specified, shall conform to relevant IS standards suitable for vitrified tile applications.

1.8 Tile Spacer and Levelling Accessories

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Tile spacers, wedges, clips and levelling accessories shall be of approved quality.
- Levelling system shall ensure even surface finish and uniform joints.

1.9 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for mortar, slurry, cleaning and curing shall be clean and free from harmful impurities.

2. WORKMANSHIP

2.1 General

- Vitrified tile flooring work shall be executed strictly as per approved drawings, approved sample and instructions of Engineer-in-Charge.
- Tiles shall be laid true to line, level, slope and pattern.
- Finished flooring shall be smooth, even and free from hollowness, lippage or visible defects.
- Work shall include surface preparation, cutting, laying, grouting, cleaning and finishing complete in all respects.

2.2 Surface Preparation

- Base surface shall be properly cleaned and prepared before laying mortar bed.
- Surface shall be free from dust, loose particles, oil and laitance.
- Necessary levels and slopes shall be checked before commencement.

2.3 Laying of Cement Mortar Bed

- Tiles shall be laid over 20 mm thick cement mortar bed of proportion 1:4.
- Mortar bed shall be evenly spread and properly compacted to required level and slope.

- Mortar shall be prepared fresh and used immediately after mixing.

2.4 Tile Cutting

- Tiles shall be cut accurately using zero-chipping diamond cutter only.
- Cut edges shall be smooth, true and free from chipping or damage.
- Minimum possible cut pieces shall be used at edges and corners.

2.5 Tile Laying

- Grey cement slurry @ 3.3 kg/sqm shall be spread uniformly over mortar bed before laying tiles.
- Tiles shall be laid using notch trowel, wedges, clips, pliers and tile levelling system.
- Rubber mallet shall be used gently to ensure proper bedding and levelling.
- Tiles shall be properly aligned maintaining uniform joints and pattern continuity.
- Finished flooring shall remain free from lippage and unevenness.

2.6 Jointing and Grouting

- Tile joints shall be filled with white cement mixed with matching pigment.
- Grouting shall be compact, smooth and flush with tile surface.
- Excess grout shall be cleaned immediately after application.

2.7 Alignment and Finish

- Flooring shall be perfectly level and true to required slope.
- Surface shall possess uniform polished appearance throughout.
- No hollow sound, cracked tile, chipped edge or uneven joint shall be permitted.

2.8 Cleaning and Protection

- Finished flooring shall be cleaned thoroughly after grouting.
- Flooring shall be protected from traffic, stains and damage until completion.
- Damaged or defective tiles shall be replaced without additional cost.

2.9 Curing

- Cement mortar bed and joints shall be properly cured for minimum specified duration as per standard practice.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Square metre** of finished vitrified tile flooring area.

Item No – 52

Flush Door With Both Side Laminate - Providing and fixing 35 mm thick shutters for Doors with Both side Laminate including Indian teak Wood Frame including black enamelled iron oxidized fixtures and fastenings and necessary hardware such as hinges, door stopper, door closer, handle, mortice lock etc, complete.

1. MATERIALS

1.1 Flush Door Shutter

Wooden Flush Door Shutters (Solid Core) : Shall Conform M30 page no-16 in General Technical Specification Booklet.

- Door shutter shall be 35 mm thick solid core flush door shutter of approved make and quality.
- Shutter shall be made from seasoned timber framework with solid/hollow core construction as per IS standards.
- Shutter shall be free from warping, twisting, delamination and manufacturing defects.
- Both sides of shutter shall be finished with approved decorative laminate.

1.2 Decorative Laminate

- Decorative laminate shall be of approved make, shade, texture and finish.
- Laminate thickness shall be minimum 1.0 mm unless otherwise specified.
- Laminate shall be resistant to scratches, stains and moisture.
- Adhesive used for fixing laminate shall conform to relevant IS standards.

1.3 Teak Wood Frame

Teak Wood : Shall Conform M29 page no-15 in General Technical Specification Booklet.

- Door frame shall be made from seasoned Indian teak wood of approved section size.
- Timber shall be kiln dried and chemically treated against termite and moisture attack.
- Teak wood shall be free from knots, cracks, sapwood and other defects.
- Frame surfaces shall be smooth, properly planed and true to dimensions.

