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Portable ramps for wheelchairs

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Assistive Products Association (JASPA)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS T 9207** : 2015), which has been technically revised.

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Portable ramps for wheelchairs

1 Scope

This Japanese Industrial Standard specifies the requirements for portable ramps (hereafter referred to as ramps) to be installed where steps, a level difference or a gap exists to permit the passage of a manual or electric wheelchair (hereafter referred to as wheelchairs) by supporting the weight at both ends. This Standard is not applicable to ramps fixed by claws etc.

2 Normative references

Part or all of the provisions of the following standards, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS G 4305 *Cold-rolled stainless steel plate, sheet and strip*

JIS K 6253-3 *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 3 : Durometer method*

JIS R 6253 *Waterproof abrasive papers*

JIS T 0102 *Glossary of terms used in assistive products for persons with disabilities*

JIS T 14971 *Medical devices — Application of risk management to medical devices*

JIS Z 8051 *Safety aspects — Guidelines for their inclusion in standards*

JIS Z 8401 *Rounding of numbers*

JIS Z 8703 *Standard atmospheric conditions for testing*

3 Terms and definitions

For the purpose of this Standard, the following terms and definitions, and those given in JIS T 0102 apply.

3.1

travelling surface

entire surface of that side of a ramp, including the top and bottom edges, on which the wheels of a wheelchair travel

3.2

supporting base

base on which the top and bottom edges of the ramp is placed

3.3

test surface

that part of the travelling surface of a ramp, when the ramp is placed on supporting bases, which is inside both edges in contact with the supporting bases

Note 1 to entry The level difference on travelling surface of a telescopic or folding ramp is treated as one test surface.

3.4**pressurizing pad**

pad through which a test load is applied on the test surface

3.5**pressurizing jig**

jig for receiving the test load, consisting of four or two pressurizing pads and capable of applying a load evenly to each of the pads.

Note 1 to entry The mass of the pressurizing jig is the preliminary load.

Note 2 to entry See Figure 1.

3.6**deflection**

increase in the amount of deflection of the test surface under the test load from that under the preliminary load, expressed in angle

3.7**residual deflection**

difference in the amount of deflection of the test surface under the preliminary load before application and after removal of the test load, expressed in angle

3.8**solid ramp**

ramp consisting of one or more inseparable board(s)

3.9**channel ramp**

ramp consisting of two or more separate boards

3.10**side guard**

rising part at either side of the ramp

3.11**width**

edge-to-edge lateral dimension of the ramp

Note 1 to entry The width is measured as the distance between the outer edges of both side guards for ramps with side guards, and between the edges of the travelling surface for those without.

3.12

width of the travelling surface

edge-to-edge width dimension of the travelling surface

Note 1 to entry The width of the travelling surface is measured as the distance between the inner edges of both side guards for ramps with side guards, and between both edges for those without.

3.13

test rubber

rubber plate to be attached to that surface of a test block which will be in contact with the test surface

3.14

maximum withstand mass

maximum mass that can be supported by the ramp

3.15

apparent hardness of castor wheel

hardness of the outer circumference of the tyre which constitutes the castor wheel

3.16

longitudinal runout of castor wheel

total runout of the outer circumference of the tyre in radius direction which constitutes the castor wheel

