

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 5807-3 (1971): Methods of test for clear finishes for wooden furniture, Part 3: Resistance to marking by oils and fats [CED 13: Building Construction Practices including Painting, Varnishing and Allied Finishing]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartḥari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE



Indian Standard

METHODS OF TEST FOR
CLEAR FINISHES FOR WOODEN FURNITURE
PART III RESISTANCE TO MARKING BY OILS AND FATS

(First Reprint JUNE 1990)

UDC 684.4.041 : 684.59

© Copyright 1971

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Indian Standard

METHODS OF TEST FOR CLEAR FINISHES FOR WOODEN FURNITURE PART III RESISTANCE TO MARKING BY OILS AND FATS

Painting, Varnishing and Allied Finishes Sectional Committee, BDC 34

<i>Chairman</i>	<i>Representing</i>
SHRI B. SHIRAZI	Cole Paints & Contracts Pvt Ltd, Bombay
<i>Members</i>	
SHRI S. K. ANAND	Engineer-in-Chief's Branch, Army Headquarters
SHRI V. V. SASIDARAN (<i>Alternate</i>)	Blundell Eomite Paints Ltd, Bombay
SHRI N. S. BHARATIA	The Indian Paints Association, Calcutta
SHRI C. J. BHUMKAR	
SHRI T. K. S. MANI (<i>Alternate</i>)	National Test House, Calcutta
SHRI S. K. BOSE	
SHRI K. C. SEAL (<i>Alternate</i>)	Directorate General of Supplies and Disposals, New Delhi
SHRI P. K. CHAKRAVARTI	
SHRI G. S. SAVKAR (<i>Alternate</i>)	Central Water and Power Commission, New Delhi
SHRI K. R. CHANDRASHEKHAR	
SHRI V. J. PATIL (<i>Alternate</i>)	Ministry of Railways
CHEMIST AND METALLURGIST (RESEARCH, DESIGNS & STANDARDS ORGANIZATION, CHITTA-KANJAN)	
SHRI A. K. DAS GUPTA	Public Works Department, Government of West Bengal
DIRECTOR	Indian Lac Research Institute (CSIR), Ranchi
SHRI SHRAVAN KUMAR (<i>Alternate</i>)	
SHRIMATI S. GURUSWAMY	Curzon & Co, Madras
SHRI HAZARI LAL MARWAH	Central Builders' Association, New Delhi
SHRI K. P. MUKHERJEE	National Metallurgical Laboratory (CSIR), Jamshedpur
PROF B. NARAYANA DAS	Institution of Engineers (India), Calcutta
SHRI S. V. NATHAN	Goodlass Nerolac Paints Pvt Ltd, Bombay
DR A. V. R. RAO	National Buildings Organization, New Delhi
SHRI O. P. RATRA (<i>Alternate</i>)	
SHRI B. S. RAWAT	Forest Research Institute and Colleges, Dehra Dun
SHRI P. B. SHAH	Asian Paints Co (I) Pvt Ltd, Bombay
DR S. M. SINGH	Central Building Research Institute, (CSIR), Roorkee
SHRI S. SRINIVASAN	Ministry of Shipping & Transport, New Delhi

(Continued on page 2)

(Continued from page 1)

Members

DR R. K. SUD
SUPERINTENDING SURVEYOR OF
WORKS, SOUTH WESTERN ZONE,
CPWD, BOMBAY

SURVEYOR OF WORKS I, ATTA-
CHED TO THE OFFICE OF SSW
(NEW DELHI ZONE), CPWD,
NEW DELHI (*Alternate*)

SHRI Y. S. SWAMY

SHRI D. AJITHA SIMHA,
Director (Civ Engg)

Representing

Nagrath Paints Pvt Ltd, Kanpur
Central Public Works Department, New Delhi

Imperial Chemical Industries (India) Pvt Ltd,
Calcutta
Director General, ISI (*Ex-officio Member*)

Secretary

SHRI L. RAMACHANDRA RAO
Deputy Director (Civ Engg), ISI

Indian Standard

METHODS OF TEST FOR CLEAR FINISHES FOR WOODEN FURNITURE PART III RESISTANCE TO MARKING BY OILS AND FATS

0. FOREWORD

0.1 This Indian Standard (Part III) was adopted by the Indian Standards Institution on 27 August 1971, after the draft finalized by the Painting, Varnishing and Allied Finishes Sectional Committee had been approved by the Civil Engineering Division Council.

0.2 In order to facilitate the consumer to test the performance of clear finishes of wooden furniture under certain particular situations, standard methods of testing the clear finishes have been developed. One such method is to test finishes for wooden furniture on which oils and fats may be spilt or splashed. It affords a method for comparing different finishes or may be used in conjunction with an agreed approved sample, to check the standard of supplies.

0.3 In view of the diversity of woods and finishing systems used in the furniture industry it is quite impracticable to specify a uniform standard test substrate and method of preparation of the finishing system. These should of necessity be the subject of agreement between purchaser and vendor and this method seeks only to lay down a standard procedure for testing a wooden panel coated with the appropriate finishing system.

0.3.1 Individuals vary appreciably in their standard of visual assessment of any markings produced by spilling oils and fats on the test surface. However, as the purpose of the test is to ensure that the finish will not undergo disfigurement of any type when used under the set of conditions, total absence of any disfigurement has been stipulated as the condition for any finish to be declared to comply with this requirement.

0.4 In the formulation of this standard due weightage has been given to international co-ordination among the standards and practices prevailing in different countries in addition to relating it to the practices in the field in this country.