1.4 Fixtures and Fastenings

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Necessary hardware such as hinges, handles, mortice lock, tower bolt, stopper, screws, holdfasts and fasteners shall be of approved make and quality.
- Fixtures shall be black enamelled iron oxidized finish unless otherwise specified.
- Hardware shall be durable, corrosion resistant and suitable for door applications.

1.5 Door Closer

- Door closer shall be hydraulic type of approved make and suitable capacity.
- Door closer shall ensure smooth and noiseless operation of shutter.

1.6 Adhesives

- Adhesives used for laminate fixing and joinery work shall conform to IS 848.
- Adhesive shall provide durable bonding and moisture resistance.

1.7 Paint and Polish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

French Polish : Shall Conform M45 page no-21 in General Technical Specification Booklet.

- Teak wood frame shall receive approved polish/paint finish as specified.
- Finish shall be smooth, durable and aesthetically acceptable.

1.8 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and finishing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Flush door work shall be executed strictly as per approved drawings, approved sample and instructions of Engineer-in-Charge.
- Door shutters and frames shall be installed true to line, level and plumb.
- Finished door assembly shall operate smoothly without binding, twisting or rattling.
- Work shall include fabrication, laminate fixing, hardware fixing and installation complete in all respects.

2.2 Door Frame Fixing

- Teak wood frames shall be accurately cut, jointed and assembled true to required dimensions.
- Frames shall be fixed rigidly in position with approved holdfasts and fasteners.
- Frames shall be checked for plumb, level and alignment before fixing shutter.
- Joints shall be neat and properly finished.

2.3 Door Shutter Preparation

- Flush door shutters shall be factory manufactured or fabricated as approved.
- Both sides of shutter shall be laminated using approved adhesive under proper pressure.
- Laminate finish shall be smooth, bubble free and uniformly bonded.
- Exposed edges shall be properly lipped and finished.

2.4 Hardware Fixing

- Hinges shall be properly recessed and securely fixed with screws.
- Mortice lock, handles, stopper, tower bolts and other accessories shall be accurately fitted.
- Door closer shall be installed as per manufacturer's recommendations.
- Hardware fixing shall ensure smooth and proper functioning.

2.5 Alignment and Operation

- Door shutter shall maintain uniform clearance with frame.
- Door shall open and close smoothly without obstruction.
- Finished installation shall remain rigid and free from vibration or noise.

2.6 Surface Finishing

- Wooden frame surfaces shall be sanded smooth before application of finish.
- Necessary coats of polish/paint shall be uniformly applied.
- Laminate surfaces shall remain clean and free from scratches, dents or adhesive marks.

2.7 Cleaning and Protection

- Completed door work shall be protected from stains, scratches and damage until handing over.
- Hardware and laminate surfaces shall be cleaned properly after installation.
- Damaged shutter, laminate, frame or hardware shall be repaired or replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Square metre** of door shutter area.

Item No – 53

CARPET FLOORING

Providing and fixing Loop pile carpet made From The Finest Nylon Yarn With Action Backing With Fixed Colors. Loop Pile Carpets comes with Super Extra Heavy Quality, Multi Color Look, Soft Touch With Super High Density, Soil Proof, Color Fast Anti Skid & Anti Allergy. Pile carpet with In level loop pile carpets, the loops are of a consistent length, which creates a relatively level & even look, or more usually, the loops are intended to form a patterned & textured appearance. Some carpet styles blend both loop & cut piles to produce unique patterns. complete as directed by architect and engineer in charge.

1. MATERIALS

1.1 Carpet Flooring

- Carpet flooring shall be loop pile carpet made from finest quality nylon yarn with action backing of approved make and quality.
- Carpet shall be super extra heavy-duty quality with high-density pile construction suitable for commercial/institutional applications.
- Carpet shall possess soft touch finish, anti-skid properties, anti-allergy characteristics and soil-resistant surface.
- Carpet shall be colour fast and resistant to fading under normal usage conditions.
- Carpet shall be available in fixed approved colours, patterns and textures as selected by Architect.

1.2 Loop Pile Construction

- Carpet shall consist of in-level loop pile construction where loops remain of consistent length to create uniform appearance.
- Patterned/textured loop pile carpet or combination of loop and cut pile construction may be provided as approved.
- Carpet pile shall remain uniform, dense and firmly bonded to backing.

