

# Installers Manual



## Thank you ...

for your interest in the PROMAFOUR® encasing system by Promat HPI, the worldwide reference in passive fire protection and high performance insulation materials.

As a division of Promat group, Promat HPI (High Performance Insulation) is specialised in the design and manufacturing of innovative products and solutions, as well as integrated systems for thermal insulation applications in many areas of industry.

PROMAFOUR® is the result of our many years of experience and know-how in fire protection and insulation.

This manual is meant as a useful guide to help you to encase, insulate and finish your fireplace or stove quickly and easily in only a few steps.

In order to build a secure and aesthetic PROMAFOUR® encasement, we advise you to follow the instructions described below to utilise the PROMAFOUR® product range, which has been developed specifically for use with fires and stoves.

## PROMAFOUR®, the mantelpiece and insulation that make the difference

### Safe and reliable

PROMAFOUR® construction boards are noncombustible and resistant to very high temperatures up to 1000°C during prolonged exposure. They don't contain any bonding agent, which could emit an irritating odour or affect the cohesion of the board in a negative way.

### Aesthetics and convenience

PROMAFOUR® construction boards have a naturally smooth surface which is ideal for painting without additional plastering. Thanks to minimal expansion and contraction during and after heating, the risk of cracks, microscopic fissures or deformation is reduced to an absolute minimum. By insulating your fireplace floor and rear wall with a PROMASIL®-1000L board, the loss of heat is reduced to the bare minimum. Thanks to the high thermal storage capacity of PROMAFOUR® construction boards, the emitted heat is

distributed evenly in your living room. Your fireplace will continue to emit heat, even after the fire is extinguished.

### Mechanical strength and solidity

PROMAFOUR® construction boards are composed of calcium silicate and cement. This results in very strong walls, even with minimal thicknesses of 12 mm, 15 mm or 18 mm. Also heavier objects, such as frames, paintings and flat screens can be attached to the wall without additional strengthening.

### Quick and easy installation

PROMAFOUR® construction boards can be easily cut with traditional woodworking equipment and installed using standard screws, staples and refractory PROMAFOUR®-GLUE 1000.

## General safety measures

Before you begin to install your PROMAFOUR® encasement, it is important to carefully read the following safety measures and instructions:

1. Always observe the safety instructions of the fire or stove manufacturer.
2. Always ensure safe working conditions and a safe working environment.
3. Take the necessary precautionary measures to prevent possible injuries to the hands, eyes, feet, back and other areas of the body.
4. Call in additional help if a particular part of the PROMAFOUR® system is too heavy to lift alone.
5. Always use the correct equipment, as described in the relevant installation manual.
6. Only use equipment which conforms to applicable safety standards.
7. Always observe the maximum concentration values for occupational dust exposure while cutting PROMAFOUR® construction boards and PROMASIL®-1000L insulation boards. We can cut your boards to size in our workshop on request.

## Products comprising the PROMAFOUR® system

### 1. PROMAFOUR® construction boards

PROMAFOUR® construction boards are noncombustible, high temperature resistant, calcium silicate and cement based boards which can resist temperatures up to 1000°C. PROMAFOUR® construction boards are solid large sized boards with excellent mechanical strength. Their large dimensions, 1250 mm (W) x 2500/3000 mm (L), enable a quick and simple installation. They are available in thicknesses of 12 mm, 15 mm and 18 mm.

### 2. PROMAFOUR®-STUDS

PROMAFOUR®-STUDS are noncombustible, cut-to-size profiles, which are made of the same material as PROMAFOUR® construction boards. PROMAFOUR®-STUDS are available in two standard sizes: 48 mm x 3000 mm x 18 mm and 69 mm x 3000 mm x 18 mm. Studs in other sizes are available on request.

### 3. PROMASIL®-1000L insulation boards

PROMASIL®-1000L insulation boards are lightweight, large sized, refractory calcium silicate boards with excellent insulation properties which can resist temperatures up to 1000°C. Their homogeneous, stable, calcium silicate structure guarantees exceptional thermal and mechanical properties. PROMASIL®-1000L boards are available in 1200 mm x 2500 mm and thicknesses of 25 mm, 30 mm, 40 mm and 50 mm. In order to prevent overheating and/or ignition of the rear wall due to prolonged and frequent heating and to minimise possible heat loss from the back of your fire/stove, we advise you to insulate the rear wall or to protect it against the heat emitted by your appliance at all times.

