



ACRYPOL
PROFESSIONAL RANGE

Flexiglass®

GRP multi surface overlay
System

Installation Guide

10
YEAR

WARRANTY

20
YEAR

WARRANTY


**STYRENE
FREE**



Flexiglass®

*GRP multi surface overlay
System*

OVERVIEW

Acrypol Flexiglass® is a versatile grp resin roof system designed for new and existing roofs.

Flexiglass® can be applied to almost any roof surface such as felt, asphalt, concrete, metal and OSB3 TG board as a new roof covering.

Flexiglass® is a totally seamless highly flexible roof system ideal for any sized job.



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BENEFITS



Terms and conditions apply

- Avoids stripping the existing roof, reducing costs with no need for skips and extra labour
- Ease of application and with all the benefits that come with a GRP system

PRIMARY COMPONENTS

Flexiglass 20kg
G20/FLEXITC20

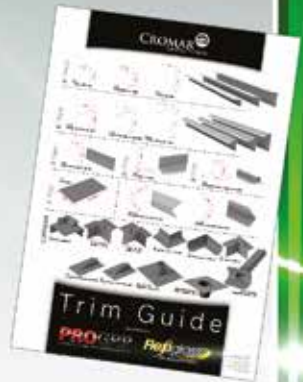


Flexiglass
Encapsulating Primer 5kg
G20/FLEXIPRIMER5



Flexiglass Catalyst
5kg
G20FLEXICAT5

Chopped Strand Matting 225gsm
 35KG GMAT225
 16.5KG GMAT/225/16.5
 6.75KG GMAT/225/6.75



GRP Edge Trims
Pre-formed in
3m lengths



STORAGE.

Protect the resins, primer and catalyst from extremes in temperature, store the resin at approximately 15°C for 24-48 hours before installation. In high temperatures keep the tins out of direct sunlight prior to use. In colder conditions keep the tins as warm as possible.

ANCILLARY COMPONENTS



Acetone
GA/1, GA/5, GA25
For cleaning trims, and when required,
preparation of the Flexiglass surface.



Trim adhesive
MPHM/031
For ensuring correct fixing of trims.

Flexiglass SEAM TAPE
GB/ROLL
For bandaging trim to
roof cracks, or splits in
roofing material.

APPLICATION TOOLS



Application rollers (Frame and sleeve)
GROLL/3, GROLL/7, GROLL/9
3", 7" And 9" wide for applying primer and
Flexiglass resins
(Replacement sleeves available)



Laminating brushes
GPB/2, GPB/3, GPB/4
2" 3" And 4" wide for application of primer,
and moulding Flexiglass to shape in difficult
to access areas. Also useful for Flexiglass
detailing such as internal joints and corners.



Gloves
GGLOVES
To protect hands throughout
the application process.



Mixing buckets
SEMPY/10
For measuring primer and
Acrypol-Flexiglass .



Mixer paddle
GMIXPAD/LRG

Make sure the roof is free from defects and any remedial work is carried out before the resin work starts. It can also be advantageous to take a core sample to ensure the substrate is sound. If moisture is found you may want to fit adequate ventilation. Where the substrate has collapsed or decayed, this area should be removed and rebuilt providing a solid base ready for the Flexiglass® system. Where fungi, algae and lichens have accumulated, remove before work commences. We recommend Alphachem fungicidal wash MFW/501. Ensure the roof surface is clean and dry before applying Flexiglass®.

As an overlay system the roof falls will not alter so if ponding water exists on the roof it will remain a ponded area after application, which can be addressed during the assessment.

Core testing; why? when?

A core test should be carried out prior to any overlay application to ensure the roof is in a sound and dry structural condition. Several 25mm core samples can be taken directly from the roof. Inspect the core samples for any signs of damp and/or deterioration. Any evidence of rot, damp or deterioration should be removed and replaced before starting the job.

