

# Magboard<sup>©</sup> Benelux



Supplier of **ecological** Multi-purpose construction board



## S - LINE



## ***Magboard S-line is THE ecological construction board for walls, floors and ceilings for indoor and outdoor use***

**These high-performance magnesium oxide boards offer innovative, sustainable building solutions for new-build, renovation and restoration projects. The boards can be easily plastered and are therefore also suitable for interior design. In most situations it is possible to use boards that are 50% thinner than usual. Magboard S-Line board offers solutions that:**

- Help to realise faster and more flexible building methods
- Allows users to comply with the strictest standards and building codes
- Reduces the total construction costs of building significantly
- Have a positive impact on sustainability
- Reduces the CO2 footprint and water consumption

**Magboard S-Line board is a *higher-performance, 'greener' and smarter alternative* for traditional fire resistant board**

materials like multiplex, gypsum and fiber cement products.

### **Limitless application purposes**

Magboard S-Line Board can be used for an almost endless range of indoor and outdoor applications in commercial and non-commercial buildings. The boards can be easily utilised when constructing:

- Interior walls in both dry and wet spaces
- Exterior walls
- Floor and ceiling construction
- Steel columns and beam cladding
- Interior design

### **Certification**

Magboard S-Line Board is CE certified. This means that the boards have been thoroughly tested and meet all European directives in the field of health, safety and environment.

Magboard S-Line is a multi-purpose applicable eco construction board for walls, floors and ceilings for indoor and outdoor use.

**Magboard**  
**Benelux** 

# Features of Magboard S-Line Panel in brief



**A1 fire class in accordance with European standard EN 13501-1**



**Good acoustic properties**



**Board can withstand a splash of water**



**Impact resistant and solid**



**Easy to process with standard tools**



**Easy to finish with plastering, painting or tiling**

Magboards' S-Line Boards are top-grade homogenous **fibre-reinforced fire-resistant, ecological and acoustic** boards based on magnesium oxide, magnesium chloride, fibreglass and perlite that can be used in many different applications in both dwellings and utilities buildings.

## Fire safety

Magboard S-Line board is incombustible (Class A1). When used correctly, a 9 mm board can easily maintain fire resistance for in excess of 60 minutes (in accordance with EN 1364-1: R015).

## Impact resistance

Magboard S-Line Boards are strong and durable and offer high impact resistance. They are thus ideal for buildings that are exposed to high impacts, like partition walls in schools, hospitals and leisure or public buildings.

## Thermal and acoustic insulation

Magboard S-Line boards have excellent thermal and acoustic insulation qualities. They are very energy efficient (Rc value: 1.2 K/W per inch) and comply with all acoustic performance standards.

## Easy to handle, quick to install

Magboard S-Line boards can be easily machined, trimmed, drilled or shaped using ordinary (power) tools. Because the boards are lightweight, they can also be handled and installed easily and quickly. And thanks to its smooth surface and excellent adhesive qualities, Magboard S-Line facilitates the finishing process.

## Health

Magboard S-Line boards are non-toxic, silicate-free and asbestos-free.

## Waterproof and damp-proof

Magboard S-Line boards are completely water resistant. Furthermore, Magboard S-Line boards do not deteriorate when immersed in water or exposed to freezing/thawing cycles.

# Product Applications

- Magboards' S-Line Boards are used to realise fire-resistant ceilings, walls and steel cladding
- Also suitable for walls or ceilings with penetrations
- In both dwellings and utilities buildings, for new construction or renovation

