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## Paper and board — Determination of compressive strength — Ring crush method

*Papier et carton — Détermination de la résistance à la compression —  
Méthode d'écrasement en anneau*



Reference number  
ISO 12192:2011(E)

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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 12192 was prepared by Technical Committee ISO/TC 6, *Paper, board and pulps*, Subcommittee SC 2, *Test methods and quality specifications for paper and board*.

This second edition cancels and replaces the first edition (ISO 12192:2002), which has been technically revised. In the revision, the instrument is clarified in accordance with ISO 13820, relevant terms are defined, a precision statement is added, and other minor text corrections have been made. Significant technical changes in this revision include an expansion of the scope of the method to thinner specimens (lower grammage) and a clarification of the procedure to indicate testing with alternating sides of the test piece facing outward.

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## **Introduction**

Fibreboard shipping containers are frequently subjected to in-plane compressive forces during shipment or storage. Therefore, resistance to crushing is an important measure of the performance characteristics of the containers.

The resistance to crushing depends on the design of the containers and on the in-plane crush resistance of the components of the board from which it is made. The in-plane crush resistance of these components can be measured by the ring crush test.