1.3 Backing Material

- Carpet backing shall consist of action backing or approved equivalent suitable for heavy-duty flooring applications.
- Backing shall provide dimensional stability, anti-skid performance and long service life.
- Backing material shall be resistant to moisture and deformation.

1.4 Adhesives

- Adhesive used for carpet fixing shall be approved heavy-duty flooring adhesive suitable for nylon carpet applications.
- Adhesive shall provide durable bonding with floor surface and backing material.

- Adhesive shall be resistant to moisture and ageing.

1.5 Underlay (Where Specified)

- Underlay material, wherever specified, shall be of approved make and density suitable for carpet flooring.
- Underlay shall provide cushioning, acoustic comfort and enhanced durability.

1.6 Fixtures and Accessories

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Necessary accessories such as edge trims, transition strips, gripper strips, fixing tapes and fasteners shall be of approved make and quality.
- Accessories shall provide neat and durable finishing.

1.7 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning purposes shall be clean and free from harmful impurities.

2. WORKMANSHIP

2.1 General

- Carpet flooring work shall be carried out strictly as per approved drawings, approved sample and instructions of Architect / Engineer-in-Charge.
- Carpet shall be laid true to line, pattern and alignment.
- Finished carpet flooring shall present smooth, wrinkle-free and aesthetically uniform appearance.
- Work shall include surface preparation, cutting, laying, jointing and finishing complete in all respects.

2.2 Surface Preparation

- Base floor surface shall be cleaned thoroughly before carpet installation.
- Surface shall be dry, level, smooth and free from dust, grease, loose particles or irregularities.
- Any unevenness or defects in floor surface shall be corrected before laying carpet.

2.3 Carpet Cutting and Preparation

- Carpet rolls/tiles shall be accurately measured and cut true to required dimensions.
- Carpet pattern and pile direction shall be maintained uniformly throughout installation.
- Cut edges shall be straight and neatly finished.

2.4 Carpet Laying

- Carpet shall be fixed using approved adhesive uniformly applied over prepared surface.
- Carpet shall be pressed properly to ensure complete bonding without air pockets.
- Necessary stretching and alignment shall be carried out to avoid wrinkles, bubbles or loose portions.
- Joints shall be minimum possible width and properly aligned.

2.5 Jointing and Edge Finishing

- Carpet joints shall be neat, straight and inconspicuous.
- Necessary edge trims, transition strips and finishing accessories shall be properly fixed.
- Carpet edges near walls, corners and openings shall be neatly tucked and finished.

2.6 Pattern and Pile Alignment

- Carpet pattern, texture and pile direction shall remain consistent throughout flooring area.
- Loop pile and textured appearance shall remain uniform without visible mismatch.

2.7 Appearance and Performance

- Finished carpet flooring shall be smooth, firm and free from wrinkles, bulges or visible adhesive marks.
- Carpet shall provide soft, comfortable and anti-skid walking surface.
- Installation shall ensure proper acoustic and aesthetic performance.

2.8 Cleaning and Protection

- Carpet flooring shall be cleaned properly after installation.
- Completed carpet shall be protected from moisture, stains and physical damage until handing over.
- Damaged or defective carpet portions shall be replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Square metre** of finished carpet flooring area actually laid and approved.

Item No – 54

INVISIBLE GRILL WORK:Providing and fixing Invisible grills for balconies made with high-tensile stainless steel cables ss 316 grade 18 gauge with spacing not more than 50 mm , coated with nylon for rust and dust prevention , to provide safety from entering birds and provide aesthetics and safety by maintaining an unobstructed view. The grill is made partially openable so that it is fixed on a periferal alluminum tube section of 75 mm x 25 mm and 2mm thick with anodizing 10mm fastner fixed on the balcony with standard hardware like hinges, screws and stoppers to make partially openable . The openable and fixed section are to be fitted with Tube section for firm gripping.The anodizing colour is as per the drawinga and architect selection.

INVISIBLE GRILL WORK

1. MATERIALS

1.1 Stainless Steel Cable

- Invisible grill shall consist of high-tensile Stainless Steel (SS) 316 Grade cables of minimum 18 gauge thickness.

