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Thermoplastic polyolefin sheets for waterproofing

热塑性聚烯烃(TPO)防水卷材

(English Translation)

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Foreword

Chapter 5.3 of this standard is mandatory, AND the rest is recommended.

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

The consistency of standard to ASTM D6878.2008 "Standard specification for thermoplastic polyolefin based sheet roofing" is not equivalent.

This standard was proposed by the China Building Materials Federation.

This standard shall be under the jurisdiction of the National Light Decoration and Decoration Building Materials Standardization Committee, Building Waterproof Material Subcommittee (SAC/TC 195/SC 1).

The main drafting organizations of this standard. China Building Materials Science Research Institute Suzhou Waterproof Research Institute, China Building Waterproofing Association.

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1 Scope

This standard specifies the terms and definitions, classification and identification, requirements, test methods, inspection rules, marking, packaging, storage and transportation of thermoplastic polyolefin sheets for waterproofing.

This standard applies to the waterproof sheets which use the ethylene and alpha-olefin polymer as the main raw material for the purposes of building engineering.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this Standard.

GB/T 328.5-2007 Test methods for building sheets for waterproofing - Part 5. Plastic and rubber sheets for waterproofing - Thickness and mass per unit area

GB/T 328.7 Test methods for building sheets for waterproofing - Part 7. Plastic and rubber sheets for waterproofing length, width, straightness, and flatness

GB/T 328.9-2007 Test methods for building sheets for waterproofing - Part 9.

Plastic and rubber sheets for waterproofing - Tensile properties

GB/T 328.10-2007 Test methods for building sheets for waterproofing - Part

10 Bitumen plastic and rubber sheets for waterproof - Water tightness

GB/T 328.13 Test methods for building sheets for waterproofing - Part 13.

Plastic and rubber sheets for waterproofing - Dimensional stability

GB/T 328.15 Test methods for building sheets for waterproofing - Part 15.

Plastic and rubber sheets for waterproofing - Foldability at low temperature

GB/T 328.19 Test methods for building sheets for waterproofing - Part 19.

Plastic and rubber sheets for waterproofing - Resistance to tearing

GB/T 328.21 Test methods for building sheets for waterproofing - Part 21.

Plastic and rubber sheets for waterproofing - Resistance to peeling of joints

GB/T 328.25-2007 Test methods for building sheets for waterproofing - Part

25 Bitumen plastic and rubber sheets for waterproofing - Resistance to

static loading

GB/T 528 Rubber, vulcanized or thermoplastic - Determination of tensile stress - Stain properties

GB/T 529 Rubber, vulcanized or thermoplastic - Determination of tear strength (trouser, angle and crescent test pieces)

GB 12952-2011 Polyvinyl chloride plastic sheets for waterproofing

GB/T 18244 Test methods for resistance to weathering of building waterproofing materials

GB/T 18378 Terminology for waterproof bitumen and waterproof sheet

GB/T 20624.2 Paints and varnishes - Rapid-deformation (impact resistance) tests - Part 2. Falling-weight test small area indenter

GB 50009 Load code for the design of building structures

3 Terms and definitions

The terms and definitions as defined in GB/T 18378 AND the following terms and definitions apply to this document.

3.1

Homogeneous thermoplastic polyolefin waterproofing sheets

It refers to the thermoplastic polyolefin waterproofing sheets that do not employ an inner reinforcing material or a backing material.

3.2

Thermoplastic polyolefin waterproofing sheets backed with fabric

It refers to the thermoplastic polyolefin waterproofing sheets which compound the fabric such as polyester nonwoven fabric at the lower surface.

3.3

Thermoplastic polyolefin waterproofing sheets with internally reinforced fabric

It refers to the thermoplastic polyolefin waterproofing sheets which is reinforced with polyester or fiberglass meshes in the middle of the sheet.

6.4 Appearance

Visual inspection.

6.5 Tensile performance

The test sample size of type L and P product is 150 mm x 50 mm; PERFORM test in accordance with the method A of GB/T 328.9-2007; the fixture spacing is 90 mm; the elongation is calculated using the 70 mm marking line spacing; the type P elongation is taken as the elongation L at the maximum tension, AND the type L elongation is taken as the elongation at fracture. If the sample does not fracture when the product testing machine travels to its end, CHANGE the fixture spacing to 50 mm and the marking line spacing to 30 mm;