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Flexibla tätskikt – Bestämning av emissivitet

Flexible sheets for waterproofing – Determination of emissivity

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EUROPEAN STANDARD

EN 15976

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2011

ICS 91.100.50

English Version

Flexible sheets for waterproofing - Determination of emissivity

Feuilles souples d'étanchéité - Détermination de l'émissivité

Abdichtungsbahnen - Bestimmung des Emissionsgrades

This European Standard was approved by CEN on 17 March 2011.

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Foreword

This document (EN 15976:2011) has been prepared by Technical Committee CEN/TC 254 "Flexible sheets for waterproofing", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2011, and conflicting national standards shall be withdrawn at the latest by October 2011.

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1 Scope

This European Standard specifies the method to determine the emissivity of plastic, rubber and bitumen vapour control layers, underlays for walls and underlays for discontinuous roofing.

It also defines a conditioning procedure for these product families in order to quantify the sensitivity of emissivity to humidity and temperature.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 13416, *Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for roof waterproofing — Rules for sampling*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply

3.1 emissivity

emissivity of a material (usually written ϵ) is the ratio (proportion) of the energy radiated by a surface relative to the energy radiated by a blackbody at the same temperature. It is a measure of a material's ability to radiate heat

3.2 blackbody

blackbody is a theoretical object that absorbs all electromagnetic radiation that falls on it at all wavelengths. No electromagnetic radiation passes through it and none is reflected

NOTE A blackbody is also a perfect emitter with a normal and corrected emissivity of 1.

3.3 TIR

Thermal Infrared Radiation principle

4 Symbols

For the purposes of this document, the following symbols apply

c specific heat capacity is the measure of the heat energy required to increase the temperature of a unit quantity of a substance by a certain temperature interval.

λ the wavelength λ is the distance between repeating units of a propagation wave of a given frequency.

NOTE In this document it is understood the wave length is limited to the infrared light spectrum.