- Stainless steel cables shall possess high tensile strength and corrosion resistance suitable for exterior applications.
- Cables shall be factory coated with UV-resistant transparent nylon coating for protection against rust, dust, weathering and abrasion.
- Spacing between adjacent cables shall not exceed 50 mm center-to-center or as specified in approved drawings.

1.2 Aluminium Peripheral Frame

- The grill system shall be supported on aluminium tube sections of size 75 mm × 25 mm and minimum 2.0 mm thickness.
- Aluminium sections shall be extruded from approved alloy conforming to relevant IS standards.
- Aluminium members shall be free from dents, twists, bends and manufacturing defects.
- Surface finish shall be anodized in approved colour and shade as selected by the Architect.

1.3 Openable Frame Assembly

- Partially openable panels shall be fabricated using matching aluminium tube sections and reinforcement members.
- Openable shutters shall be designed to permit maintenance access while maintaining structural integrity and safety.
- Additional aluminium sections shall be provided wherever necessary for firm gripping and cable anchorage.

1.4 Hardware and Accessories

- Hardware shall include SS 304/SS 316 fasteners, hinges, locking arrangements, stoppers, cable tensioners, anchor bolts, brackets, cleats, end fittings and all accessories required for complete installation.
- Fasteners shall be minimum 10 mm diameter anchor fasteners or as recommended by the system manufacturer.
- All hardware exposed to weather shall be corrosion resistant.

1.5 Cable Tensioning System

- Stainless steel cables shall be fixed using approved tensioning devices capable of maintaining uniform tension throughout the installation.
- Tensioning accessories shall be designed to prevent cable sagging, loosening or displacement during service life.

2. WORKMANSHIP

2.1 General

- Invisible grill system shall be manufactured, supplied and installed strictly in accordance with approved drawings, approved samples and directions of the Engineer-in-Charge.
- Installation shall provide safety against accidental falls, entry of birds and maintain maximum unobstructed external view.
- Finished installation shall be rigid, secure, aesthetically uniform and free from visible defects.

2.2 Aluminium Frame Installation

- Aluminium peripheral frame shall be accurately fabricated and securely fixed to balcony slab, beam, wall or structural members using approved anchor fasteners.
- Frames shall be aligned true to line, level and plumb.
- Necessary reinforcement members shall be provided to ensure structural stability.

2.3 Cable Installation

- Stainless steel cables shall be installed vertically or as indicated in approved drawings.
- Cable spacing shall not exceed 50 mm centre-to-centre.
- Cables shall be tensioned uniformly using approved tensioning devices.
- Installed cables shall remain straight, taut and free from sagging.

2.4 Openable Section

- Openable portion shall be fabricated and installed with approved hinges, locking arrangement and stoppers.
- Openable panels shall operate smoothly without obstruction.
- Locking system shall securely hold the panel in closed position during normal use.
- Additional tube sections shall be provided at fixed and openable portions for proper anchorage and rigidity.

2.5 Surface Finish

- Aluminium sections shall be anodized in approved colour and finish.
- Finished surfaces shall be free from scratches, dents, stains, oxidation marks and visible defects.
- Nylon coating on cables shall remain intact without peeling, cracking or damage.

2.6 Tolerances

- Cable alignment shall be straight and uniform throughout the installation.
- Variation in cable spacing shall not exceed ± 3 mm.
- Frames shall be installed without distortion, twisting or visible misalignment.

2.7 Cleaning and Protection

- Completed installation shall be thoroughly cleaned.
- Protective films on aluminium sections shall be removed after completion of work.
- Contractor shall protect the installation from damage until project handover.
- Damaged cables, fittings or frame components shall be replaced at no additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall be carried out in **Square Metres (Sq.m.)** of actual installed invisible grill area measured along the finished face of the grill system.

- No separate measurement shall be made for openable sections, aluminium framing, cable tensioning devices, hinges, locks, stoppers, fasteners or accessories.

