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Doorsets — Soft heavy body impact test

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Doorsets — Soft heavy body impact test

1 Scope This Japanese Industrial Standard specifies, among the performance test methods listed in **JIS A 1513**, the impact test method of doorsets using a swinging impact body containing sand.

Remarks 1 The normative reference of this Standard is as follows.

JIS A 1513 *Windows and doorsets — General rule for test method*

2 The International Standard corresponding to this Standard is as follows.

ISO 8270 : 1985 *Doorsets — Soft heavy body impact test*

2 Terms and definitions For the purpose of this Standard, the following terms and definitions apply.

(1) **drop height** amount of vertical movement of the impact body

(2) **permanent residual deformation** change in shape or dimension in the doorset remaining after impact

3 Test apparatus The test apparatus mainly consists of the following elements (1) to (3). See also Figs. 1 and 2.

(1) **Specimen mounting rig**, constructed to enable mounting of a specimen as in normal service, and sufficiently rigid to withstand test loads without generating any sort of deformation that may affect the test results.

(2) **Impact body**, used for giving the specimen an impact for testing, of total mass 30 kg ± 1 kg, consisting of a spherical leather bag (1) of diameter approximately 350 mm, containing dry sand (2), and fastened at the top and bottom with a ring bolt that penetrates through the centre of the bag as shown in Fig. 2.

Notes (1) A bag obtained by sewing together eight pieces of leather of 1.5 mm thickness or artificial leather with at least equal strength to this, or canvas (hereafter referred to as leather pieces), which forms a conical shape enveloped by a sphere of diameter approximately 350 mm when filled with sand. The top of the bag shall be squeezed at a position approximately 350 mm from the centre of the envelop sphere so as to have an opening of diameter approximately 80 mm. The bottom of the bag shall be reinforced with a circular leather piece etc. of diameter approximately 150 mm, and then given a hole at the centre, to which a ring bolt of diameter approximately 5 mm shall be attached. The opening at the top shall be reinforced with a leather piece etc., and fastened with a hose band etc.

(2) Sand of bulk specific gravity approximately 1500 kg/m^3, which passes through a 2 mm sieve and remains on a 0.6 mm sieve.