INTERNATIONAL STANDARD

ISO
4211-4

First edition
1988-07-01

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
ORGANISATION INTERNATIONALE DE NORMALISATION
МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Furniture — Tests for surfaces —

Part 4 :
Assessment of resistance to impact

Ameublement — Essais des finitions de surface —

Partie 4 : Évaluation de la résistance au choc

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 4211-4 was prepared by Technical Committee ISO/TC 136, *Furniture.*

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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Furniture — Tests for surfaces —

Part 4 :
Assessment of resistance to impact

1 Scope and field of application

This part of ISO 4211 specifies a method of assessment of resistance to impact of the surfaces of finished furniture.

The tests are generally carried out on panels of a size sufficient to meet the requirements of the test and of the same material as, and finished identically to, the finished furniture.

The method is suitable for use either as a means of comparing different finishing systems or as a quality control test to ensure that a specified performance level is being achieved or maintained.

NOTE — The nature of the substrate will have a major effect on the results obtained in the test.

2 References

ISO 3290, *Rolling bearings — Bearing parts — Balls for rolling bearings.*

ISO 6508, *Metallic materials — Hardness test — Rockwell test (scales A, B, C, D, E, F, G, H, K).*

3 Principle

A cylindrical steel weight is dropped from specified heights through a vertically-mounted guide onto a steel ball of specified diameter and hardness positioned on the test panel. The degree of damage to the test area is assessed by reference to a descriptive numerical rating code.

4 Apparatus and materials

4.1 Horizontal base which provides rigid support for the test panel. When the test area forms part of a piece of furniture, the complete item should stand on a rigid floor.

4.2 Vertically-mounted guide tube with an inside diameter of 40 ± 5 mm (A in figure 1). A 10 ± 0,5 mm thick disc with a centre hole of diameter 14 $^{0}_{+0,05}$ mm for the ball (4.4) shall be attached to the bottom end of the guide tube.

4.3 Cylindrical steel weight (B in figure 1) with a mass of 500 ± 5 g and a diameter that is approximately 1 mm less than the inside diameter of the guide tube. This weight shall be made of softer alloy than the ball, so that it will not make indentations on the ball. Provision shall be made for the weight to be raised and lowered.
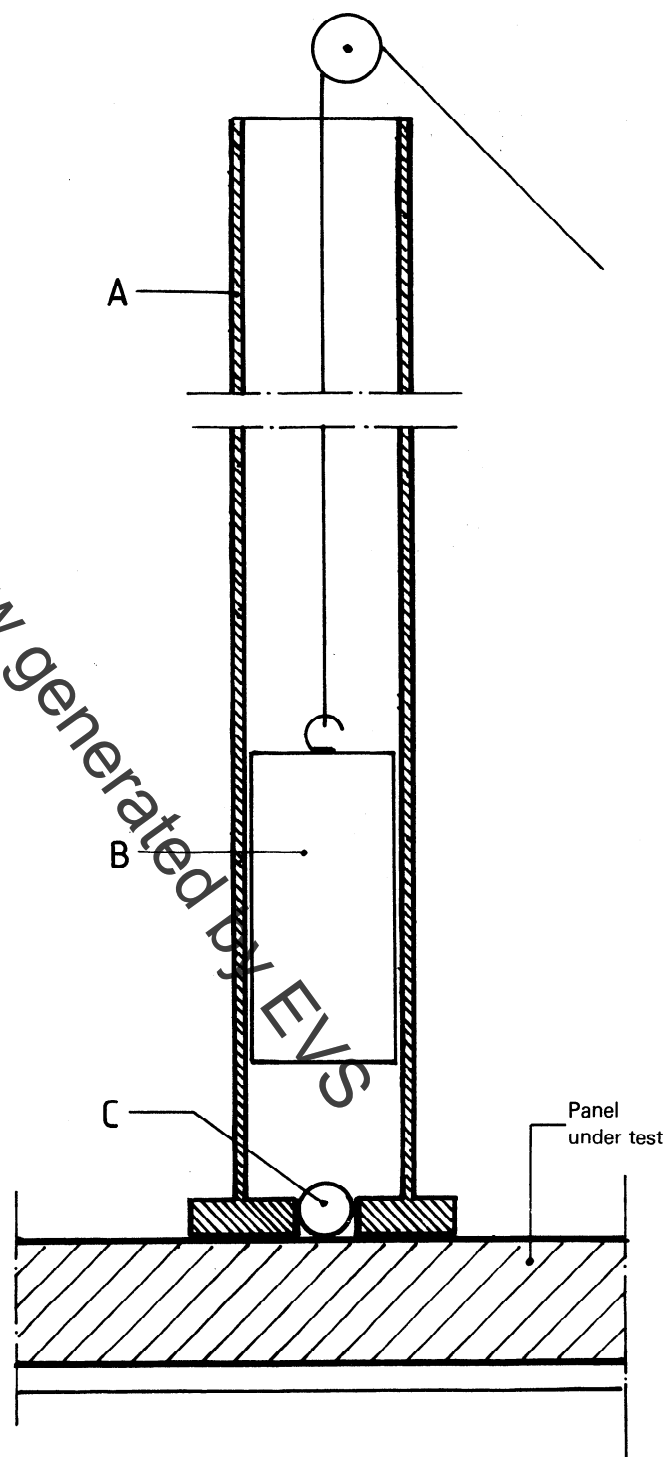
A

B

C

Panel under test

Figure 1 — Impact on surface