

**DECLARATION OF PERFORMANCE**

**No. MW-LT-W-ST/2022/2**

page 1/10

1. **Unique identification code of the product-type:** MW LIGHT sandwich panel (MW-LT-W-ST d<sub>N</sub> t<sub>Ne</sub>/t<sub>Ni</sub>)
2. **Intended use/es:** internal and external walls
3. **Manufacturer:** BALEX METAL sp. z o.o., ul. Wejherowska 12C, 84-239 Bolszewo
4. **System for assessment and verification of functional properties stability:** 3
5. **Harmonised standard:** PN-EN 14509:2013
6. **Notified body/ies:** ITB (no. 1488), CERTBUD (no. 2310)
7. **Declared performance/s:** Table 1, Table 2, Table 3, Table 4, Table 5, Table 6, Table 7, Table 8, Table 9

Profiles of the steel facings:

M – micro-profile; L – lined; R – grooving; G – plan; 1L – clearline; 2L – double clearline;

Other symbols:

NPD – No Performance Determined

N/A – not applicable

\* – under certain conditions as described in the relevant classification report

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.

Signed in the name of the manufacturer by:

Chief Executive Officer

Marek Dzikiewicz

Bolszewo, 1.09.2022

 **BALEXMETAL Sp. z o.o.**  
64-239 Bolszewo, ul. Wejherowska 12C  
tel. 58 778-44-44, fax 58 778-44-55  
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P-191112216 (17)



**DECLARATION OF PERFORMANCE**

**No. MW-LT-W-ST/2022/2**

page 2/10

**Table 1: Declared performance ( $t_{Ne}/t_{Ni} = 0,5/0,5$ )**

Essential characteristics				Performances							
Steel grade				S250GD							
Types of coatings	Metallic			Z100; Z140; Z200; Z225; Z275; AZ100; AZ150; AZ185; ZA200; ZA255; ZM60; ZM100; ZM120							
	Organic			SP, PVC(F), CESAR55							
Facing thickness	External $t_{Ne}$ [mm]			0,5							
	Internal $t_{Ni}$ [mm]			0,5							
Facing profile types	External			M, L, R, G, 1L, 2L							
	Internal			L, G							
Core material				Mineral wool							
Nominal core density [ $kg/m^3$ ]				90							
Nominal thickness $d_N$ [mm]				80	100	120	150	175	200	240	
Panel weight [ $kg/m^2$ ]				16	18	20	22	24	27	30	
Mechanical performance	Wrinkling strength [MPa]	In span:	External face	M	121	119	117	115	105	95	79
				L	119	113	107	99	97	94	87
				G, R, 1L, 2L	115	110	105	98	94	91	85
			External face at elevated temp.	M	121	119	117	115	105	95	79
	L	119		113	107	99	97	94	87		
	G, R, 1L, 2L	115		110	105	98	94	91	85		
	Internal face	L	120	117	114	110	101	92	77		
		G	116	111	107	101	92	84	70		
	At a support:	External face	M	120	116	113	109	102	95	79	
			L	85	85	85	85	82	79	74	
			G, R, 1L, 2L	80	78	76	74	74	75	75	
		External face at elevated temp.	M	120	116	113	109	102	95	79	
			L	85	85	85	85	82	79	74	
			G, R, 1L, 2L	80	78	76	74	74	75	75	
		Internal face	L	106	106	107	108	99	91	77	
			G	102	100	99	97	90	83	70	
Thermal transmittance	Heat transfer coefficient $U_{d,s}$ [ $W/m^2K$ ]			0,47	0,38	0,32	0,26	0,23	0,19	0,17	
	Heat conductivity coefficient $\lambda_D$ [ $W/mK$ ]			0,040							
Reaction to fire; classification*				NPD	A2-s1,d0						
Fire resistance; classification*				NPD	EI 45	EI 60	EI 60	EI 90	EI 120	EI 120	
Water permeability; resistance classification				A							
Air permeability; coefficient $n$ and $C$				NPD							
Water vapour permeability; coefficient $\mu$ [-]				$\infty$ (Impermeable)							
Airborne sound insulation; rating $R_w$ ( $C$ , $C_{tr}$ ) [dB]				32 (-3, -4)							
Sound absorption; rating $\alpha_w$ [-]				0,20							
Durability; criteria DUR 2				Pass							
Regulated substances				NPD							



