ift-Nachweis

Number	18-003400-PR01 (NW-K20-06-en-02)
Owner	ETEM COMMERCIAL AND INDUSTRIAL LIGHT METALS S.A. 1, Iroon Polytechniou Str., 190 18 Magoula Greece
Product	Metal profiles with thermal break
Designation	System: E53
Details	Material Aluminium alloy - painted - powder coated; Projected width from - to 87 mm - 214 mm; Structural depth 38 mm; Thermal break; Material Polyamide 6.6 with 25% glass fibre (PA 6.6 GF25); Surface treatment of profile untreated; Casement; Designation E53202 / E52241 / E53282 / E53250 / E32210 / E22214; Thickness of infill 26 mm; Edge cover of infill from - to 11 mm -13 mm; Frame; Designation E53100 / E53101 / E53104 / E53106 / E32650 / E70640 / E53102; Additional frame profile; Designation E53600 / E32651 / E19641; Casement overlap profile; Designation E53510
Special features	

Result

Calculation of thermal transmittance according to
EN ISO 10077-2:2017-07 (Radiosity-Method)

$$U_f = 2.9\ \text{W/(m²K)} – 3.9\ \text{W/(m²K)}$$

ift Rosenheim
29.01.2019

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Head of Testing Department
Building Physics

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Operating Testing Officer
Building Physics

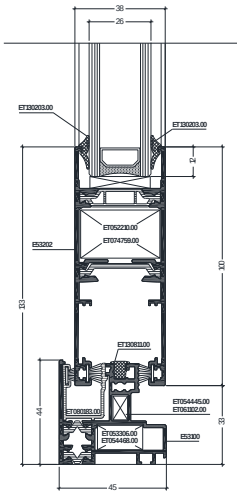
Basis

Test report: 18-003400-PR01 (PB-K20-06-en-02)

Replaces ift-Nachweis 18-003400-PR01 (NW-K20-06-en-01), dated 24.01.2019

Representation

Representative test specimen



For testing, the insulation glass unit was supplanted by a replacement panel.

Instructions for use

The results obtained can be used as evidence in accordance with the above basis.

Validity

There is no time limit.
When using this document the up-to-dateness of above basis and the conformity of the product have to be observed.

The data and results given relate solely to the tested/described specimen. This test/evaluation 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 document may only be published in full.

Identity-Check

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Testing and Calibration – EN ISO/IEC 17025
Inspection – EN ISO/IEC 17020
Product Certification – EN ISO/IEC 17065
Certification of Management Systems – EN ISO/IEC 17021

Notified Body 0757
PÜZ-Stelle: BAY 18

ilac-MRA DAkkS Deutsche Akkreditierungsstelle D-PL-11349-01-00

Type list for calculation of thermal transmittance according to EN ISO 10077-2:2017-07

Test result

Calculated thermal transmittance:

Specimen No.	Description	Projected width b_f in mm	Filling thickness d_p in mm	U_f [1] in W/(m²K)
-01	E53202-E53100	133	26	3,4
-02	E52241-E53100	112	26	3,6
-03	E53282-E53100	115	26	3,5
-04	E53202-E53100-E53600	133	26	3,4
-05	E52241-E53100-E53600	112	26	3,6
-06	E53282-E53100-E53600	115	26	3,5
-07	E53202-E53101 (Cas. internal)	133	26	3,6
-08	E52241-E53101 (Cas. internal)	112	26	3,9
-09	E53282-E53101 (Cas. internal)	115	26	3,8
-10	E53202-E53101 (Cas. external)	133	26	3,6
-11	E52241-E53101 (Cas. external)	112	26	3,8
-12	E53282-E53101 (Cas. external)	115	26	3,8
-13	E53202-E53101-E53600 (Cas. internal)	133	26	3,6
-14	E52241-E53101-E53600 (Cas. internal)	112	26	3,9
-15	E53282-E53101-E53600 (Cas. internal)	115	26	3,8
-16	E53202-E53101-E53600 (Cas. external)	133	26	3,6
-17	E52241-E53101-E53600 (Cas. external)	112	26	3,8
-18	E53282-E53101-E53600 (Cas. external)	115	26	3,8
-19	E53202-E53104	133	26	3,6
-20	E52241-E53104	112	26	3,9
-21	E53282-E53104	115	26	3,8
-22	E53202-E53106	133	26	3,6
-23	E52241-E53106	112	26	3,9
-24	E53282-E53106	115	26	3,8
-25	E53202-E53100 (with sliding rail)	133	26	3,4
-26	E52241-E53100 (with sliding rail)	112	26	3,6
-27	E53282-E53100 (with sliding rail)	115	26	3,6
-28	E53202-E53101 (Cas. internal, with sliding rail)	133	26	3,6
-29	E52241-E53101 (Cas. internal, with sliding rail)	112	26	3,9

