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Corrugated fibreboard—Part 1 : Determination of flat crush resistance

ICS 85.060

Descriptors : corrugated, board (paper), compressive strength, compression testing

Reference number : **JIS Z 0403-1 : 1999 (E)**

Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of International Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law.

By this establishment, **JIS Z 0401** : 1995 was withdrawn and replaced by **JIS Z 0403-1** and **JIS Z 0403-2**.

JIS Z 0403 consists of the following 2 parts under the general title *Corrugated fibreboard*.

Part 1 : Determination of flat crush resistance
Part 2 : Determination of edgewise crush resistance

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Corrugated fibreboard—Part 1 : Determination of flat crush resistance

Introduction This Japanese Industrial Standard has been prepared based on the second edition of **ISO 3035** *Single-faced and single-wall corrugated fibreboard—Determination of flat crush resistance* published in 1982 without any modification in the technical contents of the corresponding portions. For items of the flat crush tester, some parts of **ISO 3037** *Corrugated fibreboard—Determination of edgewise crush resistance (Unwaxed edge method)* are adopted, and items not specified in the corresponding International Standards (performance of flat crush tester and test method) are added as the Japanese Industrial Standard.

In addition, the portions underlined with dots in this Standard are the matters which are not specified in the corresponding International Standards.

1 Scope This Standard specifies a method for the determination of the flat crush resistance of single-faced and single-wall (double-faced) corrugated fibreboard.

In addition, this method is not applicable to double-wall (double-double-faced) corrugated fibreboard and triple-wall (double-double-double-faced) corrugated fibreboard.

Remarks : The corresponding International Standards to this Standard are as follows:

ISO 3035 : 1982 *Single-faced and single-wall corrugated fibreboard—Determination of flat crush resistance*

ISO 3037 : 1994 *Corrugated fibreboard—Determination of edgewise crush resistance (Unwaxed edge method)*

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards shall be applied.

JIS P 8110 *Paper and board—Sampling for testing*

Remarks : **ISO 186** : 1994 *Paper and board—Sampling to determine average quality* is equivalent to the said standard.

JIS P 8111 *Paper, board and pulps—Standard atmosphere for conditioning and testing*

Remarks : **ISO 187** : 1990 *Paper, board and pulps—Standard atmosphere for conditioning and testing and procedure for monitoring the atmosphere and conditioning of samples* is equivalent to the said standard.

3 Principle Subjection of a test piece of the corrugated fibreboard to an increasing force applied perpendicularly to the surface by a compression tester having two flat and parallel platens, until the fluting collapses. Measurement of the maximum force sustained by the test piece.