

Test Report



Number	18-001154-PR04 (PB-K20-06-en-02)
Owner (Client)	YAVUZ COMPANY d.o.o. Cehaje bb 75350 Srebrenik Bosnia-Herzegovina
Product	Plastic profile,
Designation	profile combination: casement member - frame member System: PVC profile BAUWIN 5 chambers
Details	Material Polyvinyl Chloride unplasticized (PVC-U); Projected width 116 mm; Structural depth 70 mm; Casement member: Designation BW 7001 - 5 chambers ; Cross section (W x T) 78 mm x 70 mm; Thickness of infill 24 mm; Edge cover of infill 20 mm; Reinforcement material Steel - galvanized Steel; Reinforcement designation BW7011-0; Frame member: Designation BW 7001-5 chambers; Cross section (W x T) 65 mm x 70 mm; Reinforcement material Steel - galvanized Steel; Reinforcement designation BW7001-0
Special features	
Order	Testing of thermal transmittance
Contents	The test report contains a total of 5 pages and annexe (3 pages).
Note	This test report replaces test report 18-001154-PR04 PB-K20-06-en-01 dated 15.11.2018. The test report shall only be published in its unabbreviated form. The "Guidance Sheet for the Use of ift Test Documents" applies.

Ve-PB0-4390-en/ (01.12.2017

Testing of thermal transmittance

1 Execution

1.1 Sampling and product description

The following details have been presented to ift:

Sampler: YAVUZ COMPANY d.o.o. 75350 Srebrenik (Bosnia-Herzegovina)
Evidence: ift Rosenheim did not receive a sampling report.
Date of delivery: 12.09.2018, 12.09.2018, 12.09.2018, 12.09.2018
Description: For product identification the specimen tested is described/represented in the Annex. Material specifications, item numbers and other company-specific descriptions are details provided by the client and will be checked for plausibility by ift.
Test specimen no.: 18-001154-PK04 / WE: 46668-005, WE: 46668-006, WE: 46668-007, WE: 46668-008

1.2 Basic documents *) of the procedures

EN 12412-2:2003 - 07

Thermal performance of windows, doors and shutters - Determination of thermal transmittance by hot box method - Part 2 Frames

*) and the relevant national versions, e.g. DIN EN

1.3 Short description of the procedures

Thermal transmittance according to EN 12412-2:2003-07

The test was performed according to the guarded hot box method. The test specimen was located in a wall with infill insulation that was surrounded by two half shells, the interior and the exterior space. Air and surface temperature as well as the registered heating capacity were measured. The thermal transmittance was evaluated in steady state.

The result was verified by comparative calculations as per EN ISO 10077-2.

Testing of thermal transmittance

2 Detailed results

Thermal transmittance

1508

Project-No.	18-001154-PR04	Task No.	18-001154
Basis of testing	EN 12412-2:2003-07 Thermal performance of windows, doors and shutters - Determination of thermal transmittance by hot box method - Part 2 Frames		
Test equipment used	Pst/022762 - u-Wert Prüfstand PstZ/022764 - Wand 1 (Hot Box)		
Test specimen	Kunststoff-Hohlkammerprofile		
Number of test specimen	46668-005, 46668-006, 46668-007, 46668-008		
Date of testing	19 September 2018		
Testing personnel in charge	Konrad Huber		

Informationen regarding test arrangement / test method

Test method There have been no deviations from the test methods according to standard/basis.

