

# Procor® 10/20

Trowel applied, two component liquid waterproofing membrane for sub-structure walls.

## Description

Procor® is a two component, synthetic rubber, liquid waterproofing membrane. It cures to form a resilient, fully bonded elastomeric sheet. Procor will protect structures against water and water vapour ingress.

### Product Range

| Product    | Application   |
|------------|---|
| Procor® 10 | Trowelling grade for horizontal surfaces. Also recommended for vertical application at temperatures less than 12°C. |
| Procor® 20 | Trowelling grade for vertical surfaces at application temperatures above 12°C.                                      |

## Principal Applications

New and remedial waterproofing of:

- Podium decks
- Terraces
- Inverted roofs
- Basements
- Retaining walls
- Lift pits
- Floors
- Wet rooms
- Superstructures - vapour barrier
- Service reservoir roofs

## Compatibility/Adhesion

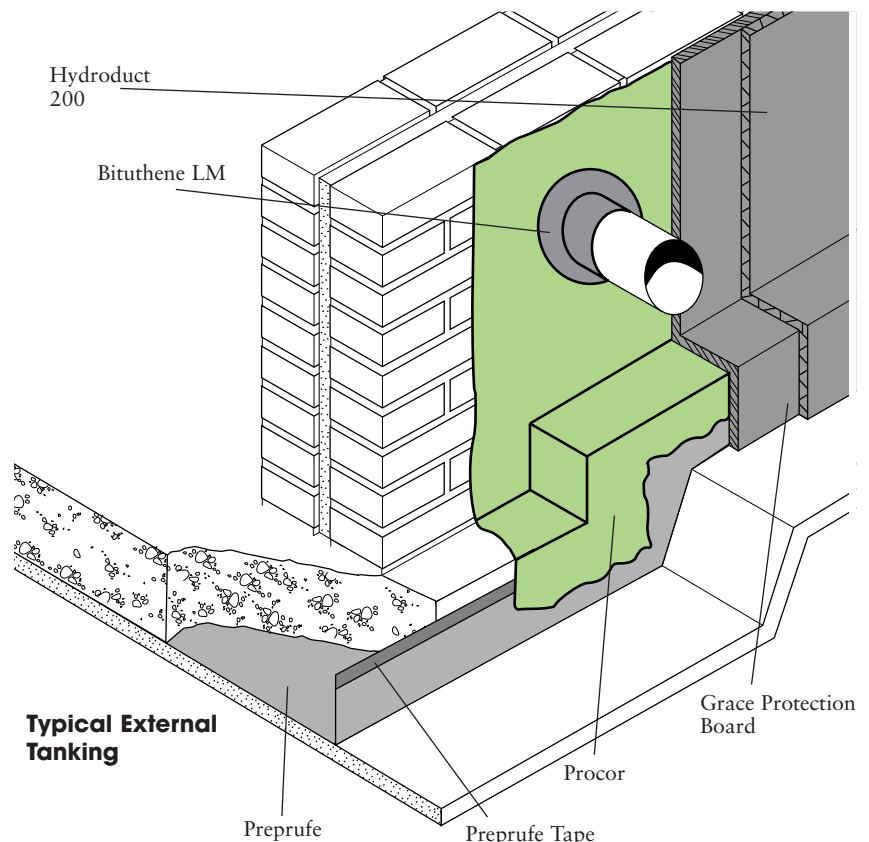
Procor is designed for use with cementitious and masonry substrates.

For compatibility/adhesion on other substrates, check with Grace.

