



**उत्पाद मैनुअल
आई एस 3097:2006 के अनुसार पृष्ठावरीत
पार्टिकल बोर्ड के लिए**

दस्तावेज़ संख्या – पीएम/आईएस 3097/1/दिसंबर 2022

भारतीय मानक ब्यूरो की स्कीम-1 (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 लाइसेंसी द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज़ का उपयोग किया जा सकता है।

**PRODUCT MANUAL FOR
VENEERED PARTICLE BOARDS
ACCORDING TO IS 3097:2006**

Document No.- PM/ IS 3097/1/Dec 2022

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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1.	Product	:	IS 3097 : 2006
	Title	:	VENEERED PARTICLE BOARDS
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	- Particle board as per IS 3087 - Veneers as per Cl 5.2 of IS 3097 - Adhesive as per IS 848
b)	Grouping guidelines	:	Please refer ANNEX – A
c)	Sample Size	:	One Board for all tests
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 and tolerance (Cl 7)		
	(ii) Manufacture (Cl 6)		
6.	Scope of the Licence :		
	Licence is granted to use Standard Mark as per IS 3097:2006 with the following scope:		
	Name of the product	Veneered Particle Boards	
	Designation		
	Size (in mm)	upto and including - Length × Width × Thickness	

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ANNEX A**Grouping Guidelines**

1. IS 3097:2006 covers Veneered Particle Boards as per IS 3097:2006 which are categorized as given below:
 - a) Grades: Grade I and Grade II.
 - b) Type: Types 1, 2, 3 and 4 (based on the core and application of product)
 - c) Dimension of boards (in mm):
 - i) Length (mm): 800, 3650, 3000, 2700, 2400, 2100, 1800, 1500, 1200, 1000 and 900
 - ii) Width (mm): 1800, 1500, 1200, 1000, 900 and 450

(Any other dimension (length, width and thickness) as agreed to between the manufacturer and the purchaser may also be used.)

 - iii) Thickness (mm): 6, 10, 12, 20, 25, 30, 35, 40, 45 and 50
2. The following are also taken into consideration while evolving the grouping guidelines:
 - a) Any other dimensions (Length and Width) may also be manufactured as agreed to between the purchaser and the manufacturer.
 - b) In water resistance test, grade I shall be tested in boiling water whereas grade II shall be tested in water at 60°C, i.e. grade I is having stringent requirements than grade II. All other requirements for both grades remain the same.
3. Considering the above, Boards are categorized into the following groups based on Grade/Type:

Grade	Type	Designation
Grade I	Type 1 (Solid core, general purpose)	SO GP-I
	Type 2 (Solid core, decorative)	SO D-I
	Type 3 (Tubular core, general purpose)	TU GP-I
	Type 4 (Tubular core, decorative)	TU D-I
Grade II	Type 1 (Solid core, general purpose)	SO GP-II
	Type 2 (Solid core, decorative)	SO D-II
	Type 3 (Tubular core, general purpose)	TU GP-II
	Type 4 (Tubular core, decorative)	TU D-II

4. For considering GoL/CSoL the guidelines given below shall be followed:
 - a) One sample from each grade and type with the highest size (i.e. length, width & thickness) shall be tested for all requirements in order to cover all the sizes upto and including the size tested, for that particular grade and type.
 - b) If sample from Grade I is tested, then corresponding sizes and type in Grade II may also be covered.
5. In case manufacture apply for ECO mark, they shall provide documentary evidence by way of certificate or declaration to Bureau of Indian Standards while applying for ECO-Mark and the veneered particle boards shall conform to the specific requirements given for ECO-Mark under relevant clauses of the standard.
6. The Firm shall declare the varieties of Veneered Particle Boards they intend to cover in the Licence. The Scope of Licence may be restricted based on the Manufacturing and testing capabilities of the manufacturer.
7. During operation of license, ROs/BOs shall ensure that all the varieties covered in the license are tested in rotation, to the extent possible.

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

S. No.	Tests used in with Clause Reference	Test Equipment
1.	Dimensions and tolerance (Clause 7)	Stainless Steel Scale Measuring Tape Vernier Caliper Micrometer Right Angle Straightness gauge
2.	Density (Clause 9.1.a)	Hot air oven Weighing balance
3.	Moisture content (Clause 9.1.b)	Hot air oven Weighing balance
4.	Water absorption (Clause 9.1.c)	Water bath Soluble sealant material such as wax
5.	Water resistance test (Clause 9.1.d)	Water bath Thermometer or temp sensor
6.	Swelling in water due to general absorption (Clause 9.1.e.i)	Water bath Soluble sealant material such as wax Arrangement for measurement of change in length
7.	Swelling in water due to surface absorption(Clause 9.1.e.ii)	Water bath Soluble sealant material such as wax Micrometer
8.	Adhesion of plies (Clause 9.1.f)	knife
9.	Modulus of Rupture and Modulus of Elasticity (Clause 11.8)	Tensile testing machine with bend facility and with attachment for static bending test and with variable speed Extensometer/Dial gauge
10.	Determination of deflection under sustained load (long time loading test)	
11.	Conditioning of sample	Humidified Air Conditioner Hygrometer Sample cutter Weighing balance

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 3097:2006.

4. CONTROL UNIT – Veneered particle boards of the same grade, type and dimensions, manufactured under similar conditions of production, manufactured with the same batch of adhesive compound 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 submitted by the manufacturer 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 Standard 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	Recommended Levels of Control		
Clause	Requirement	Test Methods Clause Reference			No. of Sample	Frequency	Remar ks
5.1	Particle Board	5.1	IS 3097 IS 3087	S	-	Each consignment	No further testing is required ifreceived with test certificate.
5.2	Veneers	5.2	IS 3097 IS 303/ IS 1328	S			
5.3	Adhesive	5.3	IS 3097 IS 848	S	-	Each consignment	
6	Manufacture	6	IS 3097	R	Manufacturer shall ensure that all his production confirms to the requirements of this clause.		
7	Dimensions and Tolerances	7	IS 3097	R	Two	Every hour production	In case of failure, all Boards manufactured during the hour shall be checked and only those conforming shall be marked.
9.1	Density	9.1.a	IS 3097 IS 2380 (Part 3)	R	One	Each control unit	-
	Moisture content	9.1.b	IS 3097 IS 2380 (Part 3)	R	One	Each control unit	
	Water absorption	9.1.c	IS 3097 IS 2380 (Part 16)	R	One	Each control unit	
	Water resistance test	9.1.d	IS 3097	R	One	Each control unit	

	Swelling due to general absorption	9.1.e(1)	IS 3097 IS 2380 (Part 17)	R	One	Each control unit	
	Swelling due to surface absorption	9.1.e(2)	IS 3097 IS 2380 (Part 17)	R	One	Each control unit	
	Adhesion of plies	9.1.f	IS 3097	R	One	Each control unit	
	Modulus of rupture and Modulus of elasticity	9.1.g	IS 3097 IS 2380 (Part 4)	R	One	Each control unit	
	Determination of deflection under sustained load (long time loading test)	9.1.h	IS 3097 IS 2380 (Part 13)	R	One	Once in a week	

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.