### 4. PROMAFOUR®-HTI 1100 BLANKETS

PROMAFOUR®-HTI 1100 BLANKETS are flexible, high temperature resistant insulation blankets, based on alkaline earth fibres (high temperature glass fibres), which are bonded mechanically by needle felting without the addition of any bonding agents.

They are noncombustible and can resist temperatures up to 1000°C.

Thanks to their high flexibility, these insulation blankets can easily be used to “wrap up” smoke evacuation ducts. PROMAFOUR®-HTI 1100 BLANKETS are manufactured in 610 mm x 7320 mm x 25.4 mm and 610 mm x 14640 mm x 12.7 mm rolls with a density of 96 kg/m³ or 128 kg/m³.

### 5. PROMAFOUR®-GLUE 1000

PROMAFOUR®-GLUE 1000 is a refractory silicate based glue, which resists to temperatures up to 1000°C. PROMAFOUR®-GLUE 1000 adheres very well to all materials and can be used to glue PROMAFOUR®-construction boards and PROMASIL®-1000L insulation boards, as well as PROMAFOUR®-HTI 1100 BLANKETS. PROMAFOUR®-GLUE 1000 is available in 310 ml cartridges and 1.5 kg and 15 kg buckets.

### 6. PROMAFOUR®-HT JOINTFILLER

PROMAFOUR®-HT JOINTFILLER is a high temperature resistant filler, which is based on a mixture of clay and an inorganic bonding agent. It can resist temperatures up to 1000°C. PROMAFOUR®-HT JOINTFILLER has been developed especially to fill in any residual gaps around PROMAFOUR® construction boards. PROMAFOUR®-HT JOINTFILLER is available in 500 g cartridges and 1.5 kg buckets.

### 7. PROMAFOUR®-PRIMER

PROMAFOUR®-PRIMER is a noncombustible and vapour permeable primer, based on liquid calcium silicates and a controlled amount of organic additives. PROMAFOUR®-PRIMER is available in 3 l containers.

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## 1. Insulation of the rear wall, floor and fireplace/stove

### 1.1. Installation of the PROMASIL®-1000L insulation boards

Before you start, please consult the construction table on p.15 for quantities and dimensions of the required material.

#### Required material/equipment\*

- PROMASIL®-1000L
- PROMAFOUR®-GLUE 1000
- Standard mechanical screwdriver
- Standard screws suitable for the rear wall material
- Jigsaw with woodworking saw blade
- 3 mm coarse-toothed glue spatula

#### Preparation

- Cover your floor and furniture with a blanket or other protective material to avoid possible damage.
- Make sure that the floor and rear wall are in good condition. They have to be free of moisture and mould, combustible and loose parts.
- Equalise, straighten and level the floor and rear wall.
- Create sufficient secure and free workspace around your fire.

#### Safety recommendations

Only use safe equipment, wear safety gloves, goggles, shoes and a dust mask.

#### Important recommendations

- A.** In installations with a timber wall, an air cavity has to be provided by applying a 50 mm thick PROMASIL®-1000L board directly to the PROMAFOUR® construction boards at a minimum distance of 5 cm from the rear wall. Use PROMAFOUR®-GLUE 1000 and self-tapping plaster-board-screws on the outside of the PROMAFOUR® construction boards. Apply a sufficiently thick layer of PROMAFOUR®-GLUE 1000 on the edges of the board before fixing it using screws on the outside. The upper and lower side of the insulating wall should be mounted on metal profiles, which are fixed to the floor and ceiling in advance. Provide sufficient ventilation in this cavity.

- B.** Protect and insulate the floor by providing a small air cavity between the wall and the board, as described in point A.
- C.** Even in the case of a freestanding stove, the floor and rear wall have to be protected and insulated as described in points A and B.
- D.** In the case of a timber wall, use boards with a minimum thickness of 50 mm. In case of a brick wall, boards with a thickness of 30 mm are sufficient.
- E.** Observe the installation and security instructions of the fireplace/stove manufacturer.