Implementation of tests / Test results

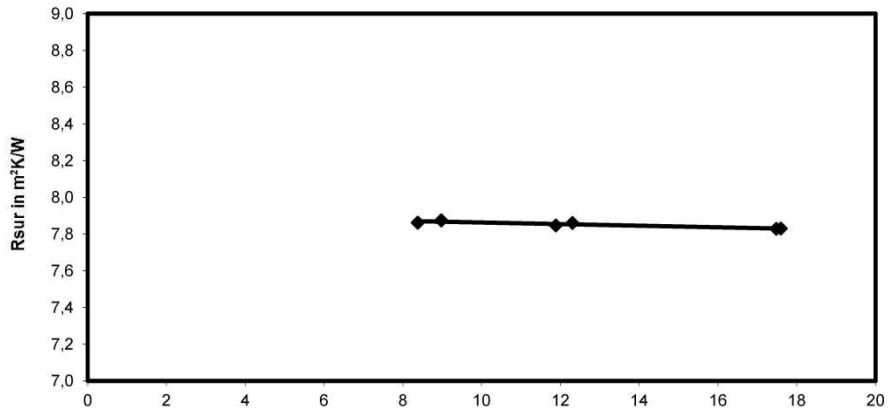
Designation	Symbol	Value	Unit
Results U_f			
Air temperature warm side	θ_{ci}	22,9	°C
Air temperature cold side	θ_{ce}	1,9	°C
Environmental temperature - warm	θ_{in}	23,1	°C
Environmental temperature - cold	θ_{ne}	1,9	°C
Air velocity internal (air flow down)	v_i	approx. 0,1	m / s
Air velocity external (air flow down)	v_e	1,7	m / s
Input power to hot box	Φ_{in}	39,9	W
Heat flow density of specimen	q_{sp}	28,2	W / m ²
Total surface resistance	R_{st}	0,188	(m ² K) / W

Measured value U_f			
Thermal transmittance	U_f	1,3	W / (m ² K)
Uncertainty of measurement (absolute)	ΔU_f	0,08	W / (m ² K)

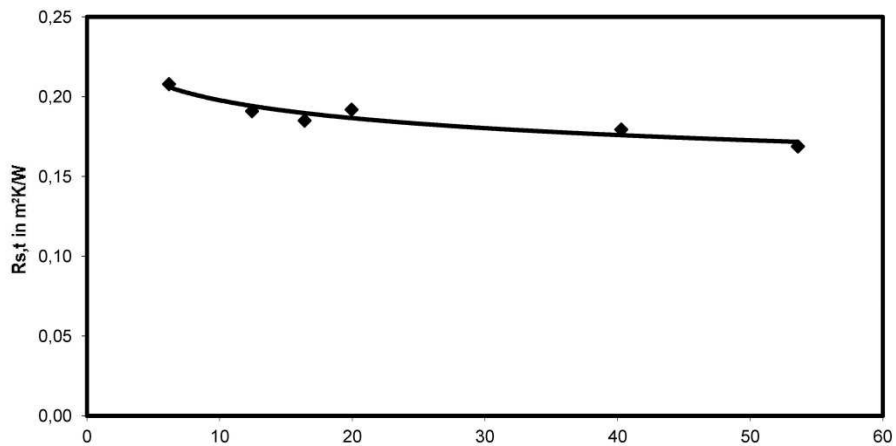


Testing of thermal transmittance

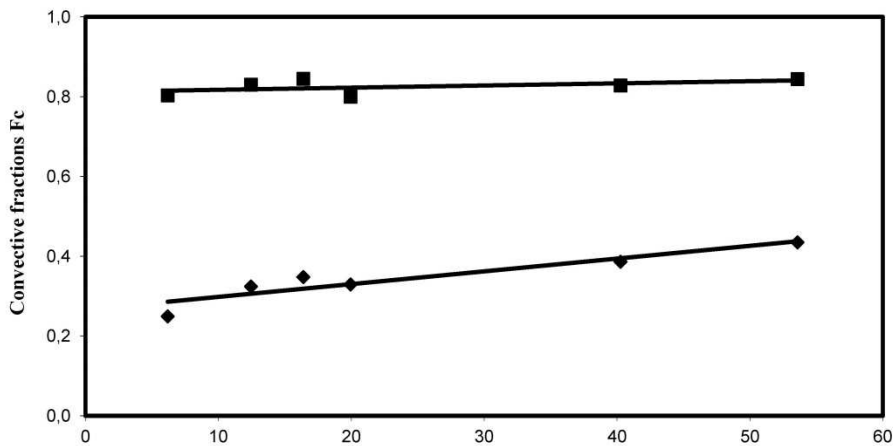
Diagrams showing results of calibration measurement



Surround panel, mean temperature



Density of heat flow rate q in W/m²



Density of heat flow rate q in W/m²

Testing of thermal transmittance

3 Summary

3.1 Result

Thermal transmittance according to EN 12412-2:2003-07

Thermal transmittance $U_f = 1,3 \text{ W}/(\text{m}^2\text{K})$

3.2 Instructions for use

This test/evaluation does not allow any statement to be made on further characteristics of the present structure regarding performance and quality, in particular the effects of weathering and ageing.

