



उत्पाद मैनुअल
आई एस 2095 (Part 1):2023 के अनुसार
जिप्सम प्लास्टर बोर्ड - भाग 1 प्लैन
जिप्सम प्लास्टर बोर्ड के लिए

दस्तावेज संख्या - पी एम/आई एस 2095 (Pt 1)/2/Nov 2023

भारतीय मानक ब्यूरो की स्कीम-I (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल प्रमाणीकरण के प्रचालन में रीति और पारिश्रिता की सुसंगतता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसि द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज का उपयोग किया जा सकता है।

**PRODUCT MANUAL FOR
GYPSUM PLASTER BOARDS : PART 1 - PLAIN GYPSUM
PLASTER BOARD ACCORDING TO IS 2095 (PART 1):2023**

Document No.- PM/IS 2095 (Pt 1)/2/Nov 23

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

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PRODUCT MANUAL FOR GYPSUM PLASTER BOARDS : PART 1 - PLAIN GYPSUM PLASTER BOARD ACCORDING TO IS 2095 (PART 1):2023

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1.	Product	:	IS 2095 (Part 1) : 2023
	Title	:	Gypsum Plaster Boards: Part 1 – Plain Gypsum Plaster Boards
	No. of Amendments	:	NIL
2.	Sampling Guidelines:		
a)	Raw material	:	i) Gypsum Plaster – Clause 5.1 of IS 2095 (Pt 1) ii) By-Product Gypsum – IS 12679 iii) Paper Liner – Clause 5.3 of IS 2095 (Pt 1)
b)	Grouping guidelines	:	Please refer ANNEX – A
c)	Sample Size	:	4 boards of full size
3.	List of Test Equipment	:	Please refer ANNEX – B
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – C
5.	Possible tests in a day :		
	i) Dimensions (Clause 7.1)		
	ii) Impact Resistance (Clause 7.4)		
	iii) Loading Capability (Clause 7.6)		
	iv) Finish (Clause 7.9)		
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 2095 Part (1) with the following scope:		
	Name of the product		Plain Gypsum Plaster Board
	Type		A/D/F/H1/H2/FH/R1/R2/W
	Size (width x length), mm		Upto and including ---- (width x length)
	Thickness, mm		

ANNEX A**Grouping Guidelines**

1. Plain gypsum plaster boards covered in IS 2095 (Part 1) are classified as under:
 - a) Types :
 - i) Type A — Plain gypsum plaster board
 - ii) Type D — Gypsum plaster board with controlled density
 - iii) Type F — Gypsum plaster board with fire resistance properties (manufacture in 12.5 mm and above thickness)
 - iv) Type H1 and H2 — Gypsum plaster board with moisture resistance properties
 - v) Type FH — Gypsum plaster board with fire and moisture resistance properties
 - vi) Type R1 and R2 — Gypsum plaster board with impact resistance (manufacture in 12.5 mm and above thickness)
 - vii) Type W — Gypsum plaster board with mold and moisture resistance properties
 - b) Dimensions :

Width – 600/1220 mm
Length – 1800 to 3600 mm
Thickness – 9.5/12.5/15/19/23/25 mm

(Note : Gypsum plaster boards with other dimensions may be manufactured subject to mutual agreement between the purchaser and the manufacturer, however same tolerances shall be applicable)
2. IS 2095 (Part 1) specifies the Flexural Breaking Load values as per the type & thickness of board.
3. Considering the above, following grouping guidelines for GoL/ CSoL have been developed:
 - (a) Board of each type and lowest thickness shall be tested for all requirements to cover that particular type and all higher thicknesses in the scope of licence.
 - (b) Board of highest dimension (i.e. width and length) shall be tested for all requirements to cover boards of all dimensions upto and including the dimension tested.
4. Manufacturer shall declare the each edge and end profiles of plain gypsum plaster boards as per Clause 7.1.3 of IS 2095 (Part 1):2023.
5. The Scope of Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.
6. During the operation of the Licence, BO shall ensure that all varieties covered in the Licence may be tested in rotation, to the extent possible

ANNEX-B**List of Test Equipment*****Major test equipment required to test as per the Indian Standard***