**DECLARATION OF PERFORMANCE**

No. MW-LT-W-ST/2022/2

page 3/10

Table 2: Declared performance ( $t_{Ne}/t_{Ni} = 0,5/0,6$ )

Essential characteristics				Performances							
Steel grade				S250GD							
Types of coatings	Metallic			Z100; Z140; Z200; Z225; Z275; AZ100; AZ150; AZ185; ZA200; ZA255; ZM60; ZM100; ZM120							
	Organic			SP, PVC(F), CESAR55							
Facing thickness	External $t_{Ne}$ [mm]			0,5							
	Internal $t_{Ni}$ [mm]			0,6							
Facing profile types	External			M, L, R, G, 1L, 2L							
	Internal			L, G							
Core material				Mineral wool							
Nominal core density [kg/m <sup>3</sup> ]				90							
Nominal thickness $d_N$ [mm]				80	100	120	150	175	200	240	
Panel weight [kg/m <sup>2</sup> ]				17	19	20	23	25	28	31	
Mechanical performance	Wrinkling strength [MPa]	In span:	External face	M	0,065	0,065	0,065	0,065	0,06	0,06	0,06
				L	0,08	0,08	0,08	0,08	0,07	0,07	0,07
				G, R, 1L, 2L	0,045	0,045	0,045	0,045	0,045	0,045	0,045
			External face at elevated temp.	M	2,5	2,5	2,5	2,5	2,5	2,5	2,5
				L	121	119	117	115	105	95	79
	Internal face	L	119	113	107	99	97	94	87		
		G, R, 1L, 2L	115	110	105	98	94	91	85		
		M	121	119	117	115	105	95	79		
	At a support:	External face	L	119	113	107	99	97	94	87	
			G, R, 1L, 2L	115	110	105	98	94	91	85	
			M	120	116	113	109	102	95	79	
		External face at elevated temp.	L	85	85	85	85	82	79	74	
			G, R, 1L, 2L	80	78	76	74	74	75	75	
			M	120	116	113	109	102	95	79	
Internal face		L	85	85	85	85	82	79	74		
		G, R, 1L, 2L	80	78	76	74	74	75	75		
		L	92	92	92	93	85	79	66		
Thermal transmittance	Heat transfer coefficient $U_{d,s}$ [W/m <sup>2</sup> K]			0,47	0,38	0,32	0,26	0,23	0,19	0,17	
	Heat conductivity coefficient $\lambda_D$ [W/mK]			0,040							
Reaction to fire; classification*				NPD	A2-s1,d0						
Fire resistance; classification*				NPD	EI 45	EI 60	EI 60	EI 90	EI 120	EI 120	
Water permeability; resistance classification				A							
Air permeability; coefficient $n$ and $C$				NPD							
Water vapour permeability; coefficient $\mu$ [-]				$\infty$ (Impermeable)							
Airborne sound insulation; rating $R_w$ (C, $C_{tr}$ ) [dB]				32 (-3, -4)							
Sound absorption; rating $\alpha_w$ [-]				0,20							
Durability; criteria DUR 2				Pass							
Regulated substances				NPD							





**DECLARATION OF PERFORMANCE**

No. MW-LT-W-ST/2022/2

page 4/10

Table 3: Declared performance ( $t_{Ne}/t_{Ni} = 0,5/0,7$ )