3.2 Payment

- Rate shall include supply and installation of SS 316 high-tensile cables with nylon coating, aluminium peripheral frame, openable sections, cable tensioning system, hinges, locks, stoppers, anchor fasteners, brackets and all accessories required for complete execution.
- Rate shall include fabrication, anodizing, cable fixing, tensioning, transportation, loading, unloading, handling, installation, testing, protection and cleaning.
- Rate shall include all labour, materials, tools, plants, machinery, scaffolding and incidental works required to complete the item.
- No separate payment shall be made for hardware, fasteners, hinges, locking arrangements, cable tensioners, wastage, access equipment or protection works.
- The item shall be executed complete as per approved drawings, approved samples and directions of the Engineer-in-Charge at all floors, all levels and all heights

Item No – 55 to 72

Providing, supplying and installation of Kitchen equipment of SS 304 and make it functional while commissioning for all mentioned equipments, with respect to all general arrangement drawings and associated support system for its placement and connection system of LPG or PNG gas supply system to ensure the leak proof and hazard proof connection with their instructions and manuals. Any change in size or location as per the requirements are to be done, as per instructions of archSitect and Engineer incharge.(PNG/ LPG supply is in the clients scope)

SS STORAGE RACK 4 TIER of Size (1650x450x1500)

WORK TABLE WITH FRYER (500x900x850)

THREE BURNER RANGE(1650x700x850)

WORK TABLE WITH SINK(600x900x850)

WORK TABLE WITH 2 U/S (450x900x850)

WORK TABLE WITH 2 U/S (1550x450x850)

PICK UP TABLE WITH 2 U/S WITH 2 OHS (1000x800x850)

FOUR BURNER RANGE (900x900x850)

SINGLE SINK UNIT (800 X 800 X 850)

CLEAN DISH TABLE (800 X 800 X 850)

POT RACK 4 TIER (1050 X 600 X 1500)

SS EXHAUST HOOD WITH BUFFLE FILTER (1650 X 850 X 500)

SS EXHAUST HOOD WITH BUFFLE FILTER (900 X 1050 X 500)

Electric combi Oven

50 KG Stainless Steel Grain Storage Big Containers

25 KG Stainless Steel Grain Storage Big Containers

Tava Roti

Bean Marry

1. MATERIALS

1.1 Stainless Steel

- All kitchen equipment shall be manufactured from food-grade Stainless Steel SS 304 of approved make and quality.
- Stainless steel sheets, pipes and sections shall be corrosion resistant, non-reactive and suitable for commercial kitchen use.
- Stainless steel surfaces shall possess smooth satin/matt finish free from dents, waviness, sharp edges and fabrication defects.
- Minimum thickness of SS sheet shall be as per approved drawings and equipment requirements.

1.2 Structural Framework

Structural Steel : Shall Conform M22 page no-14 in General Technical Specification Booklet.

- Supporting framework, reinforcement members and structural supports wherever required shall be made from approved quality structural steel/stainless steel sections.
- Members shall possess adequate rigidity and load-bearing capacity.

1.3 Stainless Steel Storage Rack / Pot Rack

- Storage racks and pot racks shall be fabricated from SS 304 sections and shelves.
- Shelves shall be rigid, level and capable of carrying required storage load.
- Rack assembly shall be corrosion resistant and easy to clean.

1.4 Burner Range Units

- Three burner and four burner cooking ranges shall be commercial-grade heavy-duty units suitable for LPG/PNG operation.
- Burners shall provide uniform flame and efficient combustion.
- Gas piping connections, valves and fittings shall be leak-proof and safe in operation.
- Knobs and control valves shall be heat resistant and durable.

1.5 Work Tables

- Work tables shall be fabricated from SS 304 with reinforced top surface.
- Undershelves (U/S) and overshelves (OHS) shall be properly supported and rigidly fixed.
- Table tops shall be smooth, level and hygienic.

1.6 Sink Units

- Sink bowls shall be deep drawn stainless steel with smooth corners and hygienic finish.
- Drain outlets, waste couplings and plumbing connections shall be properly fixed.
- Sink units shall include splash backs wherever specified.

1.7 Exhaust Hood

- Exhaust hood shall be fabricated from SS 304 sheet with necessary stiffeners and supports.
- Hood shall be complete with removable SS baffle filters.
- Hood shall effectively collect fumes, smoke and vapours from cooking area.