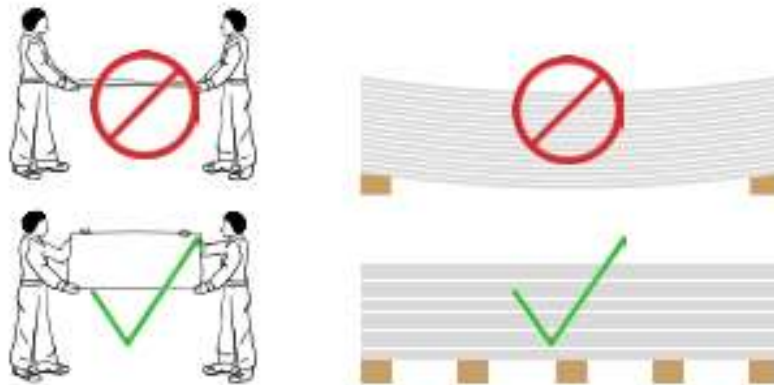


## Fitting Guidelines

- Magboards' S-Line Boards must be attached using phosphated or stainless steel screws with a milling head. In case of a wooden backing structure, divergent point staples may also be used
- For boards with a thickness of 9 to 12 mm, use divergent point staples with a spine width of at least 10 mm, galvanised and resin-tipped with a length of at least 22 mm and a thickness of at least 1.5 mm. For boards with a thickness of 18 mm, use divergent point staples with a spine width of at least 10 mm, galvanised and resin-tipped with a length of at least 35 mm and a thickness of at least 1.5 mm
- Distance between the staples to the edge of the board at least 15 mm. The centre-to-centre distance using staples is no more than 150 mm. Ensure that the spine of the staple sinks to at least 0.5 mm below the surface of the board
- Screws for fastening boards with a thickness of 9 to 12 mm should be phosphated or stainless steel with a milling head and have a length of at least 30 mm and a thickness of at least 3.9 mm. Screws for fastening boards with a thickness of 18 mm should be phosphated or stainless steel with a milling head and have a length of at least 40 mm and a thickness of at least 3.9 mm
- Distance to the edge of the board at least 4 x the diameter of the screw. The centre-to-centre distance using screws is no more than 250 mm. For rows of screws use the centre-to-centre distances of the backing structure
- Place the boards with a free space of 6 mm around the structure at top, bottom and sides. Only fasten MAGBOARDS' S-LINE Boards to the C-profiles, not to the U-profiles. Staggered joints are not allowed
- The first board must be screwed fast to the metal C-profile. Begin at the open side of the metal C-profiles. With wooden battens, the first board is usually stapled down
- Magboards' S-Line Boards must be glued in all cases along both the long-side and short-side seams using an adhesive suitable for creating durable, elastic and very strong seals
- The adhesive between the board edges must be pressed firmly to ensure it fills the space properly. The width of the joint must be at least 3 mm and no more than 5 mm. When using adhesive the joint width must not be abutted to 0. Use the spacers
- Magboards' S-Line Boards must always be mounted on a sufficiently ventilated system or backing structure. The dew point must not be in or on the board.
- When using in humid spaces, such as basements or bathrooms, the boards must be sealed with a waterproofing agent

# Packaging & Storage

- Magboards' S-Line Boards are supplied on pallets packed in foil with protective corner guards
- Magboards' S-Line Boards must be transported horizontally and dry and stored on a flat surface
- Don't grab the boards by the corners, and don't let them rest on their corners or edges
- Magboards' S-Line advises a maximum stacking height of 2 pallets
- To prevent the boards from deforming, we do not recommend vertical storage
- Keep dry and frost-free at temperatures between +5°C and +30°C



## Limitations

- With large temperature differences to the rear of the boards, a damp-proof foil must be applied
- If the boards become damp during transport or storage, they may only be used once completely dry
- Once the Magboards' S-Line Boards have been fitted, the relative humidity for the rest of the construction phase must be between 40% and 80%
- Wet plaster and wet floor finishes must be dry if possible before fitting the boards, and at the very least before gluing and finishing, as construction moisture delays the drying process of adhesives and finishes
- Heating using a gas heater is not permitted, as this damages the Magboards' S-Line Boards due to the risk of condensation. Thermal shocks must be avoided
- Magboards' S-Line Boards may not be used for prolonged heat-resistant applications, such as fireplaces, heaters, boiler rooms where the active load is above room temperature

## Dimensions

Description	Thickness (mm)	Length (mm)	Width (mm)	Weight per board (kg)
Magboards' S-Line Board	9	2743	600	15
Magboards' S-Line Board	9	2743	1200	30
Magboards' S-Line Board	12	2743	600	20
Magboards' S-Line Board	12	2743	1200	40
Magboards' S-Line Board	18	2300	1200	45

