Respected Sir,
Please help us interpret Clause 25.2 & 25.3 of IS 1293 standard.
As per IS:1293 2005, Cl.25.2 is not applicable for 3pin molded plugs, as PVC material has a maximum temperature rating of 105 °C.
As per IS:1293 2019, Cl.25.2 is applicable, ball pressure test at 125 °C, due to which our sample has failed & our license is under stop marking.
Request you to guide us, so we may accordingly take corrective action & submit fresh samples.

		Plates	meaning r this standards				
127	25.1	Resistance to heat	After the test, the marking shall be legible and safety is not impaired.	-	-	-	Satisfactory
128	25.1	Resistance to heat	After thr test the marking shall be legible and safety is not impaired	-	-	-	Satisfactory
129	25.2	Resistance to heat	Diameter of impression caused by ball shall not exceed 2 mm	-	-	-	Test Not Applicable
130	25.3	Resistance to heat	Diameter of impression caused by ball shall not exceed 2 mm	-	-	-	Less than 2 mm
131	25.4	Resistance to heat	Sample shall show no damage.	-	-	-	Satisfactory

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			washers or stirrups.				
30	25.4	RESISTANCE TO HEAT	After 1 h, the jaws are removed and the samples shall show no damage within the meaning of this standard	-	-	-	Satisfactory
31	25.3	RESISTANCE TO HEAT Parts of insulating material not necessary to retain current-carrying parts and parts of the earthing circuit in position, even though they are in contact with them	The diameter of the impression caused by the ball is measured and shall not exceed 2 mm.	-	-	-	Test Not Applicable
32	25.2	RESISTANCE TO HEAT Parts of insulating material necessary to retain current-carrying parts of the earthing circuit in position, as well as parts of the front surface zone of thermoplastic material	The diameter of the impression caused by the ball is measured and shall not exceed 2 mm.	-	2.0	mm	4.75 (mm)
33	25.1	RESISTANCE TO HEAT Accessories and surface mounting boxes	After the test, marking shall still be legible.	-	-	-	Satisfactory
34	25.1	RESISTANCE TO HEAT Accessories and surface mounting boxes	During the test, they shall not undergo any change impairing their further use, and sealing compound, if any, shall not flow to such an extent that live parts are exposed.	-	-	-	Satisfactory

each side of each cover or cover-plates which is fixed without screws on a mounting or supporting surfaces, as shown in Fig. 9. The face B resting on the mounting/ supporting surface, with the face A perpendicular to it, the gauge is applied at right angle to each side under test.

In the case of a cover or cover-plate fixed without screws to another cover, or cover-plate or to a mounting box, having the same outline dimensions, the face B of the gauge shall be placed at the same level as the junction; the outline of the cover or cover-plate shall not exceed the outline of the supporting surface.

The distances between the face C of the gauge and the outline of the side under test, measured parallel to face B, shall not decrease (with the exception for grooves, holes, reverse tapers or the like, placed at a distance less than 7 mm from a plane including face B and complying with the test of **24.18**) when measurements are repeated starting from point *x* in the direction of the arrow *y* (*see* Fig. 10).

24.18 A gauge according to Fig. 5, applied with a force of 1 N shall not enter more than 1.0 mm from the upper part of any groove, whole or reverse taper or the like when the gauge is applied parallel to the mounting/ supporting surface and at right angle to the part under test, as shown in Fig. 11.

NOTE — Verification as to whether the gauge according to Fig. 5 has entered more than 1.0 mm is made with reference to a surface perpendicular to face B and including the upper part of the outline of the grooves, holes, reverse tapers or the like.

25 RESISTANCE TO HEAT

Accessories and surface mounting boxes shall be resistant to heat.

Compliance is checked by:

a) for surface mounting boxes, separable covers, separable cover-plates and separable frames, by the test of **25.3**;

b) for portable accessories, with the exception of the parts, if any, covered by (a), by the tests of **25.1**, **25.4** and with the exception of accessories made from natural or synthetic rubber or a mixture of both, **25.3**;

c) for fixed socket-outlets, with the exception of the parts, if any covered by (a), by the tests of **25.1**, **25.2** and with the exception of fixed socket-outlets made from natural or synthetic rubber or a mixture of both, **25.3**.

Parts intended only for decorative purposes, such as, certain lids, are not submitted to this test.

25.1 The specimen is kept for 1 h in a heating cabinet at a temperature of 100 ± 2°C.

During the test, they shall not undergo any change impairing their further use, and sealing compound, if any, shall not flow to such an extent that live parts are exposed.

After the test, the samples are then allowed to cool down to approximately room temperature. There shall be no access to live parts which are normally not accessible when the specimens are mounted as in normal use, even if the standard test finger is applied with a force not exceeding 5 N are mounted as for normal use.

After the test, marking shall still be legible.

Discoloration, blisters or slight displacement of the sealing compound is disregarded, provided that safety is not impaired within the meaning of this standard.

25.2 Parts of insulating material necessary to retain current-carrying parts of the earthing circuit in position, and parts of the front surface zone of thermoplastic material of 2 mm width surrounding the phase and neutral pin entry holes of socket-outlets, shall be subjected to a ball-pressure test by means of the apparatus as shown in Fig. 27, except that insulating parts necessary to retain the earthing terminal in position in a box, shall be tested as specified in **25.3**.