1.8 Electric Combi Oven

- Electric combi oven shall be of approved make and commercial grade suitable for institutional kitchen operation.
- Unit shall include digital/manual control system and all standard accessories.
- Electrical connections shall conform to safety standards.

1.9 Stainless Steel Grain Storage Containers

- Grain storage containers shall be fabricated from food-grade SS 304.
- Containers shall have proper lid arrangement and smooth hygienic finish.
- Capacity shall be suitable for 25 kg and 50 kg storage respectively.

1.10 Tava Roti / Bain Marie

- Tava roti unit and Bain Marie shall be commercial-grade SS 304 kitchen equipment suitable for continuous operation.
- Heating system, controls and accessories shall be of approved make.

1.11 Gas Supply Accessories

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Necessary gas valves, regulators, connectors, flexible hoses, clamps and fittings shall be approved for LPG/PNG systems.
- All gas accessories shall ensure leak-proof and hazard-proof operation.

1.12 Fasteners and Fixtures

Fixtures and Fastenings : Shall Conform M43 page no-19 in General Technical Specification Booklet.

- Nuts, bolts, screws, brackets, anchors and fixing accessories shall be stainless steel or corrosion resistant type.
- Hardware shall provide rigid and durable installation.

1.13 Paint and Protective Finish

Paints : Shall Conform M44 page no-21 in General Technical Specification Booklet.

- Supporting members and non-SS exposed components wherever applicable shall receive approved protective coating.

1.14 Water

Water : Shall Conform M1 page no-9 in General Technical Specification Booklet.

- Water used for cleaning and testing shall be clean and free from impurities.

2. WORKMANSHIP

2.1 General

- Kitchen equipment work shall be executed strictly as per approved drawings, kitchen layout, equipment schedule and instructions of Architect / Engineer-in-Charge.
- Work shall include supply, fabrication, transportation, installation, testing and commissioning complete in all respects.
- Equipment layout and arrangement shall match approved general arrangement drawings.

2.2 Fabrication

- SS fabrication shall be carried out using precision cutting, bending and welding techniques.
- Welded joints shall be smooth, continuous and properly finished.
- Exposed edges and corners shall be rounded and safe in handling.
- Fabricated units shall be rigid, hygienic and aesthetically finished.

2.3 Installation

- Equipment shall be installed at approved location, level and alignment.
- Necessary supports, brackets and anchoring arrangements shall be provided.
- Equipment shall remain stable and vibration free during operation.

2.4 Gas Connection Work

- LPG/PNG connection system shall be installed using approved gas fittings and accessories.
- All gas connections shall be leak-proof and safe.
- Necessary valves, regulators and shut-off arrangements shall be provided.
- Gas pipeline connection shall comply with applicable safety requirements.
- PNG/LPG supply source shall remain in client scope.

2.5 Electrical Connections

- Electrical equipment shall be connected using approved wiring and safety accessories.
- Proper earthing and protection systems shall be ensured.
- Equipment shall be tested before commissioning.

2.6 Exhaust Hood Installation

- Exhaust hood shall be rigidly suspended/fixed with proper supports.
- Baffle filters shall be removable and easily cleanable.
- Hood alignment and suction coverage shall match cooking equipment layout.

2.7 Sink and Drainage Connections

- Sink units shall be connected properly with drainage line.
- Waste fittings and traps shall be leak-proof.
- Sink surface shall maintain proper drainage slope.

2.8 Testing and Commissioning

- All equipment shall be tested for proper operation and performance.

- Gas connections shall be checked for leakage.
- Electrical systems shall be tested for safe functioning.
- Equipment shall be commissioned in working condition along with operational manuals and manufacturer instructions.

2.9 Cleaning and Finishing

- All SS surfaces shall be cleaned after installation.
- Surface shall remain free from stains, welding marks and scratches.
- Protective films shall be removed after completion.

2.10 Protection

- Installed equipment shall be protected from damage until handing over.
- Defective or damaged components shall be repaired/replaced without additional cost.

3. MODE OF MEASUREMENT AND PAYMENT

3.1 Measurement

- Measurement shall generally be carried out in **Number (Nos.)**

**Deputy Executive Engineer
Shahibaug (R&B) Sub Division
Ahmedabad**

**Executive Engineer
Ahmedabad City (R&B) Division
Ahmedabad**