



PRODUCT MANUAL FOR STANDARD SAND FOR TESTING CEMENT ACCORDING TO IS 650 : 1991

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 650 : 1991
	Title	:	STANDARD SAND FOR TESTING CEMENT
	No. of Amendments	:	1
2.	Sampling Guidelines:		
a)	Raw material	:	Source of sand shall be from locations specified in clause 3 of IS 650 : 1991
b)	Grouping guidelines	:	Sand of each size fraction as per clause 4.2 shall be tested to cover that size in the scope of licence
c)	Sample Size	:	2 kg of each size fraction for all tests
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) Physical characteristics (Clause 4.2)		
	(ii) Chemical requirement (Clause 5.1)		
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 650 : 1991 with the following scope:		
	Name of the product	STANDARD SAND FOR TESTING CEMENT	
	Size fraction		

ANNEX A**List of Test Equipment***Major test equipment required to test as per the Indian Standard*

S. No.	Tests used in with Clause Reference	Test Equipment
1	Physical characteristics (Clause 4.2)	- IS sieves - 2 mm, 1 mm, 500 micron and 90 micron
2	Chemical requirements (Clause 5.1)	- Drying oven - Weighing balance - Porcelain disc - Distilled water - Water bath - Covered crucible - Hydrochloric acid - Stop watch - pipette

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 equipment.

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

3. LABELLING AND MARKING – As per the requirements of IS 650: 1991. Batch/control unit number and /or date of manufacturing shall also be marked on the package containing standard sand.

4. CONTROL UNIT – Standard Sand of same size fraction produced in one hour from raw material received from same source 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 Standard 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 Methods			No. of Sample	Frequency	Remarks
		Clause	Reference				
4	Physical characteristics						
	Visual inspection	4.1	IS 650	-	Adequate inspection shall be carried out to ensure the quality of standard sand		
	Sieve analysis	4.2	IS 650	R	One	Each control unit	-
5	Chemical requirements	5.1 5.1.1	IS 650	R	One	Daily for each size fraction and source of raw material	-

Note: 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.