

1. Unique identification code of the product-type:

IzoRoof PIR-F

2. Intended use/es:

Roofs and roofs cladding

3. Manufacturer:

IZOPANEL Sp. z o.o.

36 Budowlanych Street, Gdańsk 80-298, Poland

Tel.: +48 58 340 17 17, Fax: +48 58 340 17 18, E-mail: info@izopanel.pl

5. System/s of AVCP:

System 3 and 4

6a. Harmonised standard:

EN 14509:2013 „Self-supporting double skin metal faced insulating panels – Factory made products – Specification”

Notified body/ies:

- Instytut Techniki Budowlanej – Notified Body no. 1488
- Polskie Centrum Badań i Certyfikacji S.A. - Notified Body no. 1434
- FIRES s.r.o. - Notified Body no. 1396

7. Declared performance/s:

Essential Characteristics	Performance Characteristics							
Metal faces thickness (external / internal) 0,4 / 0,4 [mm]								
Mechanical Resistance								
Shear strength; f_{cv} [MPa]	≥0,07							
Shear Modulus; G_c [MPa]	≥1,5							
Shear strength after long-term loading; f_{cvt} [MPa]	≥0,03							
Compressive strength; f_{cc} [MPa]	≥0,09							
Cross panel tensile strength; f_{ct} [MPa]	≥0,08							
Bending moment capacity M_u [kNm/m] Side (external/internal)	Panel thickness [mm]	40	60	80	100	120	140	160
	External side	1,43	2,36	3,17	4,21	5,29	4,89	5,78
	Internal side	1,74	2,34	3,00	3,64	4,29	4,95	5,61
Wrinkling stress δ_w [MPa] Side (external/internal)	Panel thickness [mm]	40	60	80	100	120	140	160
	Wrinkling stress	176/93					134/93	
Bending moment capacity over a central support M_u [kNm/m] Side (external/internal)	Panel thickness [mm]	40	60	80	100	120	140	160
	External side	1,74	2,48	3,15	3,58	4,14	4,87	5,40
	Internal side	2,00	2,66	3,36	4,08	4,87	4,47	5,09
Wrinkling stress over a central support δ_w [MPa] Side (external/internal)	Panel thickness [mm]	40	60	80	100	120	140	160
	Wrinkling stress	280/98					280/80	
Creep coefficient								
$\phi_{t=2000h}$	1,40							
$\phi_{t=100000h}$	2,16							
Thermal transmittance; U [W/m²K]	Panel thickness [mm]	40	60	80	100	120	140	160
	Thermal transmittance	0,53	0,34	0,26	0,21	0,17	0,15	0,13
Thermal conductivity [$\lambda_{declared}$] [W/mK]	≤0,021							
External fire performance - roofs	B_{Roof} (t1,t2,t3)							

Essential Characteristics		Performance Characteristics							
Reaction to fire	Panel thickness [mm]	40	60	80	100	120	140	160	
	Reaction to fire	B-s2, d0		B-s1, d0					
Fire resistance	Panel thickness [mm]	40	60	80	100	120	140	160	
	Fire resistance class	NPD			REI 30				
Flexural tensile strength (ceilings)	NPD								
Water permeability	Class A								
Air permeability	Thrust				Suction				
	n = 0,6443 C = 0,1098				n = 0,4498 C = 0,2433				
Water vapour permeability	Impermeable								
Airborne sound insulation; $R_w(C,C_{tr})$ [dB]	25 (-2,-5)								
Dimensional tolerances	Pass								
Durability	Pass – all colours								
Dangerous substances	NPD								
Metal faces thickness (external / internal) 0,5 / 0,4 [mm]									
Mechanical Resistance									
Shear strength; f_{cv} [MPa]	≥0,1								
Shear Modulus; G_c [MPa]	≥1,5								
Shear strength after long-term loading; f_{cvt} [MPa]	≥0,03								
Compressive strength; f_{cc} [MPa]	≥0,09								
Cross panel tensile strength; f_{ct} [MPa]	≥0,05								
Bending moment capacity M_u [kNm/m] Side (external/internal)	Panel thickness [mm]	40	60	80	100	120	140	160	
	External side	1,43	5,52	7,21	8,89	10,58	12,26	13,95	
	Internal side	1,74	2,03	2,66	3,28	3,90	4,52	5,14	
Wrinkling stress δ_w [MPa] Side (external/internal)	176/86								
Bending moment capacity over a central support M_u [kNm/m] Side (external/internal)	Panel thickness [mm]	40	60	80	100	120	140	160	
	External side	1,74	7,37	9,62	11,87	14,12	16,37	18,62	
	Internal side	2,00	2,35	3,07	3,79	4,51	5,22	5,94	
Wrinkling stress over a central support δ_w [MPa] Side (external/internal)	250/98								
Creep coefficient									
$\varphi_{t=2000h}$	1,40								
$\varphi_{t=100000h}$	2,16								
Thermal transmittance; U [W/m ² K]	Panel thickness [mm]	40	60	80	100	120	140	160	
	Thermal transmittance	0,53	0,34	0,26	0,21	0,17	0,15	0,13	
Thermal conductivity [$\lambda_{declared}$] [W/mK]	≤0,021								
External fire performance - roofs	$B_{Roof}(t1,t2,t3)$								
Reaction to fire	B-s1, d0								
Fire resistance	Panel thickness [mm]	40	60	80	100	120	140	160	
	Fire resistance class	NPD			REI 30				
Flexural tensile strength (ceilings)	NPD								
Water permeability	Class A								

Essential Characteristics	Performance Characteristics	
	Thrust	Suction
Air permeability	n = 0,6443 C = 0,1098	n = 0,4498 C = 0,2433
Water vapour permeability	Impermeable	
Airborne sound insulation; $R_w(C,C_{tr})$ [dB]	25 (-2,-5)	
Dimensional tolerances	Pass	
Durability	Pass – all colours	
Dangerous substances	NPD	

Website where the copy of the Declaration of Performance is made available:

www.izopanel.pl

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Karol Pawłowski

(name and surname)

Gdańsk, 07.06.2024

(place and date)



(signature)