Essential characteristics				Performances								
Steel grade				S250GD								
Types of coatings	Metallic			Z100; Z140; Z200; Z225; Z275; AZ100; AZ150; AZ185; ZA200; ZA255; ZM60; ZM100; ZM120								
	Organic			SP, PVC(F), CESAR55								
Facing thickness	External $t_{Ne}$ [mm]			0,5								
	Internal $t_{Ni}$ [mm]			0,7								
Facing profile types	External			M, L, R, G, 1L, 2L								
	Internal			L, G								
Core material				Mineral wool								
Nominal core density [kg/m <sup>3</sup> ]				90								
Nominal thickness $d_N$ [mm]				80	100	120	150	175	200	240		
Panel weight [kg/m <sup>2</sup> ]				18	19	21	24	26	28	32		
Mechanical performance	Wrinkling strength [MPa]	In span:	External face	M	121	119	117	115	105	95	79	
				L	119	113	107	99	97	94	87	
			External face at elevated temp.		M	121	119	117	115	105	95	79
					L	119	113	107	99	97	94	87
			G, R, 1L, 2L	115	110	105	98	94	91	85		
			M	121	119	117	115	105	95	79		
			L	119	113	107	99	97	94	87		
			G, R, 1L, 2L	115	110	105	98	94	91	85		
			L	93	90	88	85	78	71	59		
			G	116	111	107	101	92	84	70		
			M	120	116	113	109	102	95	79		
			L	85	85	85	85	82	79	74		
			G, R, 1L, 2L	80	78	76	74	74	75	75		
			M	120	116	113	109	102	95	79		
			L	85	85	85	85	82	79	74		
			G, R, 1L, 2L	80	78	76	74	74	75	75		
		L	82	82	83	83	76	70	59			
		G	102	100	99	97	90	83	70			
Thermal transmittance	Heat transfer coefficient $U_{d,s}$ [W/ m <sup>2</sup> K]			0,47	0,38	0,32	0,26	0,23	0,19	0,17		
	Heat conductivity coefficient $\lambda_D$ [W/mK]			0,040								
Reaction to fire; classification*				NPD	A2-s1,d0							
Fire resistance; classification*				NPD	EI 45	EI 60	EI 60	EI 90	EI 120	EI 120		
Water permeability; resistance classification				A								
Air permeability; coefficient $n$ and $C$				NPD								
Water vapour permeability; coefficient $\mu$ [-]				$\infty$ (Impermeable)								
Airborne sound insulation; rating $R_w$ ( $C$ , $C_{tr}$ ) [dB]				32 (-3, -4)								
Sound absorption; rating $\alpha_w$ [-]				0,20								
Durability; criteria DUR 2				Pass								
Regulated substances				NPD								



**DECLARATION OF PERFORMANCE**

No. MW-LT-W-ST/2022/2

page 5/10

Table 4: Declared performance ( $t_{Ne}/t_{Ni} = 0,6/0,5$ )

Essential characteristics				Performances							
Steel grade				S250GD							
Types of coatings	Metallic			Z100; Z140; Z200; Z225; Z275; AZ100; AZ150; AZ185; ZA200; ZA255; ZM60; ZM100; ZM120							
	Organic			SP, PVC(F), CESAR55							
Facing thickness	External $t_{Ne}$ [mm]			0,6							
	Internal $t_{Ni}$ [mm]			0,5							
Facing profile types	External			M, L, R, G, 1L, 2L							
	Internal			L, G							
Core material				Mineral wool							
Nominal core density [kg/m <sup>3</sup> ]				90							
Nominal thickness $d_N$ [mm]				80	100	120	150	175	200	240	
Panel weight [kg/m <sup>2</sup> ]				17	19	20	23	25	28	31	
Mechanical performance	Wrinkling strength [MPa]	In span:	External face	M	105	103	101	99	91	82	68
				L	103	98	92	85	84	81	75
				G, R, 1L, 2L	115	110	105	98	94	91	85
			External face at elevated temp.	M	105	103	101	99	91	82	68
				L	103	98	92	85	84	81	75
	G, R, 1L, 2L	115		110	105	98	94	91	85		
	Internal face	L	120	117	114	110	101	92	85		
		G	116	111	107	101	92	84	70		
	At a support:	External face	M	104	100	98	94	88	82	68	
			L	73	73	73	73	71	68	64	
			G, R, 1L, 2L	80	78	76	74	74	75	75	
		External face at elevated temp.	M	104	100	98	94	88	82	68	
			L	73	73	73	73	71	68	64	
			G, R, 1L, 2L	80	78	76	74	74	75	75	
Internal face		L	106	106	107	108	99	91	77		
	G	102	100	99	97	90	83	70			
Thermal transmittance	Heat transfer coefficient $U_{d,s}$ [W/m <sup>2</sup> K]			0,47	0,38	0,32	0,26	0,23	0,19	0,17	
	Heat conductivity coefficient $\lambda_D$ [W/mK]			0,040							
Reaction to fire; classification*				NPD	A2-s1,d0						
Fire resistance; classification*				NPD	EI 45	EI 60	EI 60	EI 90	EI 120	EI 120	
Water permeability; resistance classification				A							
Air permeability; coefficient $n$ and $C$				NPD							
Water vapour permeability; coefficient $\mu$ [-]				$\infty$ (Impermeable)							
Airborne sound insulation; rating $R_w$ ( $C$ , $C_{tr}$ ) [dB]				32 (-3, -4)							
Sound absorption; rating $\alpha_w$ [-]				0,20							
Durability; criteria DUR 2				Pass							
Regulated substances				NPD							



