# Promat

# PROMINA® 60
## Riser pipe protection

## Technical manual

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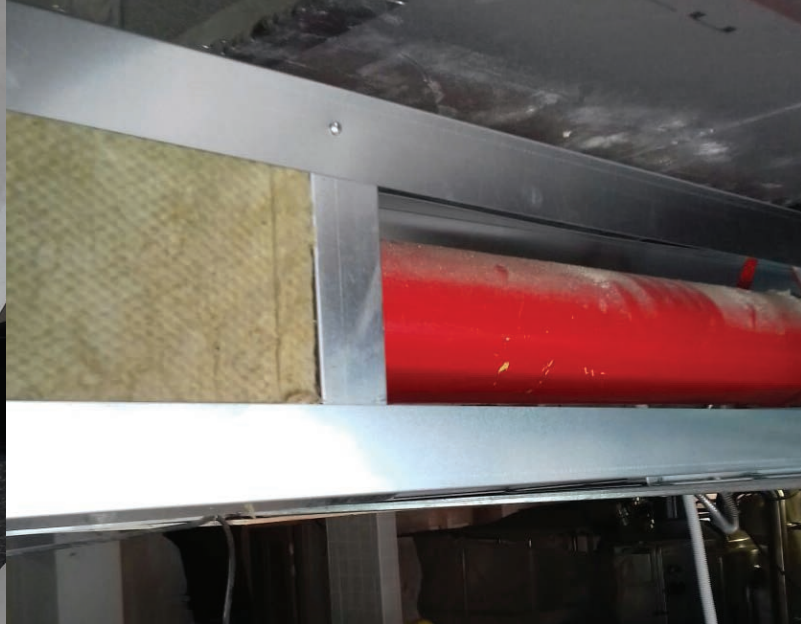
# PROMINA® 60

## Calcium silicate fire resistant board
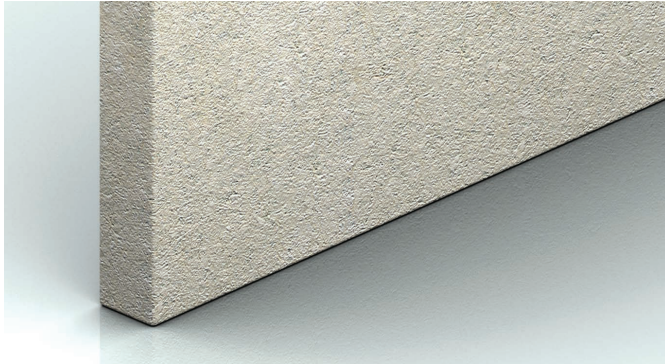


## Product description

PROMINA® 60 is a non combustible matrix engineered mineral board reinforced with selected fibres and fillers. It does not contain formaldehyde or any asbestos. The product is dimensionally stable and resistant to the effects of moisture. Its performance characteristics are not degraded by moisture. PROMINA®60 is suitable for internal use in high humidity conditions and external semi-exposed use. For fully exposed conditions, consult Promat Technical Department.

## Manufacturing Certification

PROMINA® 60 is manufactured under a quality management system certified in accordance with ISO 9001:2015. The manufacturing site is also certified to meet the environmental standards of ISO 14001:2015 and the occupational health & safety requirements of ISO 45001:2018.

## Fire Resistant Applications

→   Internal drywalls

→   Internal lining to external walls

→   Suspended and self-supporting hanger free ceilings

→   Cladding to steel sheet metal ducts

→   Enclosures to Pipes & services

→   Smoke screens

| Material properties | |
|---|---|
| General description | Calcium Silicate board fire resistant board |
| Surface condition & appearance | Light beige colour<br>Front face:  smooth<br>Back face:   sanded |
| Nominal dry density (average) | Approx. 1000kg/m³ |
| Moisture Content | Approx. 6.0%<br>The moisture content varies and will reach an equilibrium over time with the atmospheric relative humidity of the environment |
| Alkalinity | Approx. pH 12 |
| Thickness tolerance | Compliant with thickness tolerance of CE requirements (9mm thick standard sheets, +/-0.5mm) |
| Dimension tolerance | ±5mm (standard board dimensions) |

| Static Values | | | |
|---|---|---|---|
| Modulus of Elasticity E | Flexural  Strength F | Tensile strength T | Compressive strength ⊥ |
| Longitudinal: 4.1kN/mm²<br>Transverse:    4.1kN/mm² | Longitudinal: 10.0N/mm²<br>Transverse:    7.0N/mm² | Longitudinal: 4.1N/mm²<br>Transverse:    2.1N/mm² | 7.76N/mm² |

| Reaction to Fire & Thermal Properties | | |
|---|---|---|
| Combustibility | Surface burning | Thermal conductivity |
| A1 Classification:   EN 13501-1<br>Non-combustible:  BS 476: Part 4 | Class 0:    BS 476: Part 6 & 7 | 0.136W/m°K |

