



**PRODUCT MANUAL FOR
GASKETS AND PACKINGS –
COMPRESSED ASBESTOS FIBRE JOINTING
ACCORDING TO IS 2712:1998**

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 license/certificate.

1.	Product	:	IS 2712:1998
	Title	:	Gaskets and Packings- Asbestos Fibre Jointing
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	-
b)	Grouping guidelines	:	Please refer ANNEX – A
c)	Sample Size	:	One or Two Sheets (full size) (so as to have a total area not less than 1 Sq. m.)
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	:	Dimensions (Cl. 8.2), Density (Cl. 8.3), Compressibility and recovery (Cl. 8.5), Tensile strength (Cl. 8.10), Loss on ignition (Cl. 8.11)
6.	Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS 2712:1998 with the following scope:		
	Name of product	Compressed Asbestos Fibre Jointing Sheet	
	Grade		
	Nominal thickness of Sheet	Upto and including ---- mm	

ANNEX-A**Grouping Guidelines**

1. Compressed Asbestos Fibre Jointing Sheets as per IS 2712: 1998 are grouped as given below based on Grades:

Group	Group I	Group II	Group III
Grade	W/1, W/2, W/3	O/1, O/2	A/1

2. Further, the Dimensions (Length and Width) of the Asbestos Sheet shall be as agreed to between the manufacturer and the purchaser.
3. Considering the above, the guidelines given below shall be followed for considering GoL/ CSoL:
- (a) Sample of any Dimension (Length and Width) with highest thickness from each Group shall be tested separately to cover Sheets of thickness upto and including the thickness tested.
- (b) For Group I, if Sheets of Grade W/1 is tested, then Sheets of Grade W/2 and W/3 may also be covered. Similarly, if Sheets of Grade W/2 is tested, then Sheets of Grade W/3 may also be covered.
- (c) For Group II, if Sheets of Grade O/1 is tested, then Sheets of Grade O/2 may also be covered.
4. The Firm shall declare the varieties of compressed asbestos fibre jointing sheet intended to be covered in the Licence. The Scope of Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.
5. During the operation of licence, it shall be ensured that all 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*

Sr No	Tests used in with clause reference	Test equipment
1.	Dimensions, Cl. 4	Tape, Steel scale/Vernier caliper, Micrometer
2.	Conditioning, Cl. 8.2	Oven, Desiccator, anhydrous calcium chloride
3.	Density, Cl. 8.3	Weighing balance
4.	Flexibility after accelerated aging, Cl. 8.4, Annex C	Oven, mandrel
5.	Compressibility and Recovery test, Cl. 8.5, Annex D	Compression testing machine, Cylindrical indenter, Dial indicators
6.	Stress relaxation, Cl. 8.6	Apparatus as per IS 6210
7.	Oil absorption, Cl. 8.7, Annex E	Oil and Fuel, Weighing balance, Arrangement as per Annex E
8.	Water absorption, Cl. 8.8, Annex F	Distilled water
9.	Resistance to acids, Cl. 8.9, Annex G	Acids, Tensile testing machine
10.	Tensile strength, Cl. 8.10, Annex H	Tensile testing machine, Desiccator
11.	Loss on ignition, Cl. 8.11, Annex J	Oven, Desiccator

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 equipment.

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

3. LABELLING AND MARKING – As per requirements of IS 2712: 1998.

4. CONTROL UNIT – Compressed Asbestos Fibre Jointing Sheets or Rolls of same Grade and dimensions manufactured in a day from same consignment of raw material 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	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
4, 8.2	Dimensions	4, 8.2	IS 2712	R	One	Each control unit	---
8.3	Density	8.3	IS 2712	R	One	Each control unit	---
8.4	Flexibility after accelerated aging	8.4, Annex C	IS 2712	S	--	--	As per agreement between manufacturer and supplier
8.5	Compressibility and Recovery test	8.5, Annex D	IS 2712	R	One	Each control unit	---
8.6	Stress relaxation	8.6	IS 2712	R	One	Every 30 th control unit	Please see Note 3
8.7	Oil absorption	8.7, Annex E	IS 2712	R	One	Every 7 th control unit	---
8.8	Water absorption	8.8, Annex F	IS 2712	R	One	Every 7 th control unit	---
8.9	Resistance to acids	8.9, Annex G	IS 2712	R	One	Every 7 th control unit	---
8.10	Tensile strength	8.10, Annex H	IS 2712	R	One	Every 7 th control unit	---
8.11	Loss on ignition	8.11, Annex J	IS 2712	R	One	Every 7 th control unit	---

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.

Note-3: In a period of four months, the production of each grade shall be covered. In case of failure, samples from all subsequent control units shall be tested till samples from three consecutive control units are found to be conforming. The original frequency may be restored, thereafter.