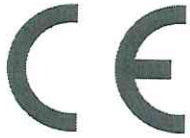
**DECLARATION OF PERFORMANCE**

No. MW-LT-W-ST/2022/2

page 6/10

Table 5: Declared performance ( $t_{Ne}/t_{Ni} = 0,6/0,6$ )

Essential characteristics				Performances								
Steel grade				S250GD								
Types of coatings	Metallic			Z100; Z140; Z200; Z225; Z275; AZ100; AZ150; AZ185; ZA200; ZA255; ZM60; ZM100; ZM120								
	Organic			SP, PVC(F), CESAR55								
Facing thickness	External $t_{Ne}$ [mm]			0,6								
	Internal $t_{Ni}$ [mm]			0,6								
Facing profile types	External			M, L, R, G, 1L, 2L								
	Internal			L, G								
Core material				Mineral wool								
Nominal core density [kg/m <sup>3</sup> ]				90								
Nominal thickness $d_N$ [mm]				80	100	120	150	175	200	240		
Panel weight [kg/m <sup>2</sup> ]				18	19	21	24	26	28	32		
Mechanical performance	Wrinkling strength [MPa]	In span:	External face	M	105	103	101	99	91	82	68	
				L	103	98	92	85	84	81	75	
			External face at elevated temp.		M	105	103	101	99	91	82	68
					L	103	98	92	85	84	81	75
			G, R, 1L, 2L	115	110	105	98	94	91	85		
			L	104	101	99	95	87	79	66		
			G	116	111	107	101	92	84	70		
			M	104	100	98	94	88	82	68		
			L	73	73	73	73	71	68	64		
			G, R, 1L, 2L	80	78	76	74	74	75	75		
			M	104	100	98	94	88	82	68		
			L	73	73	73	73	71	68	64		
			G, R, 1L, 2L	80	78	76	74	74	75	75		
			L	92	92	92	93	85	79	66		
			G	102	100	99	97	90	83	70		
	Thermal transmittance	Heat transfer coefficient $U_{d,s}$ [W/ m <sup>2</sup> K]			0,47	0,38	0,32	0,26	0,23	0,19	0,17	
Heat conductivity coefficient $\lambda_D$ [W/mK]			0,040									
Reaction to fire; classification*				NPD	A2-s1,d0							
Fire resistance; classification*				NPD	EI 45	EI 60	EI 60	EI 90	EI 120	EI 120		
Water permeability; resistance classification				A								
Air permeability; coefficient $n$ and $C$				NPD								
Water vapour permeability; coefficient $\mu$ [-]				$\infty$ (Impermeable)								
Airborne sound insulation; rating $R_w$ ( $C$ , $C_{tr}$ ) [dB]				32 (-3, -4)								
Sound absorption; rating $\alpha_w$ [-]				0,20								
Durability; criteria DUR 2				Pass								
Regulated substances				NPD								



**DECLARATION OF PERFORMANCE**

No. MW-LT-W-ST/2022/2

page 7/10

Table 6: Declared performance ( $t_{Ne}/t_{Ni} = 0,6/0,7$ )