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# PROMINA® 60

## Calcium silicate fire resistant board

| Standard thickness | Standard dimension | Number of boards per pallet | Surface area per pallet | Weight of standard sheet | Weight per pallet |
|---|---|---|---|---|---|
| 9mm | 2440mm x 1220mm | 61 | 181.5m² | Approx. 30kg | Approx. 1970kg |
| 12mm | 2440mm x 1220mm | 46 | 136.9 m² | Approx. 40kg | Approx. 1981kg |
| 15mm | 2440mm x 1220mm | 36 | 107.2 m² | Approx. 50kg | Approx. 1941kg |

All physical and mechanical values are averages based on standard production and tested according to internal procedures. The typical values are given for guidance. The figures can change dependent on the test methods used. If a particular value is of prime importance for a specification, please consult Promat Technical Department.

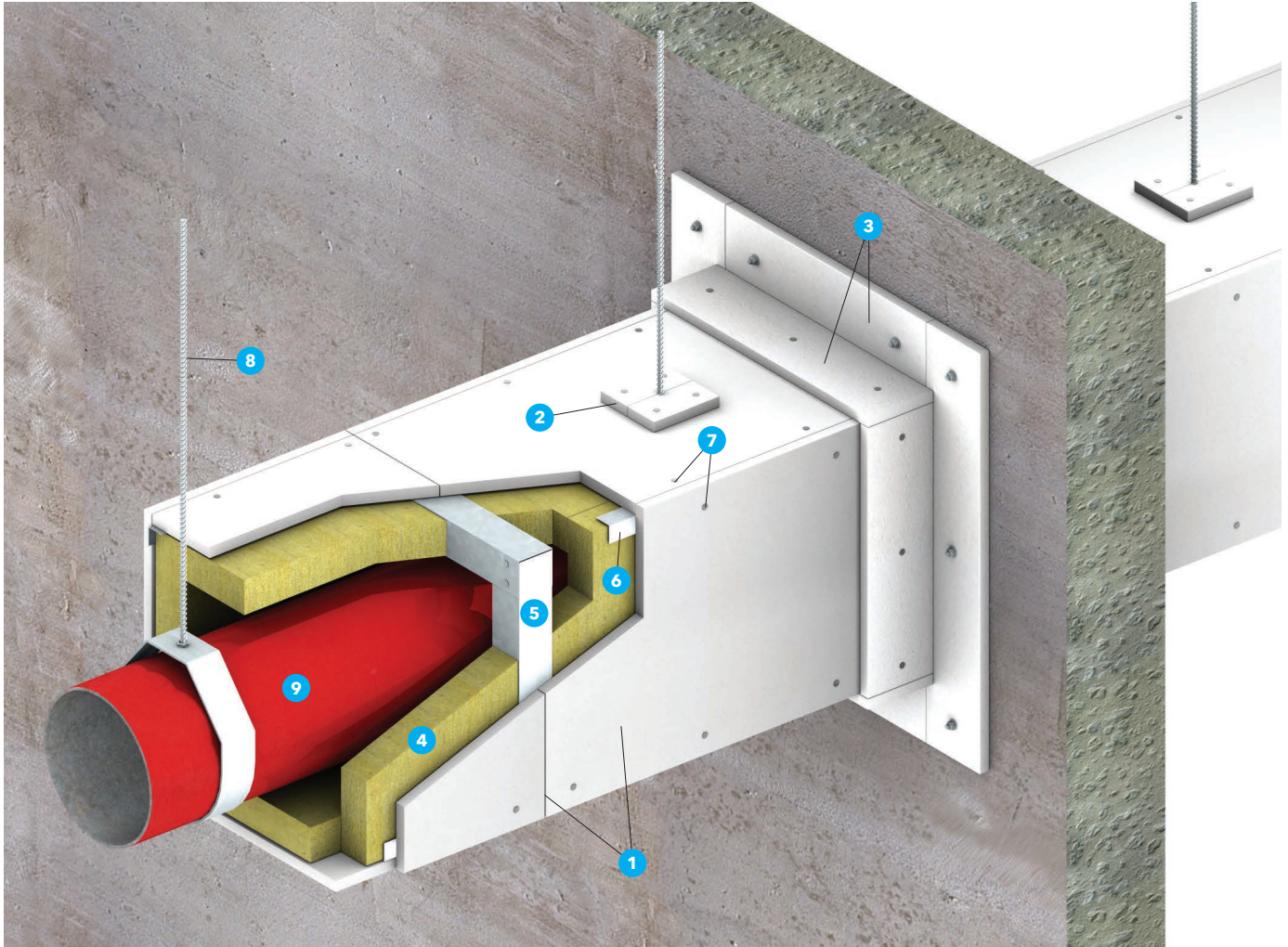# Promat

## PROMINA® 60– 2-hour riser pipe protection

| FRL | Model number | Standard |
|---|---|---|
| 120/120/120 | PN.55.12.BS | BS 476: Part 20: 1987 and FSB/PSB/001/00 |
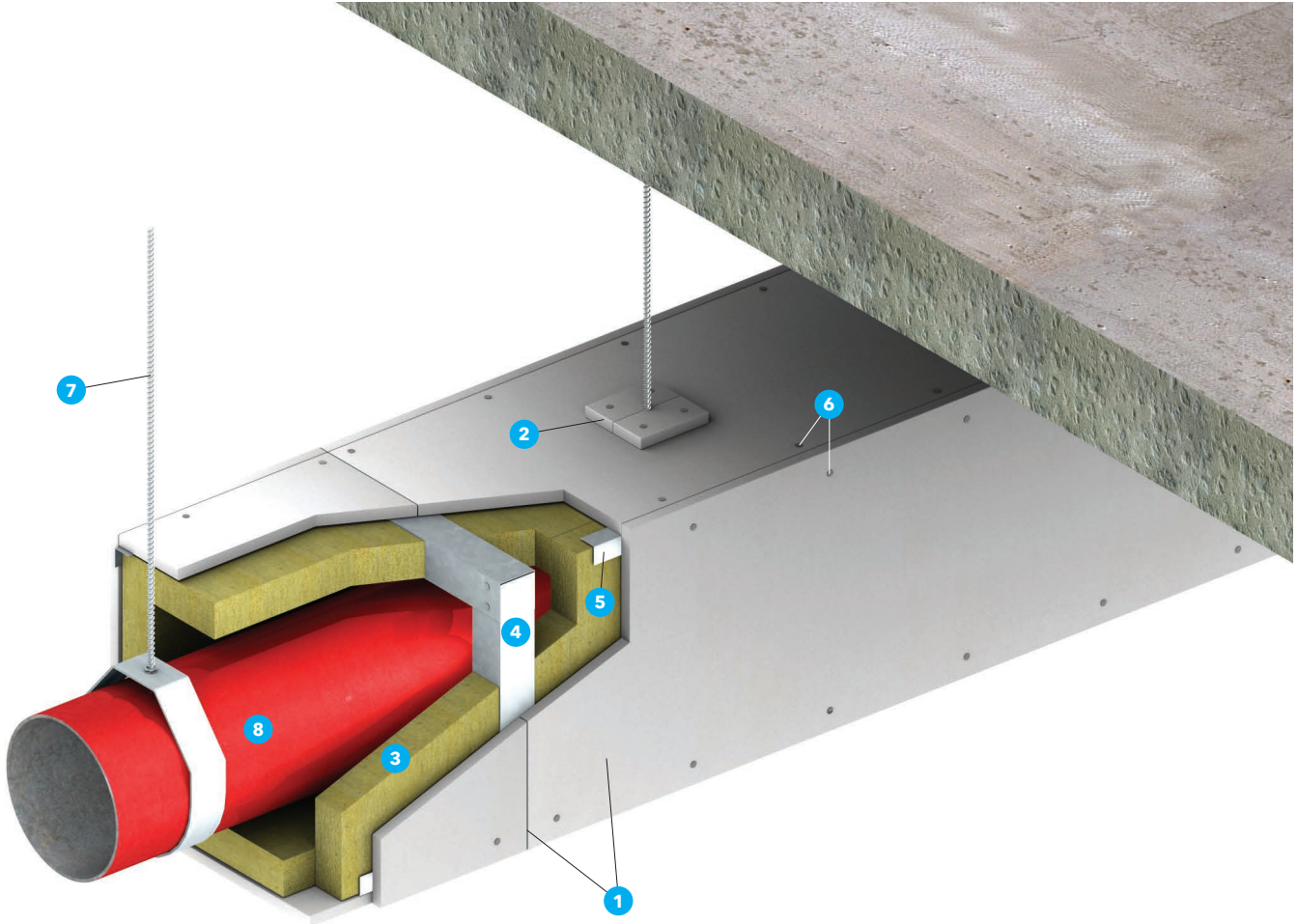


