

# Promat



Ventilation &  
smoke extraction

## PROMINA<sup>®</sup> 60

### Fire resistant cladding ducts



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## PROMINA® 60

Fire protective construction board



### Product description

PROMINA® 60 is a non combustible matrix engineered mineral board reinforced with selected fibres and fillers. It does not contain formaldehyde.

PROMINA® 60 is beige in colour. The front face is smooth and is suitable for any forms of architectural/finishing treatment; the reverse face is sanded. The board can be left undecorated or easily finished with paints, wallpapers or tiles.

PROMINA® 60 is resistant to effects of moisture and will not physically deteriorate in a damp or humid environment. Whilst its performance characteristics are not degraded by moisture or aging, PROMINA® 60 is not designed for application in areas subject to continual damp or high temperatures.

### Material properties

<b>General description</b>	Calcium Silicate board made with Mineral Matrix Engineering technology
<b>Surface condition &amp; appearance</b>	Beige colour Front face: smooth Back face: sanded
<b>Nominal dry density (average)</b>	Nominal 1000kg/m <sup>3</sup>
<b>Moisture Content</b>	Approx 8.0% (may change depending on ambient Relative Humidity)
<b>Alkalinity</b>	pH 9
<b>Thickness tolerance</b>	-0.5mm, +1mm (standard thickness of boards)
<b>Dimension tolerance</b>	±5mm (standard board dimensions)

### Advantages

- Resistant to the effects of moisture
- Not physically deteriorate when used in damp or humid conditions
- Performance characteristics are not degraded by age or moisture

### Fire Resistant Applications

- Partitions & External Walls
- Ceilings & Floors
- Ductwork
- M&E Services Enclosures
- Cavity & Smoke Barriers
- Access Panels & Hatches
- Fire Doors

### Static Values (deflection $f \leq l/250$ , safety factor $n \geq 3$ )

Modulus of Elasticity E	Flexural Strength F	Tensile strength T	Compressive strength $\perp$
Longitudinal: 4599N/mm <sup>2</sup> Transverse: 3817N/mm <sup>2</sup>	Longitudinal: 7.52N/mm <sup>2</sup> Transverse: 5.15N/mm <sup>2</sup>	Longitudinal: 5.99N/mm <sup>2</sup> Transverse: 5.17N/mm <sup>2</sup>	7.76 N/mm <sup>2</sup>

### Reaction to Fire & Thermal Properties

Combustibility	Surface burning	Thermal conductivity
A1 Classification: EN 13501-1 Non-combustible: BS 476: Part 4 AS 1530: Part 1	Class 1: BS 476: Part 7 Class 0: AS 1530: Part 3	0.136W/m <sup>2</sup> K

## PROMINA<sup>®</sup> 60

### Fire protective construction board

Standard thickness	Standard dimension	Number of boards per pallet	Surface area per pallet	Weight of boards per m <sup>2</sup>	Weight per pallet
6mm	2440mm x 1220mm	90	267m <sup>2</sup>	Approx. 6kg	Approx. 1,730kg
9mm	2440mm x 1220mm	61	181m <sup>2</sup>	Approx. 9kg	Approx. 1,760kg
12mm	2440mm x 1220mm	46	137m <sup>2</sup>	Approx. 12kg	Approx. 1,775kg
15mm	2440mm x 1220mm	36	107.m <sup>2</sup>	Approx. 15kg	Approx. 1,733kg

