

1381
22/12/21

Sub: Data for SDOTE/OTE cases in vendor registration portal

Ref.: PV Letter No. 3210/Genl/PV/M1 Dt. 10/12/2021

As per referred letter, Manufacturing Technology and Testing/Inspection facility for Plywood Package as required is as below;

(1) Manufacturing Technology:

(a) Raw materials:

- (a.i) **Plywood:** Plywood used should confirm to IS-303-1989 specification and should be boiling water resistant. The one used for body shall be 3 ply x 6mm thick and that used for top cover 7 ply x 12 mm thick.
- (a.2) **Timber:** The Timber species used for wooden batton and bottom shall be these listed in appendix 'A' to specification IND/ME/883(e) Prov.
- (a.3) **Glue:** Glue used for fixing corrugated paper with plywood should confirm to specification IND/ME/381(b).
- (a.4) **Lining:** The inside surface of the box is to be lined with two layers of 3 mm thick 3 ply double faced corrugated coarse flute cardboard to specification JSS 8135-08(20 Kgs resistance) stick to inner surface with case by glue as above specification of glue.
- (a.5) **Handle:** The package shall be provided with handle of 380 x 30 Nylon flexible woven strips 800 Kg minimum tensile strength on the opposite sites of the box fastened by means of 2 rivets to overhead Bifurcated rivets with split ends as given in drawings positioned at 80 mm from the top of box. The handle is to be tested to with-stand a test load of three times the filled mass of the box with a minimum load of 136 Kg.
- (a.6) **Iron strip:** The galvanized iron strip around the wooden frame should be 5 ± 1 mm so as to keep the metal strip away from the bottom there by avoiding any chance of friction.

(II) Process to manufacture Plywood package:

The construction and assembly of the package are to be in accordance with Drg. No. OFI/MA/SAP/163 (PROV.) R5. The body of the package shall be made of either 3 ply x 6 mm thick or 5 ply x 6mm thick. Boiling water resistant plywood to specification IS 303-1989 and shall be mounted on Galvanised iron angle strip 30 x 30 x 0.5 mm thick to IS 1573-1986 specification with rolled edges fastened to the body by means of nickel plated shap head rivets with split ends as given in drawing. The top cover to be made of 7 ply x 12mm thick plywood. BWR to specification IS 303-1989 as per drawing. The bottom to be made of 13mm Thick wood jointed and dovetailed nailed on a 50 x 20 mm frame bottom assembled on the body by means of 34/100 Galvanised steel strips 30 mm 1 inch width and nailed on the mount. The position of the strip should be at a distance of 5 ± 1.0 mm from the bottom of the case as indicated in the drawing. The nails should confirm to specification IS 723-1972. The nailing of the wooden bottom of the frame should be from the top of wooden plank. No nails should protrude at the bottom of the 50 x 20 mm wooden frame. The locking is to be done by means of self locking arrangement

as detailed in the drawing. All corners and sharp edges of the package and bottoms are to be smoothed.

Above manufacturing process are as per Specification for Plywood Package No. OFI/0005/SPN/A Dt. 02.09.94(Rev. No.5).

(2). Testing/Inspection Facility:

Sl. No.	Parameter	Testing Facility Required
1.	Moisture Content (Calculated on the dry material) for plywood material	As per Appendix 'B' of IS 303-1989.
2.	Moisture Content (Calculated on the dry material) for batten segments	As per IND/ME/883(e)
3.	Jolt Test	Bump test machine
4.	Drop Test	Concrete hard surface
5.	Stacking	----
6.	Salt Spray Test	5% Solution of Pure sodium Chloride in distilled water

Above testing/inspection facility requirement is as per Specification for Plywood Package No. OFI/0005/SPN/A Dt. 02.09.94 (Rev. No.5).


HOS/WI (Member)


HOS/LY (Member)


HOS/BP (Member)
M.N.Nandi


DO/BP (Chairman)

To,

DO/PV