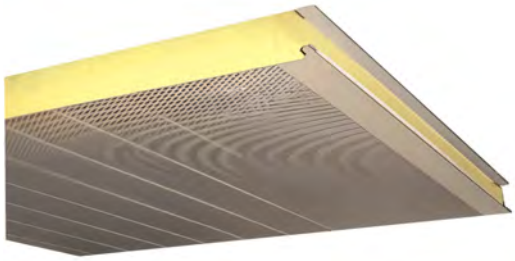
McMillan Insulated Panels

MINERAL WOOL ACOUSTIC WALL PANELS (Sectorization)

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. The acoustic perforated panels have micro-perforations on the inner face and a fiberglass veil that enhances the adhesion of the steel and the absorption of sound waves, creating a quieter and more pleasant environment. 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

Fire-resistant insulated metal panels feature a dual metal coating and mineral wool insulation. Their exposed fastening, with a tongue and groove design, guarantee complete watertightness of the union, whether installed vertically or horizontally. This system ensures a flawless finish and superior performance for any facade application. Its perforated inner sheet contributes to its outstanding acoustic performance (up to 37dB). The straightforward installation process for these fire-resistant facade panels streamlines work and reduces assembly time.

- 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

Certificate of conformity 2.1 in accordance to EN 10204
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)
50	1000	8.50	M	13.9	0.775
60	1000	8.50	M	14.6	0.622
80	1000	10.00	M	17.0	0.467
100	1000	11.00	M	19.4	0.376
120	1000	12.00	M	21.8	0.315
150	1000	12.00	M	25.4	0.255
200	1000	12.00	M	31.4	0.191

ACOUSTIC PERFORMANCE

Thickness (mm)	R_w (db)	R_A (dbA)	α_w
50	≥35	≥34.4	0.85
60	≥35	≥34.4	0.85
80	≥36	≥35.1	0.90
100	≥37	≥36.1	0.85
120	≥37	≥36.2	0.80
150	≥37	≥36.2	0.80
200	≥37	≥36.2	0.80

FIRE RESISTANCE

Thickness (mm)	Classification
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

FLEXURAL PROPERTIES							
Load capacity table for simply supported panels (two-point)							
Load capacity (kg/m^2)	30	60	80	100	120	150	200
Thickness (mm)	**Span (m)**						
50	4.21	2.64	2.26	2.15	1.98	1.86	1.30
60	4.46	2.94	2.71	2.54	2.43	2.01	1.41
80	5.48	3.49	3.05	2.85	2.62	2.25	1.53
100	6.63	4.07	3.42	3.15	2.86	2.45	1.70
120	7.80	4.63	3.84	3.45	3.11	2.71	1.92
150	*Upon consultation with Technical Dept.						
200	*Upon consultation with Technical Dept.						

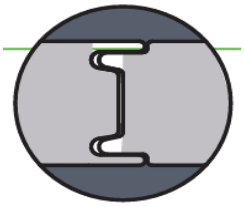
Deflection L/180. Safety factor 1.8

PROFILE AND JOINTS

Standard profile

Cold-storage profile

Flat profile



Exposed fastener