#### Tip

- You can obtain a very fine saw-cut without burs by using a DIA saw blade. This saw blade, which has been developed especially to cut fibre-cement and calcium silicate boards, is equipped with moulded teeth and diamond plating. This type of saw blade also has a better durability than ordinary saw blades. Contact Promat for more detailed information.
- Cutting different materials with the same saw blade reduces its life span. We therefore advise you to use a fibre cement saw blade only to cut fibre cement materials.
- It is advisable to insulate the rear wall behind a freestanding stove also. PROMASIL®-1000L boards are the best solution for this application.

\* For more product information, go to page 3.

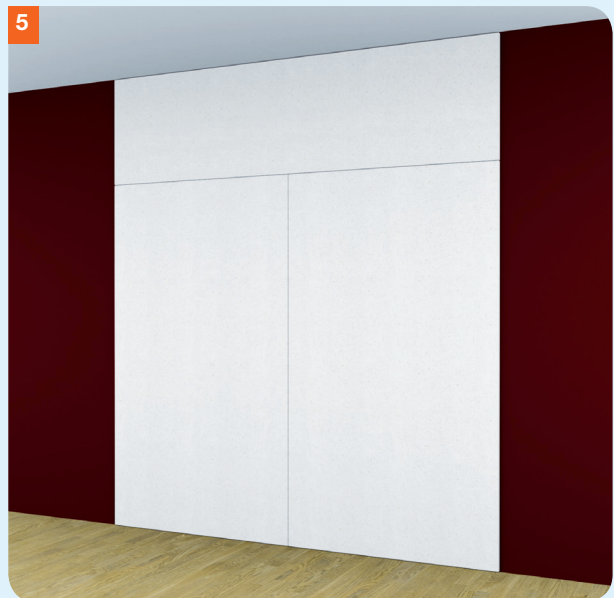
## Installation

1. Remove any trace of dirt and dust and ensure that the surface is level, dry and clean.
2. Cut the PROMASIL®-1000L boards to the right size. Remove the sawdust and provide an opening in the board for the smoke evacuation duct if necessary.
3. Apply a layer of PROMAFOUR®-GLUE 1000 on the entire surface of the boards and the edges by means of a coarse-toothed glue spatula (3 mm). Depending on the kind of surface, the quantity of glue needed will be between 1.5 to 3 kg/m<sup>2</sup>.
4. Protect the floor and rear wall by providing an air cavity. Also refer to points A and B under the section 'Important recommendations' on p.4 for a detailed description.
5. After a drying time of approximately 3 minutes, press the PROMASIL®-1000L board firmly to the floor/rear wall. Don't forget to carefully press the sides of the board also.

> Picture 5

6. Then fix the board in each corner by means of screws and an installation ring.
7. Install your fireplace/stove following the instructions of the manufacturer.

> Picture 7



## 1. Insulation of the rear wall, floor and stove

### 1.2. Insulation of the smoke evacuation ducts

#### Required material/equipment\*

- PROMAFOUR®-HTI 1100 BLANKET
- PROMAFOUR®-GLUE 1000
- Standard stainless steel wire
- Standard metal spring clips
- Standard cutting tools and measuring tape

#### Preparation

- Cover your floor and furniture with a blanket or other protective material to avoid possible damage.
- Create sufficient secure and free workspace around your fire.
- Create sufficient space to unroll the insulation blanket. Use cardboard or similar material to protect the floor when cutting.

#### Safety recommendations

Only use safe equipment, wear safety gloves, goggles, shoes and a dust mask.

#### Important recommendations

- A.** Use smoke extraction and chimney ducts prescribed by the stove manufacturer which meet the appropriate ASTM or local standards.
- B.** Smoke extraction ducts and penetrations have to be installed and insulated according to the national fire protection and insulation standards and prescriptions.
- C.** Both single and double wall smoke extraction ducts, which penetrate a timber construction, such as a timber floor, wall or roof, have to receive additional fire resistant insulation. Try to avoid direct contact with surrounding timber components where possible.
- D.** For the insulation of smoke extraction duct penetrations through a timber construction, we can recommend our PROMAFOUR® smoke extraction duct penetration system. Contact Promat for more detailed information.
- E.** Insulated double wall smoke extraction ducts do not require additional insulation against energy loss.

