



उत्पाद मैनुअल
लकड़ी के दरवाजे, खिड़की और रोशनदान के चौखट
के लिए आई एस 4021:1995 के अनुसार

PRODUCT MANUAL
TIMBER DOOR, WINDOW AND VENTILATOR FRAMES
ACCORDING TO IS 4021:1995

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो) अनुरूपता मूल्यांकन (विनियम, 2018 की योजना -I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity 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.

1.	मानक संख्या IS No.	:	IS 4021:1995
	शीर्षक Title	:	Timber Door, Window And Ventilator Frames
	संशोधनों की संख्या No. of amendments	:	3
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	Please refer to Annex-A Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be established during Grant of Licence/Change in Scope of Licence/ Factory Surveillance
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Please refer to Annex-B

c)	नमूने का परिमाण Sample Quantity	:	1 piece Note: This section indicates the quantity of the sample of the product and/or the raw material (if applicable), required to be sent to the laboratory for testing, for the purpose of Grant of Licence/Change in Scope of Licence/ Factory Surveillance (incase of market surveillance, effort may be made to procure therequired quantity of product sample, as far as possible since raw material sample may not be available in market)
d)	परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर Parameters to be Declared in Test Request		- Same as the scope of licence
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer to Annex-C
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	Please refer to Annex-D
5.	एक दिन में संभावित परीक्षण Possible tests in a day		
	All tests		
6.	लाइसेंस का दायरा /Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS 4021:1995 with the following scope:		
	Name of the product	Timber Door, Window and Ventilator Frames	
	Type of Material	Timber / Laminated Veneer Lumber	
	Grade of Timber	First Grade / Second Grade	
	Type of Frame	D/W/V/S/T/DD/WW/V	
	Size of Opening	• Modular : Size Designations • Non-Modular: Size (Width x Height)	

भारतीय मानक ब्यूरो
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 New Delhi – 110002

ANNEX- A

Details of Raw Materials

Raw Material	Indian Standard
Timber	Maximum permissible moisture content in timber shall be as specified in IS 287.
Laminated Veneer Lumber	Laminated Veneer Lumber shall conform to IS 14616.

ANNEX B

Grouping Guidelines

1. Timber Door, Window and Ventilator Frames as per IS 4021:1995 are classified as given below:

(a) Type of Material : Timber / Laminated Veneer Lumber

(b) Grade of Timber : First Grade / Second Grade

(c) Type of Frame : D/W/V/S/T/DD/WW/V

(d) Size of Opening :

Modular (with Designation) - 8 DS 20/ 8 DS 21/ 9 DS 20/ 9 DS 21/ 10 DS 20/ 10 DS 21/12 DT 20/ 12 DT 21/ 6WS12/ 10WT12/ 12WT12/ 6WS13/ 10WT13/ 12WT13/ 6V6/ 10V6/ 12V6

Non-Modular (with Width x Height)- Sizes other than modular sizes, as agreed to between the manufacturer and the purchaser, may also be permitted.

2. Considering the above, the grouping guidelines given below shall be followed for GoL/CSoL:

a) Modular size of opening:

(i) Timber Door, Window and Ventilator Frames of the highest Size Designations from each Type of Material, Grade of Timber, Type of Frame shall be tested for all requirements to cover Frames of all lower Size designations including the size designation tested for that particular Type of Material, Grade of Timber and Type of Frame.

b) Non-modular sizes:

Timber Door, Window and Ventilator Frames of the highest Size (width x height) from each Type of Material, Grade of Timber, Type of Frame shall be tested for all requirements to cover Frames of all lower sizes including the size tested for that particular Type of Material, Grade of Timber and Type of Frame.

3. The Firm shall declare the varieties of Timber Door, Window and Ventilator Frames they intend to cover in the Licence. The Scope of Licence may be restricted based on the Manufacturing and Testing capabilities of the Manufacturer.

4. During the operation of the Licence, BO shall ensure that all the varieties covered in the Licence are tested in rotation, to the extent possible.

