

PM/8391 (Part 3)/1
May 2022



उत्पाद मैनुअल
Rubberized Coir Sheets for Cushioning — Specification
Part 3 Sandwiched

IS 8391 (Part 3):2019 के अनुसार

PRODUCT MANUAL
FOR Rubberized Coir Sheets for Cushioning — Specification
Part 3 Sandwiched
ACCORDING TO IS 8391 (Part 3):2019

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम 2018 की योजना- I के तहत प्रमाणन के संचालन में अभ्यास और पारदर्शिता के संचालन में पारदर्शिता सुनिश्चित करने के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन लाइसेंस/प्रमाणपत्र प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है

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.

1.	उत्पाद Product	:	IS 8391 (Part 3):2019
	शीर्षक Title	:	Rubberized Coir Sheets for Cushioning — Specification Part 3 Sandwiched
	संशोधनों की संख्या No. of amendments	:	NIL
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	Coir Fibre and Coir ropes shall conform to the requirements given in Clause 5 of IS 8391 (Part 3):2019.
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Please refer Annex-A
c)	नमूने का आकार Sample Size	:	Two sheets at full manufacturing shape and dimension for all tests including destructive tests
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer Annex-B

4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	Please refer Annex-C
5.	एक दिन में संभावित परीक्षण Possible tests in a day		
	Shape and dimensions, Manufacture, workmanship and finish, Indentation hardness, Density, Determination of pH value (not considering the time for conditioning)		
6.	लाइसेंस का दायरा /Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS 8391 (Part 3):2019 with the following scope:		
	Name of the product	Rubberized coir sheets for cushioning,Part3:Sandwiched	
	Grade	Medium/Firm/Extra Firm	
	Optional requirements	With/Without ECO mark	

**BUREAU OF INDIAN STANDARDS
MANAK BHAVAN,9, BAHADUR SHAH ZAFAR MARG,
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ANNEX-A

GROUPING GUIDELINES

For the purpose of grant of licence or change in scope of licence, if sample of higher grade (higher indentation hardness index) is tested, the lower grades shall be covered in the scope of licence. For example, if sample of extra firm grade is tested, medium and firm grade shall be added in the scope of licence.

In case it is intended to cover ECO mark in the licence, the sample(s) shall be tested for the optional additional requirements for Eco Mark

While considering grant of licence/inclusion of additional varieties, it shall be ensured that complete manufacturing/testing facility is available with manufacturer.

During operation of licence, BOs shall ensure that all varieties covered in the licence shall be tested in rotation to the extent possible.

ANNEX – B**LIST OF TEST EQUIPMENTS****Major test equipment required to test as per the Indian Standard**

Sr. No.	Test Equipment	Tests used in with Clause Reference
1	Steel Scale	Shape and Dimensions, Cl.6 (Length and Width)
2	Thickness Measuring Instrument as per B.2.2	Shape and Dimensions, Cl.6 (Thickness)
3.	Weighing scale with L.C. 0.1 g	Density (optional) cl.7.1
3	Indentation hardness test apparatus	Indentation hardness, resistance to ageing Cl 7.2 and Cl7.3
4	Weighing scale with digital display	Indentation hardness, resistance to ageing Cl 7.2 and Cl7.3
5	Hot air oven with temperature controller and digital display	Resistance to ageing, compression set Cl 7.3, Cl 7.5,7.6
6	Flexing test apparatus with counter	Resistance to flexing, Cl7.4
7	Humidity Chamber with Digital Controller	Conditioning of samples, Cl8.1.6
8	pH meter	pH value, Cl7.7
9	Compression test apparatus with heating element	Compression set, Cl.7.5,7.6
10	Weighing balance	pH, chloride, sulphate content Cl7.7,7.8, 7.9
11	Reflux condenser with ground glass joint, Round bottom flask, conical flask with ground glass stopper, dark glass stoppered bottle, heating mantle, funnels, beakers, burettes, pipettes, Measuring flask and other glassware as required	pH, chloride, sulphate content Cl7.8,7.9
12	Buffer tablets of pH 4.0 and 9.0 Calcium carbonate (Chloride free), Potassium Chromate, Std Silver Nitrate Solution 0. 1N, Sodium Chloride, Distilled Water, Benzidine Hydrochloride, Barium Chloride, Hydrochloric acid, sulphuric acid, sodium hydroxide, sodium sulphate, phenol red indicator, alcohol-95%, Whatman filter paper No. 41, litmus paper, Gooch crucible with asbestos pad and other chemicals and reagents as required	pH, chloride, sulphate content Cl7.7,7.8,7.9
13	Muffle furnace	Sulphate content Cl.7.9
14	Air conditioner(s)	

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

ANNEX B**SCHEME OF INSPECTION AND TESTING**

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

1.1 The manufacturer shall prepare and implement a calibration plan for the test equipment.

2. **TEST RECORD-** The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. **PACKING AND MARKING** - The Standard Mark as given in the Schedule of the license shall be incorporated on the label attached with rubberized coir sheet (as supplied), provided always that the rubberized coir sheet thus marked conforms to all the requirement of the specification.

3.2 Each sandwiched rubberized coir sheets for cushioning shall be attached with a label bearing the following information:

- a) Name of the material;
- b) Manufacturer's name, initials, trade-mark or any other identification mark;
- c) Grade;
- d) Dimensions;
- e) Criteria for which sandwiched rubberized coir sheets has been labeled as Eco-mark; and
- f) BIS licence number and "For BIS certification details please visit www.bis.gov.in"

5. **CONTROL UNIT-** For the purpose of this scheme, product of rubberized coir sheets of the same grade manufactured in a day from one formulation of compounded rubber latex shall be considered as a control unit.

6. **LEVELS OF CONTROL :-** The tests as indicate in Table 1 and at the levels of controls in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and records maintained in accordance with paragraph 2 above.

6.1 All the production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark.

7. **REJECTION** - 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
LEVELS OF CONTROL

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or)S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Methods Clause Reference			No. of Sample	Frequency	Remarks
5	Manufacture, workmanship and finish	5	IS 8391 (Part 3)	R		Each sheet	In case of failure of 10 continuous sheets produced shall be tested and original frequency restored only when all the 10 sheets pass the test
6.1 &6.2	Shape and dimensions	Annex B	-do-	R	Two	Every hour	-do-
7.2	Indentation hardness	Annex D	-do-	R	One	Each control unit	-do-
7.3	Resistance to ageing	Annex E	-do-	R	One	Every 5 th control unit	-do-
7.4	Resistance to flexing	Annex F	-do-	R	One	Every 5 th control unit	-do-
7.5 &7.6	Compression set	Annex G	-do-	R	Two	Every 5 th control unit	-do-

7.7	pH value	Annex H	-do-	R	One	Each control unit	-do-
7.8	Chloride content	Annex J	-do-	R	One	Every 5 th control unit	-do-
7.9	Sulphate content	Annex K	-do-	R	One	Every 5 th control unit	-do-
7.1	Density (optional test)	Annex C	-do-	R	One	Each control unit or as agreed between purchaser and supplier	
9	Additional requirements for eco mark (optional)						
i)	Residual pesticides (sum parameter)		IS 15651	S	One	Once in a year	Applicable for products being marked with Eco mark
ii)	pH of aqueous extract		IS 8391 (Part 1)	S	One	Once in a year	-do-

Note-1: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. 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.