Refer to separate data sheets for Procor® 75, Procor® Deck Systems 2 and 4R

## Advantages

- **Liquid applied** - particularly suitable for irregular profiles.
- **Fully bonded** - water cannot track between membrane and substrate.
- **Elastomeric** - accommodates structural movements and bridges concrete shrinkage cracks.
- **Seamless** - continuous waterproofing integrity with easy detailing.
- **Primerless** - applied directly to substrate.
- **Damp surface tolerant** - can be applied to green concrete and damp to touch surfaces.
- **Safety** - non hazardous product with no harmful solvents.
- **Cold Applied** - eliminates fire hazard during application.
- **Low Odour**



## Limitations

- Procor® should not be used as a permanently exposed waterproof membrane.
- Maximum exposure of protection boards 30 days.
- Protection boards are designed to provide protection against damage during installation of finishes only. If protection boards are to be regularly trafficked by site vehicles use additional protection measures.
- Protection boards should always be fully loaded by backfill, screeds, hard or soft landscaping, tiles, or similar.
- Do not use paving slab supports directly off of protection boards.

## Application

### Application Temperature Range

Procor can be applied when the ambient temperature is between +5°C and +35°C.

### Storage

Store under cover in original sealed containers at ambient temperatures of between +5°C and +35°C. Shelf life is 9 months in unopened containers.

### Pre-conditioning

Both parts A and B should be pre-conditioned to bring the temperature to +10°C minimum prior to mixing. Part B will be permanently damaged if allowed to freeze.

### Tools Required

- Stiff broom.
- Steel plastering trowel.
- Wet film thickness gauge.
- Coarse sanding disc/sander.
- Stanley knife.

### Surface Preparation

All cementitious surfaces should be wood float or shutter finish, sound, free from large voids and frost. Irregularities greater than 3mm should be removed or filled. Masonry walls should be flush pointed or bagged.

All substrates must be air lanced or swept with a stiff broom to remove dirt, dust and loose stones. Procor liquid waterproofing membrane can be applied to damp to touch substrates but all ponded and surface water must be removed.

Poor quality cementitious surfaces; eg. powdery friable or excessive laitance, may require shot blasting or pressure hosing, to provide a sound dense surface. Certain substrates may require treatment with Procor Surface Sealer, an acrylic based sealing solution. When in doubt contact Grace Technical Services.

## Mixing

Procor liquid waterproofing membrane is supplied as a two component product and can be mixed manually.

Use a 19mm x 100mm piece of timber or similar.

Pre mix Part A for 30 seconds then add Part B. Stir slowly in a folding motion until an homogeneous colour, free of streaks is achieved. Scrape unmixed material from the side of the bucket and mix in.

**Overmixing will cause excessive thickening.**

### CAUTION:

**Do not leave mixed material in the bucket. Mixed Procor left in the bucket will reach temperatures above 100°C and could cause burns.**

### Vertical Application

Procor 20 is recommended for vertical surfaces in excess of 300mm height.

At application temperatures below 12°C Procor 10 is recommended as an alternative to Procor 20.

Application thickness is controlled by marking out an area and spot checking

thickness with a wet film thickness gauge as work proceeds. The liquid membrane is best applied using a pour and trowel technique.

Cover the top half of the wall first. Use a plasterers hawk or pour Procor directly from the bucket onto the wall.

For the bottom half of the wall, pour the Procor onto the wall directly from the bucket or pour onto a clean area at the bottom of the wall and trowel upwards. Swipe and trowel marks are acceptable as long as minimum thickness is maintained. Do not overwork the material after it has been applied to the wall.

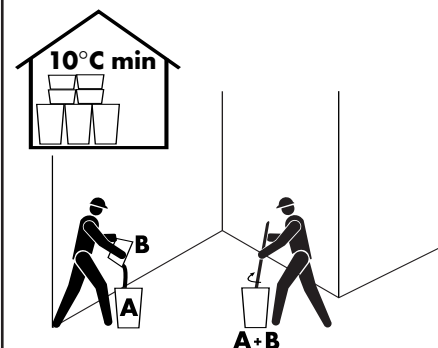
### Horizontal Application

Procor 10 is recommended for horizontal applications and upstands up to 300mm.