- F.** In rooms with free access, single wall smoke extraction ducts have to be insulated. We recommend PROMAFOUR®-HTI 1100 BLANKETS for this application.
- G.** Never use fire resistant foams, silicones or sealants containing organic bonding agents to seal penetrations.

#### Tip

- It is necessary to cut the PROMAFOUR®-HTI 1100 BLANKET larger than the girth of the smoke extraction duct, in order to provide a sufficient overlap.
- PROMAFOUR®-HTI 1100 BLANKETS may also be used to 'wrap up' or insulate your stove or as mending wool. Always consult the stove manufacturer in this regard, because certain types of stoves may not be insulated because of the risk of overheating.
- A PROMAFOUR®-HTI 1100 BLANKET with a density of 128 kg/m<sup>3</sup> has better insulating and mechanical properties than an insulation blanket with a density of 96 kg/m<sup>3</sup>.
- PROMAFOUR®-HTI 1100 BLANKETS don't contain any organic bonding agents, which burn at high temperatures. Therefore the insulation is safer, has a longer life span and won't cause irritating odours when you turn on the stove for the first time.
- PROMAFOUR®-HTI 1100 BLANKETS are composed of high temperature resistant, bio-soluble glass fibers and therefore not subject to any health risk classification.

\* For more product information, go to page 3.

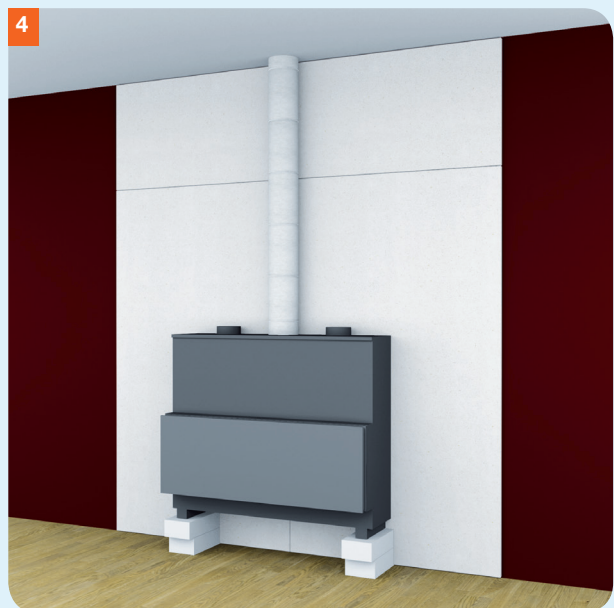
## Installation

1. Unroll the PROMAFOUR®-HTI 1100 BLANKET on cardboard or similar protective surface.
2. Cut the PROMAFOUR®-HTI 1100 BLANKET to the right size.
3. Wrap the PROMAFOUR®-HTI 1100 BLANKET around the smoke extraction duct.

> **Picture 3**

4. Attach the insulation blanket with stainless steel wire. It is advisable to provide an additional fixation by means of metal spring clips and PROMAFOUR®-GLUE 1000.

> **Picture 4**



## 2. Installation of the metal profiles and PROMAFOUR®-STUDS

### Required material/equipment\*

- At least two vertical PROMAFOUR®-STUDS of 18 mm thick and 69 mm width
- Two horizontal PROMAFOUR®-STUDS of 18 mm thick and 69 mm width
- Two PROMAFOUR® L-profiles (assembled STUDS)
- PROMAFOUR®-GLUE 1000 + standard cartridge clip
- Standard mechanical screwdriver
- 25 mm long, self-tapping, stainless steel screws
- Standard mechanical stapler
- 20 mm long staples
- 70 mm U-profiles in stainless or galvanised steel
- Consult the construction table on p.15 for quantities and dimensions of the required material

### Preparation

- Cover your floor and furniture with a blanket or other protective material to avoid possible damage.
- Create sufficient secure and free workspace around your fire.
- Take the measurements of the positions, where the U-profiles and STUDS will be installed and mark these measurements on the floor and ceiling.
- Cut the metal U-profiles and PROMAFOUR®-STUDS to the right size.
- Assemble the PROMAFOUR® L-profiles by fixing two PROMAFOUR®-STUDS lengthwise and with a right angle to each other by means of PROMAFOUR®-GLUE 1000 and stainless steel screws or staples.