-30	E53282-E53101 (Cas. internal, with sliding rail)	115	26	3,8
-31	E53202-E53101 (Cas. external, with sliding rail)	133	26	3,6
-32	E52241-E53101 (Cas. external, with sliding rail)	112	26	3,8
-33	E53282-E53101 (Cas. external, with sliding rail)	115	26	3,8
-34	E53202-E53104 (with sliding rail)	133	26	3,6
-35	E52241-E53104 (with sliding rail)	112	26	3,9
-36	E53282-E53104 (with sliding rail)	115	26	3,8
-37	E53202-E53106 (with sliding rail)	133	26	3,6
-38	E52241-E53106 (with sliding rail)	112	26	3,9
-39	E53282-E53106 (with sliding rail)	115	26	3,8
-40	E53202-E53202	106	26	3,8
-41	E52241-E52241	87	26	3,2
-42	E53282-E53282	90	26	3,0
-43	E53202-E53510-E53202	214	26	3,0
-44	E52241-E53510-E52241	172	26	3,2
-45	E53282-E53510-E53282	178	26	3,1
-46	E53202-E32650	122	26	2,9
-47	E52241-E32650	101	26	3,0
-48	E53282-E32650	104	26	3,0
-49	E53202-E53250-E32650	122	26	3,1
-50	E52241-E32210-E32650	101	26	3,2
-51	E53282-E32210-E32650	104	26	3,2
-52	E53202-E53250-E22214-E70640	122	26	3,2
-53	E52241-E32210-E22214-E70640	101	26	3,2
-54	E53282-E32210-E22214-E70640	104	26	3,2
-55	E53202-E53102 (Cas. internal)	133	26	3,6
-56	E52241-E53102 (Cas. internal)	112	26	3,8
-57	E53282-E53102 (Cas. internal)	115	26	3,8
-58	E53202-E53102 (Cas. external)	133	26	3,6
-59	E52241-E53102 (Cas. external)	112	26	3,8
-60	E53282-E53102 (Cas. external)	115	26	3,7
-61	E53202-E53102 (Cas. internal, with sliding rail)	133	26	3,6
-62	E52241-E53102 (Cas. internal, with sliding rail)	112	26	3,9
-63	E53282-E53102 (Cas. internal, with sliding rail)	115	26	3,8
-64	E53202-E53102 (Cas. center, with sliding rail)	133	26	3,1
-65	E52241-E53102 (Cas. center, with sliding rail)	112	26	3,3
-66	E53282-E53102 (Cas. center, with sliding rail)	115	26	3,2

-67	E53202-E53102 (Cas. external, with sliding rail)	133	26	3,6
-68	E52241-E53102 (Cas. external, with sliding rail)	112	26	3,8
-69	E53282-E53102 (Cas. external, with sliding rail)	115	26	3,7
-70	E53202-E53102-E53600 (Cas. internal)	133	26	3,6
-71	E52241-E53102-E53600 (Cas. internal)	112	26	3,9
-72	E53282-E53102-E53600 (Cas. internal)	115	26	3,8
-73	E53202-E53102-E53600 (Cas. center)	133	26	3,1
-74	E52241-E53102-E53600 (Cas. center)	112	26	3,3
-75	E53282-E53102-E53600 (Cas. center)	115	26	3,2
-76	E53202-E53102-E53600 (Cas. external)	133	26	3,5
-77	E52241-E53102-E53600 (Cas. external)	112	26	3,8
-78	E53282-E53102-E53600 (Cas. external)	115	26	3,7

[1)] Calculated and rounded according to EN ISO 10077-2 using the radiosity method

The calculated values of the thermal transmittance can be used for profiles made of aluminium with lacquered or powder coated surface and with an untreated surface in the thermal break.