The test was performed according to standard and the details for identification of the test specimen are complete; on the basis of this Test Report an "ift-Nachweis" (Evidence) can be issued.

ift Rosenheim
23.11.2018



Manuel Demel, M.BP, Dipl.-Ing. (FH)
Deputy Head of Testing Department
Building Physics



Konrad Huber, Dipl.-Ing. (FH)
Operating Testing Officer
Building Physics

Nr./no 18-001154-PR04 PB-K20-06-en-02

Die Beschreibung des geprüften Probekörpers dient der normkonformen Identifizierung des Produkttyps, für den die festgestellten Werte gelten. Alternativ zur vorgegebenen tabellarischen Datenerfassung kann die Beschreibung auch in Form von technischen Zeichnungen, Verarbeitungsrichtlinien, Stücklisten etc. erfolgen. Zusätzliche Produktdetails bitte ergänzen.

Die Angaben sind Voraussetzung für die Erstellung eines ift-Nachweises. Nur bei Angabe aller in diesem Dokument angeforderten Daten ist ggf. eine nachträgliche Gutachtliche Stellungnahme möglich. Alle Angaben des Auftraggebers werden vom ift auf Plausibilität geprüft; ggf. festgestellte Abweichungen und/oder ergänzende Feststellungen werden dokumentiert.

The description of the specimen to be tested serves to identify, in conformity with the standards, the product type, for which the values determined will apply. Alternatively to the specified tabulated data collection, the description may also be made by technical drawings, processing instructions, parts lists, etc. Please supplement additional product details.

The details are the precondition for issuing the "ift-Nachweis". Only upon provision of all requested data subsequently requested Expert Statements may be issued. All details provided by the client will be checked for plausibility by ift, any deviations observed and/or additional findings will be documented.

Wareneingang-Nr.: 46668-005, 46668-006,
 ID of goods received : 46668-007, 46668-008

Alle Maßangaben in mm
 All dimensions in mm

Nicht Zutreffendes bitte löschen.
 Please delete non-appropriate.

ift Mitarbeiter: Stefan Junker
 ift staff member :

Eigenschaft Characteristic	Angaben des Auftraggebers (unverändert) Information provided by client (unchanged)	Festgestellte Abweichungen bei ift-Kontrolle Deviations observed at ift-check
Produkt / Bauart / Komponente Product / design / component	Kunststoffprofil mit Plastic profile Profilkombination Flügelrahmen – Blendrahmen profile combination casement member - frame member	
Hersteller Manufacturer	DOO YAVUZ COMPANY Čehaje bb 75350 Srebrenik Bosnia and Herzebovina	
Bezeichnung / Typ / Art.-Nr. Designation / type/ item no.	PVC profile BAUWIN 5 chambers	
Ansichtsbreite Projected width	70 mm	116mm
Material Material	PVC hart PVC	
Dichtungssystem Sealing system	Anschlagdichtungssystem ad system Yavuz universal rubber seals left black typ Nr.09.1003.21126.01 Yavuz universal rubber seals right black Nr.09.1003.21415.01	
Flügelrahmen Casement member		
Hersteller Manufacturer	DOO YAVUZ COMPANY Čehaje bb 75350 Srebrenik Bosnia and Herzebovina	
Bezeichnung / Typ / Art.-Nr. Designation / type/ item no.	BW 7001 - 5 chambers (casement member for window)	BW 7011
Profilquerschnitt (B x D) Profile cross section (W x T)	70x78mm BW 7011	78mm x 70 mm
Aussteifung Reinforcement		