### Safety recommendations

Only use safe equipment, wear safety gloves, goggles, shoes and a dust mask.

### Important recommendations

- A.** Use appropriate concrete/masonry screws or anchors to fix the U-profiles in a stone floor and screws for a timber floor.
- B.** Watch carefully not to damage pipes, which run through the floor, when fixing the metal U-profiles.
- C.** As an insulation specialist, we advise you to carefully follow the instructions mentioned below during the installation of PROMAFOUR®-STUDS and L-profiles.

### Tip

- Standard U-profiles are available at your local building materials store.
- You can use the same standard U-profiles as those, which are used to build a drywall.
- PROMAFOUR®-STUDS can also be used to enlarge the inner peripheral frame, which has to be completely integrated into the encasement.

\* For more product information, go to page 3.



## Installation

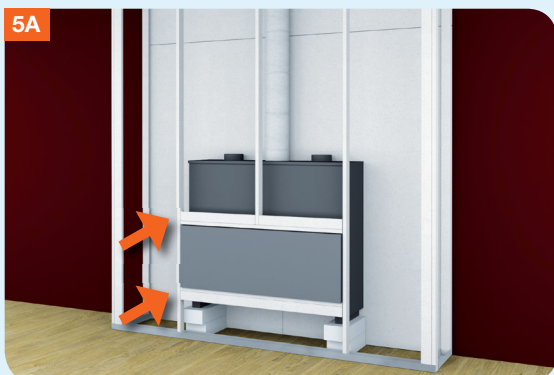
1. Cut the PROMAFOUR®-STUDS and L-profiles to the right length.
2. Fix the metal U-profiles to the floor and the ceiling. > Pictures 2A, 2B



3. Place both PROMAFOUR® L-profiles in the first angles of the metal U-profiles.
4. Place the vertical PROMAFOUR®-STUDS in the metal U-profiles, which are fixed to the left and right side of your stove, to the rear wall and in the middle above your stove. > Pictures 4A, 4B



5. Place two horizontal PROMAFOUR®-STUDS between the vertical PROMAFOUR®-STUDS that have been placed next to your stove at the same level of the upper and lower side of the stove's glass pane. Provide a 3 mm wide gap between the STUDS and the stove, in order to allow it to expand when heated without damaging the entire system. > Pictures 5A, 5B



## 3. Installation of the PROMAFOUR® construction boards

### Required material/equipment\*

- PROMAFOUR® construction boards
- PROMAFOUR®-GLUE 1000
- Sharp-pointed stainless steel screws of 25 mm with self-milling head
- Standard mechanical stapler
- Staples 20 mm
- Consult the construction table on p.15 for quantities and dimensions of the required material

### Preparation

- Cover your floor and furniture with a blanket or other protective material to avoid possible damage.
- Create sufficient secure and free workspace around your fire.
- Determine the required dimensions and number of PROMAFOUR® construction boards.
- Cut the PROMAFOUR® construction boards to the right size.

### Safety recommendations

Only use safe equipment, wear safety gloves, goggles, shoes and a dust mask.

### Important recommendations

- A. Depending on the type of stove (wood- or gas-fired) and its dimensions, we recommend that you build the PROMAFOUR® encasement as described in the table on p.15 and following the installation instructions.
- B. When encasing a large fire, if you intend attaching heavier objects, such as a flat screen or a mirror to the encasement or if you want to tile it, we recommend a PROMAFOUR® construction board with a thickness of 18 mm.
- C. Provide a 3 mm wide gap between the peripheral edge of the stove and the PROMAFOUR® construction board, in order to allow it to expand when heated without damaging the entire system.
- D. See our recommendations on p.13 for the finishing of the angles.