1. One layer of 12mm thick PROMINA® 60 board, joints fully sealed with all purpose plaster jointing compound.

2. 12mm thick PROMINA® 60 cover strips at hanger rod penetration junction. Caulk all edges between the strip and the hanger rod with PROMASEAL®-A Acrylic Sealant.

3. 50mm thick x 100kg/m³ mineral wool infill to cavity between board and riser pipe.

4. Minimum 50mm x 50mm x 0.6mm thick galvanised steel collar coincided with board joints at maximum 1220mm centres.

5. Minimum 50mm x 50mm x 0.6mm thick galvanised steel angle fixed to collar framework at corners.

6. 45mm long M4 self-tapping screws at nominal 200mm centres.

7. Supporting steel hanger rods, maximum stress allowance not exceeding 10N/mm².

8. Wet/dry riser pipe or hydrant pipe up to 600mm outer diameters.

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## PROMINA® 60– 4-hour riser pipe protection

| FRL | Model number | Standard |
|---|---|---|
| 240/240/240 | PN.55.24.BS | BS 476: Part 20: 1987 and FSB/PSB/001/00 |



1. One layer of 12mm thick PROMINA® 60 board, joints fully sealed with all purpose plaster jointing compound.

2. 12mm thick PROMINA® 60 cover strips at hanger rod penetration junction. Caulk all edges between the strip and the hanger rod with PROMASEAL®-A Acrylic Sealant.

3. Minimum 100mm wide x 12mm thick PROMATECT® 50 collars, fitted around the pipe on both sides of the wall forming an L shape collar.

4. 50mm thick x 100kg/m³ mineral wool infill to cavity between board and riser pipe.

5. Minimum 50mm x 50mm x 0.6mm thick galvanised steel collar coincided with board joints at maximum 1220mm centres.

6. Minimum 50mm x 50mm x 0.6mm thick galvanised steel angle fixed to collar framework at corners.

7. 45mm long M4 self-tapping screws at nominal 200mm centres.