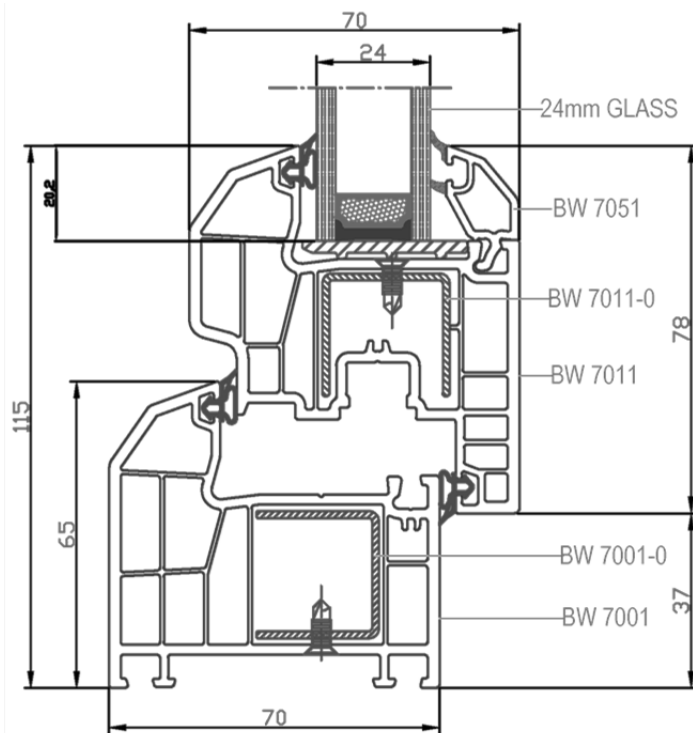
Nr./no 18-001154-PR04 PB-K20-06-en-02

Eigenschaft Characteristic	Angaben des Auftraggebers (unverändert) Information provided by client (unchanged)	Festgestellte Abweichungen bei ift-Kontrolle Deviations observed at ift-check
Bezeichnung / Typ / Art.-Nr. Designation / type/ item no.	steel reinforcement BW 7011-0	
Abmessungen (B x H x D) Dimensions (W x H x D)	26mmx27mmx1,5mm	
Material Material	steel	
Oberflächenbehandlung Surface treatment	Metalic surface, untreated	galvanized
Blendrahmen Frame member		
Hersteller Manufacturer	DOO YAVUZ COMPANY Čehaje bb 75350 Srebrenik Bosnia and Herzebovina	
Bezeichnung / Typ / Art.-Nr. Designation / type/ item no.	BW 7001-5 chambers (frame member for window and door)	
Profilquerschnitt (B x D) Profile cross section (W x T)	70mmx65mm	65mm x 70mm
Aussteifung Reinforcement	steel reinforcement	
Bezeichnung / Typ / Art.-Nr. Designation / type/ item no.	BW 7001-0	
Abmessungen (B x H x D) Dimensions (W x H x D)	26mmx27mmx1,5mm	
Material Material	steel	
Oberflächenbehandlung Surface treatment	Melalic surface, untreated	galvanized
Vorsatzschale Facing profile		no Facing profile
Bezeichnung / Typ / Art.-Nr. Designation / type/ item no.	Bauwin BW 7051	--
Profilquerschnitt (B x D) Profile cross section (W x T)	15,3Wx26,5T	--
Material Material	hard u PVC	--
Ersatzpaneel Replacement panel		
Einstand der Verglasung Edge cover of glazing	The depth of the glass in the panel 20,2mm	
Dicke der Verglasung Thickness of glazing	Thickness of the glass 24mm	

Test Report

no. 18-001154-PR04 (PB-K20-06-en-02) dated 23.11.2018

owner (client) YAVUZ COMPANY d.o.o., 75350 Srebrenik (Bosnia-Herzegovina)



Picture 1 Cross section of the specimen. The test was done without insulating glass unit.