



उत्पाद मैनुअल
आई एस 10360:1982 के अनुसार
फ़र्श के लिए पोज़ोलाना कंक्रीट ब्लॉक के लिए

दस्तावेज़ संख्या - पी एम/आई एस 10360/1/ फ़रवरी 2023

भारतीय मानक ब्यूरो की स्कीम-I (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल प्रमाणीकरण के प्रचालन में रीति और पारिश्रिता की सुसंगतता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसी द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज़ का उपयोग किया जा सकता है।

**PRODUCT MANUAL FOR LIME-
POZZOLANA CONCRETE BLOCKS FOR
PAVING ACCORDING TO IS 10360 : 1982**

Document No.- PM/ IS 10360/1/Feb 2023

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.

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1.	Product	:	IS 10360 : 1982
	Title	:	LIME-POZZOLANA CONCRETE BLOCKS FOR PAVING
	No. of Amendments	:	NIL
2.	Sampling Guidelines:		
a)	Raw material	:	Please refer ANNEX – A
b)	Grouping guidelines	:	Nil
c)	Sample Size	:	40 blocks for all tests
3.	List of Test Equipment	:	Please refer ANNEX – C
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – D
5.	Possible tests in a day :		
	General (Clause 4.1), Dimensions (Clause 4.2)		
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 10360 : 1982 with the following scope:		
	Name of the product	LIME-POZZOLANA CONCRETE BLOCKS FOR PAVING	

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ANNEX A

DETAILS OF RAW MATERIAL

1. Lime – IS 712
2. Pulverised fuel ash - IS 15648
3. Burnt Clay Pozzolana – IS 1344
4. Lime Pozzolana Mixture – IS 4098
5. Coarse & Fine aggregates – IS 383
6. Cement – IS 269, IS 1489-1 of IS 1489-2
7. Water – As per Cl 3.6 of IS 10360

ANNEX C**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.	Dimensions(clause 5)	- Measuring scale - Steel Tape - Radius gauge - Vernier caliper
2	Compressive Strength (Cl 6.1)	- Test facilities as per Appendix C of IS : 2185 (Part I)
3	Drying Shrinkage (Cl 6.2)	- Test facilities as per Appendix E of IS : 2185 (Part I)
4	Moisture Movement (Cl 6.3)	- Test facilities as per Appendix F of IS : 2185 (Part I)
5	Abrasion Resistance (Cl 6.4)	- Test facilities as per Appendix F of IS 9284
6	Flexural Strength (Cl 6.5)	- Test facilities as per Appendix F of IS : 2690 (Part II)

ANNEX D**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 10360 : 1982.

4. CONTROL UNIT – All Lime-Pozzolana Concrete Blocks for Paving manufactured from same lot and mix of raw materials under similar conditions of manufacture in a day 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	Re marks
		Clause	Reference				
3	Materials						
3.1	Lime	3.1	IS 10360 IS 712	S	One sample in a month or whenever there is change in source of supply.		No further testing is required, if received with test certificate or ISI marked
3.2	Pulverized fuel ash	3.2	IS 10360 IS 15648	S			
3.3	Burnt Clay pozzolana	3.3	IS 10360 IS 1344	S	1	Each consignment	No further testing is required accompanied with test certificate or ISI marked.
3.4	Lime Pozzolana Mixture	3.4	IS 10360 IS 4098	S	1	Each consignment	No further testing is required accompanied with test certificate or ISI marked.
3.5	Aggregates	3.5	IS 10360 IS 383	S	One	Once in year for each size.	Additional sample shall be tested wherever there is change in source of raw material.
3.6	Cement	3.6	IS 10360	S	-	-	Cement received shall be ISI marked and accompanied with test certificate.
3.7	Water	3.7	IS 10360 IS 456	S	1	Once in a year or whenever there is a change in source of water, whichever is earlier	
4	General	4	IS 10360	R	Firm to have adequate in-process controls to check compliance of this parameter as per the tolerances given in the Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity		
5	Dimensions	5	IS 10360				
6.1	Compressive strength	6.1 Annex-C	IS 10360 IS 2185 (Part 1)	R	3	Each Control Unit	

6.2	Drying shrinkage	6.2 Annex-E	IS 10360 IS 2185 (Part 1)	S	3	Once in a month	
6.3	Moisture Movement	6.3 Annex-F	IS 10360 IS 2185 (Part 1)	R	3	Once in a week	
6.4	Abrasion Resistance	6.2	IS 10360 IS 9284	S	3	Once in three months	
6.5	Flexural strength	6.5	IS 10360 IS 2690 (Pt II)	S	3	Once in three months	

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.