



ORYX® BOARDS

Fire-resistant compartmentalisation

Ceilings – partition walls – shafts – and sound absorbing walls

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ORYX®, passion for passive fire protection

ORYX® is the specialist in passive fire protection for buildings. Thanks to our passionate expertise and extensive product range, ORYX® provides solutions for countless applications in the field of fire-resistant load-bearing structures, fire-resistant compartments and the creation of fire-resistant penetrations.

Our specialists are always ready to provide you with technical advice and support.

PRODUCT DESCRIPTION

ORYX® BOARDS are top-grade homogenous fibre-reinforced fire-resistant 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.

CHARACTERISTICS

- Non-flammable fire class A1 in line with European standard EN 13501-1
- Fire-resistance tested in various applications, such as ceilings, (shaft) walls and steel cladding, with a classification of EI 30 up to EI 120 (EN 13501-2)
- Tested for acoustic applications. The boards have an Rw value of between 49 and 60 dB, and with a double layer a reduction of 70 dB is even possible
- Impact-resistant and high tensile strength
- Equivalent weight about 1000 kg/m³
- Insensitive to vermin
- Asbestos-free
- Easy and fast to process using traditional tools
- Available in various sizes and thicknesses
- Easy to finish with plaster, paint, wallpaper or tiles

APPLICATIONS

- ORYX® 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

- ORYX® 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 ORYX® 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
- ORYX® 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
- ORYX® 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 AND STORAGE

- ORYX® Boards are supplied on pallets packed in foil with protective corner guards
- ORYX® 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
- ORYX® 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 ORYX® 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 ORYX® Boards due to the risk of condensation. Thermal shocks must be avoided
- ORYX® 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)
ORYX® Board	9	2743	600	15
ORYX® Board	9	2743	1200	30
ORYX® Board	12	2743	600	20
ORYX® Board	12	2743	1200	40
ORYX® Board	18	2300	1200	45



SAFETY REQUIREMENTS

- 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.

All information about our products and applications can be found at www.oryx.pro

FITTING INSTRUCTIONS

CEILING APPLICATIONS

ORYX® Board is EI 60 tested and classified for ceiling application. ORYX® 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

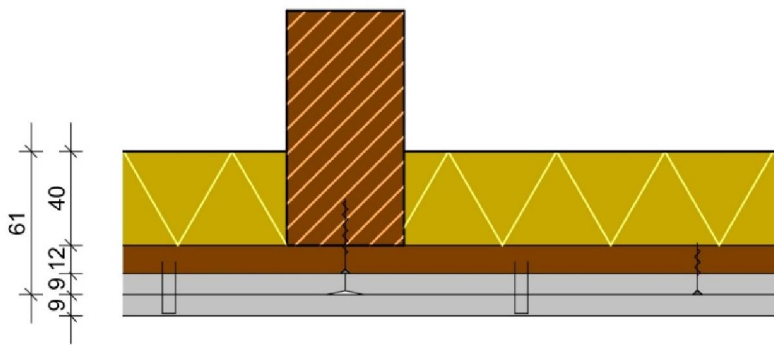
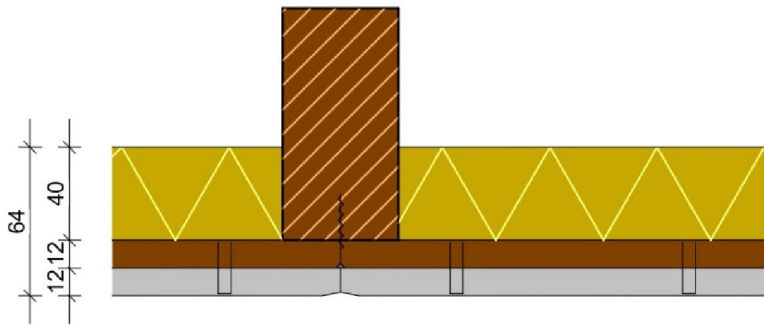
Ceiling with a fire-resistance level of EI 60: 1 x 12 or 2 x 9 mm

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

Material	1 x 12 mm or 2 x 9 mm ORYX® Board
Processing 1 x 12 mm	ORYX® 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 ³ 40 mm thick rockwool between the beams.
Processing 2 x 9 mm	1 st ORYX® Board 9 mm screwed, centre-to-centre distance 300 mm on wooden battens, 2 nd ORYX® Board 9 mm visible side stapled on 1 st ORYX® Board (over the seams 1 st board), mutual distance 150 mm. Divergent point staples, length 22 mm. Apply 35 kg/m ³ 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



**PROCESSING ADVICE FOR PARTITION WALLS**

ORYX® 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

PROCESSING ADVICE FOR PARTITION WALLS
Partition wall with a fire-resistance level of EI 30: 1 x 9 mm