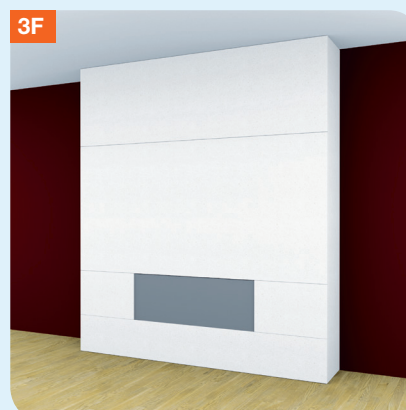
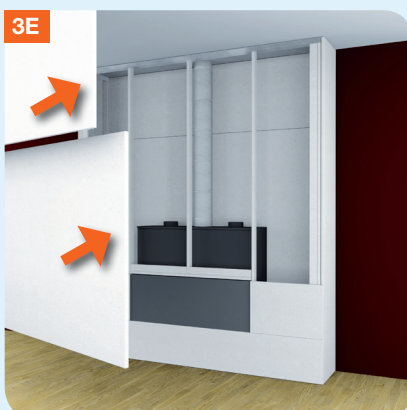
### Tip

- PROMAFOUR® construction boards can be cut to size and installed very easily by means of traditional equipment. They can also be combined with other building materials. They can be cut to size on request, even with chamfered edges or mitered angles.
- We recommend the use of PROMAFOUR®-GLUE 1000, not only to guarantee stronger joints, but also to obtain a better sealing at the joints. This also allows better positioning of the boards prior to final fixing by means of screws and staples.
- It is simple to rough-drill the holes before fixing the screws (8 mm from the outer edge for 15 mm boards). We recommend to use a drill with a slightly smaller diameter than the diameter of the screw. Then place the screw upright in the hole and screw it down.
- To obtain a better finish to the drilled holes, they can also be pre-milled. The screws can then be fully screwed into the board and the heads can be finished with PROMAFOUR®-HT JOINTFILLER.
- Provide reinforcement at the backside of each joint.
- PROMAFOUR® waste may be disposed of with ordinary building material waste (observe the local and national legislation).

\* For more product information, go to page 3.

## Installation

1. Prepare the boards, which will be used to make up the angles of the encasement by chamfering the edges of two boards (demi- V-shape) or by mitering one board (45° angle).
2. Fix the PROMAFOUR® construction boards (12 mm, 15 mm or 18 mm) to the PROMAFOUR®-STUDS by means of PROMAFOUR®-GLUE 1000.  
> Pictures 3A-3F
3. Then fix them by means of stainless steel screws of 25 mm and self-milling head or staples of 20 mm.  
> Pictures 3A-3F



## 4. Finishing of the PROMAFOUR® encasement

### 4.1. Finishing of the joints

Joints and drilled holes can be finished by means of PROMAFOUR®-HT JOINTFILLER and PROMAFOUR®-GLUE 1000.

#### Required material/equipment\*

- PROMAFOUR®-HT JOINTFILLER
- PROMAFOUR®-GLUE 1000
- Glass paper or sanding machine with fine grit
- Spatula or trowel

#### Preparation

- Cover your floor and furniture with a blanket or other protective material to avoid possible damage.
- Create sufficient secure and free workspace around your fire.
- Remove all dust and dirt and make sure that all surfaces are clean and dry.

#### Safety recommendations

Only use safe equipment, wear safety gloves, goggles, shoes and a dust mask.

#### Important recommendations

- A.** Smooth and flat surfaces in filler can be obtained easily by using a spatula.
- B.** Thinner layers (up to 1 mm) need to dry 2 to 3 hours.
- C.** Thicker layers (2 up to 3 mm) need to dry 6 to 8 hours.
- D.** The finished surface can be painted with a silicate coating.

#### Tip

- To obtain a better finish to the drilled holes they can also be pre-milled. The screws can then be fully screwed into the board and the heads can be finished PROMAFOUR®-HT JOINTFILLER.
- We recommend the use of PROMAFOUR®-GLUE 1000, not only to guarantee stronger joints, but also to obtain a better seal in the joints.

#### Installation

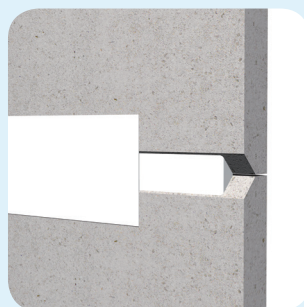
##### A. Boards with square edges

1. Apply a layer of PROMAFOUR®-GLUE 1000 between the adjacent edges of the PROMAFOUR® construction boards and press them together firmly.
2. Sand down possible irregularities with fine glass paper.



