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Profile wall polyethylene pipes

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Foreword

This translation has been made based on the original Japanese Industrial Standard 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 The Japan Plastics Industry Federation (JPIF)/the Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14. Consequently **JIS K 6780 : 1996** is replaced with this Standard.

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Profile wall polyethylene pipes

1 Scope This Japanese Industrial Standard specifies the profile wall polyethylene pipes (hereafter referred to as “pipes”) integral-moulded with socket part, straight part and inserting part which are used as the external pressure pipes requiring mainly durability for underground structure such as sewer conduit, drain conduit for rain water on road etc. and under-road conduit, etc.

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 (including amendments) indicated below shall be applied.

JIS B 7506 *Gauge blocks*

JIS B 7507 *Vernier, dial and digital callipers*

JIS B 7512 *Steel tape measures*

JIS B 7516 *Metal rules*

JIS B 7733 *Verification of the force measuring system of the compression testing machine*

JIS K 6900 *Plastics—Vocabulary*

JIS K 6922-1 *Plastics—Polyethylene (PE) moulding and extrusion materials—Part 1 : Designation system and basis for specifications*

JIS K 6922-2 *Plastics—Polyethylene (PE) moulding and extrusion materials—Part 2 : Preparation of test specimens and determination of properties*

JIS K 7100 *Plastics—Standard atmospheres for conditioning and testing*

JIS K 7161 *Plastics—Determination of tensile properties Part 1 : General principles*

JIS K 7350-1 *Plastics—Methods of exposure to laboratory light sources Part 1 : General guidance*

JIS K 7350-2 *Plastics—Methods of exposure to laboratory light sources Part 2 : Xenon-arc sources*

JIS K 7350-3 *Plastics—Methods of exposure to laboratory light sources—Part 3 : Fluorescent UV lamps*

JIS K 7350-4 *Plastics—Methods of exposure to laboratory light sources—Part 4 : Open-flame carbon-arc lamps*

JIS K 8102 *Ethanol (95)*

JIS K 8150 *Sodium chloride*

JIS K 8541 *Nitric acid*

JIS K 8576 *Sodium hydroxide*

JIS K 8951 *Sulfuric acid*

JIS Z 8401 *Guide to the rounding of numbers*

JIS Z 8703 *Standard atmospheric conditions for testing*

ISO 4607 *Plastics—Methods of exposure to natural weathering*

3 Definitions For the purposes of this Standard, the definitions given in **JIS K 6900** and the following definitions apply.

- a) **rib** Spiral construction whose section has circular or square shape and which has hollowed core material inside.
Moreover, the wall of pipe can be constructed by forming continuously square ribs.
- b) **pressure-resistant polyethylene rib pipes** External pressure pipe made of high density polyethylene equipped with rib.
- c) **pipe rigidity** The rigidity of pipe which is expressed by the ratio of the load for deflection to the deflection appeared on the section perpendicular to pipe axis.
- d) **hollowed core material** Hollowed flexible material employed for forming rib.

4 Classification Pipes shall be classified as shown in Table 1 according to the sectional shape shown at straight part and to the pipe rigidity.

Table 1 Classification of pipes

Unit: kN/m²

Classification	Sectional shape ⁽¹⁾	Pipe rigidity
R30	R-type	30
R45		45
R60		60
R90		90
R120		120
F30	F-type	30
F45		45
F60		60
F90		90
F120		120

Note (1) R-type has circular or square rib projecting at outside of pipe, and F-type is the pipe formed continuously by square rib and has not the rib projecting at outside of pipe (see Fig. 1).