ANNEX C

List of Test Equipment

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sr No.	Tests Used in With Clause Number	Test Equipment
1	Moisture Content (Clause 4.1.2 of IS 4021)	• Moisture Meter
2	Permissible Defects (Clause 4.1.5 of IS 4021)	• Measurement Tape, • Vernier Caliper, • Square Tool
3	Construction and Workmanship (Clause 5 of IS 4021)	
4	Dimensions, sizes and tolerance (Clause 6 & 7 of IS 4021)	

ANNEX D

SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that manufacturers (licensees/applicants) will implement a Quality Assurance Plan i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Assurance Plan defining the control unit (i.e. lot/batch etc.) and the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and submit the same to BIS Branch Office for information. The manufacturer shall comply with the same and maintain test records in accordance with para 2.4.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is : All Timber Door, Window and Ventilator Frames of the same type of material, grade, type of frame and size of opening manufactured in a day shall be considered as a control unit.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan. Alternatively, the manufacturer has the option of adherence to the quality plan as per levels of control recommended in column 3 of Table 1.

1.4 However, all manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard.

2. ENSURING COMPLIANCE THROUGH TESTING- It is expected that manufacturers (licensees/applicants) will establish a suitably equipped and staffed in house laboratory (In house testing facility) for testing at least those parameters of the Indian Standard which require routine testing for ensuring quality of the product. This includes in-process controls as may be defined and put in place by the manufacturer and testing parameters/requirements which can only be performed in the factory.

2.1 For the guidance of manufacturers, Table 1 giving the recommended levels of control is given below. Column 2 of Table 1 indicates routine tests where test equipment is required in house as “R” or other tests which can be subcontracted as “S”. Subcontracting is permitted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.2 For MSME manufacturers, the requirement of maintaining a laboratory/in-house testing facility for routine tests (indicated as “R” in Column 2 of Table 1) is also optional.

2.2.1 MSME manufacturers may utilize common cluster based facilities as per guidelines for the

utilization of cluster based test facilities by MSMEs or the provisions of Sharing of testing facilities or get testing done from BIS recognized/empaneled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.3 Large Scale manufacturers shall maintain an in-house laboratory equipped at least with test facilities for routine tests (indicated as “R” in Column 2 of Table 1), where different tests given in the specification shall be carried out in accordance with the method given in the specification. They shall also implement a calibration plan for the in-house test equipment.

2.3.1 Alternatively, in lieu of an in-house laboratory, large scale manufacturers can also utilize the provisions of Sharing of testing facilities as per the Guidelines for Grant of Licence available on BIS website www.bis.gov.in. (Under Conformity Assessment>Product Certification Process). Even for subcontracted tests, provisions for sharing of testing facilities can be utilized.

2.4 TEST RECORDS- The manufacturers maintaining an in-house laboratory or utilizing common cluster based facilities or shared test facilities shall maintain test records for the tests carried out to establish conformity. For the tests being subcontracted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025, test reports issued by the laboratories shall be available for inspection by BIS.

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be hammer-marked on the exposed surface of frames provided always that the product so marked conforms to each requirement of the specification.

3.1 Marking shall be done as per Clause 11 of IS 4021:1995.

3.2 **Additional Marking requirements:** The product shall also be marked with the following additional requirement on the product/package:

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4. REJECTION - All the production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. 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
(ONLY FOR GUIDANCE PURPOSE)

(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				
4.1	Timber	4.1.1, 4.1.2, 4.1.3, 4.1.4, 4.1.5	IS 4021	R	One	Each Consignment	No further testing is required,if material received with test certificate or ISI Marked.
4.2	Laminated Veneer Lumber	4.2	IS 4021 IS 14616	S	One	Each Consignment	
5	Construction and Workmanship	5.1, 5.2, 5.3, 5.4	IS 4021	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.		
6	Dimensions, Sizes and Tolerances	6.1	IS 4021				
7	Metallic Fastners/ holdfasts	7	IS 4021				
8	Finish	8.1, 8.2, 8.3	IS 4021				