SULFROCK LTD
Magnesium sulphate board

Board performance, backed by product-specific testing.

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

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PRODUCT OVERVIEW / SEPTEMBER 2026



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.

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.

Measured board performance

Keep dated test results separate and match the supplied product.

Earlier board performance report

Intertek 241203010SHF-001, issued 20 January 2025, tested 12 mm sample:
Density: 919 kg/m³. Flexural strength, dry / wet: 20.5 / 18.1 MPa.
Thermal conductivity: 0.180 W/(m·K), ASTM C518 method.
Leachable chloride: 0.0098%. Water absorption: 18.4% by mass, 48 h immersion.

March 2026 thermal report

Intertek 260227008SHF-001, issued 11 March 2026, EN 12664:2001:
Tested thickness: 12.22 mm. Mean test temperature: 23.86°C.
Thermal conductivity: 0.159 W/(m·K). Thermal resistance: 0.077 m²K/W.
The sample is branded Sulfrock; the original report calls it magnesium oxide board.
Original supplier and laboratory terminology remains in the unaltered reports.

Read each result in its context

The 0.180 and 0.159 values belong to different reports and test conditions.
Do not present them as a single interchangeable declared value. Confirm the supplied product matches the tested sample. Chloride is low, not mathematically zero. Water absorption is not a waterproofing rating.

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.

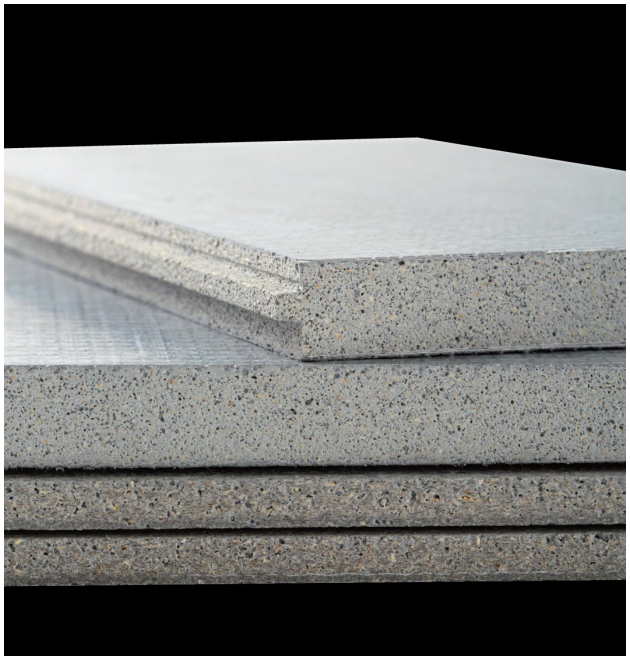
Source: Intertek report 241203010SHF-001. These tests do not replace project-specific fixing, weatherproofing or structural design.

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.

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

Request the full evidence

Report references identify the method, sample and scope.

Reaction to fire

Intertek 241217005SHF-001: EN 13501-1:2018 A1 for the tested 12 mm board.
This does not establish a fire-resistance period for an IPS panel or assembly.

Board performance and thermal results

Intertek 241203010SHF-001: January 2025 physical, moisture and fixing results and ASTM C518 conductivity 0.180 W/(m·K).
Intertek 260227008SHF-001: March 2026 EN 12664 conductivity 0.159 W/(m·K) and resistance 0.077 m²K/W for its tested 12.22 mm sample.

Other original laboratory reports

241111004SHF-001: ASTM E84 surface burning.
241127003SHF-001: ASTM E136 combustibility.
Read each complete report and check its stated manufacturer, sample and scope.

Technical documents and enquiries

https://intelligentpanelsystems.co.uk/technical
Approved-email access is required for the protected technical reports.
07786 388201 / re@intelligentpanelsystems.com
SulfRock website: sulfrock.uk

Wall panel thermal calculations

SulfRock® facing boards with Plixxent® PU foam insulation.

Panel build-up

SulfRock® 12 mm magnesium sulphate facing boards on each side.
Plixxent® PU foam insulation core selected for the complete project build-up.

Nominal panel	Insulation core	Layer sum	Wall U-value
125 mm	100 mm	124 mm	0.22 W/m²K
150 mm	125 mm	149 mm	0.18 W/m²K
175 mm	150 mm	174 mm	0.15 W/m²K

How to use these values

Nominal panel sizes are rounded product names; exact layer sums are shown. These are Plixxent A/S wall calculations for the stated layers, not measured whole-building results. Junctions, openings, fixings and thermal bridges require project-specific assessment. The 150 mm and 175 mm calculation sheets supplied on 3 October are dated 13 March 2026; the earlier combined schedule is dated 28 September 2026. Preserve the identity and scope of each source.

Specification and installation

Panel joints, splines, openings, foundations and roof connections follow the approved project design, drawings and installation method statement.

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. This is not a manufacturer safety data sheet.

What the draft covers

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

Current online copy

sulfrock.uk - Health and safety section.
Manufacturer safety data and dust composition still require verification.
Assessment date: 29 September 2026. Draft for competent review.

Help us keep our information accurate.

If you notice an error, outdated information or something that needs clarification in this document, please let us know.

Report an Issue: Visit our website and select Report a Website or Document Issue.

Sulfrock - https://sulfrock.uk

Board enquiries: info@sulfrock.uk