Essential characteristics			Performances								
Steel grade			S250GD								
Types of coatings	Metallic		Z100; Z140; Z200; Z225; Z275; AZ100; AZ150; AZ185; ZA200; ZA255; ZM60; ZM100; ZM120								
	Organic		SP, PVC(F), CESAR55								
Facing thickness	External $t_{Ne}$ [mm]		0,6								
	Internal $t_{Ni}$ [mm]		0,7								
Facing profile types	External		M, L, R, G, 1L, 2L								
	Internal		L, G								
Core material			Mineral wool								
Nominal core density [kg/m <sup>3</sup> ]			90								
Nominal thickness $d_N$ [mm]			80	100	120	150	175	200	240		
Panel weight [kg/m <sup>2</sup> ]			19	20	22	25	27	29	33		
Mechanical performance	Wrinkling strength [MPa]	Bending strength $f_{cc}$ [MPa]		0,065	0,065	0,065	0,065	0,06	0,06	0,06	
		Tensile strength $f_{ct}$ [MPa]		0,08	0,08	0,08	0,08	0,07	0,07	0,07	
		Shear resistance $f_{cv}$ [MPa]		0,045	0,045	0,045	0,045	0,045	0,045	0,045	
		Shear modulus $G_c$ [MPa]		2,5	2,5	2,5	2,5	2,5	2,5	2,5	
		In span:	External face	M	105	103	101	99	91	82	68
				L	103	98	92	85	84	81	75
				G, R, 1L, 2L	115	110	105	98	94	91	85
			External face at elevated temp.	M	105	103	101	99	91	82	68
				L	103	98	92	85	84	81	75
				G, R, 1L, 2L	115	110	105	98	94	91	85
		Internal face	L	93	90	88	85	78	71	59	
			G	116	111	107	101	92	84	70	
		At a support:	External face	M	104	100	98	94	88	82	68
				L	73	73	73	73	71	68	64
G, R, 1L, 2L	80			78	76	74	74	75	75		
External face at elevated temp.	M		104	100	98	94	88	82	68		
	L		73	73	73	73	71	68	64		
	G, R, 1L, 2L		80	78	76	74	74	75	75		
Internal face	L	82	82	83	83	76	70	59			
	G	102	100	99	97	90	83	70			
Thermal transmittance	Heat transfer coefficient $U_{d,s}$ [W/m <sup>2</sup> K]		0,47	0,38	0,32	0,26	0,23	0,19	0,17		
	Heat conductivity coefficient $\lambda_D$ [W/mK]		0,040								
Reaction to fire; classification*			NPD	A2-s1,d0							
Fire resistance; classification*			NPD	EI 45	EI 60	EI 60	EI 90	EI 120	EI 120		
Water permeability; resistance classification			A								
Air permeability; coefficient $n$ and $C$			NPD								
Water vapour permeability; coefficient $\mu$ [-]			$\infty$ (Impermeable)								
Airborne sound insulation; rating $R_w$ ( $C$ , $C_{tr}$ ) [dB]			32 (-3, -4)								
Sound absorption; rating $\alpha_w$ [-]			0,20								
Durability; criteria DUR 2			Pass								
Regulated substances			NPD								



**DECLARATION OF PERFORMANCE**

No. MW-LT-W-ST/2022/2

page 8/10

Table 7: Declared performance ( $t_{Ne}/t_{Ni} = 0,7/0,5$ )

