



**PRODUCT MANUAL FOR
PVC WATER – STOPS AT TRANSVERSE CONTRACTION JOINTS
FOR USE IN MASONRY AND CONCRETE DAMS
ACCORDING TO IS 15058 : 2002**

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 15058 : 2002
	Title	:	PVC WATER – STOPS AT TRANSVERSE CONTRACTION JOINTS FOR USE IN MASONRY AND CONCRETE DAMS
	No. of Amendments	:	1
2.	Sampling Guidelines:		
a)	Raw material	:	-
b)	Grouping guidelines	:	Not applicable
c)	Sample Size	:	2 meters
3.	List of Test Equipment	:	Please refer ANNEX –A
4.	Scheme of Inspection and Testing	:	Please refer ANNEX –B
5.	Possible tests in a day :		
	(i) Hardness (Shore A) (Clause 3.2, Table 1)		
	(ii) Colour (Clause 3.3)		
	(iii) Shape and Dimension (Clause 4)		
	(iv) Workmanship and Finish (Clause 5)		
6.	Scope of the Licence :		
	Licence is granted to use Standard Mark on PVC Water – Stops at Transverse Contraction Joints for use in Masonry and Concrete Dams as per IS 15058:2002.		

ANNEX A
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.	Tensile Strength (Clause 3.2 and Table 1)	Tensile Testing Machine complying with ISO 7500-1 and ISO 9513, and meeting the specifications given in 5.1.2 to 5.1.6 of IS 13360 (Part 5/Sec 1)/ ISO 527-1 Extensometer or similar arrangement to measure elongation
2.	Elongation (Clause 3.2 and Table 1)	
3.	Hardness (Shore A) (Clause 3.2 and Table 1)	Type A or type D Shore durometer consisting of pressure foot, as per fig 1 and/or Fig 2 of IS 13360 (Part 5/Sec 11)/ ISO 868
4.	Water absorption (Clause 3.2 and Table 1)	Balance
		Oven
		Containers containing distilled water or water of equivalent purity
		Desiccators
		Vernier Caliper
5.	Cold bend temperature at which samples does not crack (Clause 3.2 and Table 1)	Winding Device consisting of mandrel of 5.08mm in dia which can be moved along its own axis by a screw of 6.35 mm pitch and shall be provided with fixed guides for guiding the specimens tangentially onto the surface of the mandrel at an angle of 68.5° to the axis
		Cooling Medium
		Dry Ice
6.	Accelerated Extraction test (Clause 3.2 and Table 1)	Solution consisting of 5.0 g CP (crystalline pure) sodium hydroxide and 5.0 g CP potassium hydroxide dissolved in a litre of distilled water. Arrangement for maintaining the solution at 60-66 °C and passing of air bubble through liquid at the rate of approximately 380 bubbles per minute
		Tensile Testing Machine complying with ISO 7500-1 and ISO 9513, and meeting the specifications given in 5.1.2 to 5.1.6 of IS 13360 (Part 5/Sec 1)/ ISO 527-1 Extensometer or similar arrangement to measure elongation
7.	Stability in effects of alkalis test (Clause 3.2 and Table 1)	Weighing balance
		Micrometer
		Vernier caliper
		Constant temperature liquid bath
		Type A or type D Shore durometer consisting of

		pressure foot, as per fig 1 and/or Fig 2 of IS 13360 (Part 5/Sec 11)/ ISO 868
		Sodium hydroxide Potassium hydroxide Distilled water
8.	Shape and Dimension (Clause 4)	Vernier Caliper
		Micrometer

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

ANNEX B

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 15058:2002.

4. CONTROL UNIT – PVC water stops of same size manufactured continuously under similar conditions of productions in a shift of 8 hrs 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				
3.1	Material	3.1	IS 15058	R	Test certificate from supplier of raw material may be obtained for each lot of raw material received.		
3.2, Table 1	Tensile Strength	-	IS 13360 (Pt.5/Sec 1)/ ISO 527-1 : 1993	R	One	Each control unit	-
	Elongation	-	IS 13360 (Pt.5/Sec 1)/ ISO 527-1: 1993	R	One	-do-	-
	Hardness (Shore A)	-	IS 13360 (Pt.5/Sec 11)	R	One	-do-	-
	Water absorption	Annex A	IS 15058	R	One	-do-	-
	Cold bend temperature at which sample does not crack	Annex G	IS 9766	R	One	-do-	-
	Accelerated extraction test	Annex B	IS 15058	S	One	Once in six months	-
	Stability in effects of alkalis test	Annex C	IS 15058	S	One		-
3.3	Colour of water stop	3.3	IS 15058	R	Each Piece	-	-
4	Shape & Dimensions	4.1, 4.1.1	IS 15058	R	Each Piece	-	-
5	Workmanship & finish	5.1, 5.2	IS 15058	R	Each Piece	-	-

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.