8. Supporting steel hanger rods, maximum stress allowance not exceeding 6N/mm².

9. Wet/dry riser pipe or hydrant pipe up to 600mm outer diameters.

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## Wall penetration

Where the enclosure passes through a fire compartment wall, the penetration must be properly sealed. The gap between the enclosure and the wall opening should be fully filled with PROMASEAL®-A Acrylic Sealant. For 240 minutes fire resistance, an L shape collar is required fitted around the pipe on both sides of the wall.
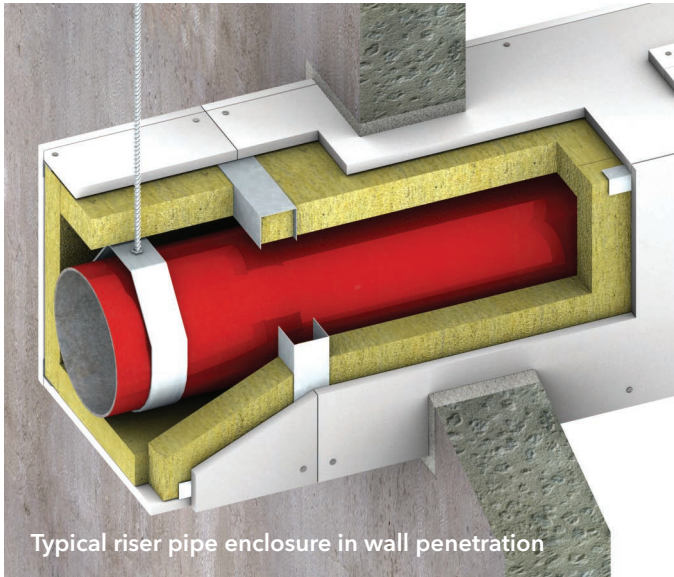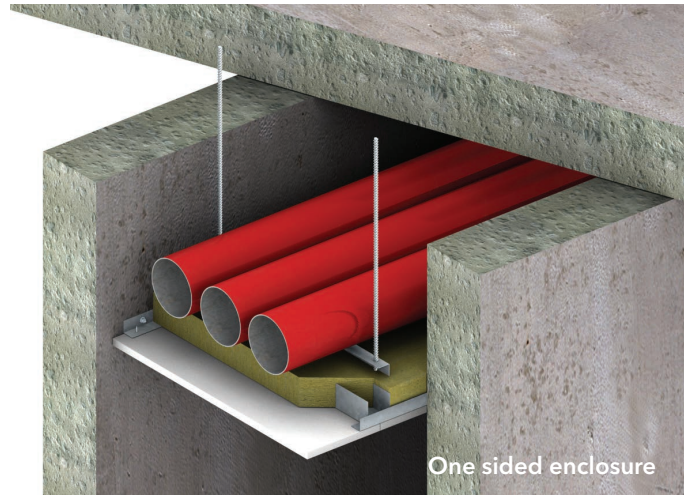

Typical riser pipe enclosure in wall penetration


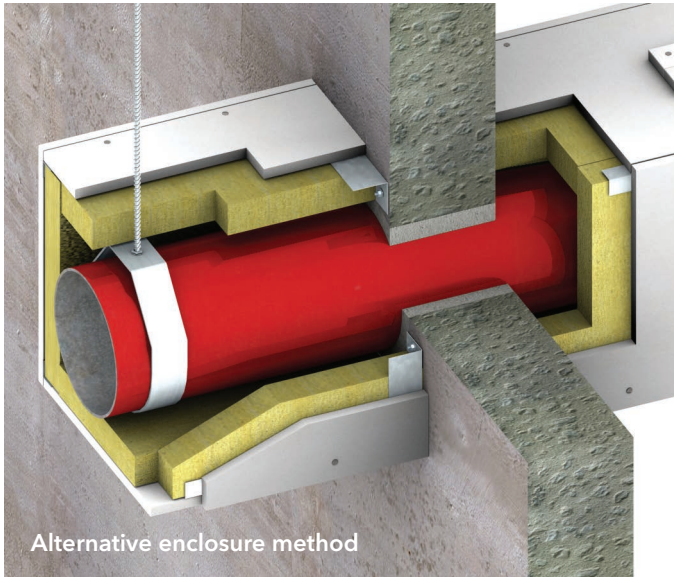Alternative enclosure method

## One, two or three sided protection

One, two or three sided enclosures are constructed similarly as a four sided enclosure.
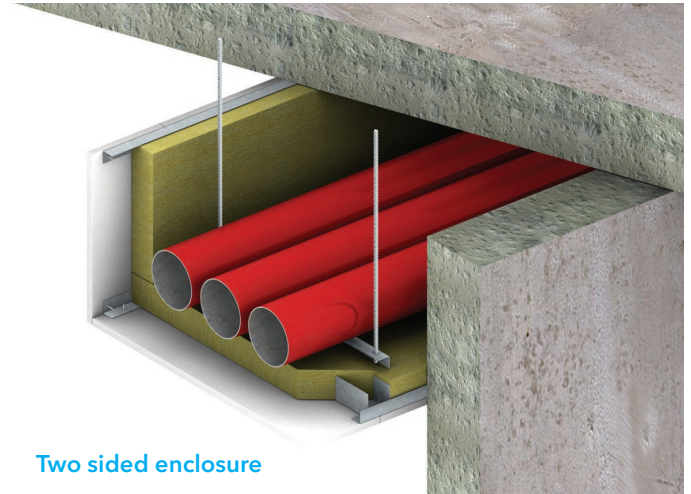
Minimum 30mm x 30mm x 0.6mm thick galvanised steel angles are fastened to the wall or floor slab with M6 all steel expanding anchors at 600mm nominal centres. The PROMINA® 60 boards forming the walls of the protection to the building services are then fastened to the angles with M4 self-tapping screws in appropriate length at 200mm nominal centres. The services are independently supported.
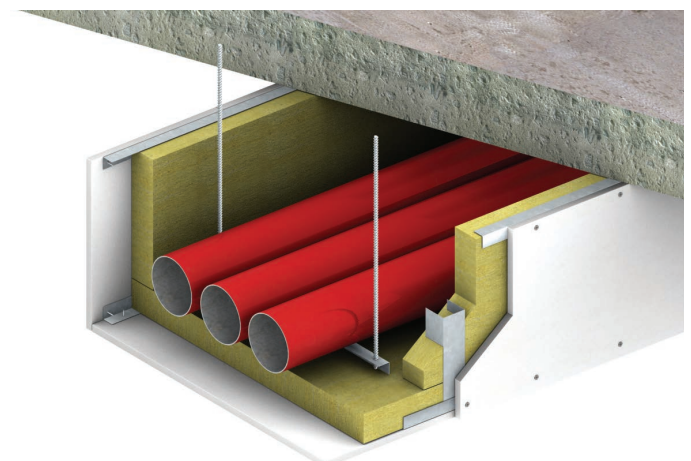