3.17

carrying handle

handle used for carrying the ramp

Unit: mm

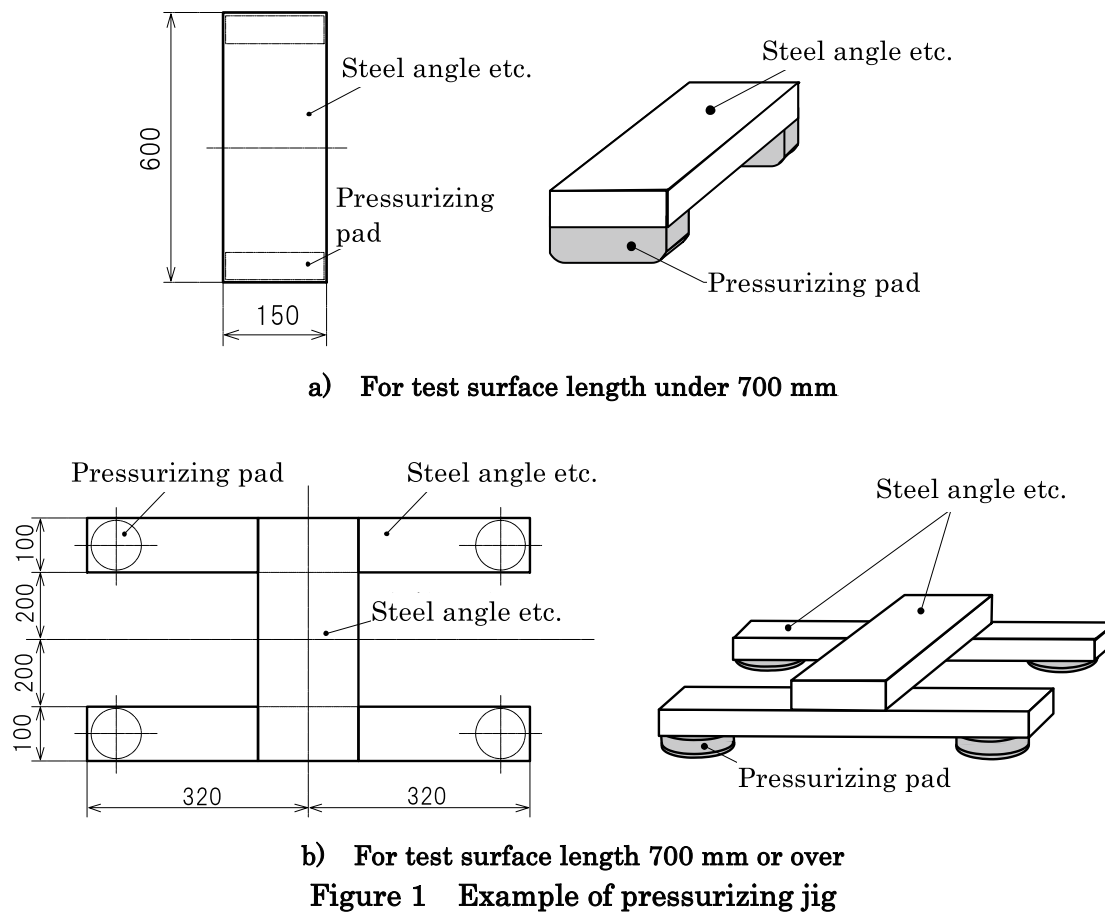
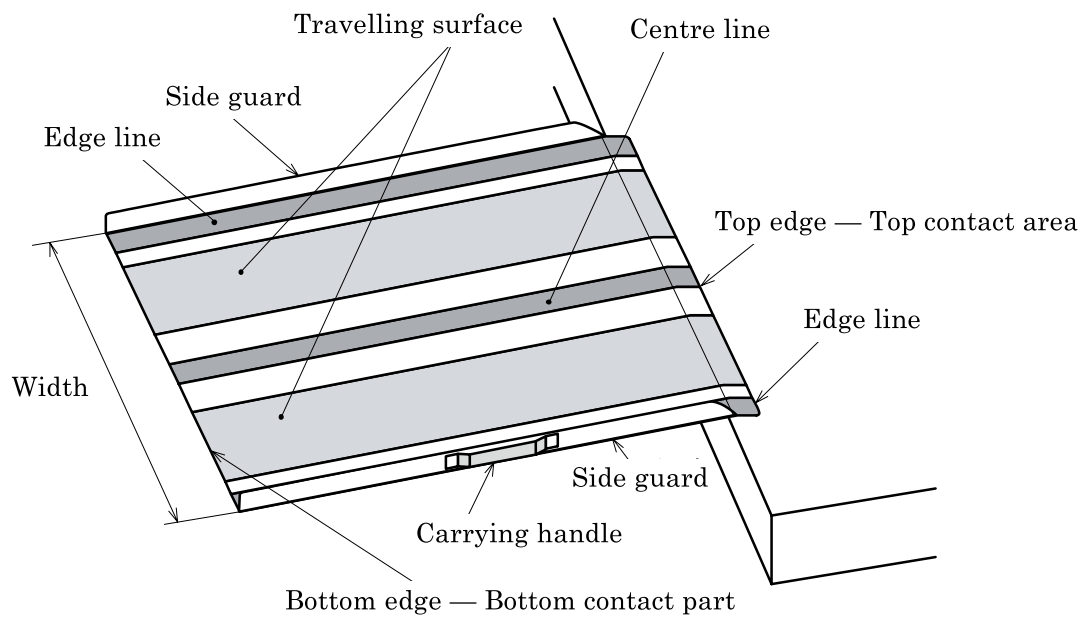


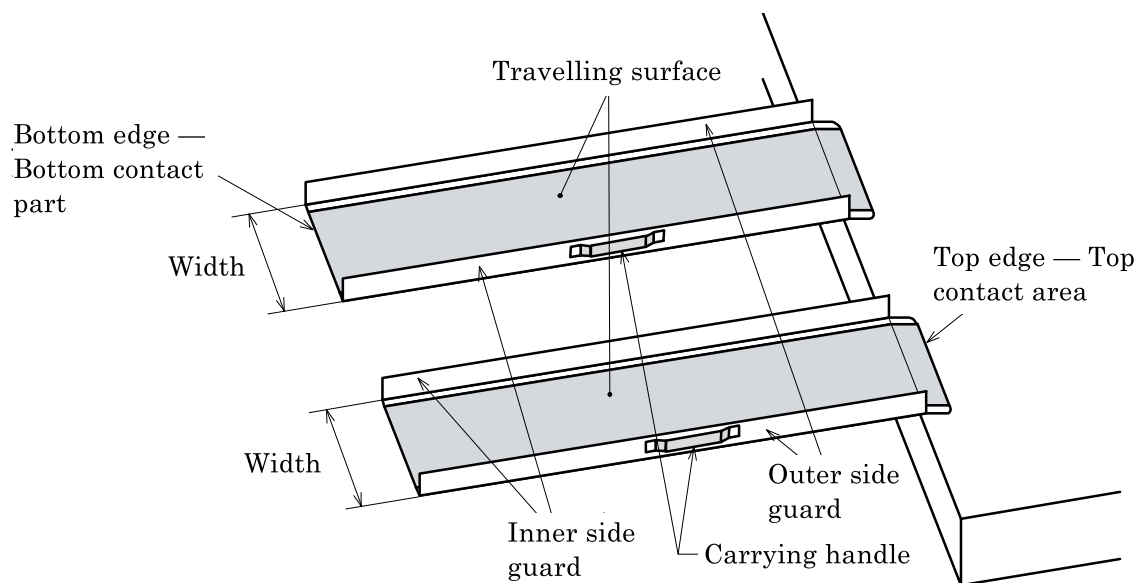
Figure 1 Example of pressurizing jig

4 Names of parts

Names of parts of the ramp are shown in Figure 2.



a) Solid ramp



b) Channel ramp

Figure 2 Names of parts

5 Classification

Ramps are classified into the following according to the configuration.

- a) Solid ramp
- b) Channel ramp

NOTE The ramp may be a simple one-piece board, or have a folding, telescoping or other mechanism.