NOTE — When it is not possible to carry out the test on the sample under test, the test shall be carried out on a piece cut out of the sample and at least 2 mm thick. If this is not possible, up to and including four layers, each cut out of the same specimen sample, may be used, in which case the total thickness of the layers shall be not less than 2.5 mm.

The part under test shall be placed on a steel plate at least 3 mm thick and in direct contact with it.

The surface of the part to be tested is placed in the horizontal position and a steel ball of 5 mm diameter is pressed against this surface with a force of 20 N.

The test load and the supporting means shall be placed within the heating cabinet for sufficient time to ensure that they have attained the stabilized testing temperature before the test commences.

The test is made in a heating cabinet at a temperature of 125 ± 2°C.

After 1 h, the ball shall be removed from the specimen, which is then immersed, in cold water for cooling down within 10 s, to approximately room temperature.

The diameter of the impression caused by the ball is measured and shall not exceed 2 mm.

25.3 Parts of insulating material not necessary to retain current-carrying parts and parts of the earthing circuit in position, even though they are in contact with them, are subjected to a ball-pressure test in accordance with **25.2**, but the test is made at a temperature of 70 ± 2°C or 40 ± 2°C plus the highest of temperature-rise determined for the relevant part during the test of **19**, whichever is the higher.

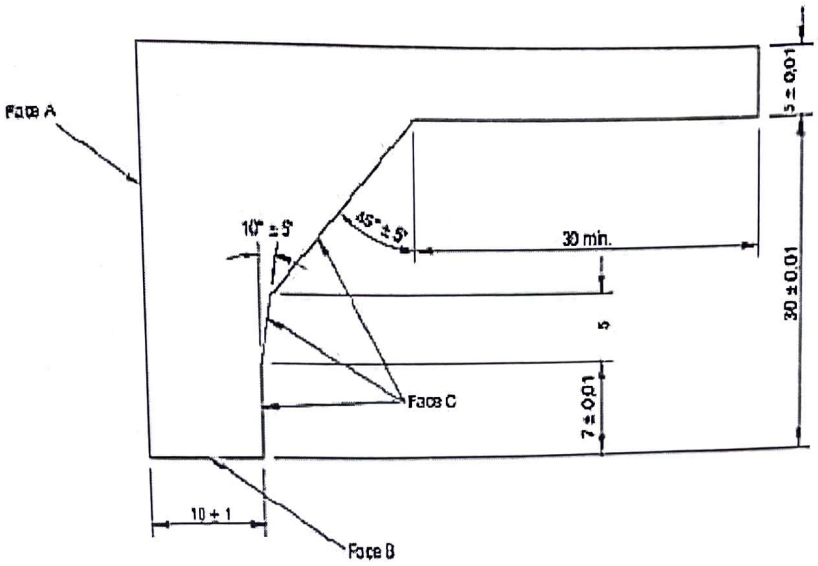

FIG. 32 GAUGE (THICKNESS ABOUT 2 MM) FOR THE VERIFICATION OF THE OUTLINE OF COVERS OR COVER-PLATES

exposed.

After the test, the samples are then allowed to cool down to approximately room temperature. There shall be no access to live parts which are normally not accessible when the specimens are mounted as in normal use, even if the probe B of IS 1401 is applied with a force not exceeding 5 N.

After the test, marking shall still be legible.

Discoloration, blisters or slight displacement of the sealing compound is disregarded, provided that safety is not impaired within the meaning of this standard.

25.2 Parts of insulating material necessary to retain current-carrying parts of the earthing circuit in position, as well as parts of the front surface zone of thermoplastic material of 2 mm width surrounding the phase and neutral pin entry holes of socket-outlets, shall be subjected to a ball-pressure test by means of the apparatus as shown in Fig. 38, except that insulating parts necessary to retain the earthing terminal in position in a box, shall be tested as specified in **25.3**.

The part under test shall be placed on a steel plate at least 3 mm thick and in direct contact with it.

The surface of the part to be tested is placed in the horizontal position and the hemispherical tip of the test equipment pressed against this surface with a force of 20 N.

The test load and the supporting means shall be placed within the heating cabinet for sufficient time to ensure that they have attained the stabilized testing temperature before the test commences.

The test is made in a heating cabinet at a temperature of 125 ± 2°C.

After 1h, the ball shall be removed from the specimen, which is then immersed, in cold water for cooling down within 1 0 s, to approximately room temperature.

The diameter of the impression caused by the ball is measured and shall not exceed 2 mm.

NOTE — When it is not possible to carry out the test on the sample under test, the test shall be carried out on a piece cut out of the sample and at least 2 mm thick which is cut out of a new set of aged specimens If this is not possible, up to and including four layers, each cut out of the same specimen may be used, in which case the total thickness of the layers shall be not less than 2.5 mm.

25.3 Parts of insulating material not necessary to retain current-carrying parts and parts of the earthing circuit in position, even though they are in contact with them, are subjected to a ball-pressure test in accordance with **25.2**, but the test is made at a temperature of 70 ± 2°C or 40 ± 2°C plus the highest of temperature- rise determined for the relevant part during the test of 19, whichever is the higher.

25.4 The specimens are subjected to a compression test by means of an apparatus as shown in Fig. 37, the test being made in a heating cabinet at a temperature of 80 ± 2°C.

The apparatus comprises two steel jaws, having a cylindrical face of 25 mm radius, a width of 15 mm and a length of 50 mm. The length of 50 mm can be increased, depending on the size of the accessory to be tested.