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**Wood-based panels — Dry-process  
fibreboard —**

**Part 2:  
Requirements**

*Panneaux à base de bois — Panneaux de fibres obtenus par procédé  
à sec —*

*Partie 2: Exigences*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

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.

ISO 16895-2 was prepared by Technical Committee ISO/TC 89, *Wood-based panels*, Subcommittee SC 1, *Fibre boards*.

ISO 16895 consists of the following parts, under the general title *Wood-based panels — Dry-process fibreboard*:

- *Part 1: Classifications*
- *Part 2: Requirements*

# Wood-based panels — Dry-process fibreboard —

## Part 2: Requirements

### 1 Scope

This part of ISO 16895 provides the manufacturing property requirements for uncoated dry-process fibreboard.

The values listed in this part of ISO 16895 relate to product properties used to classify fibreboards into one of four types, UDF, LDF, MDF and HDF (see Clause 3), for use in one of four service conditions, REG, MR, HMR and EXT. The values are not characteristic values to be used for design purposes.

### 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 12460-2, *Wood-based panels — Determination of formaldehyde release — Part 2: Small-scale chamber method*

ISO 12460-3, *Wood-based panels — Determination of formaldehyde release — Part 3: Gas analysis method*

ISO 12460-4, *Wood-based panels — Determination of formaldehyde release — Part 4: Desiccator method*

ISO 12460-5, *Wood-based panels — Determination of formaldehyde release — Part 5: Perforator method*

ISO 16572, *Timber structures — Wood-based panels — Test methods for structural properties*

ISO 16895-1, *Wood-based panels — Dry-process fibreboard — Part 1: Classifications*

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 16981, *Wood-based panels — Determination of surface soundness*

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, *Wood-based panels — Fibreboard, particleboard and oriented strand board (OSB) — Vocabulary*

ISO 20585, *Wood-based panels — Determination of wet bending strength after immersion in water at 70 °C or 100 °C (boiling temperature)*

### 3 Terms, definitions and abbreviations

For the purposes of this document, the terms and definitions given in ISO 17064 and ISO 16895-1 and the following abbreviations apply.

|     |                              |
|-----|------------------------------|
| EXT | exterior                     |
| FN  | furniture                    |
| GP  | general purpose              |
| HDF | high-density fibreboard      |
| HMR | highly moisture resistant    |
| LB  | load bearing                 |
| LDF | low-density fibreboard       |
| MDF | medium-density fibreboard    |
| MR  | moisture resistant           |
| REG | regular                      |
| UDF | ultra-low-density fibreboard |

### 4 Expression of specification limits and general requirements

#### 4.1 Expression of specification limits

This International Standard may be used to evaluate groups of panels or production batches. To evaluate a group of panels, this requires that:

- The mandatory tests of ISO 16895-1, Tables 5 to 8, be applied to samples of the group. Conditioning of test specimens is required and is specified in each test method.
- The results of the tests be evaluated against the appropriate specification limits in Tables 1 to 19 of this part of ISO 16895, according to the product type and thickness range of the panels. Tables 1 and 2 apply to all product types and thickness ranges of panels.

For density variation and dimensions (Table 1), specification limits are based on the mean values for individual panels (calculated in accordance with Annex A) and are maximum tolerances. For formaldehyde emission, Table 2 gives upper specification limits for individual panel results.

Specification limits in Tables 3 to 19 are based on 5 (lower) or 95 (upper) percentile expressions, according to 4.2 and 4.3.