

केन्द्रीय मुहर विभाग-2

हमारा संदर्भ: के मू वी-2/16: 2553 (Pt.1)

18 03 2019

विषय: संशोधित IS 2553 (Part 1):2018 की एस आई टी (Scheme of Inspection and Testing)

1. यह उपरोक्त विषय व 06 02 2019 को जारी किए गए कार्यान्वयन दिशा निर्देशों के संदर्भ में है।
2. सक्षम अधिकारी द्वारा अनुमोदित संशोधित IS 2553 (Part 1):2018 की एस आई टी अनुपालन हेतु संलग्न है।

(आदित्य दास)
वैज्ञानिक सी

प्रमुख (के मू वी-2)

सभी क्षेत्रीय/शाखा कार्यालय

प्रतिलिपि :

आई टी एस विभाग – बी आई एस इंटरनेट पर डालने हेतु

CENTRAL MARKS DEPARTMENT-2

Our Ref: CMD-2/16: 2553 (Pt.1)

18 03 2019

Subject: Scheme of Inspection and Testing (SIT) for Revised IS 2553 (Part 1):2018

1. This has reference to the above and further to the implementation guidelines issued on 06 02 2019.
2. Scheme of Inspection and Testing for Revised IS 2553 (Part 1):2018, duly approved by the CA, is enclosed for implementation.

(Aditya Das)
Scientist C

Head (CMD-2)

All ROs/BOs

**SCHEME OF INSPECTION AND TESTING
FOR CERTIFICATION OF SAFETY GLASS
PART-1 ARCHITECTURAL, BUILDING AND GENERAL USES
ACCORDING TO IS 2553 (Part 1):2018
(Fourth Revision)**

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. **PACKING AND MARKING** -The Standard Mark as given in Schedule of the license shall be marked on each piece of safety glass provided always that the safety glass thus marked conforms to all the requirement of the specification. The packing and marking shall be done as per the provisions of the Indian Standard. In addition, the licence no. CM/L-___ and details of BIS website shall be marked at an appropriate place as follows: "For details of BIS certification please visit www.bis.gov.in"
4. **CONTROL UNIT** – For the purpose of this scheme, all the safety glass of same nominal thickness and type and manufactured by the same method under similar conditions in a day shall constitute a control unit.
5. **LEVELS OF CONTROL** - The tests as indicated in Table 1 and the Levels of Control specified therein shall be carried out on the whole production of the factory covered by this scheme and appropriate record charts maintained in accordance with paragraph 2 above. All the production which conforms to the Indian Standard and covered by this licence shall be marked with the Certification Mark of the Bureau.
 - 5.1 All production which conforms to the Indian Standard and covered in the licence should be marked with Standard mark.
 - 5.2 Each control unit shall be individually tested to determine its conformity or otherwise according to Table 1.
 - 5.2.1 In the beginning of the production run each control unit shall be tested till 5 consecutive control units pass all the requirements of the Indian Standard. Thereafter every 7th control unit shall be taken up for testing. In case of any failure all control units subsequently manufactured shall be tested till three consecutive control units pass the test.
6. **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. A separate record shall be maintain in giving information relating to the rejection of the production not conforming to the requirement of the specification and the method of its disposal. Such material shall in no case be stored together with that conforming to the specification.

**SCHEME OF INSPECTION AND TESTING
OF SAFETY GLASS
PART-1 ARCHITECTURAL, BUILDING AND GENERAL USES
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(Fourth Revision)**

TABLE 1: LEVEL OF CONTROL

(1)					(2)	(3)		(4)
Test Details					Test equipment requirement R:required (or) S: Sub-contracting permitted	Levels of Control		Remarks
Sl.No.	Clause	Requirements	Test Method			No. of Samples	Frequency	
			Clause	Reference				
1.	5.1.1	General	5.1.1	IS 2553 (Part 1):2018	R	Each piece	-	Visual
2.	5.1.2	Distribution of Allowable Defects	4.4 and 4.5	IS 14900	R	Each piece	-	Visual
	5.2	Requirements specific to Flat Toughened (Tempered) Safety Glass						
3.	5.2.1	Thickness	5.1	IS 17004	R	5 percent but not less than 5 pieces	Each Control Unit	-
4.	5.2.2	Dimensions and Squareness	5.2.2	IS 2553 (Part 1):2018	R	5 percent but not less than 5 pieces	Each Control Unit	-
5.	5.2.3	Fragmentation Test	6.1	IS 17004	R	Three pieces	Every seventh control unit subject to the condition given in 5.2.1 of the	-

							Scheme	
6.	5.2.4	Flatness	5.2.4	IS 2553(Pt-1):2018	R	5 percent but not less than 5 pieces	Each Control Unit	-
7.	5.2.5	Resistance to Impact	6.2.1, 6.4.5.2	IS 17004	R	5 percent but not less than 5 pieces	Every seventh control unit	
8.	5.2.6	Surface Compression (Optional)	6.5	IS 17004	S	As agreed between manufacturer and purchaser		
9.	5.2.7	Mechanical Strength - Four Point Bending Test (Optional)	6.3	IS 17004	S	As agreed between manufacturer and purchaser		
10.	5.2.8	Fabrication in Glass	5.2.8	IS 2553(Pt-1):2018	R	5 percent but not less than 5 pieces	Each Control Unit	
11.	5.2.9	Edge Working of Glass for toughening	5.2.9	-do-	R	-do-	-do-	
	5.3	Requirements Specific to Laminated Safety Glass			R			
12.	5.3.1	Thickness	4.2 & Table 1	IS 17004	R	Each piece Each sheet	-	-
14.	5.3.2	Dimensions, Squareness and Edge Displacement	5.3.2	IS 2553 (Pt-1):2018	R	5 percent but not less than 5 pieces	Each Control Unit	Applicable only to the material when supplied as cut sizes.
15.	5.3.3	Light stability test	7.6	IS 17004	R	Three pieces	Three months subject to the condition given in 5.2.1 of the Scheme	Sample to be retained for boil test
16.	5.3.4	Boil and Bake Tests	7.1.1, 7.1.2	IS 17004	R	-do-	-do-	
17.	5.3.5	Fracture and adhesion test	6.2.2	-do-	R	Ten pieces	Every seventh control unit	Subject to the condition given in 5.2.1 of the

								Scheme.
18.	5.3.6	Defects in the Central Area	5.3.6.7	IS 2553 (Pt-1):2018	R	5 percent but not less than 5 pieces	Each Control Unit	
19.	5.3.7	Humidity Test (optional)	7.2	IS 17004	S	As agreed between manufacturer and purchaser		
20.	5.3.8	Resistance to Human Impact Test	6.4	IS 17004	R	5 percent but not less than 5 pieces	Every seventh control unit	Subject to the condition given in 5.2.1 of the Scheme
21.	5.3.9	Working on Glass after lamination	5.3.9	IS 2553 (Pt-1):2018	R	5 percent but not less than 5 pieces	Each Control Unit	

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 empaneled 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 to BO head.