0.5 This standard is one of a series of Indian Standards on Method of test for clear finishes for wooden furniture. Other standards published so far in the series are:

IS : 5807 (Part I)-1970 Methods of test for clear finishes for wooden furniture : Part I Resistance to dry heat

IS : 5807 (Part II)-1970 Methods of test for clear finishes for wooden furniture : Part II Resistance to wet heat.

0.6 In reporting the results of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS : 2-1960*.

1. SCOPE

1.1 This standard (Part III) lays down the method of test for assessing the resistance of a wood finishing system to marking by an oil or fat in contact with the surface of the finishing system.

1.2 The test may be used either as a means of comparing a number of finishing systems or as a controlled check test to ensure that a consistent quality of supplies is being maintained.

2. PRINCIPLE

2.1 Oil or fat is placed on the surface of the test panel. After 24 h the test material is removed, the test area is generally rubbed with a soft cloth damped in dilute acetic acid, polished with a soft, clean, dry cloth and examined visually for signs of marking. There should not be any visible marking discolouration or other type of disfigurement of the finish.

3. PREPARATION OF TEST SURFACE

3.1 The panel shall be substantially flat and not less than $250 \times 150 \times 10$ mm and the centres of the 25 mm diameter test areas shall not be less than 50 mm apart and not less than 40 mm from any side.

3.1.1 The full finishing system shall be applied by appropriate method or application as described in IS : 2338 (Part I)-1967† to an agreed wooden substrate suitably prepared and complying with the dimensions described in 3.1.

3.1.2 Unless otherwise specified the final coat shall be allowed to age at room temperature of not less than 15°C with free access of air for an agreed period before test, the period to be not less than 28 days.

*Rules for rounding off numerical values (*revised*).

†Code of practice for finishing of wood and wood-based materials : Part I Operations and workmanship.

4. TEST PROCEDURE

4.1 Place the appropriate number of pools of oil or pats of fat each approximate 25 mm in diameter, allowing at least two per test material, on the test panel. Note by any suitable method the test positions of each material and ensure that the test positions for a particular test material are as random as possible and that they do not lie on the same grain structure. Leave the panel undisturbed at a temperature of $27 \pm 2^\circ\text{C}$ for 24 h. After this period remove the oil or fat from the panel with soft absorbent paper or cloth. Gently rub the test area with a soft cloth dampened with dilute acetic acid solution [0.5 percent (m/m) solution of analytical grade glacial acetic acid in distilled water]. Give the test area final light polish with a soft dry cloth. The panel shall then be examined in accordance with 4.2.

4.2 Examination of the Test Panel—The test area shall be carefully examined visually at angles of 90° and 30° to the surface against bright natural daylight.

5. ASSESSMENT AND REPORTING OF RESULTS

5.1 Disfigurement of any type, such as marking, change of colour, blushing, etc shall be noted. The surface shall be considered as unaffected if the test spots are indistinguishable from the surrounding area.

6. RE-TEST

6.1 In the event of one test area for a given test material being assessed as a failure, the test shall be repeated on another test panel and if a failure occurs again, the finish shall be classed as unacceptable in respect of that test material.

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 110002

Telephones: 331 01 31, 331 13 75

Telegrams: Manaksanstha
(Common to all Offices)

Regional Offices:

	Telephone
Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 110002	{ 331 01 31 331 13 75
*Eastern : 1/14 C. I. T. Scheme VII M, V. I. P. Road, Maniktola, CALCUTTA 700054	36 24 99
Northern : SCO 445-446, Sector 35-C, CHANDIGARH 160036	{ 2 18 43 3 16 41
Southern : C. I. T. Campus, MADRAS 600113	{ 41 24 42 41 25 19 41 29 16
†Western : Manakalaya, E9 MIDC, Marol, Andheri (East), BOMBAY 400093	6 32 92 95

Branch Offices:

'Pushpak', Nurmohamed Shaikh Marg, Khanpur, AHMADABAD 380001	{ 2 63 48 2 63 49
‡Peenya Industrial Area 1st Stage, Bangalore Tumkur Road BANGALORE 560058	{ 38 49 55 38 49 56
Gangotri Complex, 5th Floor, Bhadbhada Road, T. T. Nagar, BHOPAL 462003	6 67 16
Plot No. 82/83, Lewis Road, BHUBANESHWAR 751002	5 36 27
53/5, Ward No. 29, R.G. Barua Road, 5th Byelane, GUWAHATI 781003	3 31 77
5-8-56C L. N. Gupta Marg (Nampally Station Road), HYDERABAD 500001	23 10 83
R14 Yudhister Marg, C Scheme, JAIPUR 302005	{ 6 34 71 6 98 32
117/418 B Sarvodaya Nagar, KANPUR 208005	{ 21 68 76 21 82 92
Patliputra Industrial Estate, PATNA 800013	6 23 05
T.C. No. 14/1421, University P.O., Palayam TRIVANDRUM 695035	{ 6 21 04 6 21 17

Inspection Offices (With Sale Point):

Pushpanjali, First Floor, 205-A West High Court Road, Shankar Nagar Square, NAGPUR 440010	2 51 71
Institution of Engineers (India) Building, 1332 Shivaji Nagar, PUNE 411005	5 24 35

*Sales Office in Calcutta is at 5 Chowringhee Approach, P. O. Princep Street, Calcutta 700072

†Sales Office in Bombay is at Novelty Chambers, Grant Road, 89 65 28
Bombay 400007

‡Sales Office in Bangalore is at Unity Building, Narasimharaja Square, 22 36 71
Bangalore 560002

Reprography Unit, BIS, New Delhi, India