

**DECLARATION OF PERFORMANCE**  
**No 2S-S5N0-0011**  
According to Regulation No 305/2011

Unique identification code of the product-type:	<b>Self-supporting double skin metal faced insulating panels (sandwich panels) TENAX with MW core</b>
Product name:	<b>TENAX W50 MW S2 TENAX W80 MW S2 TENAX W100 MW T2 TENAX W120 MW T2 TENAX W150 MW T2 TENAX W175 MW T2 TENAX W200 MW T2 TENAX W240 MW T2 TENAX W300 MW T2</b>
Intended use:	<b>For external walls, partitions, and ceilings of buildings.</b>
Manufacturer:	<b>TENAX PANEL, SIA Spodriibas 1, Dobeles, Latvia, LV- 3701</b>
System/s of AVCP:	<b>Scheme 1 (Reaction to fire) Scheme 3 (Fire resistance) Scheme 4</b>
Harmonised standard:	<b>EN 14509:2013</b>
Notified body/ies:	<b>No 1325 - AS Inspecta Latvia, Skanstes Str. 54A, LV-1013, Riga, Latvia No 1396 – FIRES s.r.o., Osloboditelov 282, 059 35, Batizovice, Slovakia</b>

The performance of the product identified above is in conformity with the set of declared performance/s (see attachments No 1 and No 2). This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:  
TENAX PANEL, SIA Project Manager



Baiba Cimernane  
16.09.2024.

**Declaration of Performance No 2S-S5N0-0011, Annex 1**

Sandwich panels TENAX W50 MW S2, TENAX W80 MW S2

Year when CE mark was affixed	18	
Essential characteristics	Performance	
<b>Metal facings</b>		
Thickness of external facing, mm	0,5; 0,6; 0,7	
Thickness of internal facing, mm	0,5; 0,6; 0,7	
Steel name	S280GD; S320GD	
Organic coating type and thickness	SP25; PVDF35; PUR50; PVC150	
<b>Core material</b>		
MW density, kg/m <sup>3</sup>	110	
Thermal conductivity, W/m·K	0,042	
<b>Panel</b>		
Thickness, mm		
- declared	50	80
- nominal	50	80
Panel weight, kg/m <sup>2</sup> (metal thickness 0,5/0,5 mm)	14,6	17,9
Shear modules of the core material, MPa	4,0	4,0
Shear strength of the panel, MPa	0,045	0,045
Long term shear strength, MPa	0,020	0,020
Creep coefficient		
- t = 2 000 h	0,3	0,3
- t = 100 000 h	0,4	0,4
Compressive strength of the core material, MPa	0,08	0,08
Cross-panel tensile strength, MPa	0,12	0,12
Wrinkling stress for inner face		
- in span	105	105
- for loads pressing at an internal support	80	80
Wrinkling stress for outer face, MPa		
- in span	105	105
- in span at elevated temperature	105	105
- at an internal support	80	80
- at an internal support at elevated temperature	80	80
Thermal transmittance, W/m <sup>2</sup> ·K	0,80	0,50
Durability	Pass - all colours	Pass - all colours
Resistance to point loads	NPD	NPD
Resistance to access loads, kPa	NPD	NPD
Reaction to fire	A2-s1,d0	A2-s1,d0
Fire resistance for walls		
- horizontal installation	NPD	NPD
- vertical installation	NPD	NPD
Fire resistance for ceilings	NPD	NPD
Water permeability	NPD	NPD
Air permeability	NPD	NPD
Airborne sound insulation	NPD	NPD
Sound absorption	NPD	NPD

**Declaration of Performance No 2S-S5N0-011, Annex 2**

Sandwich panels TENAX W100 MW T2, TENAX W120 MW T2, TENAX W150 MW T2, TENAX W175 MW T2, TENAX W200 MW T2, TENAX W230 MW T2, TENAX W240 MW T2, TENAX W300 MW T2

Year when CE mark was affixed	18						
<b>Essential characteristics</b>	<b>Performance</b>						
<b>Metal facings</b>							
Thickness of external facing, mm	0,5; 0,6; 0,7						
Thickness of internal facing, mm	0,5; 0,6; 0,7; 0,8						
Steel name	S280GD; S320GD						
Organic coating type and thickness	SP25; PVDF35; PUR50; PVC150						
<b>Core material</b>							
MW density, kg/m <sup>3</sup>	110						
Thermal conductivity, W/m·K	0,042						
<b>Panel</b>							
Thickness, mm							
- declared	100	120	150	175	200	240	300
- nominal	100	120	150	175	203	240	300
Panel weight, kg/m <sup>2</sup> (metal thickness 0,5/0,5 mm)	20,1	22,3	25,6	28,4	31,5	35,5	42,1
Shear modulus of the core material, MPa	3,7	3,7	3,7	3,7	3,7	3,7	3,0
Shear strength of the panel, MPa	0,045	0,045	0,045	0,045	0,045	0,045	0,045
Long term shear strength, MPa	0,020	0,020	0,020	0,020	0,020	0,020	0,020
Creep coefficient							
- t = 2 000 h	0,3	0,3	0,3	0,3	0,3	0,3	0,3
- t = 100 000 h	0,4	0,4	0,4	0,4	0,4	0,4	0,4
Compressive strength of the core material, MPa	0,08	0,08	0,08	0,08	0,08	0,08	0,08
Cross-panel tensile strength, MPa	0,10	0,10	0,10	0,10	0,09	0,09	0,08
Wrinkling stress for inner face							
- in span	100	100	95	90	90	85	80
- for loads pressing at an internal support	80	80	80	80	80	80	80
Wrinkling stress for outer face, MPa							
- in span	100	100	95	90	90	85	80
- in span at elevated temperature	100	100	95	90	90	85	80
- at an internal support	80	80	80	80	80	80	80
- at an internal support at elevated temperature	80	80	80	80	80	80	80
Thermal transmittance, W/m <sup>2</sup> ·K	0,40	0,34	0,27	0,23	0,20	0,17	0,14
Durability	Pass - all colours	Pass - all colours	Pass - all colours	Pass - all colours	Pass - all colours	Pass - all colours	Pass - all colours
Resistance to point loads	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Resistance to access loads, kPa	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Reaction to fire	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0	A2-s1,d0
Fire resistance for walls							
- horizontal installation	EI90	EI90	EI180	EI180	EI180	EI180	EI180
- vertical installation	EI60	EI60	EI120	EI120	EI120	EI120	EI120
Fire resistance for ceilings	NPD	EI120	EI120	EI120	EI120	EI120	EI120
Water permeability	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Air permeability	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Airborne sound insulation	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Sound absorption	30 (-;-;3)	31 (-;-;4)	32 (-;-;4)	32 (-;-;4)	33(-;-;3)	33(-;-;3)	33(-;-;3)