

Evidence of Performance

Thermal transmittance

Test Report 432 35908/1e

Translation of Test Report 432 35908/1 dated 15 September 2008



Client **ALUMIL - MILONAS**
ALUMINIUM INDUSTRY S. A.
Industrial Area

61100 Kilkis
Greece

Product	Thermal break metal profiles originating from facade systems
Designation	M50 Energy
Installation depth	approx. 106 mm to 255 mm
Projected width	50 mm
Material	Aluminium profile with thermal break
Surface	Structural profile sections/cover cap: powder coated/coated
Thermal break / thermal barrier	Type: continuous shapes Material: uPVC and polyethylene foam (density: 25 - 35 kg/m ³) / connections (stainless steel, Ø 5.5 mm) with grommets (Ø 16 mm) at intervals of 200 mm Metal surfaces of thermal break/pressure plate: plate finished, untreated surfaces
Infill	Thickness: 20 - 40 mm Installation depth: 15 mm
Special features	-

Basis

ift Guideline WA-03/3 (2005)
„Verfahren zur Ermittlung von U_f -Werten für thermisch getrennte Metallprofile aus Fassadensystemen“
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: Frames

Representation

see Annex

Instructions for use

This test report serves to demonstrate the thermal transmittance $U_{t,m}$ of the tested profile system

Validity

The data and results given relate solely to the tested and described profile system.

Determination of thermal transmittance does not allow any statement to be made on any further characteristics of the construction submitted regarding performance and quality.

Publishing notes

The ift-Guidance Sheet 'Conditions and Guidance for the use of ift-test reports' applies.
The cover sheet can be used as abstract.

Contents

The test report comprises a total of 23 pages
1 Object
2 Procedure
3 Detailed results
Annex

Thermal transmittance



$$U_{t,m} = 1.0 - 1.8 \text{ W}/(\text{m}^2 \cdot \text{K}) *$$

The specified range of values refers to the profile combinations listed in table 8 and 9 of this report. The $U_{t,m}$ -values for other profile combinations of the system are determined using the linear regression in accordance with table 10 and 11.



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