

Technical specifications

Item No 01 : Providing and fixing modular wardrobe with loft using 16–18 mm thick calibrated BWR grade plywood conforming to IS 710, complete as per approved drawings and Engineer-in-Charge instructions. All exposed inner faces and niche openings finished with 0.8 mm laminate, and shutters finished on both sides with high-pressure decorative laminate (HPL). Shutters and panels bonded using marine grade adhesive, ensuring smooth, even and aligned finish. All exposed edges sealed with 1 mm thick PVC edge banding using automatic edge banding machine with pre-milling process. Shutters fixed with auto-closing concealed hinges with clip-on mechanism and full adjustability for proper alignment. Including all hardware such as SS handles, magnets, fasteners, door straighteners and accessories of approved make. Complete fabrication, supply and installation including adhesives, labour, tools, transport and finishing, ensuring level, aligned and defect-free work. Measurement in sqm of front elevation area, complete in all respects as per specifications and approved design.

Scope of Work

Providing and fixing modular wardrobe with loft, fabricated using **16–18 mm thick calibrated BWR grade plywood conforming to IS 710**, complete as per approved drawings and instructions of the Engineer-in-Charge (EIC).

The work shall include design, fabrication, supply, and installation of wardrobe with loft, comprising shutters, carcass framework, and necessary supporting members, complete in all respects.

Material Specifications

1. Plywood

- All shutters, framing members, vertical supports, loft structure, pelmet, and exposed components shall be made from **16–18 mm thick calibrated BWR grade plywood (IS 710)**.
- Framing members shall be of adequate width (approx. 90- 100 mm) to ensure rigidity and structural stability.

2. Laminate Finish

- **Shutters (both wardrobe and loft):**
 - Finished on **both sides** with **high-pressure decorative laminate (HPL)** of approved shade and texture.
- **Pelmet and visible outer surfaces:**
 - Finished with **0.8 mm thick decorative laminate**.
- **Internal faces (limited to exposed inner faces, framing members, and niche openings):**
 - Finished with **0.8 mm thick non-decorative laminate**.
- All laminates shall be fixed using **marine grade adhesive**, ensuring smooth, bubble-free, and uniform finish.

3. Edge Finishing

- All exposed edges of plywood shall be sealed with **1 mm thick PVC edge banding**, applied using **automatic edge banding machine with pre-milling, trimming, buffing, and finishing**, ensuring smooth and durable edges.

4. Adhesives

- **Marine grade synthetic resin adhesive (Fevicol Marine or equivalent)** to be used for all laminate bonding.
- **PUR adhesive** may be used additionally for machine application as required.
- **Epoxy adhesive** to be used for specialized fixing where required.

5. Hardware & Fittings

Providing and fixing all necessary hardware of approved make such as **Häfele / Hettich / Godrej**, including:

- **Auto-closing concealed hinges** with clip-on mechanism and full adjustability
- **Stainless steel (SS) handles (minimum 8")**.
- **Magnetic catches as per instruction of EIC**.
- **Dimensions of Door straighteners for shutters will be decided by EIC considering approved make and available models**.
- **Fasteners, screws, connectors, and fixing accessories are to be used as per instruction of engineer incharge**.
- **Miscellaneous hardware, fillers, and support fittings**.

Fabrication & Installation

- All components shall be **machine cut, accurately sized, and factory-finished**.
- Assembly shall be done using approved **adhesives, screws, and mechanical fasteners**.
- The wardrobe shall be installed **true to line, level, plumb, and properly aligned**.
- Proper shutter alignment, smooth operation, and uniform gap maintenance shall be ensured.
- Necessary **site adjustments, cut-outs, and finishing** shall be included.

Measurement

- Measurement shall be in **square meters (sqm) of front elevation area** of wardrobe and loft shutters only.
- Rate shall include **all materials, labour, adhesives, hardware, transport, tools, and installation**, complete in all respects.
- Rate is including samples required for testing. From total ready material Random 1 % finished material will be taken from the site for testing. There will not be any separate payment for the testing sample. In case of testing failure of the sample agency has to redo whole batch of work.