Essential characteristics			Performances								
Steel grade			S250GD								
Types of coatings	Metallic		Z100; Z140; Z200; Z225; Z275; AZ100; AZ150; AZ185; ZA200; ZA255; ZM60; ZM100; ZM120								
	Organic		SP, PVC(F), CESAR55								
Facing thickness	External $t_{Ne}$ [mm]		0,7								
	Internal $t_{Ni}$ [mm]		0,5								
Facing profile types	External		M, L, R, G, 1L, 2L								
	Internal		L, G								
Core material			Mineral wool								
Nominal core density [kg/m <sup>3</sup> ]			90								
Nominal thickness $d_N$ [mm]			80	100	120	150	175	200	240		
Panel weight [kg/m <sup>2</sup> ]			18	19	21	24	26	28	32		
Mechanical performance	Wrinkling strength [MPa]	In span:	Bending strength $f_{cc}$ [MPa]	0,065	0,065	0,065	0,065	0,06	0,06	0,06	
			Tensile strength $f_{ct}$ [MPa]	0,08	0,08	0,08	0,08	0,07	0,07	0,07	
			Shear resistance $f_{cv}$ [MPa]	0,045	0,045	0,045	0,045	0,045	0,045	0,045	
			Shear modulus $G_c$ [MPa]	2,5	2,5	2,5	2,5	2,5	2,5	2,5	
	At a support:	External face	M	94	92	90	89	81	73	61	
			L	92	87	83	76	75	73	67	
			G, R, 1L, 2L	115	110	105	98	94	91	85	
			External face at elevated temp.	M	94	92	90	89	81	73	61
				L	92	87	83	76	75	73	67
				G, R, 1L, 2L	115	110	105	98	94	91	85
		Internal face	L	120	117	114	110	101	92	77	
			G	116	111	107	101	92	84	70	
			External face	M	93	90	87	84	79	73	61
				L	66	66	66	66	63	61	57
				G, R, 1L, 2L	80	78	76	74	74	75	75
			External face at elevated temp.	M	93	90	87	84	79	73	61
L	66	66		66	66	63	61	57			
G, R, 1L, 2L	80	78		76	74	74	75	75			
Internal face	L	106	106	107	108	99	91	77			
	G	102	100	99	97	90	83	70			
Thermal transmittance	Heat transfer coefficient $U_{d,s}$ [W/m <sup>2</sup> K]		0,47	0,38	0,32	0,26	0,23	0,19	0,17		
	Heat conductivity coefficient $\lambda_D$ [W/mK]		0,040								
Reaction to fire; classification*			NPD	A2-s1,d0							
Fire resistance; classification*			NPD	EI 45	EI 60	EI 60	EI 90	EI 120	EI 120		
Water permeability; resistance classification			A								
Air permeability; coefficient $n$ and $C$			NPD								
Water vapour permeability; coefficient $\mu$ [-]			$\infty$ (Impermeable)								
Airborne sound insulation; rating $R_w$ (C, $C_{tr}$ ) [dB]			32 (-3, -4)								
Sound absorption; rating $\alpha_w$ [-]			0,20								
Durability; criteria DUR 2			Pass								
Regulated substances			NPD								





**DECLARATION OF PERFORMANCE**

No. MW-LT-W-ST/2022/2

page 9/10

Table 7: Declared performance ( $t_{Ne}/t_{Ni} = 0,7/0,6$ )

Essential characteristics			Performances								
Steel grade			S250GD								
Types of coatings	Metallic		Z100; Z140; Z200; Z225; Z275; AZ100; AZ150; AZ185; ZA200; ZA255; ZM60; ZM100; ZM120								
	Organic		SP, PVC(F), CESAR55								
Facing thickness	External $t_{Ne}$ [mm]		0,7								
	Internal $t_{Ni}$ [mm]		0,6								
Facing profile types	External		M, L, R, G, 1L, 2L								
	Internal		L, G								
Core material			Mineral wool								
Nominal core density [kg/m <sup>3</sup> ]			90								
Nominal thickness $d_N$ [mm]			80	100	120	150	175	200	240		
Panel weight [kg/m <sup>2</sup> ]			19	20	22	25	27	29	33		
Mechanical performance	Wrinkling strength [MPa]	In span:	External face	M	94	92	90	89	81	73	61
				L	92	87	83	76	75	73	67
				G, R, 1L, 2L	115	110	105	98	94	91	85
			External face at elevated temp.	M	94	92	90	89	81	73	61
				L	92	87	83	76	75	73	67
		G, R, 1L, 2L		115	110	105	98	94	91	85	
		Internal face	L	104	101	99	95	87	79	66	
			G	116	111	107	101	92	84	70	
		At a support:	External face	M	93	90	87	84	79	73	61
				L	66	66	66	66	63	61	57
				G, R, 1L, 2L	80	78	76	74	74	75	75
			External face at elevated temp.	M	93	90	87	84	79	73	61
				L	66	66	66	66	63	61	57
				G, R, 1L, 2L	80	78	76	74	74	75	75
Internal face	L		92	92	92	93	85	79	66		
	G	102	100	99	97	90	83	70			
Thermal transmittance	Heat transfer coefficient $U_{d,s}$ [W/ m <sup>2</sup> K]		0,47	0,38	0,32	0,26	0,23	0,19	0,17		
	Heat conductivity coefficient $\lambda_D$ [W/mK]		0,040								
Reaction to fire; classification*			NPD	A2-s1,d0							
Fire resistance; classification*			NPD	EI 45	EI 60	EI 60	EI 90	EI 120	EI 120		
Water permeability; resistance classification			A								
Air permeability; coefficient $n$ and $C$			NPD								
Water vapour permeability; coefficient $\mu$ [-]			$\infty$ (Impermeable)								
Airborne sound insulation; rating $R_w$ ( $C$ , $C_{tr}$ ) [dB]			32 (-3, -4)								
Sound absorption; rating $\alpha_w$ [-]			0,20								
Durability; criteria DUR 2			Pass								
Regulated substances			NPD								