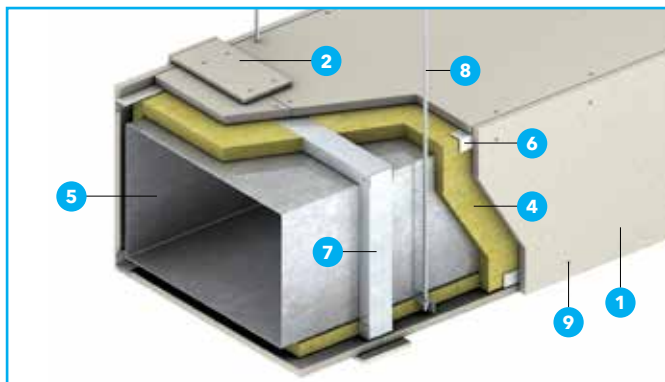
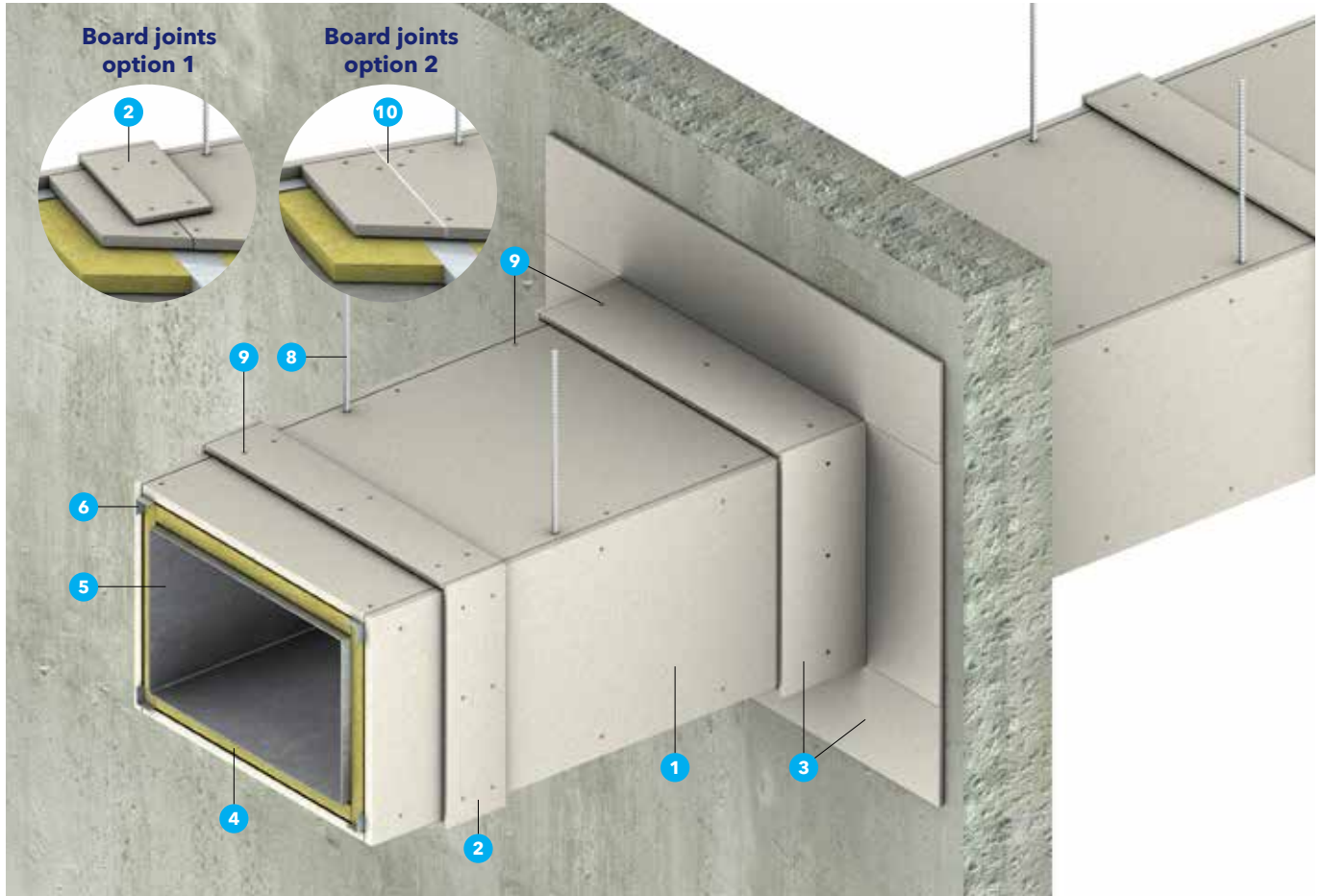
All physical and mechanical values are averages based on standard production and tested according to internal procedures. The typical values are given for guidance. The figures can change dependent on the test methods used. If a particular value is of prime importance for a specification, please consult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

### Manufacturing Certification

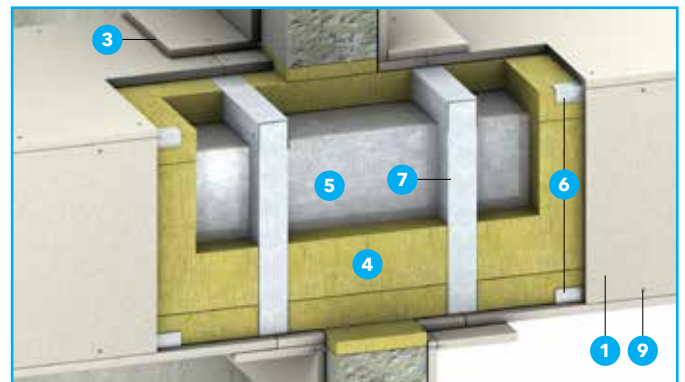
PROMINA<sup>®</sup> 60 is manufactured under a quality management system certified in accordance with ISO 9001:2015. The manufacturing site is also certified to meet the environmental standards of ISO 14001: 2015 and the occupational health & safety requirements of ISO 45001:2018.