## Safety Requirements

- Ecological Non-toxic, non-explosive and non-flammable
- Dust may irritate the eyes. Preferably wear safety goggles. If eyes become irritated, remove any contact lenses and rinse for at least 15 minutes with water or saline solution
- Dust may irritate the skin, but is not absorbed by undamaged skin. Wash the skin with soap and water and seek medical assistance if irritation persists
- Swallowing is unlikely but the mouth and respiratory tract may become irritated. Dilute with a considerable amount of water. Avoid vomiting and seek medical assistance
- Dust can irritate the nose, throat and respiratory tract. Preferably wear a dust mask. If irritation occurs, move to an area with fresh air. If you get shortness of breath or start to wheeze, seek medical assistance. We recommend cleaning with an industrial vacuum cleaner with particulate filter. Fine water spray can be used to sweep up the dust
- Dust can be removed as an inert, inorganic and non-toxic material in line with local guidelines
- Avoid contact with hydrofluoric acid

### DISCLAIMER

The content of this brochure has been compiled with the greatest possible care and is only intended for information purposes. The information contained herein does not constitute a partial or full guarantee or proposal for which we are liable. We reserve the right to change or alter product specifications.

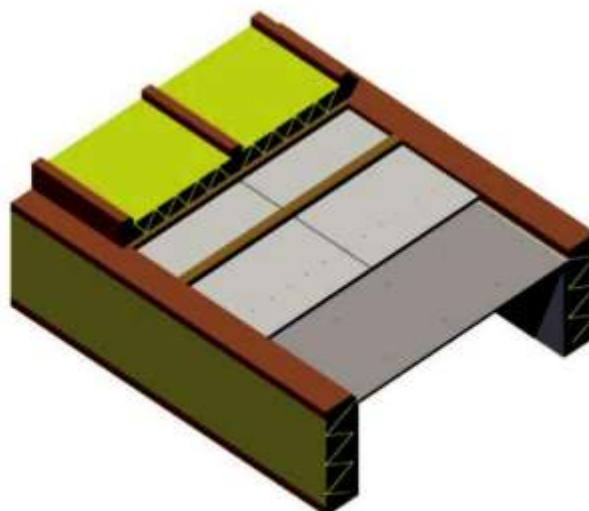
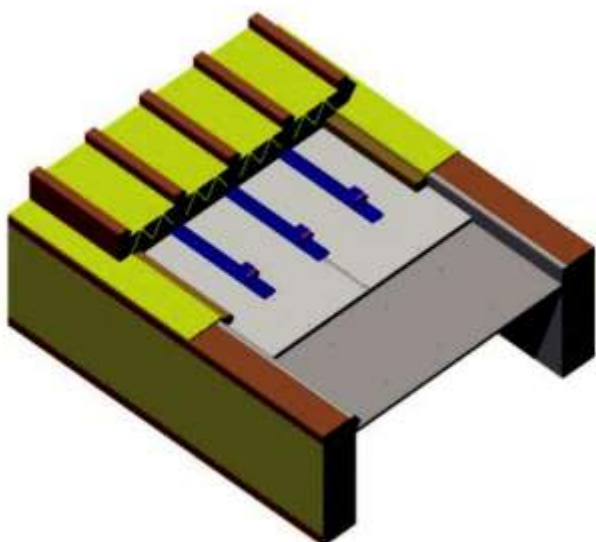
The data stated in this brochure are obtained under certain circumstances. The user is personally responsible for proper application.

# Fitting Instructions

## Ceiling Applications

Magboards' S-Line Board is EI 60 tested and classified for ceiling application.  
Magboards' S-Line Board is tested in compliance with EN 1364-2, Efectis Report 2012-Efectis R9196c and 2013-Efectis-R0470a.

Fire-resistance	Board thickness and structure	Report number
EI 60	2 x 9 mm 1 x 12 mm	2012-Efectis-R9196c 2013-Efectis-R0470a



# Processing Advice

## For Ceilings

Ceiling with a fire-resistance level of EI 60: 1 x 12 or 2 x 9 mm

Ceiling application under wooden or steel beams with and without noise requirements.

