

# Evidence of Performance

## Thermal transmittance

### Test report 432 31927/1e

Translation of Test Report 432 31927/1 dated 7 August 2007



Client **ETEM S. A.**  
**light metals industry**  
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#### 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)

Product	Thermal break metal profiles used in facade systems
Designation	E 85 2 SIDED STRUCTURAL GLAZING
Installation depth:	96 mm to 267 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 Metal surfaces of thermal break / Pressure plates: anodised / painted / powder-coated
Infill panel	Thickness: 27 mm, 31 mm Installation depth: 15 mm
Special features	External butyl strip

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  
23 pages.

- 1 Object
- 2 Procedure
- 3 Detailed results  
Annex

#### Thermal transmittance



$$U_f = 2.1 - 2.6 \text{ W}/(\text{m}^2 \cdot \text{K})$$

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

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