

Evidence of Performance

Thermal transmittance

Test report 432 31927/4e

Translation of Test Report 432 31927/4 dated 7 August 2007



Client **ETEM S. A.**
light metals industry
1 Iroon Polytechniou Str.

19018 Magoula
Greece

Product	Thermal break metal profiles used in facade systems
Designation	E 85 WITH ADDITIONAL THERMAL INSULATION SPACER ET.080173.00
Installation depth:	74 mm to 274 mm
Projected width:	50 mm
Material	Aluminium profile with thermal break
Finishes	Structural profile sections / Cover plates: Powder coated / painted
Thermal break / thermal barrier	Type: Isolator without overlaps, continuous Material: Rigid PVC, screw fixings (stainless steel, Ø 5.5 mm) spaced at 300 mm, washers with rubber layer Inserts: - Metal surfaces of thermal break / Pressure plates: anodised / painted / powder-coated
Infill panel	Thickness: 19 mm, 34 mm Installation depth: 15 mm
Special features	Isolator ET.080173.00 in thermal break, Plug-on profiles / spacer profiles on internal section 6 mm between internal section and glazing gasket External butyl strip

Basis

ift Guideline WA-03/3
(February 2005) „Verfahren zur Ermittlung von U_f -Werten für thermisch getrennte Metallprofile aus Fassadensystemen (Determination of the U_f -values of thermal break metal profiles used in façade systems)

EN ISO 10077-2 : 2003-10
Thermal performance of windows, doors and shutters - Calculation of thermal transmittance - Part 2: Numerical method for frames
EN 12412-2 : 2003-07
Thermal performance of windows doors and shutters - Determination of thermal transmittance by hot box method - Part 2: Frame

Representation

See Annex

Instructions for use

This test report serves to demonstrate the thermal transmittance U_f of the tested system.

Validity

The data and results given refer solely to the described and tested specimen.

Testing the thermal transmittance does not allow any statement to be made on further characteristics of the present structure regarding performance and quality.

Notes on publication

The ift Guidance Sheet "Conditions and Guidance for the Use of ift Test Documents" applies.

The cover sheet can be used as abstract.

Contents

The report comprises a total of 26 pages.

- 1 Object
- 2 Procedure
- 3 Detailed results
Annex

Thermal transmittance



$$U_f = 1.6 - 2.3 \text{ W}/(\text{m}^2 \cdot \text{K})$$

The specified range of values refers to the profile combinations listed in tables 6 and 7 of this report. Values for other profile combinations of the system are determined using the linear regression in accordance with tables 8 and 9.

ift Rosenheim
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