New roof system

We recommend you use a 18mm OSB3 TG board. These boards are tongue and grooved on all four edges (2400mm x 600mm) and ideal for the Flexiglass® new roof system. Other none TG Boards can be used, but additional reinforcements on the joints would be required using Flexiglass® reinforcement bandage. Lay the boards with fixings approximately 200mm apart making sure you catch the joists. Use a minimum of 63mm screws or ring shanked nails to ensure a sound firm fixing. Stagger the boards and make sure you push them tightly together.

Leave a minimum 25mm expansion gap at all abutments such as walls, chimneys, roof lights ext. All roofs over 50mtr sq or 10mtr in length will need an expansion joint, you will need to leave a 25mm gap in the OSB3 at this expansion point. Boards will need to be made waterproof as soon as possible to avoid any risk of moisture on the roof. It is not recommended you fit the OSB3 the day before as even on warmer days condensation can result in damp boards.

Felt Roof

Any areas of badly damaged felt will need to be removed, all loose felt should be re bonded, blisters star cut and bonded back down (Cromar® Trowel Mastic ATM/501). All remedial work should be allowed to dry before Flexiglass® primer is applied.

Asphalt Roofs

Blow holes in the Asphalt should be smoothed out or removed, level the surface out as much as possible. Cracks and splits should be cleaned and filled (Trowel Mastic ATM/501). Always allow repairs to cure before Flexiglass® primer is applied.

GRP

Remove any flakes /peeling of the topcoat, this can be done using a belt sander or grinder. If the roof is over a year old, clean and of sound structure, you can move straight onto the primer stage. If under 12 months old, you will need to remove the majority of the topcoat before applying Flexiglass® Primer making sure the roof is clean and free from dust.

TRAINING

Full product training is available nationally via our distributor network or available at Cromar® HQ purpose built training centre.

This will include:

- Hands on training.
- Detailed explanation for the system and application.
- Completion of the training course certified status.
- Access to after training technical support and the 10 & 20 year warranties.
- See website for more comprehensive details and to book.

www.cromar.uk.com/training

ADHESION TEST WHY? WHEN?

It would be advisable to carry out an adhesion test irrespective of the surface to be covered.

This would test the adhesion of the primer to the substrate.

APPLICATION

Primer

As the addition of a catalyst is required, you should stir the primer using a paddle mix and drill before adding the catalyst. This should be stirred for approximately 2 minutes, decant the primer into a bucket, add catalyst (Please see catalyst guide) and mix using the paddle. Once mixed apply to the roof at a coverage of approximately 200-500g per square meter dependent on the surface to be covered.

The primer should be applied using a roller or brush to ensure an even coverage. Where previous primer has dried you will need to overlap new primer by at least 75mm. Primer drying times will differ depending on the temperature. Once the primer is dry the Flexiglass® resin can be applied no later than 48 hours after priming. This will help ensure maximum adhesion.





Primer & Resin	Catalyst			
	5% 5°C 10°C	4% 10°C 15°C	3% 15°C 20°C	2% 20°C 25°C
1kg	2	2	1	1
2.5kg	4	3	2	2
5kg	8	7	5	3
10kg	16	13	10	6

Required for primer & Flexiglass® application

10 Year Application

You will require Flexiglass® resin and the 225-chop strand matting. Inspect the primer making sure all areas to be Flexiglassed are primed. As with the primer, the resin will need a good mix with the paddle, again approx. 2 Minutes. Once mixed add catalyst, stir well and apply to the roof at a coverage of approximately 800-1000g per square meter depending on the surface to be covered. Bed the 225 chop-strand matting into the Flexiglass® resin and use the same roller to help bed the matting correctly. Once you are happy the matting is bedded in the Flexiglass® and still wet add a second layer of resin over the matted area at a rate of 400-500g per square meter the matting should be completely covered when finished. Overlap the next run of matting by 75-100mm and repeat the process. Inspect the roof at all times to make sure there are no defects.



