

**DECLARATION OF PERFORMANCE**

**NO. 12/4/14509/BALEX THERM MW-W-PLUS**

<b>1 Unique identification code of the product-type</b>	Sandwich panels with mineral wool core in double-sided metal cladding BALEX THERM MW-W-PLUS with hidden fixing
<b>2 Type, batch or serial number or any other element allowing identification of the product</b>	Information identifying batches of the product – on the label of each package of the product  Thickness of the product [mm]: 80,100,120,130,140,150,160,180, 200  Thermal insulation [kg/m <sup>3</sup> ]: MW density of 110 -10/+ 15%  Cladding: Steel 0.5-0.7 mm external; 0.5/0.7 mm internal  Coating: SP, HDP, PVDF, PVC(P), PVC(F), PUR  Steel grade: S250-280GD, 1.4301  Panel weight [kg/m <sup>2</sup> ]: 80(17.5), 100(19.6), 120(21.7), 130(22.8), 140(23.8), 150(24.9), 160(25.9), 180(28), 200(30.1)  Cladding profile: external L,M,R,G, internal L,G
<b>3 Intended use, in accordance with the applicable harmonized technical specification</b>	Sandwich panels with mineral wool core in double-sided metal cladding as external walls and wall cladding, partition walls
<b>4 Name, contact address of the manufacturer</b>	<b>BALEX METAL Sp. z o.o.</b> ul. Wejherowska 12C, 84-239 Bolszewo, Poland
<b>5 System of assessment and verification of constancy of performance</b>	System 3
<b>6 Identification of notified bodies</b>	Building Research Institute 1 Filtrowa, 00-611 Warsaw, Poland Notified body no. 1488  Reports: LK-01-2943/09/Z00NK, LK-02-2943/09/Z00NK, LK-03-2943/09/Z00NK, LK04-2943/09/Z00NK, NK-02943/P/2009, NK-02943/P/2009 Part 2., NF-00782/B/2010, NF-03300/B/2009, NF-03327/B/2009, LP-03515.2/09, LP-03515.03/09, LP03-3619/C/2009/BP/U, LP04-3619/C/2009/BP/U

## 7 Declared performances

Essential characteristics	Performances	Harmonized technical specification
Heat transfer coefficient [W/m <sup>2</sup> K]	0.48(80), 0.38(100), 0.32(120), 0.30(130), 0.28(140), 0.26(150), 0.24(160), 0.22(180), 0.20(200)	PN-EN 14509:2013
Heat conductivity coefficient $\lambda_D$ [W/mK]	0.040	PN-EN 14509:2013
Tensile strength [MPa]	0.1	PN-EN 14509:2013
Shear resistance $f_{cv}$ [MPa]	0.09	PN-EN 14509:2013
Modulus of rigidity $G_c$ [MPa]	7.0(80,100,120,130); 4.5(140,150,160,180,200)	PN-EN 14509:2013
Bending strength $f_{cc}$ [MPa]	0.11	PN-EN 14509:2013
Wrinkling strength (external cladding) in the bay [MPa]	114(80,100,120); 94(130,140,150,160,180,200) *for cladding 0.6 correlation coefficient 0.81, for cladding 0.7 correlation coefficient 0.73	PN-EN 14509:2013
Wrinkling strength in the bay external cladding at increased temp. [MPa]	114(80,100,120); 94(130,140,150,160,180,200) *for cladding 0.6 correlation coefficient 0.81, for cladding 0.7 correlation coefficient 0.73	PN-EN 14509:2013
Wrinkling strength over support external cladding [MPa]	122.36(80);104.07(100,120,130); 94.15(140); 150,160,180,200) *for cladding 0.6 correlation coefficient 0.81, for cladding 0.7 correlation coefficient 0.73	PN-EN 14509:2013
Wrinkling strength over support external cladding at increased temp. [MPa]	122.36(80); 104.07(100,120,130); 94.15(140); 150,160,180,200) *for cladding 0.6 correlation coefficient 0.81, for cladding 0.7 correlation coefficient 0.73	PN-EN 14509:2013
Wrinkling strength in the bay internal cladding [MPa]	97(80,100,120); 87(130,140,150,160,180,200);	PN-EN 14509:2013
Wrinkling strength over support internal cladding [MPa]	96(80,100,120); 87(130,140,150,160,180,200);	PN-EN 14509:2013
Fire resistance	EI30(100) * $L_{max}= 4.0$ m; EI60(120,130,140,150,160,180,200) * $L_{max}=4.0$ m; EI45(120,130,140,150,160,180,200) * $L_{max}= 11.2$ m horizontal, $L_{max}= 4.0$ m vertical; EI30(120,130,140,150,160,180,200) * $L_{max}= 12$ m horizontal, $L_{max}= 4.0$ m vertical;	PN-EN 14509:2013
Reaction-to-fire	A2-s2.d0	PN-EN 14509:2013
Water permeability	Class A	PN-EN 14509:2013
Air permeability [m <sup>3</sup> /h*m <sup>2</sup> ]	Impermeable	PN-EN 14509:2013
Water vapour permeability	Impermeable	PN-EN 14509:2013
Sound insulation [dB]	$R_w \geq 32$ , $R_{A1} \geq 29$ , $R_{A2} \geq 28$	PN-EN 14509:2013
Durability	PASS DUR2	PN-EN 14509:2013

- 8 The performances of the product identified in points 1 and 2 are consistent with the declared performances in point 7.**

This declaration of performance is issued under the sole responsibility of the manufacturer, as specified in point 4.

Anna Stępień  
*Junior Specialist for Certification*



Bolszewo, 27 April 2015