Material 1 x 12 mm or 2 x 9 mm MAGBOARDS' S-LINE Board

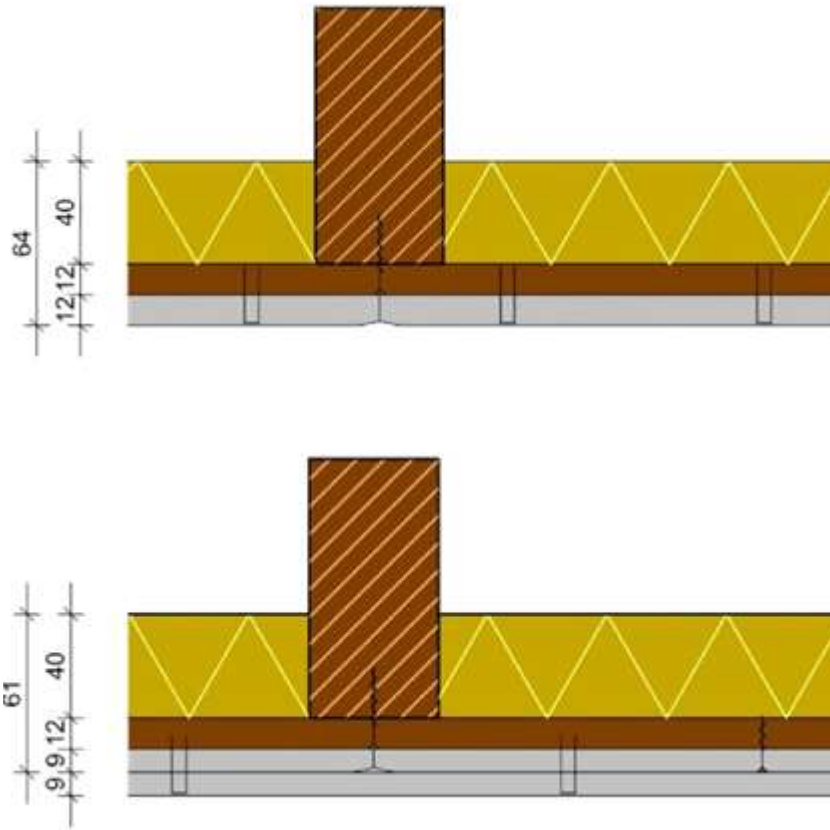
Processing 1 x 12 mm	MAGBOARDS' S-LINE Board 12 mm, stapled, centre-to-centre distance 100 mm on wooden beams. Between the beams: wooden battens 45 x 45, centre-to-centre distance 600 mm, the obtuse seams abut the battens. Apply 35 kg/m <sup>3</sup> 40 mm thick rockwool between the beams.
Processing 2 x 9 mm	1 <sup>st</sup> MAGBOARDS' S-LINE Board 9 mm screwed, centre-to-centre distance 300 mm on wooden battens, 2 <sup>nd</sup> MAGBOARDS' S-LINE Board 9 mm visible side stapled on 1 <sup>st</sup> MAGBOARDS' S-LINE Board (over the seams 1 <sup>st</sup> board), mutual distance 150 mm. Divergent point staples, length 22 mm. Apply 35 kg/m <sup>3</sup> 40 mm thick rockwool between the beams.
Seams	2 x 9 mm and 1 x 12 mm: Seams 2 - 4 mm should always be glued with fire-resistant adhesive sealant.
Edges (without noise requirement)	Screwed hardwood side laths fitted with rockwool edging strip on wall.
Edges (with noise requirement)	Screwed hardwood side laths fitted with rockwool edging strip on wall with steel battens on ANR ceiling hangers (deviation possible for lower contact noise requirement).
Reports	<i>Fire-resistance:</i> Efectis Report: 2 x 9 mm 2012-Efectis-R9196c 1 x 12 mm 2013-Efectis-R0470a



