

DECLARATION OF PERFORMANCE

No. 11.05/C PIR-F

1. Unique identification code of the product-type :

IzoCold PIR-F

2. Intended use or uses :

External and internal wall elements

3. Producent:

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

5. System(s) for assessment and verification of constancy of performance:

3

6a. Harmonised standard:

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

Notified body or bodies:

- **Building Research Institute – Notified Body No. 1488**
- **FIRES s.r.o. – Notified Body No. 1396**

7. Declared performance:

General characteristics	Performance							
Tensile strength; f_{ct} [MPa]								
120	0,08							
140-220	0,07							
Compressive strength; f_{cc} [MPa]								
120	0,1							
140-220	0,09							
Shear strength; f_{cv} [MPa]								
120	0,1							
140-220	0,07							
Creep coefficient; $\varphi_{t=2000h}$	1,57							
Creep coefficient; $\varphi_{t=100000h}$	2,44							
Long-term shear strength; f_{cvt} [MPa]								
120	0,04							
140-220	0,028							
Shear modulus; G_c [MPa]								
120	2,5							
140-220	2,1							
Critical stress [MPa]:	L(line)		R(groove)		M(micro)		E(smooth)	
Panel thickness [mm]	120	140-220	120	140-220	120	140-220	120	140-220
Ext. side - span - ambient temp.	128	92	108	78	93	67	52	37
Ext. side - span - increased temp.	120	89	101	75	87	65	48	36
Ext. side - support - ambient temp.	100	82	84	69	73	60	40	33
Ext. side — support — increased temp.	92	79	78	67	67	58	37	32
Int. side - span - ambient temp.	119	72	100	60	85	52	41	25
Int. side - span - increased temp.	112	70	94	59	80	50	39	24
Int. side - support - ambient temp.	85	60	71	50	61	43	29	21
Int. side - support - increased temp.	78	58	65	49	56	42	27	20
Bending moment [kNm/m]:								
Panel thickness [mm]	120	140	160	180	200	220		
Line, moment in span, ext. cladding - normal temp.	6,89	5,78	6,61	7,43	8,26	9,09		
Line, moment in span, ext. cladding - increased temp.	6,46	5,59	6,39	7,19	7,99	8,79		
Line, moment in span, int. cladding - normal temp.	5,12	3,62	4,14	4,65	5,17	5,69		
Line, moment in span, int. cladding - increased temp.	4,82	3,52	4,02	4,52	5,03	5,53		

General characteristics	Performance					
<i>Line, moment on support, ext. cladding - normal temp.</i>	5,38	5,34	6,10	6,87	7,63	8,40
<i>Line, moment on support, ext. cladding - increased temp.</i>	4,95	5,21	5,96	6,71	7,45	8,20
<i>Line, moment on support, int. cladding - normal temp.</i>	3,66	3,01	3,45	3,88	4,31	4,74
<i>Line, moment on support, int. cladding - increased temp.</i>	3,36	2,91	3,33	3,75	4,17	4,58
<i>Groove, moment in span, ext. cladding - normal temp.</i>	5,81	4,9	5,6	6,3	7,00	7,71
<i>Groove, moment in span, ext. cladding - increased temp.</i>	5,43	4,71	5,38	6,06	6,73	7,41
<i>Groove, moment in span, int. cladding - normal temp.</i>	4,30	3,01	3,45	3,88	4,31	4,74
<i>Groove, moment in span, int. cladding - increased temp.</i>	4,05	2,96	3,39	3,81	4,24	4,66
<i>Groove, moment in support, ext. cladding - normal temp.</i>	5,06	4,52	5,17	5,82	6,47	7,11
<i>Groove, moment on support, ext. cladding - increased temp.</i>	4,63	4,4	5,03	5,66	6,29	6,92
<i>Groove, moment on support, int. cladding - normal temp.</i>	3,06	2,51	2,87	3,23	3,59	3,95
<i>Groove, moment on support, int. cladding - increased temp.</i>	2,8	2,46	2,81	3,17	3,52	3,87
<i>Micro, moment in span, ext. cladding - normal temp.</i>	5,00	4,21	4,81	5,41	6,02	6,62
<i>Micro, moment in span, ext. cladding - increased temp.</i>	4,68	4,08	4,67	5,25	5,84	6,42
<i>Micro, moment in span, int. cladding - normal temp.</i>	3,66	2,61	2,99	3,36	3,74	4,11
<i>Micro, moment in span, int. cladding - increased temp.</i>	3,44	2,51	2,87	3,23	3,59	3,95
<i>Micro, moment on support, ext. cladding - normal temp.</i>	4,36	3,89	4,45	5,01	5,57	6,13
<i>Micro, moment on support, ext. cladding - increased temp.</i>	3,98	3,77	4,31	4,85	5,39	5,93
<i>Micro, moment on support, int. cladding - normal temp.</i>	2,63	2,16	2,47	2,78	3,09	3,4
<i>Micro, moment on support, int. cladding - increased temp.</i>	2,41	2,11	2,41	2,71	3,02	3,32
<i>Smooth, moment in span, ext. cladding - normal temp.</i>	2,80	2,32	2,66	2,99	3,32	3,66
<i>Smooth, moment in span, ext. cladding - increased temp.</i>	2,58	2,26	2,58	2,91	3,23	3,56
<i>Smooth, moment in span, int. cladding - normal temp.</i>	1,76	1,26	1,44	1,62	1,8	1,98
<i>Smooth, moment in span, int. cladding - increased temp.</i>	1,68	1,21	1,38	1,55	1,72	1,90
<i>Smooth, moment on support, ext. cladding - normal temp.</i>	2,42	2,14	2,44	2,75	3,05	3,36
<i>Smooth, moment on support, ext. cladding - increased temp.</i>	2,21	2,14	2,44	2,75	3,05	3,36
<i>Smooth, moment on support, int. cladding - normal temp.</i>	1,25	1,05	1,21	1,36	1,51	1,66
<i>Smooth, moment on support, int. cladding - increased temp.</i>	1,16	1,00	1,15	1,29	1,44	1,58

Panel Thickness[mm]	120	140	160	180	200	220
Thermal conductivity; U	0,18	0,15	0,13	0,12	0,11	0,1
Thermal conductivity coefficient [$\lambda_{\text{declared}}$]	0,021					
Reaction to fire [panel thickness in mm]:						
120 - 220	B-s1,d0					
Resistance to fire [panel thickness in mm]:						
120 - 180	EI 30					
200 - 220	EI 60					
Bending tensile strength (ceilings)	NPD					
Water permeability	A					
Air permeability	<i>thrust</i>			<i>suction</i>		
	n=1,1983 c=0,0022			n=1,0141 c=0,0036		
Steam permeability	conforms					
Specific acoustic resistance ; $R_w(C,C_{tr})$ [dB]	NPD					
Acoustic absorption; α_w	NPD					
Durability	conforms					
Hazardous substances	NPD					

Web address where this Declaration of Performance is made available:

www.izopanel.pl

Performance of the above product is in compliance with Declared Performance Package. This Declaration of Performance is issued, in accordance with Regulation (EU) no. 305/2011, at the sole responsibility of the manufacturer as indicated above.

On behalf of the manufacturer signed by:

Karol Pawłowski

(Full name)

Gdańsk, dnia 01.07.2021

(place and date)



(signature)