##### B. Boards with chamfered edges (demi- V-shape)

1. Apply a layer of PROMAFOUR®-GLUE 1000 between the adjacent edges of the PROMAFOUR® construction boards and press them together firmly.
2. Fill up the V-shape with PROMAFOUR®-HT JOINTFILLER.
3. Smooth down the surface of the boards with another layer of PROMAFOUR®-HT JOINTFILLER.
4. Sand down possible irregularities with fine glass paper.
5. Repeat steps 2, 3 and 4 until you obtain the required quality of finish.



\* For more product information, go to page 3.



## 4.2. Finishing of the angles

### Required material/equipment\*

- PROMAFOUR®-GLUE 1000
- PROMAFOUR®-HT JOINTFILLER
- Glass paper or sanding machine with fine grit
- Mitre box saw

### Preparation

- Cover your floor and furniture with a blanket or other protective material to avoid possible damage.

### Safety recommendations

Only use safe equipment and wear safety goggles.

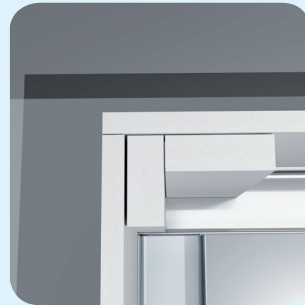
### Tip

- In contrast to gypsum boards, it is not necessary to use metal angle profiles to finish PROMAFOUR® construction boards.

### Installation

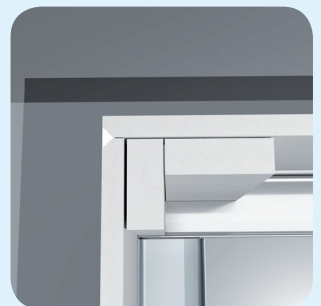
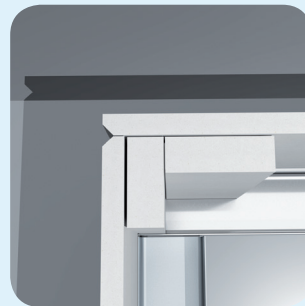
#### A. Boards with square edges

1. Apply a layer of PROMAFOUR®-GLUE 1000 between the adjacent edges of the PROMAFOUR® construction boards and press them together firmly.
2. Smooth down the surface of the boards with another layer of PROMAFOUR®-HT JOINTFILLER.
3. Sand down possible irregularities with fine glass paper.



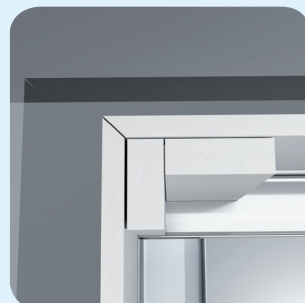
#### B. Boards with chamfered edges (demi- V-shape)

1. Chamfer the corners (demi- V-shape) of the PROMAFOUR® construction boards.
2. Apply a layer of PROMAFOUR®-GLUE 1000 between the adjacent edges of the PROMAFOUR® construction boards and press them together firmly.
3. Fill up the V-shape with PROMAFOUR®-HT JOINTFILLER.
4. Smooth down the surface of the boards and repeat.
5. Sand down possible irregularities with fine glass paper.



#### C. Mitered angles (45° angle)

1. Miter the edges of the board to create the required angle (45° angle).
2. Apply a layer of PROMAFOUR®-GLUE 1000 between the adjacent edges of the PROMAFOUR® construction boards and press them together firmly.
3. Sand down possible irregularities with fine glass paper.



\* For more product information, go to page 3.

## 4.3. Paint and/or wallpaper

### Required material/equipment\*

- PROMAFOUR®-PRIMER
- Quality paint, such as silicate based paint or washable paint
- Glass fibre wallpaper
- Heat resistant wallpaper
- Paint roller and paintbrush

### Preparation

- Cover your floor and furniture with a blanket or other protective material to avoid possible damage.
- Remove all dust and dirt and make sure that all surfaces are clean and dry.