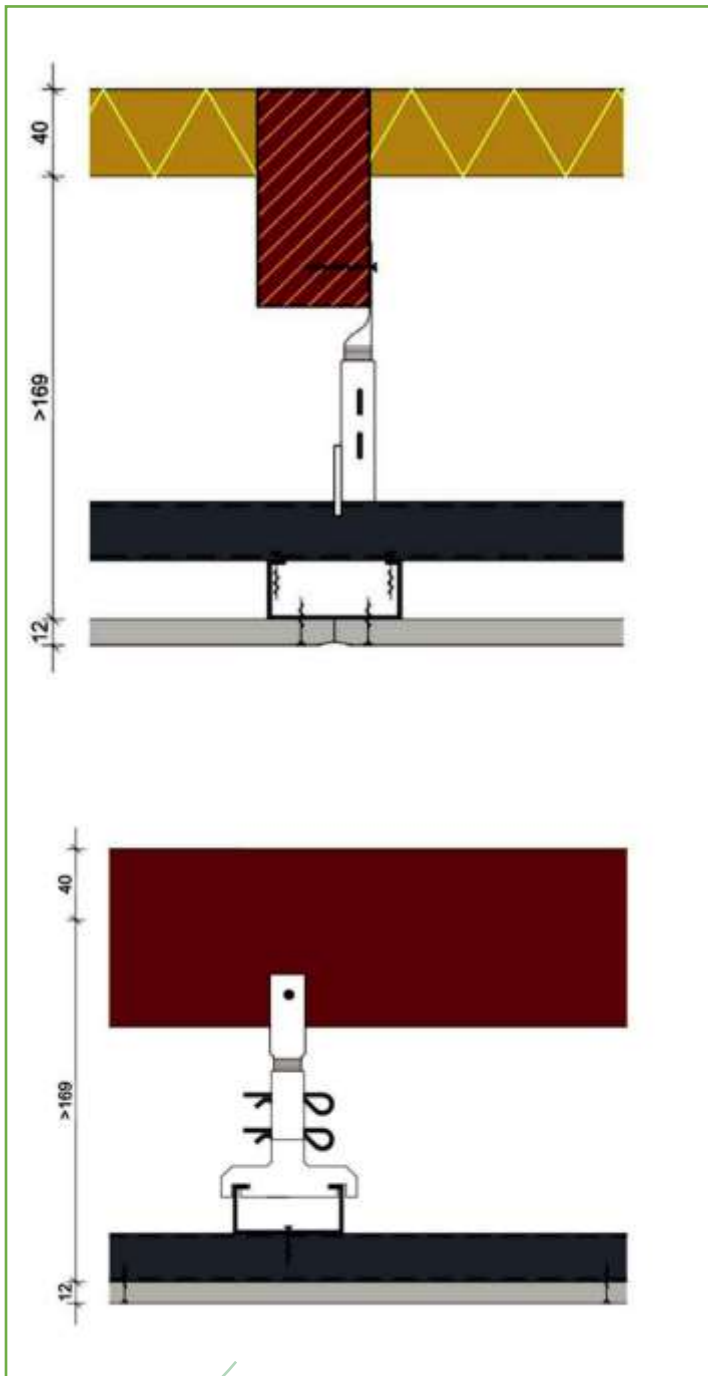
## Detail ceiling drawing

Ceiling with a fire-resistance level of EI 60: 1 x 12 mm or 2 x 9 mm

a)



b)



