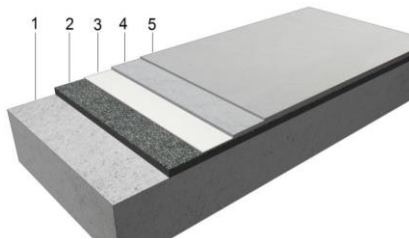


## Description of product

The Caltech FCP System consists of reinforced hybrid polymer resin, cold applied on site by hand lay giving a seamless, joint-free construction. The system should be applied in accordance with information provided by Alumasc Building Products Ltd. Caltech FCP BBA Approved liquid applied roof waterproofing system.

## Advantages & key features

- A unique flexible hybrid polymer waterproofing system with the optimum combination of flexibility and robustness.
- Rapid Cure technology for extremely fast application with cure times as low as 30mins.
- Ability to be applied direct to existing roof coverings allows for economical refurbishments with minimum disruption.
- The Caltech FCP Warm Roof System is unrivalled in terms of efficiency and performance with no need for over-decking, carrier layers or mechanical fixings.
- Carries Alumasc's trusted Accredited System Guarantee.
- Fire performance: Classified as BROOF(t4), the top rating achievable for a flat roof system and designating Caltech FCP as unrestricted under the national Requirements.
- BBA approved.
- Standard colours are Dark Grey and Light Grey (see our Colours & Finishes page for more options and further details).



## Description

Caltech FCP is a reinforced hybrid polymer resin, cold applied on site by hand lay giving a seamless, joint-free construction.

1. Existing construction.
2. Existing substrate (prepared in accordance with the Alumasc Roofing manual).
3. Primer (as required).
4. 1st Coat Caltech FCP (with Caltech FCP 225gsm Glass matting reinforcement).
5. 2nd coat Caltech FCP.

## Specifying the system

Alumasc offer a free specification service. It is strongly recommended that Alumasc Technical Services are contacted to provide specific advice on any project. Where necessary a site survey will be arranged and a bespoke specification will be produced. Please contact us on 01744 648400 to discuss.

## Preparation

All surfaces to be coated (including any coatings, repairs or test areas) are to be inspected and made good where required to provide a sound substrate for the new waterproofing system.

All areas must be clean dry and free from contaminants such as dust, oil, grease, organic growth, sand and free from corrosion, laitance etc.

Specific guidance should be sought for any unidentified coatings such as solar reflective paint or any unidentified single ply membranes. Adhesion tests may be required.

Any unsound, loose or flaking material should be removed by mechanical means back to a sound surface.

Areas where the insulation or underlying substrate has collapsed or is defective or decayed, should be cut out, repaired and reinstated on a like-for-like basis to provide a good solid base for the coating system.

For full guidance on preparation of substrates please refer to the Alumasc manual or contact Alumasc Technical Services for advice on 01744 648400.

## Equipment

Apply using a medium pile roller or brush.

## Temperature

The system may be applied between 5°C and 30°C. The system must not be applied in damp or cold conditions which could cause surface condensation; during frost or if there is a risk of rain.

## Priming

The requirement for a primer will be dependent on the substrate. It is recommended Alumasc Technical Services are contacted for advice on 01744 648400.

### Caltech FCP Universal Primer (Catalyst required)

Suitable for concrete, timber, masonry, fibre cement sheets, existing bituminous roofing, mastic asphalt, liquid coatings.

Apply one coat at an approximate coverage rate of 4-6m<sup>2</sup>/L, by brush or short pile roller.

**Caltech METprime (Two-Part Primer)**

Suitable for all types of degreased metal. Very smooth or glossy areas should be lightly abraded to provide a key.

Apply one coat at an approximate coverage rate of 15m<sup>2</sup>/L, by brush or short pile roller.

Ensure all exposed metal panel edges, cut ends, bolt heads and sharp angles etc. are fully primed. Not for use on heavily corroded metal.

**Euroroof PVC Primer**

Suitable for PVC Single-Ply membranes.

Apply one coat at an approximate coverage rate of 0.1 L/m<sup>2</sup>, by brush or short pile roller.

**Local reinforcements/detailing**

Caltech FCP may be applied to suitable existing detailing subject to preparation and (where necessary) priming.

A range of Pre-formed Alumasc GRP trims may be used. All angles shall be mitred and all joints should be reinforced with Caltech FCP Resin and 2 layers of Caltech FCP 225gsm glass matting.

Deck Joint Guidance:

All Plywood / OSB3 (TG4) Decks – Local reinforcement will not be required to board joints provided they are correctly installed. Apply Caltech Preparation layer to primed board before applying the Caltech FCP system.

Insulation board Joint Guidance:

Apply Caltech Preparation layer to primed board before applying the Caltech FCP coating system

All detailing should be locally reinforced with Caltech Resin & Reinforcement prior to application of main system.

**Catalyst**

The amount of catalyst added can be varied according to the temperature range. Never use more or less than the minimum and maximum amounts stated under any circumstances.

Catalyst addition chart:

Always stir thoroughly before use. Never use less than 2 or more than 4 scoops per litre:

| Temperature | Catalyst Addition Rate | Scoops per litre |
|-------------|------------------------|------------------|
| 3-10°C*     | 4%                     | 4 scoops         |
| 10-15°C     | 3%                     | 3 scoops         |
| 15-20°C     | 2-3%                   | 2-3 scoops       |
| 20-30°C     | 2%                     | 2 scoops         |

**Product accelerator**

Product accelerators may be required for Winter / low temperature applications. Product accelerators speed up cure and allow product to be laid at lower temperatures than standard product (down as low as 1°C deck temperature). The accelerators are contained in an additive that can be added to standard resin products on site prior to use. They should be added only as temperature ranges permit.

IMPORTANT: Accelerators are not designed as a replacement for the catalyst. After the accelerator has been added you will need to add the powder catalyst (at the maximum rate of 4% in cold conditions) before you use the product.

**Main system/coverage rates**

| 1st Coat  | 2nd Coat                  |
|---|---------------------------|
| Smooth Surfaces:<br>0.9-1.2 Litre/m <sup>2</sup> (with Caltech FCP 225 GFM)               | 0.5 litres/m <sup>2</sup> |
| Rough / De-Chipped Surfaces:<br>1.2-1.7 Litre / m <sup>2</sup> (with Caltech FCP 225 GFM) |                           |

Important: All coverage rates are indicative only and it is the contractors' responsibility to ascertain the exact coverage rates on site. Coverage will always vary depending on substrate and the environment. Additional materials over and above this will be required to any areas that require local reinforcements, detailing etc.

**Cure time**

Typically 45mins - 1 hr  
 (Incorporating low temperature additive and catalyst as required).

**Cleaning**

All tools should be cleaned with Euroroof Solvent immediately after use.

**Packaging & shelf life**

|                              |                        |
|------------------------------|------------------------|
| Caltech FCP Resin            | 15 litre tin           |
| Caltech FCP Catalyst         | 1kg pack               |
| Caltech FCP Accelerator      | 0.5 litre tin          |
| Caltech FCP Universal Primer | 5.0 litre tin          |
| Caltech FCP 225 GFM          | 50m <sup>2</sup> rolls |

Shelf life 12 Months for Caltech FCP. This is based on unopened containers stored in dry, frost-free conditions away from heat.

**Health & Safety** data sheets are available for download from [www.alumascroofing.com](http://www.alumascroofing.com) for all our products.