## PROMINA® 60 120 minutes Fire Resistant Cladding Ducts

Up to 120/120/120 fire resistance in accordance with the requirements of BS 476: Part 24: 1987 and tested to duct types A and B.



**Internal framing detail**

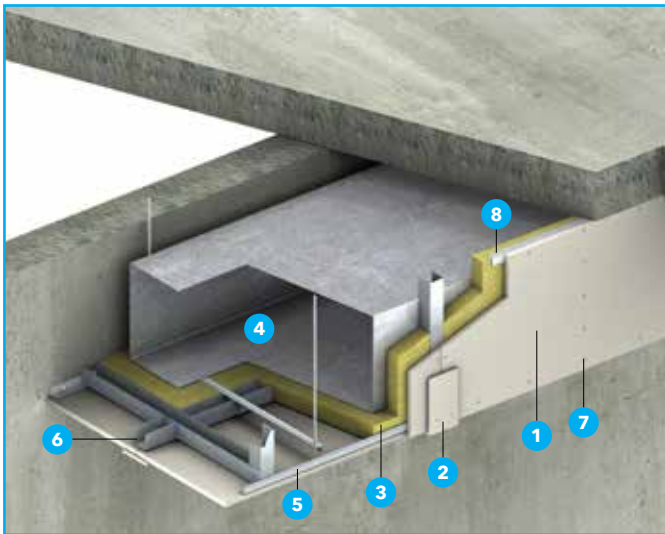


**Wall penetration detail**

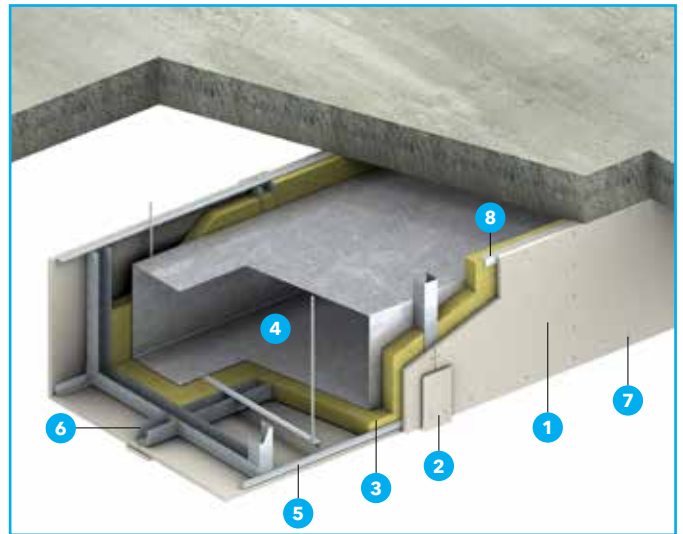
1. One layer of PROMINA® 60 12mm thick.
2. PROMINA® 60 cover strips 100mm wide x 9mm thick or PROMASEAL®-A Acrylic Sealant at all butt joints.
3. PROMINA® 60 collar 100mm width x 12mm thick fitted around the duct on both sides of the wall or floor forming an L shape.
4. Mineral wool slab 50mm x 100kg/m<sup>3</sup> density.
5. Sheet metal duct and suitable steel support bracket.
6. Galvanised steel angles 50mm x 50mm x 0.6mm thick.
7. Steel channel collar 50mm x 50mm x 0.6mm thick fill with rock wool and coincides with boards' butt joints.
8. Threaded steel rod hangers at nominal 1200mm intervals and permissible tensile stress not exceeding 10N/mm<sup>2</sup>.
9. M4 self-tapping screws at nominal 200mm centres.
10. PROMASEAL®-A Acrylic Sealant or PROMINA® 60 cover strips 100mm wide x 9mm thick at all butt joints.