## For Partition Walls

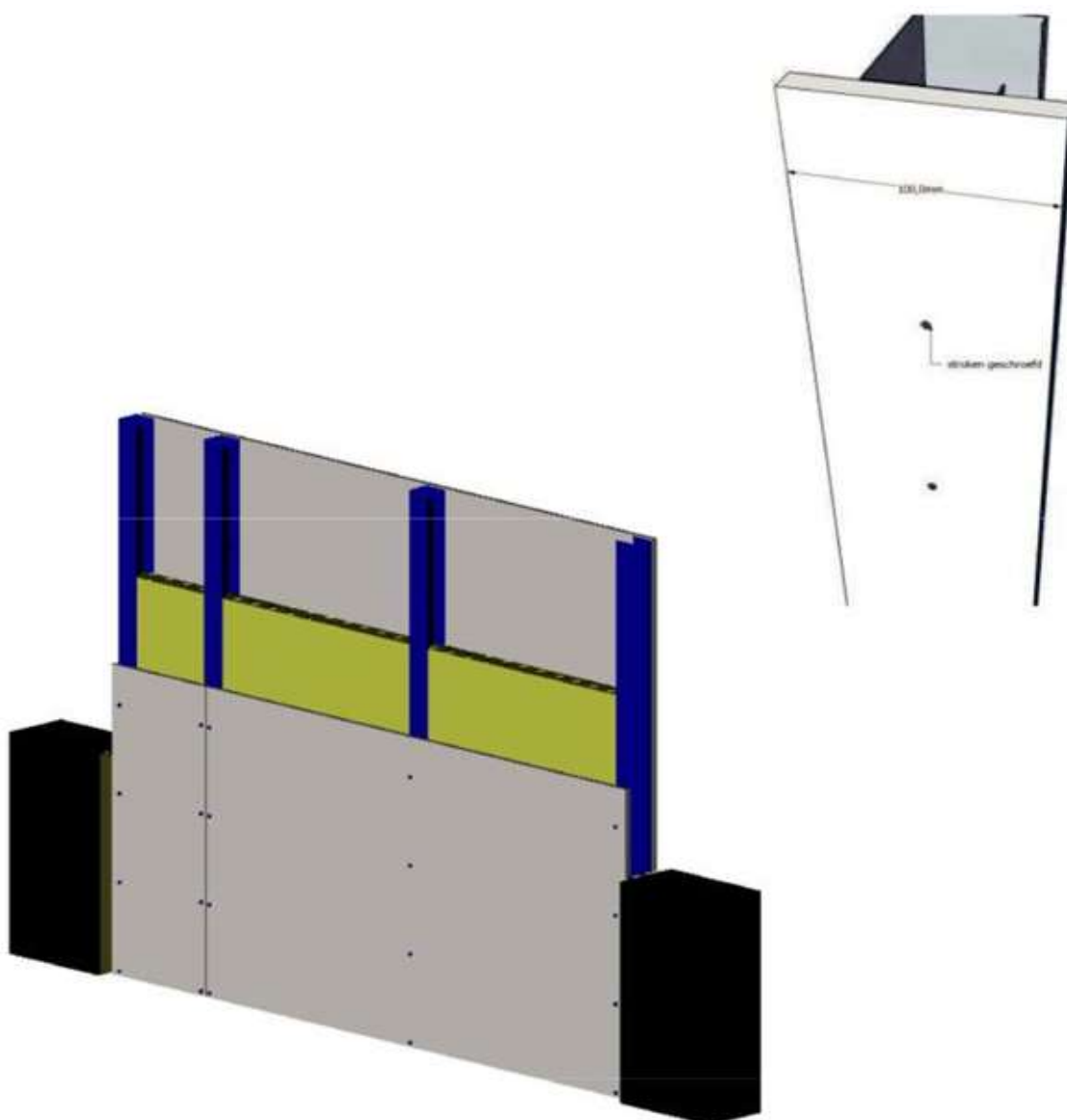
Magboards' S-Line Board is tested for wall application in compliance with EN 1364-1 report numbers 2013-Efectis-R0210a, -R0210b, 2012-Efectis-R0490, 2012-Efectis-R0091 and 2012-Efectis-R9196a.

**Table of fire-resistant partition walls**

Fire-resistance	Board thickness and structure	Report number
EI 60	9 mm (wooden construction) 12 mm (metal-stud construction)	2013-Efectis-R0210 2012-Efectis-R0490
EI 90, EW 120	12 mm	2012-Efectis-R0091

Table of fire-resistant shaft and sound absorbing walls

Fire-resistance	Board thickness and structure	Report number
EI 30, EW 60	2 x 9 mm	2013-Efectis-R9196a



## For Partition Walls

Partition wall with a fire-resistance level of EI 30: 1 x 9 mm  
Partition wall application against spruce batten or steel C profile (both sides).

**Material** 1 x 9 mm MAGBOARDS' S-LINE Board on both sides with wooden construction and  
1 x 12 mm MAGBOARDS' S-LINE Board with lightweight steel construction.

**Processing 1 x 9 mm  
Wooden construction** Both sides stapled, stainless steel divergent point staple 32 mm, centre-to-centre distance 100 mm, batten thickness 70 mm x 45 mm planed spruce, centre-to-centre distance 600 mm. Fill wall with 70 mm rockwool (35 kg/m<sup>3</sup>). Apply a joint of MAGBOARDS' S-LINE Board at the horizontal seams.

**Processing 1 x 12 mm  
metal-stud construction** Screwed on both sides, centre-to-centre distance 100 mm, 70 mm rockwool (35 kg/m<sup>3</sup>) with C-75 and U75 profile 0.60 mm, centre-to-centre distance 600 mm.

