MINERAL WOOL ROOF PANELS

APPLICATIONS

Mineral wool panels are the ultimate choice for quality, durability and performance. They are made of high-grade steel sheets bonded with organic adhesive to a high-density mineral wool core (120 kg/m3; 7.5 lb/sq ft3), offering **superior fire-resistance and thermal and acoustic insulation**, making your building more safe, comfortable and energy-efficient. Some uses include:

- **Heated** buildings
- Interior **noise screening** in industrial installations
- **Manufacturing** buildings
- Buildings that require **fire-proofing solutions**
- Non-combustible enclosures: **data processing centers, hazardous material warehouses, chemical plants,** etc.
- Buildings whose activity is **changeable** or that are intented to be **rented**.

DESCRIPTION OF THE PRODUCT

Sandwich panel with double metal cladding, for roofs with a slope of not less than 7%, insulated with mineral wool, with 5-rib profiled outer sheet to increase resistance to static and dynamic loads. The panels are fastened by means of metal clips with gaskets.

- The panels consist of two steel sheets bonded by means of organic adhesive to the mineral wool core.
- The steel sheets (EN10346) can range from 0.5 to 1.0 mm, 0.5 mm being the standard thickness.
- Coatings are applied depending on the use of the panel: SP25, PVDF25, PVDF35, HDS35, HDX55, PRISMA55, HPS200, etc., according to EN 10169.
- Standard coating is 25 mm polyester, SP25
- Can be manufactured with other materials upon request: aluminum, stainless steel, etc.
- The mineral wool core complies with EN 13162.

ADVANTAGES

Prefabricated mineral wool panels are very easy to install, durable and provide excellent fire-resistance, and thermal and acoustic insulation.

OPERATING TEMPERATURE LIMIT AND WATER BEHAVIOR

Applicable from -5°C/23°F up to 180°C/356°F
Non-hydrophilic

PRODUCT CERTIFICATIONS AND WARRANTY

CE marking according to standard EN 14509
10 years of warranty

FIRE REACTION

A2-s1, d0 classification according to standard EN-13501-1.

TECHNICAL SPECIFICATIONS (HIGH-DENSITY MINERAL WOOL CORE TYPE "M")

DIMENSIONS, WEIGHT AND THERMAL PROPERTIES					
Thickness (mm)	**Width (mm)**	**Max. Length recommendation (m)**	**Core type**	**Weight (kg/m^2)**	**"U" (W/m^2K)**
30	1000	8.00	M	13.1	0.990
40	1000	8.00	M	14.3	0.789
50	1000	8.00	M	15.5	0.661
60	1000	9.00	M	16.7	0.561
80	1000	9.00	M	18.3	0.436
100	1000	9.00	M	21.5	0.357
120	1000	10.00	M	23.9	0.302
150	1000	10.00	M	27.5	0.246
200	1000	10.00	M	33.5	0.187

ACOUSTIC PERFORMANCE		
Thickness (mm)	**R_w (db)**	**R_A (dbA)**
30	≥28	≥28
40	≥28	≥28
50	≥33	≥32.5
60	≥33	≥32.5
80	≥33	≥32.5
100	≥33	≥32.5
120	≥33	≥32.5
150	≥33	≥32.5
200	≥33	≥32.5

FIRE RESISTANCE	
Thickness (mm)	**Classification**
30	Classification not declared
40	Classification not declared
50	EI-30 according to standard EN-13501-2
60	EI-30* according to standard EN-13501-2
80	EI-60 according to standard EN-13501-2
100	EI-120 according to standard EN-13501-2
120	EI-120* according to standard EN-13501-2
150	EI-120* according to standard EN-13501-2
200	EI-120* according to standard EN-13501-2

*Estimated certification

FLEXURAL PROPERTIES					
Load capacity table for simply supported panels (two-point)					
Load capacity (kg/m^2)	80	100	120	150	200
Thickness (mm)	**Span (m)**				
30	3.40	2.90	2.60	2.21	1.80
40	3.60	3.10	2.85	2.35	1.80
50	3.96	3.42	2.98	2.50	1.92
60	4.40	3.75	3.10	2.80	2.25
80	5.76	5.16	4.48	3.66	2.77
100	6.60	5.68	4.76	3.88	2.94
120	7.50	6.10	5.15	4.41	3.12
150	*Upon consultation with Technical Dept.				
200	*Upon consultation with Technical Dept.				

Deflection L/200. Safety factor 1.8

PROFILE AND JOINTS

To install the mineral wool panels you must overlap and screw them directly into the structure at the junction. Additionally, we supply flashings, trims and specialized screws for various surfaces, along with a neoprene-gasketed washer (cappelletti) to prevent any leaks.