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(NIF/JSA)

Polyvinyl chloride floorcoverings

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editions of this Standard on technically significant
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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 Nippon Interior Association (NIF)/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 A 5705 : 2016**), which has been technically revised.

However, **JIS A 5705 : 2016** may be applied in the JIS mark certification based on the relevant provisions of Article 30, paragraph (1), etc. of the Industrial Standardization Act until 19 July 2023.

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Polyvinyl chloride floorcoverings

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 10581** : 2019, Edition 2, **ISO 10582** : 2017, Edition 2, **ISO 10595** : 2010, Edition 1, **ISO 11638** : 2020, Edition 2, and **ISO 26986** : 2010, Edition 1, with some modifications of the technical contents in order to reflect the situations in Japan.

This Standard contains requirements for the following additional matters that are not included in the corresponding International Standards : dimensional stability after immersion in water, thermal expansion coefficient, curling, incombustibility, density and appearance.

The dotted underlines indicate matters that are consistent with the corresponding International Standard. A list of modifications with the explanations is given in Annex JA. The comparison table between previous and current editions of this Standard on technically significant revisions is given in Annex JB.

1 Scope

This Standard specifies requirements for the polyvinyl chloride floorcoverings mainly used for building floors.

NOTE The International Standards corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 10581 : 2019 *Resilient floor coverings — Homogeneous poly(vinyl chloride) floor covering — Specifications*

ISO 10582 : 2017 *Resilient floor coverings — Heterogeneous poly(vinyl chloride) floor covering — Specifications*

ISO 10595 : 2010 *Resilient floor coverings — Semi-flexible/vinylcomposition (VCT) poly(vinyl chloride) floor tiles — Specification*

ISO 11638 : 2020 *Resilient floor coverings — Heterogeneous poly(vinyl chloride) flooring on foam — Specification*

ISO 26986 : 2010 *Resilient floor coverings — Expanded (cushioned) poly(vinyl chloride) floor covering — Specification*

(overall evaluation : MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative reference

Part or all of the provisions of the following standard, through reference in this text,

constitute provisions of this Standard. The most recent edition of the standard (including amendments) indicated below shall be applied.

JIS A 1454 *Test methods — Resilient floorcoverings*

3 Terms and definitions

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

3.1

binder

basic material of polyvinyl chloride floorcoverings mainly composed of a combination of vinyl resin (see 3.2), plasticizer (see 3.3) and stabilizer (see 3.4)

3.2

polyvinyl chloride (PVC) resin

raw material of polyvinyl chloride floorcoverings such as polyvinyl chloride resin and vinyl chloride-vinyl acetate copolymer resin

3.3

plasticizer

raw material of polyvinyl chloride floorcoverings such as dioctyl phthalate and dinonyl phthalate, which plasticizes (or softens) the polyvinyl chloride resin

3.4

stabilizer

raw material of polyvinyl chloride floorcoverings such as calcium-zinc stabilizer and barium-zinc stabilizer, which gives heat resistance, light resistance, etc. to the polyvinyl chloride resin

3.5

recycled materials

the following recyclable asbestos-free materials that are segregated and crushed, and then reused as the materials of interlayer, backing layer, etc. of polyvinyl chloride floorcoverings

- | | |
|-----------------|---|
| Note 1 to entry | Nonconforming products in hues, dimensions, etc. generated at the production stage. |
| Note 2 to entry | Materials generated in the distribution stage, as well as margins and excess parts generated in the installation stage. |
| Note 3 to entry | Used polyvinyl chloride floorcoverings and other polyvinyl chloride resin products generated at the disposal and recycle stage. |

3.6

incombustibility

performance (flame retardancy) delivered by a product, such as afterflame time and char length, which is equal to or more than certain specified values

Note 1 to entry The Fire Services Act enforcement regulations, Article 4-3, paragraph (3), items (i) and (iv) prescribe that polyvinyl chloride floorcoverings are considered to have flame retardancy if afterflame time is within 20 s and char length is 10 cm or under.

4 Classification

The polyvinyl chloride floorcoverings are classified as given in Table 1.

Table 1 Classification of polyvinyl chloride floorcoverings

Category		Type	Binder content %	Density kg/m ³	Symbol for type
Floor tile	Adhesive type ^{a)}	Homogeneous vinyl floor tile	30 ≤	—	TT
		Heterogeneous vinyl floor tile	30 ≤	—	FT
		Vinyl composition floor tile	30 >	—	KT
	Loose lay type ^{b)}	Loose lay type vinyl floor tile	—	—	FOA
		Thin loose lay type vinyl floor tile	—	—	FOB
Floor sheet	Without foam layer	Homogeneous vinyl floor sheet	—	—	TS
		Heterogeneous vinyl floor sheet	—	—	FS
	With foam layer	Heterogeneous vinyl floor sheet on foam	—	650 ≤	HS
		Cushioned vinyl floor	—	650 >	KS
Note ^{a)} Floor tiles installed by applying adhesive on subfloor.					
Note ^{b)} Easily peelable floor tiles installed by applying weak adhesives on subfloor. Interlocking tiles are excluded.					

5 Materials

For the material of polyvinyl chloride floorcoverings, polyvinyl chloride resins, plasticizers and stabilizers shall be used as a binder.

Materials such as filler ¹⁾, colouring agent ²⁾, foaming agent ³⁾, woven fabric ⁴⁾ and non-woven fabric ⁵⁾, and recycling materials may also be used.

Note ¹⁾ Calcium carbonate, clay, wollastonite, etc.

Note ²⁾ Organic pigments, inorganic pigments, etc.

Note ³⁾ Azo-bis-amide, etc.

Note ⁴⁾ Glass fibre, synthetic fibre, natural fibre, etc. shall be used as material components.

Note ⁵⁾ Glass fibre, pulp, synthetic fibre, natural fibre, etc. shall be used as material components.

6 Quality

6.1 Shape and dimensions