**Seams** Lightweight steel construction: seams 2 - 4 mm should always be glued with fire-resistant adhesive sealant.  
Wooden construction: seams 2 - 4 mm should always be glued with fire-resistant intumescent acrylate sealant.

**Edges** If applicable, seal edges with rockwool edging strip.

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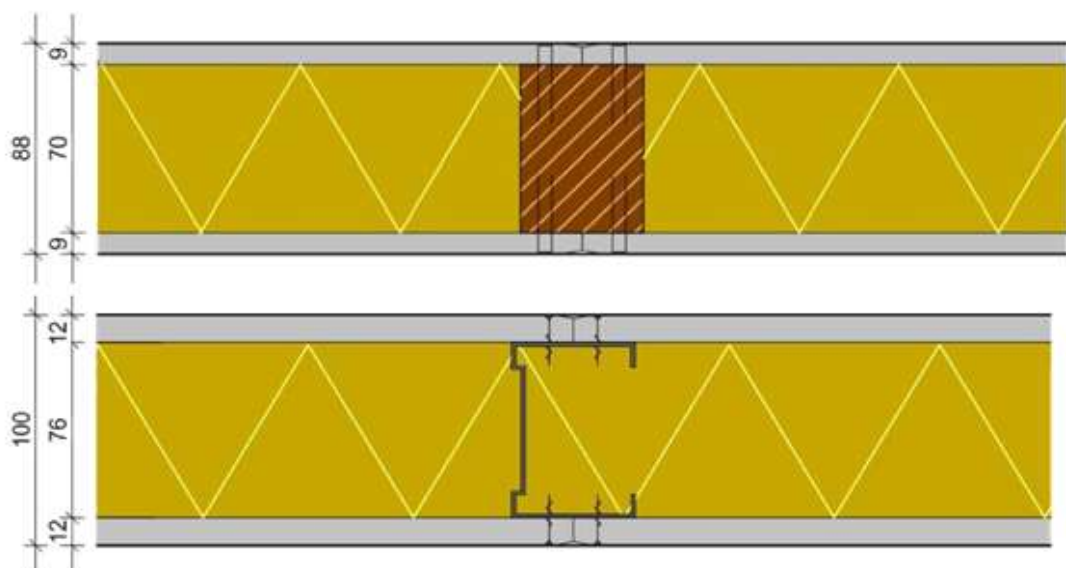
**Reports** *Fire-resistance:*  
Efectis Report  
1 x 9 mm 2013-Efectis-R0210  
1 x 12 mm 2012-Efectis R0490  
  
*Soundproofing:*  
Cauberg-Huygen Raadgevende Ingenieurs  
Ref: 20120122-01

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Partition wall with a fire-resistance level of EI 60: 1 x 9 or 1 x 12 mm  
 Partition wall application against spruce battens or steel C profiles.

Material	1 x 9 mm Magboards' S-Line Board on both sides with wooden construction and 1 x 12 mm Magboards' S-Line Board with lightweight steel construction.
Processing 1 x 9 mm Wooden construction	Both sides stapled, stainless steel divergent point staple 32 mm, centre-to-centre distance 100 mm, batten thickness 70 mm x 45 mm planed spruce, centre-to-centre distance 600 mm. Fill wall with 70 mm rockwool (35 kg/m <sup>3</sup> ). Apply a joint of Magboards' S-Line Board at the horizontal seams.
Processing 1 x 12 mm metal-stud construction	Screwed on both sides, centre-to-centre distance 100 mm, 70 mm rockwool (35 kg/m <sup>3</sup> ) with C-75 and U75 profile 0.60 mm, centre-to-centre distance 600 mm.
Seams	Lightweight steel construction: Seams 2 - 4 mm should always be glued with fire-resistant adhesive sealant. Wooden construction: Seams 2 - 4 mm should always be glued with fire-resistant adhesive sealant.
Edges	If applicable, seal edges with rockwool edging strip.
Reports	<i>Fire-resistance:</i> Efectis Report 1 x 9 mm 2013-Efectis-R0210 1 x 12 mm 2012-Efectis R0490 <i>Soundproofing:</i> Cauberg-Huygen Raadgevende Ingenieurs Ref: 20120122-01

### Detail drawing of partition wall with fire-resistance level of EI 60: 1 x 9 or 1 x 12 mm



Partition wall with fire-resistance level of EI 90 and EW 120: 1 x 12 mm Wall application against steel C profile.

