Co-operating organizations

The Timber Industry Standards Committee, under whose supervision this British Standard was prepared consists of representatives from the following Government departments and scientific and industrial organizations:—

British Door Association
British Furniture Trade Confederation
British Railways, The British Transport Commission
D.S.I.R. — Forest Products Research Laboratory*
English Joinery Manufacturers’ Association (Incorporated)
Flush Door Manufacturers’ Association
Institution of Civil Engineers
Institution of Municipal Engineers
Institution of Structural Engineers
Ministry of Housing and Local Government
Ministry of Works
National Federation of Building Trades Employers
Royal Institute of British Architects
Royal Institution of Chartered Surveyors
Timber Development Association*
Timber Trade Federation of the U.K.

The Government department and scientific and industrial organization marked with an asterisk in the above list, associated with the following, were directly represented on the committee entrusted with the preparation of this British Standard:—

Ministry of Supply

Amendments issued since publication

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This British Standard, having been approved by the Timber Industry Standards Committee and endorsed by the Chairman of the Building Divisional Council, was published under the authority of the General Council on 21 February 1957

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The following BSI references relate to the work on this standard:—

Committee reference TIB/2
Draft for comment CW(TIB) 3312

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9 Janka indentation test

In the 2 in. standard the test piece shall be 6 in. long and shall be of square section 2 in. by 2 in., cut radially and tangentially. The test requires the determination of the load necessary to force into the test piece, to a depth of 0.222 in., the hemispherical end of a steel bar, or a steel ball, 0.444 ± 0.002 in. in diameter. A diagrammatical representation of the apparatus to be employed, which shall incorporate a depth indicating device, is given in Figure 8. The same apparatus shall be used for the test on the 2 cm size test piece, which shall be clamped between distance pieces of the species under test to form a block of approximately 2 in. square. The rate of penetration of the hardness tool shall be 0.25 in./min for both the 2 in. and the 2 cm test pieces.

The determination shall be made upon the radial, the tangential and the end surfaces of the 2 in. test piece. For the 2 cm test piece the determination shall be made only on the radial and the tangential surfaces. The radial and tangential surfaces chosen for the test shall be those which most closely approach the true radial and tangential directions of the grain.

The result of each determination on both types of test piece shall be recorded.

10 Shear parallel to grain test

The test piece shall be a cube of either 2 in. or 2 cm side as shown in Figure 9.

Suitable apparatus for making the test on the 2 in. test pieces is shown diagrammatically in Figure 10.

The load shall be applied at a constant rate of crosshead movement of 0.025 in./min. A similar testing speed of 0.025 in./min is used for the 2 cm test piece, which shall be tested in an apparatus of the type illustrated in Figure 11.

The direction of shearing shall be parallel to the longitudinal direction of the grain. The test shall be made with the plane of shear failure parallel to the tangential direction of the grain and also with the plane of shear failure parallel to the radial direction.

11 Cleavage test

The form and dimensions of the 2 in. standard test piece shall be as given in Figure 12. A diagrammatic representation of the apparatus to be employed is given in Figure 12.

The 2 cm test piece (which is of the “Monnin” type) and the apparatus to be used are illustrated in Figure 13.
Figure 2 — Impact test (2 in. standard)
Figure 5 — Suitable arrangement for compression test parallel to grain (2 in. standard)
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