### Safety recommendations

Only use safe equipment, wear safety gloves, goggles, shoes and a dust mask.

### Tip

- Glass fibre gives a very nice and smooth result.
- Your PROMAFOUR® encasement can also be tiled with ceramic tiles or boards. The tiles or boards can simply be fixed to the encasement by means of PROMAFOUR®-GLUE 1000.

### Installation

#### A. Painting

1. In order to obtain the best possible result and to avoid possible cracks in the paint, we recommend a silicate based paint, which can be bought at specialist stores. Contact Promat for more detailed information. Before painting the encasement with silicate paint, first apply a double layer of PROMAFOUR®-PRIMER.

#### B. Wallpaper

1. Your PROMAFOUR® encasement can also be finished with glass fibre or heat resistant wallpaper.

\* For more product information, go to page 3.

## Tables

### Fixing mediums

Fix the PROMAFOUR® construction boards to the vertical PROMAFOUR®-STUDS with staples or screws, depending on the design and the structure of the encasement and the installer's equipment. The cutting, drilling, sanding etc. can be executed with traditional tools. If you prefer using stainless steel screws, you have to pick sharp-pointed screws with a self-milling head.

L = length of screw or staple  
r = distance to the side of the board

A = hart to hart distance  
d = thickness of the board

R = width of the staples

#### Fixation to metal profiles, thickness < 2 mm

Hardened steel phosphate drywall screws with Hi-Lo thread and milling ribs.

L = d + 25 mm

A = 250 mm

r = 15 mm

#### Fixation into the edge of the board and on PROMAFOUR®-STUDS

Staples

R = 10 mm when d ≥ 8 mm

L = 2 to 3 x d (min. 40 mm)

A = 250 mm

A = 100 mm stapled alternating at an angle to the edge r = 8 mm (PROMAFOUR®-STUDS)

*For functional reasons, the boards which are fixed with staples have to have a minimal thickness of 12 mm.*

Hardened steel phosphate drywall screws with Hi-Lo thread and milling ribs.

L = d + 25 mm

A = 250 mm

*For functional reasons, boards which are fixed with screws, have to have a minimal thickness of 15 mm.*

### Construction recommendations

Depending on the type of stove (wood- or gas-fired) and its dimensions, we recommend you to build the PROMAFOUR® encasement as described in the table below and following the installation instructions. When casing a large fire, if you want to attach heavier objects, such as a flat screen or a mirror to the encasement or if you want to tile it, we recommend a PROMAFOUR® construction board with a thickness of 18 mm.

Type of fire	Width of the fire	Thickness of the board	Use of PROMAFOUR®-STUDS and U-profiles	Fixation
Wood-burning stoves	≤ 1.25 m	PROMAFOUR® boards 12 mm	PROMAFOUR®-STUDS 68 x18 mm on corners. Metal U profiles 70 mm on floor and ceiling.	PROMAFOUR®-GLUE 1000 and staples or screws.
Gas fires	≤ 1.25 m	PROMAFOUR® boards 12 mm	Metal profiles or PROMAFOUR®-STUDS 68 x18 mm on corners. Metal U profiles 70 mm on floor and ceiling.	PROMAFOUR®-GLUE 1000 and staples or screws.
Wood-burning stoves or gas fires	≤ 1.25 m	PROMAFOUR® boards 15 mm or 18 mm	No PROMAFOUR®-STUDS required. Metal U profiles 70 mm on floor and ceiling.	PROMAFOUR®-GLUE 1000 and staples or screws.
Wood-burning stoves or gas fires	> 1.25 m	PROMAFOUR® boards 12 mm or 15 mm	PROMAFOUR®-STUDS 68 x18 mm on corners and every 625 mm. Metal U profiles 70 mm on floor and ceiling.	PROMAFOUR® GLUE 1000 and staples or screws.
Wood-burning stoves	> 1.25 m	PROMAFOUR® boards 18 mm	PROMAFOUR®-STUDS 68 x18 mm on corners and every 830 mm. Metal U profiles 70 mm on floor and ceiling.	PROMAFOUR®-GLUE 1000 and staples or screws.

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