CE

BALEXMETAL
BUDUJEMY RAZEM
WE BUILD TOGETHER

DECLARATION OF PERFORMANCE

NO. PIR-F/14509/2020/1

1. **Unique identification code of the product-type:** Cold storage panel PIR (PU-PIR-F)
2. **Intended use/es:** Self-supporting sandwich panels with rigid polyisocyanurate (PIR) foam core as external walls, wall cladding, partition walls and ceilings
3. **Manufacturer: BALEX METAL sp. z o.o.:** ul. Wejherowska 12C, 84-239 Bolszewo
4. **System/s AVCP:** 3
5. **Harmonised standard:** PN-EN 14509:2013
6. **Notified body/ies:** Instytut Techniki Budowlanej (no. 1488); Warringtonfire (no. 0833); FIRES s.r.o. (no. 1396)
7. **Declared performance/s:** Table 1

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

BALEXMETAL Sp. z o.o.
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P-191112216

Bolszewo, 27 October 2020

Signed in the name of the manufacturer by:

Certification manager

Wawrzynowicz

dr inż. Adam Wawrzynowicz

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Table 1: Essential characterisitics

Panel thickness[mm]			120	160	180	200
Cladding steel grade			S250GD, 1.4301			
Type of coating	Metallic		Z100, Z185, Z225, Z275, AZ150, AZ185, ZA130, ZA255			
	Organic		SP, HDP, PVD(F), PVC(P), PVC(F), PUR			
Cladding thickness	External [mm]		0,5; 0,6; 0,7			
	Internal [mm]		0,4; 0,5; 0,6; 0,7			
Type of profile	Exernal		M (Micro-profile), L (Lined), G (Plain), C (Clearline)			
	Internal		L (Lined), G (Plain)			
Core material			PIR			
Core density [kg/m^3]			40			
Mass of panel [kg/m^2]			13,4	15,0	15,8	16,8
Reaction to fire			B-s1,d0			
Fire resistance of walls			EI30/EW90			EI60/EW60
Tensile strength f_{Ct} [MPa]			0,08			
Shear strength f_{Cv} [MPa]			0,12	0,09		
Shear modulus G_C [MPa]			3,5	3		
Compressive strength f_{Cc} [MPa]			0,13			
Wrinkling strength	In span:	External cladding [MPa]	M: 249 L: 102 G,C: 87	M: 233 L: 102 G,C: 78	M: 218 L: 102 G,C: 78	M: 187 L: 102 G,C: 78
		External cladding at increased temp. [MPa]	M: 227 L: 102 G,C: 87	M: 213 L: 102 G,C: 78	M: 198 L: 102 G,C: 78	M: 170 L: 102 G,C: 78
		Internal cladding [MPa]	L: 128 G: 87	L: 128 G: 78	L: 128 G: 78	L: 128 G: 78
	At a support:	External cladding [MPa]	M: 174 L: 71 G,C: 61	M: 163 L: 71 G,C: 58	M: 152 L: 71 G,C: 55	M: 131 L: 71 G,C: 55
		External cladding at increased temp. [MPa]	M: 159 L: 65 G,C: 55	M: 149 L: 65 G,C: 50	M: 139 L: 65 G,C: 50	M: 119 L: 65 G,C: 50
		Internal cladding [MPa]	L: 90 G: 70	L: 90 G: 55	L: 90 G: 55	L: 90 G: 55
	Reduction factor, external cladding		d=0,6mm: 0,88 for L; 0,81 for M d=0,7mm: 0,79 for L; 0,73 for M			

	Reduction factor, internal cladding		d=0,5mm: 0,8 for L;
			d=0,6mm: 0,7 for L;
			d=0,7mm: 0,63 for L			

Heat conductivity coefficient λ_D [W/mK]			0,022			
Heat transfer coefficient $U_{d,S}$ [W/m^{2}K]			0,18	0,14	0,12	0,11
Water permeability [m^3/hm^2]			Class A			
Air permeability [m^3/hm^2]			≤0,2			
Water vapour permeability			Impermeable			
Sound insulation [dB]			R_W≥25, R_{A1}≥23, R_{A2}≥21			
Sound absorption			α=0,1			
Durability			Pass DUR 1			