
SULFROCK®

MAGNESIUM SULPHATE BOARD

**Board performance,
backed by
product-specific testing.**

A clear guide to the tested 12 mm board,
applications and specification checks.

PRODUCT OVERVIEW / SEPTEMBER 2026



01 / THE BOARD

A practical building board

Magnesium sulphate board with a reinforced multilayer construction.

SulfRock Ltd supplies magnesium sulphate board for building applications. The available test reports concern a 12 mm sample. Confirm that the board supplied today has the same composition and specification as the tested sample.

12 mm TESTED BOARD

Other thicknesses and finishes require their own applicable evidence.



02 / REACTION TO FIRE

A1 classification

The classification applies to the sample and construction described in the report.

EN 13501-1:2018

A1

The 12 mm magnesium sulphate board sample was classified A1 for reaction to fire. Testing used EN ISO 1182:2020 and EN ISO 1716:2010.

Test report 241217005SHF-001; issued 6 January 2025. The applicant named on the original report predates current SulfRock branding; confirm product traceability.

This is a board reaction-to-fire result. It does not give a fire-resistance period for a wall, floor or IPS insulated panel.

03 / TESTED VALUES

Measured, not assumed

Results below are for the tested 12 mm sample; performance in a finished assembly depends on design and installation.

DENSITY

919 kg/m³

ASTM C1185-23, section 6

FLEXURAL / DRY

20.5 MPa

Mean, equilibrium
conditioned

FLEXURAL / WET

18.1 MPa

Mean, wet conditioned

WATER ABSORPTION

18.4%

Mean by mass, 48 h
immersion

THERMAL CONDUCTIVITY

0.180 W/mK

Mean at approx. 25°C

LEACHABLE CHLORIDE

0.0098%

ASTM C871-18(2023)

Source: Intertek report 241203010SHF-001, issued 20 January 2025. Methods and conditioning are given in the full report.

04 / PERFORMANCE IN CONTEXT

Check the test conditions

The following figures describe the tested board under laboratory conditions.

WATER TIGHTNESS

No drops formed on underside after the specified 24 h test.

FREEZE / THAW

25 cycles: no visible defects; retained flexural-strength ratio 0.96.

HEAT / RAIN

25 cycles: no visible change reported.

FACE SCREW WITHDRAWAL

1,456 N with the laboratory-specified No. 10 Type AB screw.

NAIL-HEAD PULL-THROUGH

Mean maximum load 1,636 N with the specified nail geometry.

Source: Intertek report 241203010SHF-001. These tests do not replace project-specific fixing, weatherproofing or structural design.

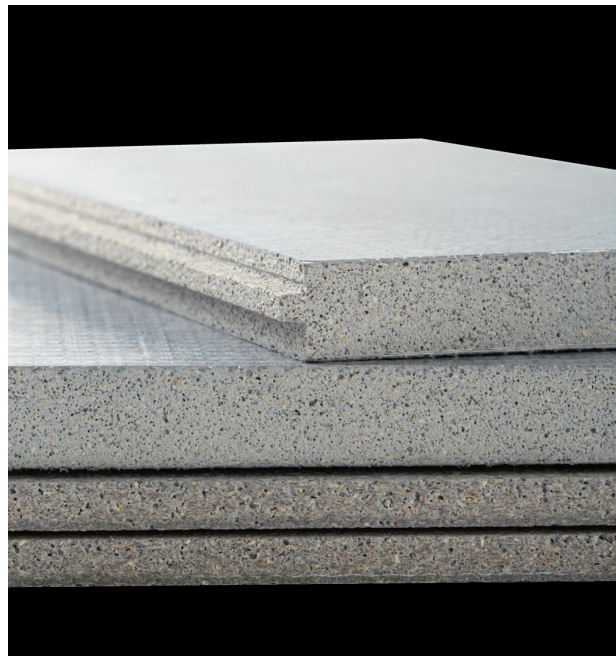
05 / BOARD SELECTION

Specify the right build-up

Board choice should follow the complete application and the relevant supporting evidence.



BACKER BOARD



FLOOR SUBSTRATE



INTERIOR FINISH

Confirm board type, finish, thickness, exposure, framing, fixing pattern, joints and compatibility before ordering.

06 / INSTALLATION

Plan the details

Obtain a project-specific installation method and current safety information before work starts.

01	BOARD	Confirm identity, thickness, dimensions and edge profile.
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02	SUPPORT	Set out framing, spans, joints and movement requirements.
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03	FIXINGS	Choose the fastener and pattern for the actual substrate and loads.
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04	EXPOSURE	Detail moisture protection, interfaces and finish compatibility.
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05	SITE SAFETY	Assess cutting dust, manual handling and suitable controls.
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07 / DOCUMENTATION

Request the full evidence

Report numbers allow project teams to check the complete test methods, sample identity and limits.

REACTION TO FIRE

241217005SHF-001 / EN 13501-1:2018 / A1 classification for tested 12 mm board.

BOARD PERFORMANCE

241203010SHF-001 / physical, moisture, thermal and fixing tests of the 12 mm sample.

ADDITIONAL ASTM TESTS

241111004SHF-001 / ASTM E84 surface burning. 241127003SHF-001 / ASTM E136 combustibility.

The original reports name the manufacturer under its earlier branding. Request the complete reports and confirm product traceability; board tests do not establish IPS panel fire resistance. Panel fire testing is due soon. Watch this space.

Request the complete reports through the protected technical portal:

sulfrock-boards.white-dill-3480.chatgpt.site/technical

07786 388201 / re@intelligentpanelsystems.com

Wall panel thermal calculations

PLIXXENT A/S | 28 September 2026 | 12 mm MgO facing board each side

NOMINAL PANEL	PU CORE	WALL U-VALUE	LAYER SUM
125 mm	100 mm	0.22 W/m²K	124 mm
150 mm	125 mm	0.18 W/m²K	149 mm
175 mm	150 mm	0.15 W/m²K	174 mm

Nominal sizes are rounded product names. Layer sum = PU core + two 12 mm boards.
Values are for the stated wall build-ups. Confirm thermal bridges and the project-specific design.

Source: PLIXXENT A/S, “Intelligent Panel Systems ltd - MgO 12 mm - 100_125_150mm”, 28 September 2026.

BRAND AND MANUFACTURER

SulfRock is the authorised brand for boards manufactured by Sulfycor New Materials Co., Limited.

COSHH assessment

12 mm SulfRock board | handling, cutting and drilling

DRAFT • SITE-SPECIFIC SIGNOFF REQUIRED

Read the full assessment and complete local checks before using it as a site control document.

What the draft covers

- Dust during board cutting, drilling and handling.
- Local extraction, housekeeping, suitable respiratory protection and supervision.
- Review of the board composition, product identity and relevant test evidence.

Open the COSHH draft →

Online copy: sulfrock-boards.white-dill-3480.chatgpt.site · Health & safety

The manufacturer safety data and dust composition still require verification; review the current issue.

Assessment date: 29 September 2026 | Draft for competent review | Not a supplier SDS