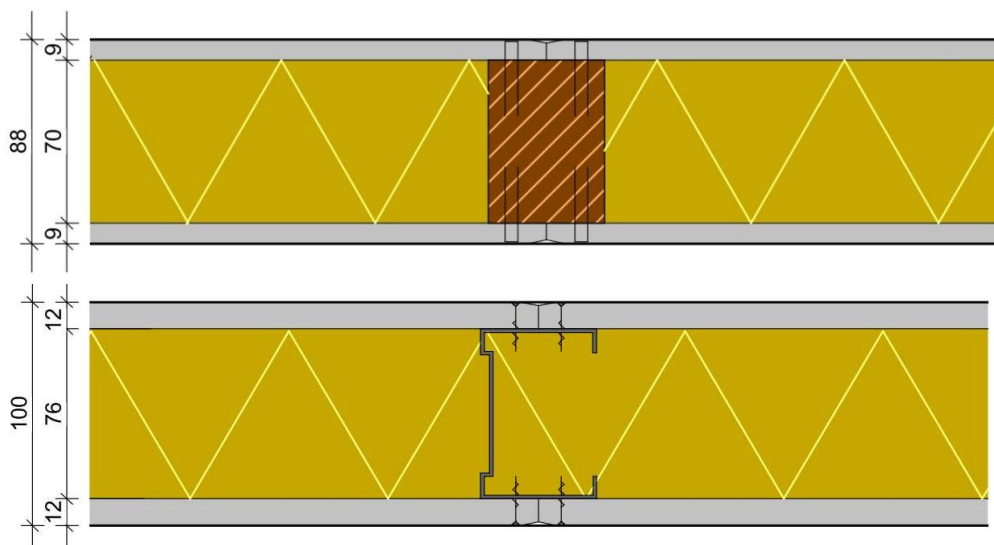
Partition wall application against spruce batten or steel C profile (both sides).

Material	1 x 9 mm ORYX® Board on both sides with wooden construction and 1 x 12 mm ORYX® 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 ³). Apply a joint of ORYX® 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 ³) 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.
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

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.

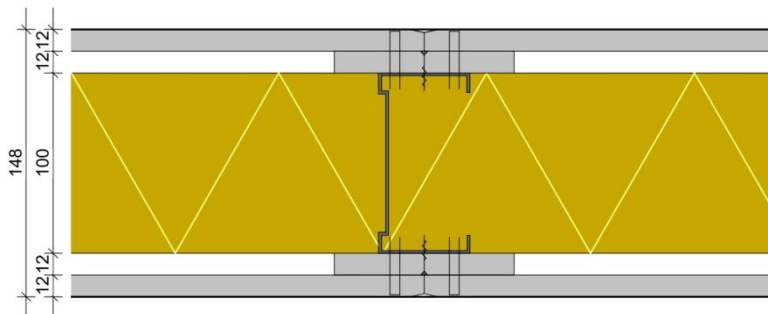
Material	1 x 9 mm ORYX® Board on both sides with wooden construction and 1 x 12 mm ORYX® Board with lightweight steel construction.
Processing 1 x 9 mm Wooden construction	Both sides stapled, stainless steel divergent point staple 32 mm, centre-to-centre distance 100 mm, batten thickness 70 mm x 45 mm planed spruce, centre-to-centre distance 600 mm. Fill wall with 70 mm rockwool (35 kg/m ³). Apply a joint of ORYX® 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 ³) 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.

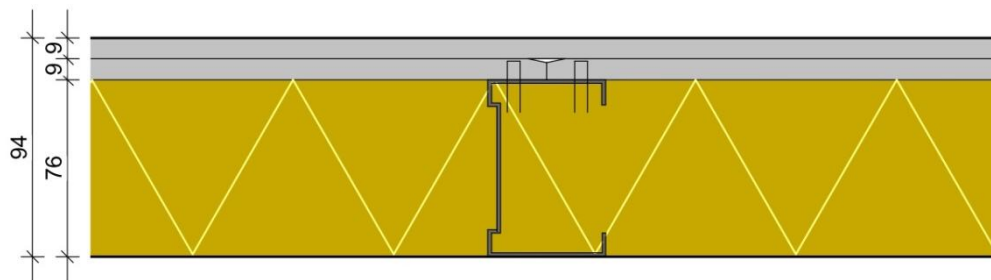
Material	1 x 12 mm ORYX® Board stapled on both sides on strips with lightweight steel construction.
Processing	100 mm strips screwed on both sides on construction U and C profiles, centre-to-centre distance 100 mm, 75 mm rockwool (45 kg/m ³) with C-100 and U100 profile 0.60 mm, centre-to-centre distance 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	<i>Fire-resistance:</i> 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


PROCESSING ADVICE 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 ORYX® Board
Processing	Metal C and U profiles, width 75 mm and thickness 0.60 mm. On one side 2 x ORYX® Board (9 mm) stapled (2 nd board over the seams of 1 st board), 75 mm rockwool (35 kg/m ³), 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