



**Appendix 1 to Declaration of Performance NO. 01/01/14509**

Manufacturer: **Balex Metal sp. z o.o.**

Declared performance		Product					Unit	Norm	
		PU-PIR-W-ST							
Intended use		Self-supporting sandwich panels with rigid polyisocyanurate (PIR) foam core as external walls, wall cladding, partition walls and ceilings							
Harmonised norm		PN-EN 14509:2013 „Self-supporting double skin metal faced insulating panels – Factory made products - Specification”							
Year of CE marking		11							
Panel thickness		40	50	60	80	100	mm	EN 14509	
Cladding steel grade		S250GD, 1.4301					-	EN 10346	
Type of coating	metallic	Z100, Z185, Z225, Z275, AZ150, AZ185, ZA130, ZA255					-	EN 10346	
	organic	SP, HDP, PVD(F), PVC(P), PVC(F), PUR					-	EN 10169	
Cladding thickness	external	0,5; 0,6; 0,7					mm	EN 10143	
	internal	0,4; 0,5; 0,6; 0,7					mm	EN 10143	
Rodzaje profilowań	zewn.	L (lining), M (mikroprofil), G (flar), C (clearline)					-		
	wewn.	L (lining), G (flat)					-		
Core material		PIR							
Core density		40					kg/m <sup>3</sup>		
Mass of panel		10,26	10,58	11,08	11,79	12,60	kg/m <sup>2</sup>		
Reaction to fire:		-					Bs2d0 (Bs1d0 cladding thick.. min. 0,5 mm)	EN 13501	
Fire resistance		NPD	NPD	NPD	NPD	EI15/EW30 (claddings with org. coat., n/a for ceilings)	EN 13501		
Tensile strenght fCt		0,08					MPa	EN 14509	
Shear strenght fCv		0,14	0,13	0,13	0,12	0,12	MPa	EN 14509	
Shear modulus Gc		3,5					MPa	EN 14509	
Compressive strenght fcc		0,13					MPa	EN 14509	
Wrinkling strenght	In span:	external cladding	M: 249 L: 111 G,R,S: 83	M: 249 L: 110 G,R,S: 84	M: 249 L: 109 G,R,S: 85	M: 249 L: 106 G,R,S: 87	M: 249 L: 104 G,R,S: 87	MPa	EN 14509
		external cladding at increased temp.	M: 227 L: 101 G,R,S: 76	M: 227 L: 100 G,R,S: 76	M: 227 L: 99 G,R,S: 77	M: 227 L: 97 G,R,S: 79	M: 227 L: 95 G,R,S: 79	MPa	EN 14509
		internal cladding	L: 139 G: 83	L: 138 G: 84	L: 136 G: 85	L: 133 G: 87	L: 131 G: 87	MPa	EN 14509
	Over support:	external cladding	M: 174 L: 78 G,R,S: 58	M: 174 L: 77 G,R,S: 58	M: 174 L: 76 G,R,S: 59	M: 174 L: 75 G,R,S: 61	M: 174 L: 74 G,R,S: 61	MPa	EN 14509
		external cladding at increased temp.	M: 159 L: 71 G,R,S: 53	M: 159 L: 70 G,R,S: 53	M: 159 L: 69 G,R,S: 54	M: 159 L: 68 G,R,S: 54	M: 159 L: 66 G,R,S: 55	MPa	EN 14509
		internal cladding	L: 125 G: 75	L: 121 G: 74	L: 116 G: 72	L: 107 G: 70	L: 99 G: 70	MPa	EN 14509
	Correlation coefficient, external cladding		d=0,6mm: 0,88 for L; 0,81 for M d=0,7mm: 0,79 for L; 0,73 for M					-	EN 14509
	Correlation coefficient, external cladding		d=0,5mm: 0,8 for L; d=0,6mm: 0,7 for L; d=0,7mm: 0,63 for L					-	EN 14509
	Heat conductivity coefficient λ <sub>D</sub>		0,022					W/mK	EN 14509
Heat transfer coefficient U <sub>d,s</sub>		0,59	0,45	0,36	0,27	0,22	W/m <sup>2</sup> K	EN 14509	
Water permeability		Class A					m <sup>3</sup> /hm <sup>2</sup>	EN 12865	
Air permeability		≤0,2					m <sup>3</sup> /hm <sup>2</sup>	EN 12114	
Water vapour permeability		Impermeable					-	EN 14509	
Sound insulation		R <sub>w</sub> ≥25, R <sub>A1</sub> ≥23, R <sub>A2</sub> ≥21					dB	EN ISO 717-1	
Sound absorbtion		α=0,1					-	EN ISO 11654	
Durability		Pass DUR 1					-	EN 14509	

Signed in the name of  
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