Item No: - 2

Providing and fixing modular kitchen cabinet work, constructed using 16–18 mm thick calibrated BWR grade plywood conforming to IS 710, including partitions, shelves, 5- drawer components, finished with 0.8 mm thick decorative laminate on external surfaces and 0.8 mm thick non-decorative laminate on internal surfaces. All exposed edges shall be sealed with PVC edge banding of approved make. The work shall include providing and fixing tandem drawer systems (including standard and pot & pan units) of approved make list, along with heavy-duty concealed hinges, stainless steel handles, and all necessary hardware fittings. Drawers and shutters shall be properly aligned and finished with smooth operation. The item shall include all fixtures, fasteners, adhesives, labour, fabrication, transportation, installation, wastage, and complete finishing as per approved drawings and instructions of the Engineer-in-Charge.

Scope of Work

Providing and fixing modular kitchen cabinet work fabricated using 16–18 mm thick calibrated BWR grade plywood conforming to IS 710, complete as per approved drawings and instructions of the Engineer-in-Charge (EIC).

The work shall include design, fabrication, supply, transportation, and installation of complete modular kitchen system comprising base cabinets, drawer units and necessary supporting framework complete in all respects.

Material Specifications

1. Plywood

- All cabinet shutters, partitions, shelves, vertical supports, drawer structures, and exposed components shall be made from 16–18 mm thick calibrated BWR grade plywood conforming to IS 710.
- Structural framing members shall be of adequate width and thickness to ensure rigidity, load-bearing capacity, and long-term durability.
- Back support members and stiffeners shall be provided wherever required for structural stability.

2. Laminate Finish

External Visible Surfaces

- All shutters, drawer fronts, exposed outer surfaces shall be finished with 0.8 mm thick decorative laminate of approved shade, texture, and finish.

Internal Surfaces

- Internal faces of cabinets, shelves, partitions, and drawer components shall be finished with 0.8 mm thick non-decorative laminate.

Laminate Fixing

- All laminates shall be fixed using marine grade synthetic resin adhesive ensuring:
 - Smooth and even surface finish
 - Bubble-free application
 - Proper bonding without peeling or warping
 - Uniform alignment and finishing

3. Edge Finishing

- All exposed plywood edges shall be sealed with approved 1 mm thick PVC edge banding.
- Edge banding shall be applied using automatic edge banding machine with pre-milling, trimming, buffing, and finishing process.
- Finished edges shall be smooth, moisture-resistant, and durable.

4. Adhesives

- Marine grade synthetic resin adhesive (Fevicol Marine or equivalent approved make) shall be used for laminate bonding.
- PUR adhesive may additionally be used for machine application wherever required.
- Epoxy adhesive shall be used for specialized fixing where necessary.

5. Hardware & Fittings

Providing and fixing all required hardware and fittings of approved make such as Häfele / Hettich / Godrej / Ebco, including:

Drawer Systems

- Heavy duty Tandem drawer systems with soft closing mechanism for modular kitchen with standard drawer and pot and pan drawer units need to be fixed.

Hinges

- Heavy-duty concealed auto-closing hinges of required degrees with clip-on mechanism and full adjustability needs to be used for the work.

Handles & Accessories

- Stainless steel (SS) handles of approved design and size.
- Magnetic catches, connectors, shelf supports, screws, fasteners, and fixing accessories.
- Miscellaneous fillers, support fittings, brackets, and alignment accessories as required.

Fabrication & Installation

- All components shall be machine cut, accurately sized, and factory finished.
- Assembly shall be done using approved adhesives, screws, connectors, and mechanical fasteners.
- Cabinets, shutters, and drawers shall be installed true to line, level, plumb, and properly aligned.
- Smooth operation of shutters and drawers shall be ensured.
- Uniform gaps, proper alignment, and finishing shall be maintained throughout the installation.
- Necessary site adjustments, cut-outs, grooves, notches, and finishing work shall be included in the item rate.
- Proper care shall be taken to avoid damage during transportation and installation.
- Drawers are to be fixed in plywood box with top, bottom, sides, and back.
- All plywood used to the work needs to be of 16 to 18 mm thickness.

Measurement

- Measurement shall be in square meters (sqm) of front elevation area of shutters and drawer fronts only.
- Rate shall include all materials, labour, adhesives, hardware, fittings, transportation, fabrication, wastage, tools, installation, and complete finishing in all respects.
- Rate shall include samples required for testing. Random 1% finished material may be taken from site for testing, and no separate payment shall be made for testing samples. In case of testing failure of the sample agency has to redo whole batch of work.

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