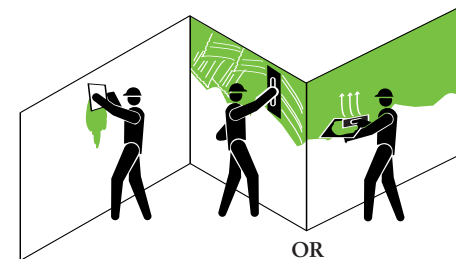
Procor 10 is best applied using a pour and spread technique, using a steel float or a flexible spreading tool. A rubber squeegee can also be used. Swipe and trowel marks are acceptable as long as the minimum thickness is maintained. Plan the application sequence so that there is no need to walk back onto the membrane. The membrane can typically accept foot traffic after 16-24 hours at 20°C.

## Application of Procor® 20

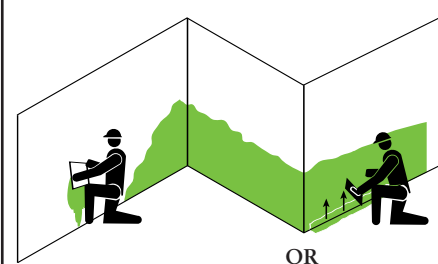
### 1. Mixing



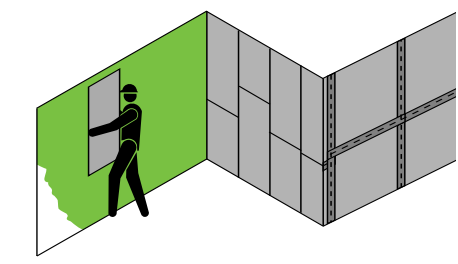
### 2. Application to top of wall



### 3. Application to bottom of wall



### 4. Protection Boards 30 - 180 mins



## Laps

Fresh Procor can be lapped on to dry, clean, previously applied Procor up to seven days old. Minimum lap 100 mm. Where Procor is more than seven days old, lightly abrade with a coarse sanding disc, wire brush or similar before lapping with fresh Procor or other Grace waterproofing.

Minimum lap 100 mm.

## Detailing

### Pipe Entries

Apply Procor to the wall face up to the pipe, allow to cure. Apply a 2.0 mm thick layer of Bituthene® LM continuously around and onto the pipe and spread a minimum 100mm onto the cured Procor.

### Protection

Procor should be protected horizontally with Grace Protection Boards 2 mm thick as soon as it has cured sufficiently to accept foot traffic. Protect vertically applied Procor with Grace Protection Boards 2mm thick. Either:

- 1) Apply the boards directly to the Procor whilst it is still tacky. (4-6 hours at 20°C)
- 2) Leave the Procor until it is tack free, apply 'dabs' of Procor to the corners and centre of the boards, leave for 1-2 hours and then fix the boards. Temporary propping may be necessary until the bond develops.

Tape all joints in Grace Protection Boards with Bitutape™ 4000 70 mm wide.

### Hot Asphalt Finishes

Procor is suitable for use beneath hot asphalt finishes. Use Servipak® 3 mm protection boards, fully bonded in Procor with Armourtape at all joints between boards.

### Floor Screeds

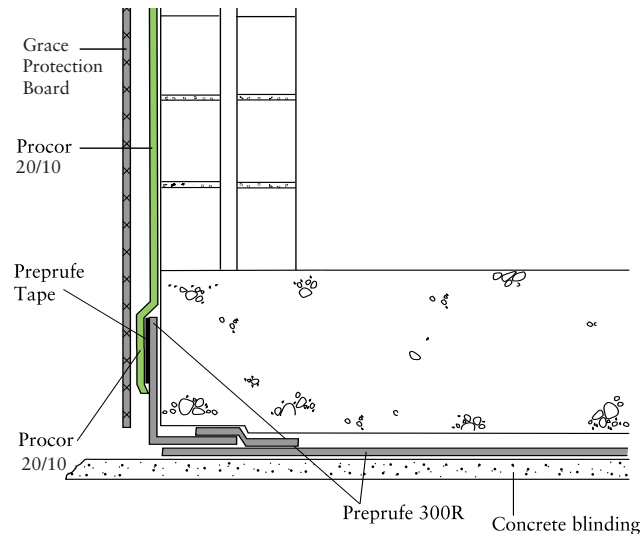
Alternatively Procor can be protected internally with a minimum 65 mm bonded sand cement screed. Procor should be covered with sharp sand whilst tacky. Remove all unbonded sand with a soft broom before applying screed.