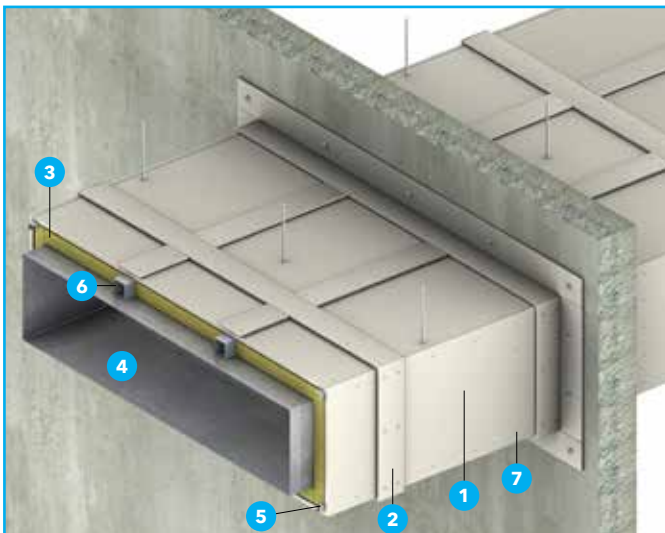
## Other typical fixings of cladding to steel ducts



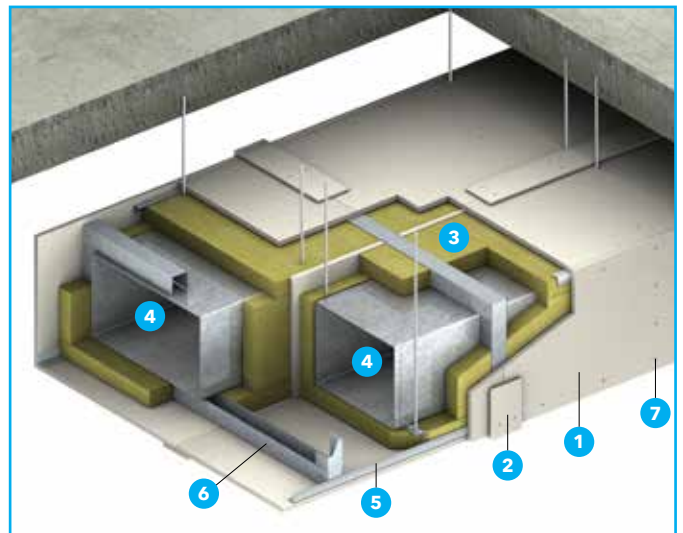
Two sided cladding to steel ducts



Three sided cladding to steel ducts



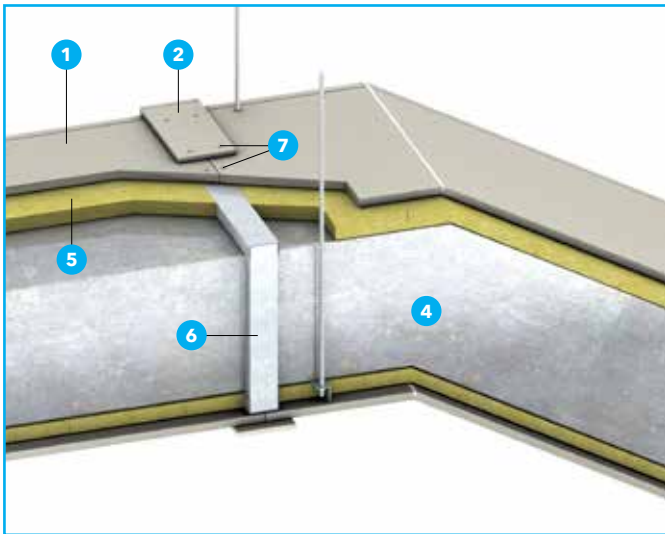
Internal duct size up to 10m



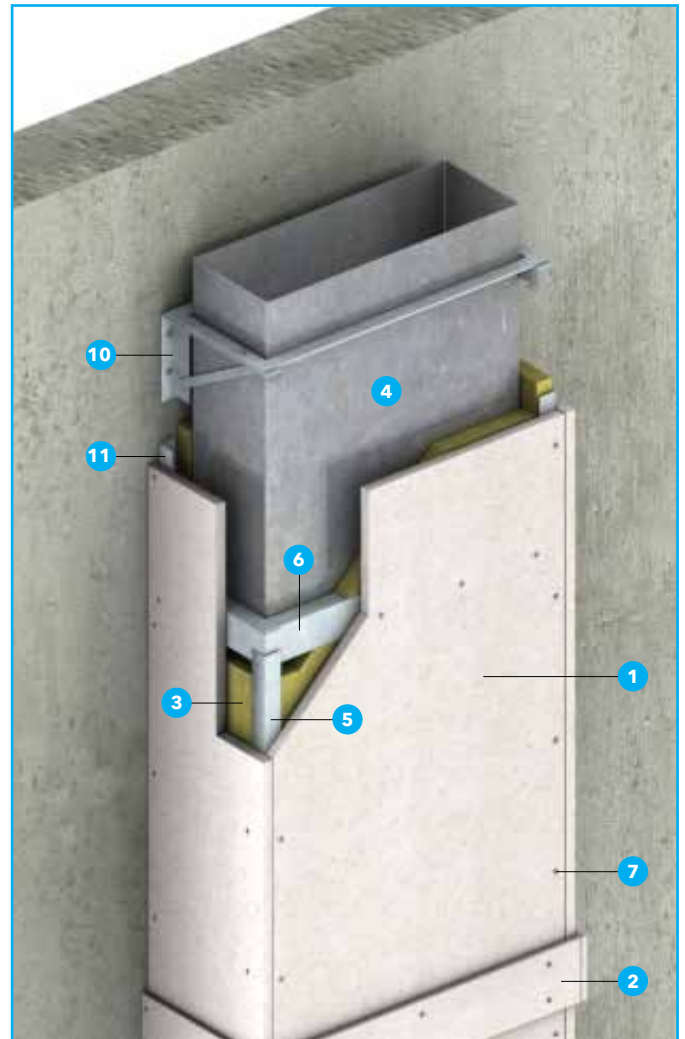
Multiple duct cladding

1. One layer of PROMINA® 60 12mm thick.
2. PROMINA® 60 cover strips 100mm wide x 9mm thick or PROMASEAL®-A Acrylic Sealant at all butt joints.
3. Mineral wool slab 50mm x 100kg/m<sup>3</sup> density.
4. Sheet metal duct and suitable steel support bracket.
5. Galvanised steel angles 50mm x 50mm x 0.6mm thick.
6. Steel channel collar 50mm x 50mm x 0.6mm thick fill with rock wool and coincides with boards' butt joints.
7. M4 self-tapping screws at nominal 200mm centres.
8. Continuous wall/floor steel angles 40mm x 40mm x 1.5mm thick.

