



**PRODUCT MANUAL FOR
ASBESTOS CEMENT BUILDING PIPES AND PIPE FITTINGS,
GUTTER AND GUTTER FITTINGS AND ROOFING FITTINGS –
ROOFING FITTINGS
ACCORDING TO IS 1626 (PART 3): 1994**

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.	Product	:	IS 1626 (Part 3): 1994
	Title	:	Asbestos Cement Building Pipes and Pipe Fittings, Gutters and Gutter Fittings and Roofing Fittings – Roofing Fittings
	No. of Amendments	:	Nil
2.	Sampling Guidelines:		
a)	Raw material	:	a) Cement – Clause 3 of IS 1626 (Part 3): 1994 b) Other ingredient – Clause 3 of IS 1626 (Part 3): 1994 c) <u>Colouring matter</u> – Clause 4 of IS 1626 (Part 3) : 1994
b)	Grouping guidelines	:	Please refer ANNEX – A
c)	Sample Size	:	Qty – 2 Nos (If supplied in pairs – 2 Pairs)
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) Shape (Clause 5.1) (ii) Dimensions (Clause 5.2) (iii) General appearance and finish (Clause 7)		
6.	Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS 1626 (Part 3): 1994 with the following scope:		
	Name of the product	Asbestos Cement Building Pipes and Pipe Fittings, Gutters and Gutter Fittings and Roofing Fittings - Roofing Fittings	
	Type of fitting/Code No/ Figure No (As per Table 1)		

ANNEX A

Grouping Guidelines

1. IS 1626 (Part 3): 1994 covers asbestos cement roof fittings to be used in conjunction with corrugated and semi-corrugated asbestos cement sheets as per IS 459. These are classified considering the type of fittings and the respective code number and Figure number (Fig 1 to 28) as specified in Table 1 of IS 1626 (Part 3):1994.
2. Dimension of fittings shall be declared by manufacturer.
3. Considering the above, following grouping guidelines is developed for GoL/CSoL:
 - One sample of each type of roof fitting of any size shall be drawn to consider that type of roof fitting (same code No and Fig No) in the scope of licence.
4. The Firm shall declare the varieties of roof fittings 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 the Licence, BO shall ensure that all the types and sizes covered in the Licence 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*

Sl. No.	Tests used in with Clause Reference	Test Equipment
1	Shape (Clause 5.1)	<ul style="list-style-type: none"> - Steel scale - Vernier calliper - Micrometer - Templets
2	Dimension (Clause 5.2)	<ul style="list-style-type: none"> - Steel scale - Vernier calliper - Micrometer - Templets
3	Permeability (Clause 6.2)	<ul style="list-style-type: none"> - Transparent or metallic tube - Steel scale - Suitable arrangement for supporting the test pics which provides the bottom surface to be inspected - Sealing wax - Air Conditioner and humidity control arrangement - Hygrometer

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 requirement of IS 1626 (Part 3): 1994.

4. CONTROL UNIT – All roof fittings of same type and size and Code number [As per Table 1 of IS 1626 (Part 3)] produced from same raw material composition under similar conditions of manufacturing in a week 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				
3	Composition						
	Cement	3	IS 1626 (Part 3)	-	-	-	Cement shall be ISI marked
4	Colouring matter	4	IS 1626 (Part 3) IS 5913	-	One	Each consignment	Further testing is not required, if received with manufacturers test certificate or ISI marked.
5	Shape, Dimensions and Tolerances						
5.1	Shape	5.1, Table 1, Fig 1 to 28	IS 1626 (Part 3)	R	1 % subject to minimum of 5 nos	Each control unit	In case of failure, complete control unit shall be checked, and only conforming product shall be marked.
5.2	Dimensions	5.2, 5.3, Table 1, Fig 1 to 28	IS 1626 (Part 3)	R	1 % subject to minimum of 5 nos	Each control unit	In case of failure, complete control unit shall be checked, and only conforming product shall be marked. Dimensions of various fittings shall be declared by manufacturer.
6.1	Freedom from visual defects	6.1	IS 1626 (Part 3)	-	All	-	Adequate visual inspection shall be done to ensure quality of product as per Standard.
6.2	Impermeability test	6.2	IS 1626 (Part 3) IS 5913	R	Three	Each control unit	-

6.3	Matching with roofing sheet	6.3	IS 1626 (Part 3)	R	Five	Each control unit	Sheets of required sizes shall be available with the manufacture for verification of the requirement.
7	General appearance and Finish	7	IS 1626 (Part 3)	-	All	-	Adequate visual inspection shall be done to ensure quality of product as per Standard.

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.