**Material** 1 x 12 mm MAGBOARDS' S-LINE Board stapled on both sides on strips with lightweight steel construction.

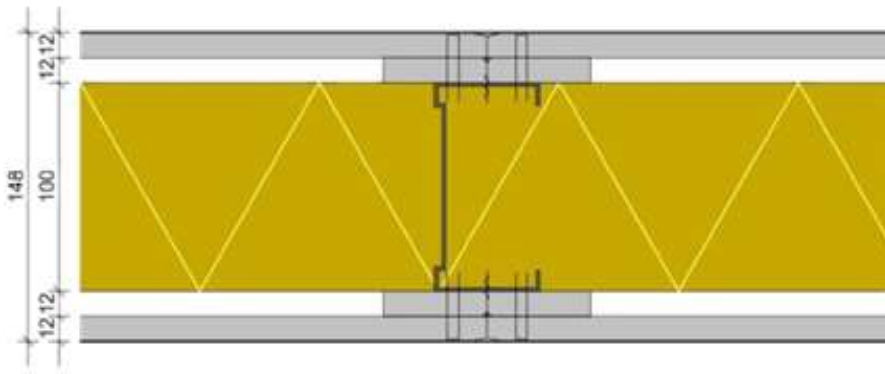
**Processing** 100 mm strips screwed on both sides on construction U and C profiles, centre-to-centre distance 100 mm, 75 mm rockwool (45 kg/m<sup>3</sup>) with C-100 and U100 profile 0.60 mm, centre-to-centre distance 600 mm.

**Seams** Seams 2 - 4 mm should always be glued with fire-resistant adhesive sealant.

**Edges** If applicable, seal edges with rockwool edging strip.

**Reports** *Fire-resistance:*  
Efectis Report 2012-Efectis-R0091

## Detail drawing of partition wall with fire-resistance level of EI 90 and EW 120 minutes: 1 x 12 mm

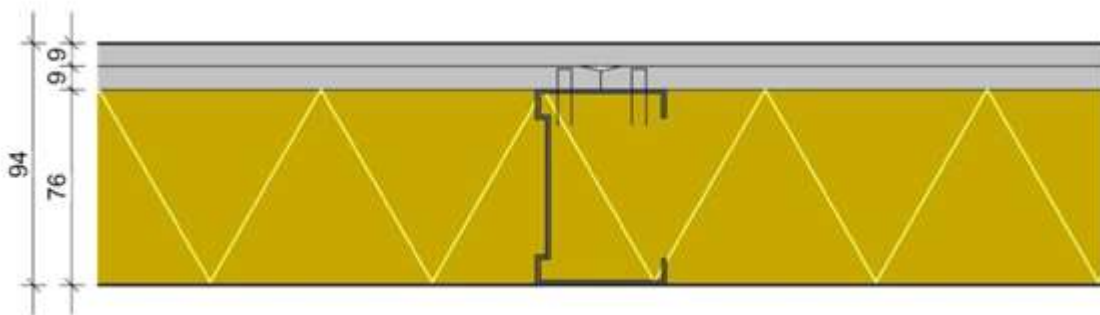


## Shaft And Sound Absorbing Walls

Shaft or sound absorbing walls with a fire-resistance level of EI 30 and EW 60: 2 x 9 mm Wall application against C and U profiles.

Material	2 x 9 mm MAGBOARDS' S-LINE Board
Processing	Metal C and U profiles, width 75 mm and thickness 0.60 mm. On one side 2 x MAGBOARDS' S-LINE Board (9 mm) stapled (2 <sup>nd</sup> board over the seams of 1 <sup>st</sup> board), 75 mm rockwool (35 kg/m <sup>3</sup> ), with centre-to-centre distance 150 mm, divergent point staples, length 22 mm.
Seams	Seams 2 - 4 mm should always be glued with fire-resistant adhesive sealant.
Edges	If applicable, seal edges with rockwool edging strip.
Reports	<i>Fire-resistance:</i> Efectis Report 2012-Efectis-R9196a

**Detail drawing of sound absorbing wall and shaft wall with fire-resistance level of EI 30 and EW 60:  
2 x 9 mm**



Metal-stud construction

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