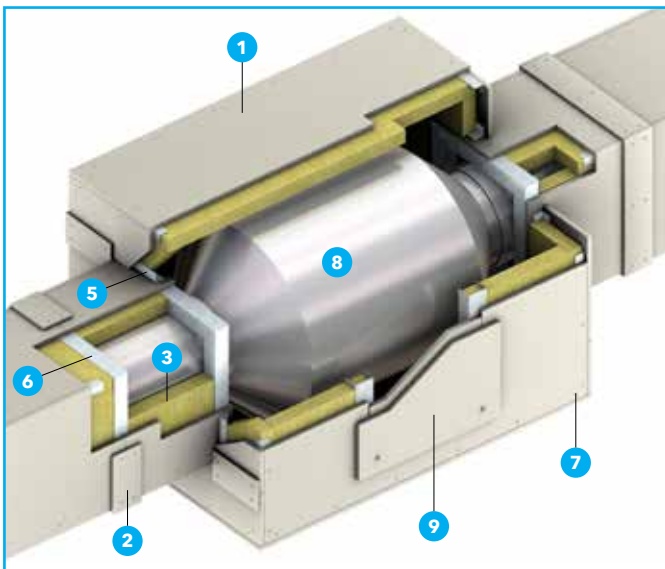
## Other typical fixings of cladding to steel ducts



Duct inclining detail



Typical vertical cladding to steel ducts



Fan enclosure and access hatch

1. One layer of PROMINA® 60 12mm thick.
2. PROMINA® 60 cover strips 100mm wide x 9mm thick or PROMASEAL®-A Acrylic Sealant at all butt joints.
3. Mineral wool slab 50mm x 100kg/m<sup>3</sup> density.
4. Sheet metal duct and suitable steel support bracket.
5. Galvanised steel angles 50mm x 50mm x 0.6mm thick.
6. Steel channel collar 50mm x 50mm x 0.6mm thick fill with rock wool and coincides with boards' butt joints.
7. M4 self-tapping screws at nominal 200mm centres.
8. Bifurcation fan.
9. Access panel constructed with PROMINA® 60 board. Contact Promat for assistance.
10. Suitable steel support bracket.
11. Continuous wall/floor steel angles 40mm x 40mm x 1.5mm thick.