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Thermal insulation products for building applications — Determination of the tensile bond strength of the adhesive and of the base coat to the thermal insulation material

Produits isolants thermiques destinés aux applications du bâtiment — Détermination de l'adhérence par traction de la colle et de la couche de base sur le matériau d'isolation thermique

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 29804 was prepared by Technical Committee ISO/TC 163, *Thermal performance and energy use in the built environment*, Subcommittee SC 1, *Test and measurement methods*.

ISO 29804 is based on EN 13494:2002 prepared by Technical Committee CEN/TC 88 *Thermal insulating materials and products*. However,

— 6.3, preparation and number of test specimens,

— 7.1, test conditions, and

— Clause 10, test report

have been modified to reflect the conditions for tropical countries. Further, 5.2, 5.4, 6.1 and 8.2 have been modified.

This International Standard is based on EN 13494:2002 prepared by Technical Committee CEN/TC 88 *Thermal insulating materials and products*, which has been amended by ISO/TC 163/SC 1 with reference to conditioning and testing conditions in tropical countries.

This International Standard is one of a series of documents specifying test methods, based on existing European Standards, that are being adopted by ISO. This "package" of standards includes the following group of interrelated documents.

International Standard	Title	Respective EN standard
12968	*Thermal insulation products for building applications — Determination of the pull-off resistance of external thermal insulation composite systems (ETICS) (foam block test)*	EN 13495
29465	*Thermal insulating products for building applications — Determination of length and width*	EN 822
29466	*Thermal insulating products for building applications — Determination of thickness*	EN 823
29467	*Thermal insulating products for building applications — Determination of squareness*	EN 824
29468	*Thermal insulating products for building applications — Determination of flatness*	EN 825
29469	*Thermal insulating products for building applications — Determination of compression behaviour*	EN 826
29470	*Thermal insulating products for building applications — Determination of the apparent density*	EN 1602
29471	*Thermal insulating products for building applications — Determination of dimensional stability under constant normal laboratory conditions (23°C/50 % relative humidity)*	EN 1603
29472	*Thermal insulating products for building applications — Determination of dimensional stability under specified temperature and humidity conditions*	EN 1604
29764	*Thermal insulating products for building applications — Determination of deformation under specified compressive load and temperature conditions*	EN 1605
29765	*Thermal insulating products for building applications — Determination of tensile strength perpendicular to faces*	EN 1607
29766	*Thermal insulating products for building applications — Determination of tensile strength parallel to faces*	EN 1608
29767	*Thermal insulating products for building applications — Determination of short-term water absorption by partial immersion*	EN 1609
29768	*Thermal insulating products for building applications — Determination of linear dimensions of test specimens*	EN 12085
29769	*Thermal insulating products for building applications — Determination of behaviour under point load*	EN 12430
29770	*Thermal insulating products for building applications — Determination of thickness for floating-floor insulating products*	EN 12431
29771	*Thermal insulating materials for building applications — Determination of organic content*	EN 13820
29803	*Thermal insulation products for building applications — Determination of the resistance to impact of external thermal insulation composite systems (ETICS)*	EN 13497
29804	*Thermal insulation products for building applications — Determination of the tensile bond strength of the adhesive and of the base coat to the thermal insulation material*	EN 13494
29805	*Thermal insulation products for building applications — Determination of the mechanical properties of glass fibre meshes*	EN 13496

Thermal insulation products for building applications — Determination of the tensile bond strength of the adhesive and of the base coat to the thermal insulation material

1 Scope

This International Standard specifies equipment and procedures for determining the tensile bond strength of the adhesive and of the base coat to the thermal insulation material.

2 Normative references

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

ISO 29466, *Thermal insulating products for building applications — Determination of thickness*

ISO 29470, *Thermal insulating products for building applications — Determination of the apparent density*

ISO 29765, *Thermal insulating products for building applications — Determination of tensile strength perpendicular to faces*

ISO 3251, *Paints, varnishes and plastics — Determination of non-volatile matter content*

ISO 9229, *Thermal insulation — Vocabulary*

EN 13499, *Thermal insulation products for buildings — External thermal insulation composite systems (ETICS) based on expanded polystyrene — Specification*

ISO 3451-1, *Plastics — Determination of ash — Part 1: General methods*

3 Terms and definitions, symbols and units

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 9229 and EN 13499 apply.

3.2 Symbols and units

Symbols used in this International Standard:

σ tensile bond strength, kPa;

F tensile load at failure, kN;

A cross-sectional area of the plate, m^2.