

# Cemprotec GFM 225

## Special Glass Fibre Reinforcement for Flexcrete Membranes

### Product Overview

**Random weave glass fibre mat comprising chopped strands of e-glass fibres.**

### Description

**CEMPROTEC GFM 225** is a specially formulated random weave mat comprising chopped strands of e-glass fibres. It is silane coated for long-term stability and emulsion-bound to give ultra-fast wetting out properties. Unlike traditional glass fibre reinforcements, the hybrid technology enables **CEMPROTEC GFM 225** to be quickly and effectively moulded around the most complex roof geometry, easily accommodating upstands and sealing around other protrusions. On facades and bridge parapets requiring reinforcement, it produces an attractive, random weave effect which is aesthetically pleasing.

**CEMPROTEC GFM 225** is a 225g/m<sup>2</sup> dual layer premium grade reinforcement for ultimate durability and longevity in the most demanding exposed conditions. Due to manufacturing tolerances, weights are approximate.

### Uses

**CEMPROTEC GFM 225** is used for overall reinforcement of the Flexcrete range of fluid applied membranes. It is particularly suited for the reinforcement of **ROOFDEX HB** used in pitched and flat roof waterproofing. It greatly enhances tensile strength and tear resistance thereby increasing cohesive strength of the composite membrane to accommodate cracks in roofing substrates. It may also be used to reinforce **BIODEX HB** or **MONODEX SMOOTH** in situations where a multi-crazed or cracked substrate must be treated, or where there is a need to provide an additional defence against mechanical damage in high traffic environments.

### Advantages

- Enhances tensile strength and tear resistance of fluid applied membranes.
- Allows the formation of a seamless waterproofing system with the strength of sheet waterproofing.
- Provides resistance to thermal movement in fluid applied roofing applications.
- Very easy to mould around difficult contours to provide a fully armoured, seamless defence against weather.
- Simple application, easy to embed even if folds are necessary because of surface undulations.
- Single source solution with proven performance in widely varying climatic conditions.

### Application Instructions

Please consult the relevant Data Sheet and Application Guide for details on substrate preparation, priming and application.

### Preparation

Fill live cracks, construction joints and joints between dissimilar materials with a suitable exterior grade flexible filler. When treating expansion joints, apply masking tape (at least 25mm wide) centred over the joint.

### Application

Pre-cut the **CEMPROTEC GFM 225** to the required size or shape using scissors. Detail work should be carried out first by treating upstands and around any fixtures, fittings or penetrations through the substrate prior to treating the main substrate.

Apply the membrane to the localised detail using a brush or roller at the minimum thickness given in the table below. Lay the pre-cut sections of **CEMPROTEC GFM 225** into the wet material immediately and work it into the coating using a brush or roller. The fibres will soon start to wet out and disperse. Smooth down any proud fibres with a loaded short pile mohair roller.

Allow to dry thoroughly overnight before treating main areas. Apply the membrane at the minimum thickness given in the table below to the main areas by brush, roller or airless spray, overlapping onto any detail work by 25mm. Lay the pre-cut sections of **CEMPROTEC GFM 225** into the wet material as above.

**CEMPROTEC GFM 225** should normally be embedded using a short pile mohair roller, although for rougher irregular substrates, a sheepskin roller may be used as this will give better contact with surface contours. Allow to dry thoroughly.

Apply a full overall application of the appropriate Flexcrete membrane in accordance with the technical literature. Ensure reinforcement is fully encapsulated.

### Shelf Life

- Indefinite when stored in dry conditions in original packaging.

### Health and Safety

- Safety Data Sheets are available on request.

### Application Top Tips

1. Rough, porous or irregular substrates will reduce coverage.
2. Regularly check application thickness with a wet film gauge.
3. Use sufficient pressure to draw the Flexcrete fluid applied membrane through the unwoven texture of the reinforcement and uniformly embed.
4. When dealing with complex details, a vigorous stippling or tamping technique will ensure complete contact with the substrate.
5. Use a short pile mohair roller to smooth down proud fibres.
6. Ensure that rollers are kept fully charged with material to avoid pulling up fibres.
7. Successive coats should ideally be applied in different colours, acting as a visual aid in achieving the necessary coverage rates.
8. Curing/drying time is temperature dependent. As a guide, the coating will be touch dry in approximately 1-8 hours in hot conditions (>30°C.), 2-12 hours at 20°C. and 4-24 hours at lowest temperature (>10°C.).
9. The use of a dark colour for embedment can reduce drying time in cooler conditions.
10. Product is through-cured in 2-24 hours dependent on temperature.
11. Cold Weather Working (See separate guide).

The information herein is correct to the best of our knowledge, but it does not necessarily refer to the particular requirements of the customer. If the customer has any particular requirements it should make them known in writing to Flexcrete Technologies Limited, and obtain further advice accordingly.

### Technical Data

Property	CEMPROTEC GFM 225
Typical Area Weight ISO3374:2000	225g/m <sup>2</sup>
Loss on Ignition ISO1887:1995	5.4% (average)
Moisture Content ISO3344:1997	≤ 0.2%
Breakage Strength ISO3342:2011	≥ 30N

### Mechanical Characteristics

Tensile Properties to BS 903-A2: 1995 when used in **ROOFDEX HB (@ 1.75 litres/m<sup>2</sup>)**:

Property	CEMPROTEC GFM 225
DFT	900µm
Elongation	5%
Tensile Strength	16.60MPa
Result	No indentation, no damage to coating system.

### Appearance

