INTERNATIONAL STANDARD

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Third edition
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Paper and board — Testing of cores —

Part 9: Determination of flat crush resistance

Papier et carton — Essais des mandrins —

Partie 9: Détermination de la résistance à l'écrasement à plat

Reference number
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Foreword

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This document was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps*.

This third edition cancels and replaces the second edition (ISO 11093-9:2006), of which it constitutes a minor revision.

The changes compared to the previous edition are as follows:

— A note has been added to the scope, stating that if the wall thickness of the core is less than 5 mm, the breaking point is not detectable.

A list of all parts in the ISO 11093 series can be found on the ISO website.

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Paper and board — Testing of cores —

Part 9: Determination of flat crush resistance

1 Scope

This part of ISO 11093 specifies a method for the determination of the maximum flat crush resistance of wound paper and board cores.

NOTE If the wall thickness of the core is less than 5 mm, the breaking point is not detectable.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system*

ISO 11093-1, *Paper and board — Testing of cores — Part 1: Sampling*

ISO 11093-2, *Paper and board — Testing of cores — Part 2: Conditioning of test samples*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
flat crush resistance
quantity calculated from the load acting at right angles to the axis of the test piece at the first maximum or levelling off of the crushing force of the load deformation curve

Note 1 to entry: The flat crush resistance is expressed in kilonewtons per metre.

4 Principle

The test piece is placed between two pressure plates arranged in parallel, so that its axis is parallel with the plane of the pressure plates and compressed at a constant plate rate until the first maximum, or levelling, of the load has been exceeded.

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