One sided enclosure


Two sided enclosure


Three sided enclosure

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Operating Country   Other countries with teammates   Export Country
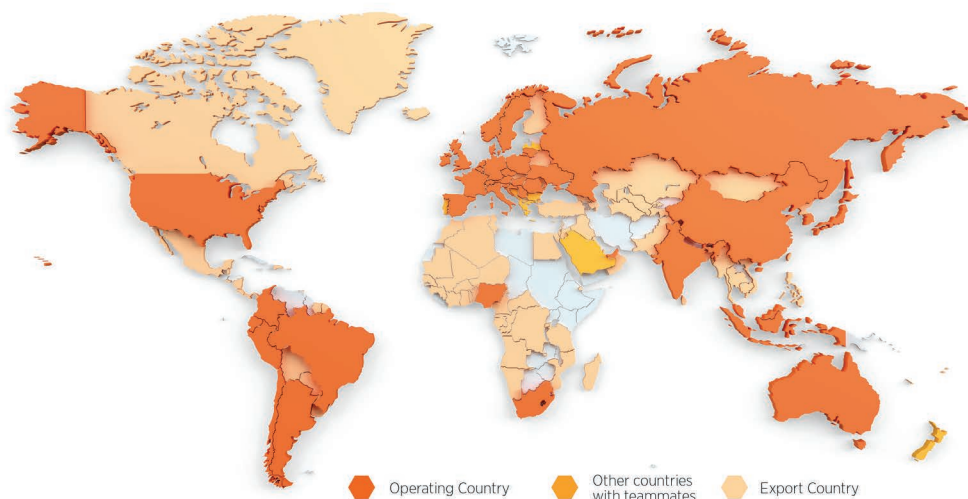
## About Etex

Etex is a global building material manufacturer and pioneer in lightweight construction. Etex wants to inspire people around the world to build living spaces that are ever more safe, sustainable, smart and beautiful.

Founded in 1905, headquartered in Zaventem, Belgium, Etex is a family-owned company with more than 13,500 employees globally. It operates more than 140 sites in 45 countries and recorded a revenue of EUR 3.0 billion and a REBITDA of EUR 570 million in 2021. Etex fosters a collaborative and caring culture, a pioneering spirit and a passion to always do better for its customers.

Etex has five R&D centres supporting five global divisions:
- Building Performance: dry construction solutions including plasterboards and fibre cement boards, plasters and formulated products, passive fire protection and associated products.
- Exteriors: a range of aesthetic fibre cement materials for use in agriculture, architectural and residential exteriors.
- Industry: fire protection and high-performance insulation products for the construction and OEM (Original Equipment Manufacturer) industries.
- Insulation: glass mineral wool and extruded polystyrene (XPS) for thermal and acoustic insulation.
- New Ways: high-tech offsite modular solutions based on wood and steel framing.

Etex's global portfolio includes leading commercial brands such as Promat, Kalsi, Siniat, Equitone, Eternit, Cedral, Durlock, Gyplac, Pladur, Superboard and URSA.

Etex is Inspiring Ways of Living, for more information, please visit our website: www.etexgroup.com

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