

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 821

PARTICLE BOARDS

DETERMINATION OF DIMENSIONS OF TEST PIECES

1st EDITION

September 1968

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Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

BRIEF HISTORY

The ISO Recommendation R 821, *Particle boards – Determination of dimensions of test pieces*, was drawn up by Technical Committee ISO/TC 89, *Boards made from wood or other ligno-cellulosic fibrous materials*, the Secretariat of which is held by the Deutscher Normenausschuss (DNA).

Work on this question by the Technical Committee began in 1963 and led, in 1964, to the adoption of a Draft ISO Recommendation.

In May 1966, this Draft ISO Recommendation (No. 959) was circulated to all the ISO Member Bodies for enquiry. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Austria	Israel	Sweden
Belgium	Korea, Rep. of	Switzerland
Canada	Netherlands	U.A.R.
Chile	New Zealand	United Kingdom
Colombia	Norway	U.S.S.R.
Czechoslovakia	Poland	Yugoslavia
Finland	Portugal	
France	Romania	
Germany	South Africa,	
India	Rep. of	
Ireland	Spain	

No Member Body opposed the approval of the Draft.

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided, in September 1968, to accept it as an ISO RECOMMENDATION.

PARTICLE BOARDS

DETERMINATION OF DIMENSIONS OF TEST PIECES

1. SCOPE

This ISO Recommendation describes a method for measuring the thickness, length and width of test pieces of particle boards, defined in ISO Recommendation R 820, *Particle boards – Definition – Classification*.

2. APPARATUS

- 2.1 *Micrometer*, having flat and parallel circular measuring surfaces of 16 ± 1 mm diameter (approximately 200 mm^2). The graduation of the apparatus should allow a reading to an accuracy of 0.01 mm.
- 2.2 *Sliding caliper*, or any other instrument with a jaw thickness of at least 5 mm, and graduated to allow a reading to an accuracy of 0.1 mm.
- 2.3 *Balance*, allowing a reading to an accuracy of 0.01 g.

3. SAMPLING AND TEST PIECES

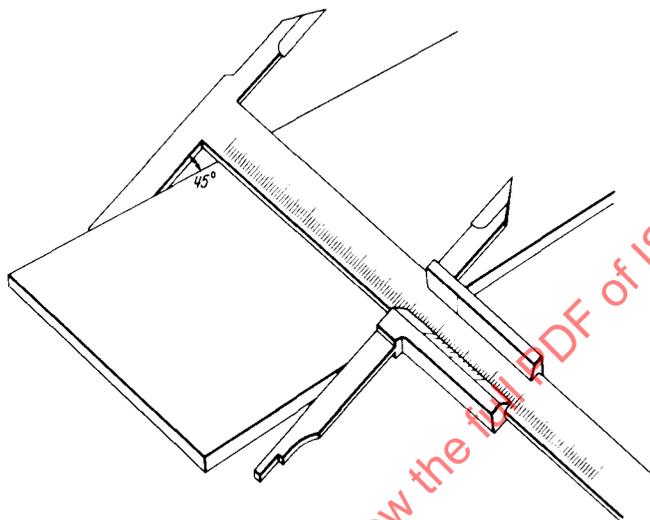
- 3.1 **Sampling and cutting of the test pieces** should be carried out in accordance with ISO Recommendation R . . . , **Particle boards – Sampling, cutting and inspection*.
- 3.2 **Test pieces.** The dimensions of the test pieces should be in accordance with those specified in the relevant test method.
- 3.3 **Conditioning.** The test pieces should be conditioned to constant mass ** in an atmosphere of a relative humidity of $65 \pm 5 \%$ and a temperature of $20 \pm 2 \text{ }^\circ\text{C}$.

* At present at the stage of draft proposal.

** Constant mass is considered to be reached when two successive weighing operations, carried out at an interval of 24 hours, do not differ by more than 0.1 % of the mass of the test piece.

4. PROCEDURE

- 4.1 For measuring the thickness, the measuring surfaces of the micrometer should be applied slowly to the test piece and at a pressure of approximately 200 gf/cm^2 .
- 4.2 For measuring the length and width, the jaw of the sliding caliper should be applied slowly and without excessive pressure to the test piece at an angle of approximately 45° to the plane of the test piece (see figure below).



- 4.3 The number and position of the measuring points should be in accordance with the ISO Recommendations concerning each testing method of particle boards.

5. CALCULATION AND EXPRESSION OF RESULTS

- 5.1 The result of each of the measurements should be expressed as follows :

- (a) *Thickness*
 – to the nearest 0.05 mm,
- (b) *Length and width*
 – to the nearest 0.1 mm.

- 5.2 For determination of thickness, length and width of the test piece, the mean arithmetical value of each group of measurements should be stated to two decimal places.

6. TEST REPORT

See ISO Recommendations concerning each particular testing method.