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Wood-based panels — Oriented strand board (OSB) — Definitions, classification and specifications

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

SO/TC ISO 16894 was prepared by Technical Committee ISO/TC 89, Wood-based panels, Subcommittee SC 2, Particle boards.

Wood-based panels — Oriented strand board (OSB) — Definitions, classification and specifications

1 Scope

This International Standard gives definitions, classifications and specifications for the manufacturing requirements of oriented strand board (OSB). The values given are used to classify OSB into one of four types, namely OSB type GP-REG, LB-REG, LB-MR or HLB-MR. The values are related to panel properties, but are not characteristic values to be used for design purposes.

- NOTE 1 When OSB characteristic strength and stiffness values are required for design purposes, the properties can be established based on testing in accordance with ISO 16572, ASTM D7033-07 or EN 789.
- NOTE 2 For specific load-bearing applications, such as walls, roofs, floors, I joist webs, the load-bearing OSB can meet the specific performance requirements for that intended application, in addition to the requirements of this International Standard.
- NOTE 3 Information on supplementary properties is given in Annex C.
- NOTE 4 This International Standard is the reference for OSB classifications and specifications. Other regional or national standards covering the performance of wood structural panels are given in the bibliography.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- ISO 9426, Wood-based panels Determination of dimensions of panels
- ISO 9427, Wood-based panels Determination of density
- ISO 12460-1, Wood-based panels Determination of formaldehyde release Part 1: Formaldehyde emission by the 1-cubic-metre chamber method
- ISO 16572, Timber structures Wood-based panels Test methods for structural properties
- ISO 16978, Wood-based panels Determination of modulus of elasticity in bending and of bending strength
- ISO 16979, Wood-based panels Determination of moisture content
- ISO 16983, Wood-based panels Determination of swelling in thickness after immersion in water
- ISO 16984, Wood-based panels Determination of tensile strength perpendicular to the plane of the panel
- ISO 16987, Wood-based panels Determination of moisture resistance under cyclic test conditions
- ISO 16998, Wood-based panels Determination of moisture resistance Boil test
- ISO 17064:2004, Wood-based panels Fibreboard, particleboard and oriented strand board (OSB) Vocabulary