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	Dimensions (Clause 7.1)	- Measuring tape, Flat surface - Steel scale - Micro meter - Vernier calliper - Dial gauge with special device as per fig.3 of IS 2095 (Pt 1) - Straight edge - Square with arms 500mm
2	Density (Clause 7.2)	- Metal rule - Micrometer/dial gauge/caliper with anvil diameter - Weighing balance - Cutter - Drying oven
3	Flexural Load (Clause 7.3)	- Loading machine as per Cl D-2 of Annex-D of IS 2095-1 - Cutter - Weighing balance - Conditioning chamber to maintain temperature of 27 ± 2 °C and humidity 65 ± 2 %
4	Impact Resistance (Clause 7.4)	- Impact test apparatus as per Cl E-1.3 & E-2.3 of Annex-E of IS 2095-1 - Depth measuring instrument
5	Surface Hardness (Clause 7.5)	- Steel sphere - Rigid, flat and horizontal table - Carbon paper - Graduated rule - Support for steel sphere
6	Loading Capability (Clause 7.6)	- Mass of 20kg - Testing arrangement as per Cl 7.6 of IS 2095-1
7	Water Absorption (Clause 7.7)	- Weighing balance - Water bath - Cutter - Conditioning chamber to maintain temperature of 27 ± 2 °C and humidity 50 ± 5 % - Stop watch
8	Fire Resistance (Clause 7.8)	- Test equipment as per IS/ISO 834 (Part 4)

The above list is indicative only and may not be treated as exhaustive.

ANNEX C**Scheme of Inspection and Testing**

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare a calibration plan for the test equipments.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. LABELLING AND MARKING –As per the requirements of IS 2095 (Part 1) : 2023. The Standard Mark, as given in the Schedule of the licence, shall be indelibly and legibly marked on the gypsum plaster boards, provided always that the boards thus marked conforms to all the requirements of the specification. In addition, the details of BIS website shall be marked on the boards as follows: “For details of BIS certification please visit www.bis.gov.in”.

4. CONTROL UNIT – All gypsum plaster boards of same type and size produced from same raw materials in a day shall constitute a control unit.

5. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

6. REJECTIONS – Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Clause Reference	Test Methods		No. of Sample	Frequenc y	Remarks
5	Material			S	One	From each consignment	No further testing is required if ISI marked or accompanied with test certificate.
	Gypsum plaster	5.1	IS 2095 (Part 1)				
	By product gypsum	5.1	IS 2095 (Part 1) IS 12679				
	Paper Liner	5.3	IS 2095 (Part 1)				
7.1	Dimensions	7.1, Table 3	Anx-A & B of IS 2095 (Part 1)	R	Firm to have adequate in-process controls to check compliance of this parameter as per the tolerances given in the Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity		
7.9	Finish	7.9	IS 2095 (Part 1)				
7.2	Density	7.2, Table 4	Anx-C of IS 2095 (Part 1)	R	One	Each Control Unit	-
7.3	Flexural Breaking Load	7.3 Table 5	Anx-D of IS 2095 (Part 1)	R	One	Each Control Unit	-
7.4	Impact Resistance	7.4 Table 6	Anx-E of IS 2095 (Part 1)	R	One	Once in a week for each type of board	This test is applicable for Type R1 and Type R2 gypsum plaster boards for a declared composition, whenever any change in

							composition is performed this test shall be done.
7.5	Surface Hardness	7.5	Anx-F of IS 2095 (Part 1)	R	One	Once in a week for each type of board	This test is applicable for Type R1 and Type R2 gypsum plaster boards
7.6	Loading Capability	7.6	IS 2095 (Part 1)	R	One	Once in a week for each type of board	This test is applicable for Type R2 gypsum plaster boards
7.7	Water Absorption	7.7 Table 7	Anx-G of IS 2095 (Part 1)	R	One	Once in a week for each type of board	This test is applicable for Type H1, H2, FH and W gypsum plaster boards
7.8	Fire Resistance	7.8	IS 2095 (part 1) IS/ISO 834 (Part 8)	S	One	Once in three months for each type of board	This test is applicable for Type F and FH gypsum plaster boards (thickness 12.5mm and above)

Note-1: Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval by BO Head.