**DECLARATION OF PERFORMANCE**

No. MW-LT-W-ST/2022/2

page 10/10

Table 9: Declared performance ( $t_{Ne}/t_{Ni} = 0,7/0,7$ )

Essential characteristics				Performances							
Steel grade				S250GD							
Types of coatings	Metallic			Z100; Z140; Z200; Z225; Z275; AZ100; AZ150; AZ185; ZA200; ZA255; ZM60; ZM100; ZM120							
	Organic			SP, PVC(F), CESAR55							
Facing thickness	External $t_{Ne}$ [mm]			0,7							
	Internal $t_{Ni}$ [mm]			0,7							
Facing profile types	External			M, L, R, G, 1L, 2L							
	Internal			L, G							
Core material				Mineral wool							
Nominal core density [kg/m <sup>3</sup> ]				90							
Nominal thickness $d_N$ [mm]				80	100	120	150	175	200	240	
Panel weight [kg/m <sup>2</sup> ]				19	21	23	26	28	30	34	
Mechanical performance	Wrinkling strength [MPa]	In span:	External face	M	94	92	90	89	81	73	61
				L	92	87	83	76	75	73	67
				G, R, 1L, 2L	115	110	105	98	94	91	85
			External face at elevated temp.	M	94	92	90	89	81	73	61
	L	92		87	83	76	75	73	67		
	G, R, 1L, 2L	115		110	105	98	94	91	85		
	Internal face	L	93	90	88	85	78	71	59		
		G	116	111	107	101	92	84	70		
		At a support:	External face	M	93	90	87	84	79	73	61
	L			66	66	66	66	63	61	57	
	G, R, 1L, 2L			80	78	76	74	74	75	75	
	External face at elevated temp.	M	93	90	87	84	79	73	61		
		L	66	66	66	66	63	61	57		
		G, R, 1L, 2L	80	78	76	74	74	75	75		
	Internal face	L	82	82	83	83	76	70	59		
		G	102	100	99	97	90	83	70		
Thermal transmittance	Heat transfer coefficient $U_{d,s}$ [W/m <sup>2</sup> K]			0,47	0,38	0,32	0,26	0,23	0,19	0,17	
	Heat conductivity coefficient $\lambda_D$ [W/mK]			0,040							
Reaction to fire; classification*				NPD	A2-s1,d0						
Fire resistance; classification*				NPD	EI 45	EI 60	EI 60	EI 90	EI 120	EI 120	
Water permeability; resistance classification				A							
Air permeability; coefficient $n$ and $C$				NPD							
Water vapour permeability; coefficient $\mu$ [-]				$\infty$ (Impermeable)							
Airborne sound insulation; rating $R_w$ ( $C$ , $C_{tr}$ ) [dB]				32 (-3, -4)							
Sound absorption; rating $\alpha_w$ [-]				0,20							
Durability; criteria DUR 2				Pass							
Regulated substances				NPD							