

# Evidence of Performance

## Thermal transmittance

### Test report 432 31927/2e

Translation of Test Report 432 31927/2 dated 7 August 2007



Client **ETEM S. A.**  
**light metals industry**  
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Greece

Product	Thermal break metal profiles used in facade systems
Designation	E 85 4 SIDED STRUCTURAL GLAZING
Installation depth:	66 mm to 237 mm
Projected width:	50 mm
Material	Aluminium profile with thermal break
Finishes	Structural profile sections: Powder coated / painted Type: Isolator without overlaps, continuous Material: Rigid PVC, screw fixings (stainless steel, Ø 5.5 mm) and glass supports (aluminium) spaced at 300 mm, Metal surfaces of thermal break: anodised / painted / powder-coated
Thermal break / thermal barrier	Thickness: 27 mm, 31 mm
Infill panel	Installation depth: 15 mm
Special features	-

#### 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.

#### Thermal transmittance



$$U_f = 2.7 - 3.2 \text{ W}/(\text{m}^2 \cdot \text{K})$$

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.

#### linear thermal transmittance



$$\Psi = 0.21 \text{ W}/(\text{m} \cdot \text{K})$$

(aluminium spacer)

Linear thermal transmittance  $\Psi$  includes thermal transmittance of the edge seal with aluminium spacer for one glazing rebate area

#### 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 22 pages.

- 1 Object
  - 2 Procedure
  - 3 Detailed results
- Annex

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