If unbonded screeds are preferred use protection boards and a minimum 75 mm thick screed.

### Cleaning Tools

Clean tools with white spirit or Serviband™ Cleaner.

## Typical Detail



## External Tanking to Masonry Sub Structure

Contact Grace for further typical details

## Supply

## NBS Specification Clause

Refer to Clause J30/J31 130.

## Health and Safety

For Procor, Bituthene LM and Servijoint One DW read the product label and Material Safety Data Sheet (MSDS) before use. Users must comply with all risk and safety phrases. MSDS's can be obtained from Grace Construction Products or from our web site at [www.graceconstruction.com](http://www.graceconstruction.com).

There is no legal requirement for a Material Safety Data Sheet for Grace Protection Boards, Servipak 3, Bitutape, Hydroduct 200 or Preprufe Tape. For health and safety questions on these products please contact Grace Construction Products Limited.

| Product                      | Unit of Sale                              |
|------------------------------|---|
| Procor® 20                   | 7.5 litre                                 |
| Procor® 10 (Summer Pack)     | 20 litre                                  |
| Procor® 10 (Winter Pack)     | 7.5 litre                                 |
| <b>Ancillary Products</b>    |   |
| Grace® Protection Board      | 1.0 m x 2.0 m and 20 m <sup>2</sup> rolls |
| Servipak® 3 protection board | 1.0 m x 2.0 m                             |
| Armourtape™                  | 75 mm x 10 m roll                         |
| Bitutape™ 4000               | 70 mm x 20 m roll                         |
| Hydroduct® 200               |   |
| Preprufe® Tape               | 100 mm x 15 m roll                        |
| Bituthene® LM                | 5.7 litre                                 |
| Servijoint® One DW           | 310 ml                                    |
| Adcor® 500S                  | 6 x 5 m rolls                             |

## Procor Physical Properties

| Property  | Typical Value                            | Test Method |
|---|--|-------------|
| Resistance to hydrostatic head over 3mm post formed crack | 20 m                                     | ASTM D5385  |
| Peel adhesion to concrete                                 | 0.9 N/mm                                 | ASTM D903   |
| Peel adhesion to self                                     | 0.9 N/mm                                 | ASTM D903   |
| Elongation  | 500%                                     | ASTM D412   |
| Pliability, 180° bend over 25mm mandrel at -30°C          | unaffected                               | ASTM D1970  |
| Pot life for Procor® 10/20                                | 30 minutes at 20°C<br>60 minutes at 10°C |             |
| Colour (component A)                                      | terracotta                               |             |
| Colour (component B)                                      | white                                    |             |

## Theoretical Coverage Rates

| Product    | Thickness (mm) | Substrate                             | m <sup>2</sup> /unit |
|------------|----------------|---------------------------------------|----------------------|
| Procor® 20 | 1.5            | Wood float or shutter finish concrete | 4.5                  |
| Procor® 20 | 1.5            | Flush pointed masonry                 | 3.5 - 4.5            |
| Procor® 10 | 2.0            | Wood float or shutter finish concrete | 10                   |

NB. Irregular and porous substrates will reduce these typical coverage rates

 Visit our web site at [www.graceconstruction.com](http://www.graceconstruction.com)

Grace Construction Products Ltd, Ajax Avenue, Slough, Berkshire SL1 4BH United Kingdom Tel +44 (0)1753 692929 Fax +44 (0)1753 691623

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