20 Year Application

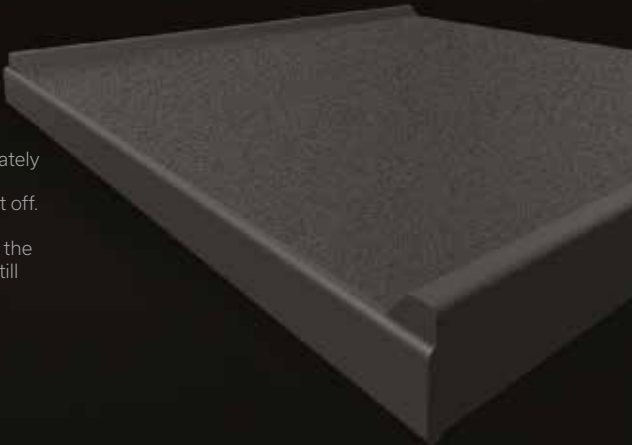
Check the roof for any debris or defects.

Once clean apply a second coat of Flexiglass® resin at a rate of 500g per meter square. This should be applied within 48 hours of the 10 years application.

The Flexiglass® resin will need a good mix with the paddle, again for approximately 2 minutes. Add catalyst, stir well and apply. Allow to dry and inspect.



ANTI-SLIP, HOW AND WHEN TO USE



Option 1- Use Scan Grit at the 20 year application stage while the Flexiglass® is still wet, at approximately 100g per square meter. Once the desired area is covered and dry simply brush the excess Scan Grit off.

Option 2 - Use the Acrypol Quartzdek granules at the 20 year application stage while the Flexiglass® is still wet, at a rate of 100g per square meter. Once the desired area is covered and dry simply brush the excess Acrypol Quartzdek granules off.

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TROUBLE SHOOTING

QUESTION | CAUSE | ANSWER

Q. Rapid cure of resin on application.

- C.** Substrate or air temperature are outside of recommended guidelines.
- A.** Check catalyst and temperature chart, also reduce amount of resin being mixed.

Q. Under cure or resin.

- C.** Catalyst and/or temperature level too low.
- A.** Check catalyst and temperature chart, and adjust mix.

Q. De-lamination between substrate or laminate (1).

- C.** Encapsulating primer not used prior to Flexiglass resin.
- A.** Must use primer to ensure good bond.

Q. De-lamination between substrate or laminate (2).

- C.** Substrates loose debris not removed, or a wet / damp surface.
- A.** Remove loose debris and make sure surface is dry.

Q. Pitting of the membrane.

- C.** The resin has been subject to rain before it has cured.
- A.** If pitting is minor and the surface has cured, it can be over coated.

Q. Pitting of first resin and laminate, or looks dry with pinholes.

- C.** Not enough resin used to wet out the 225gsm glass fibre.
- A.** Repeat process using the correct resin to glass ratio, 800/1000g/m²

Q. Second coat flecking or peeling away from the first application.

- C.** First coat has got wet or damp prior to second coat application.
- A.** Scrape away second coat, abrade, use acetone wipe and relay the complete system.

Q. Cracking or peeling of resin (1).

- C.** Used as a flow coat only with no glass.
- A.** Must be used with glass 225gsm with even resin distribution either side. Scrape off loose resin and abrade, then use full system.

Q. Cracking or peeling of resin (2).

- C.** Second coat applied outside of recommended maximum delay time, i.e. over 7days.
- A.** Scrape away second coat, abrade, use acetone wipe and relay the complete system.

Q. Resin separation, patchy.

- C.** Insufficient mixing prior to application.
- A.** Make sure resin is properly mixed prior to use.

Q. Discolouration of primer.

- C.** Bitumen leaching due to lack of primer.

- A.** Performance of primer is not affected, if aesthetics are a problem then re-apply once cured.

Q. Resin splashes on adjacent surfaces.

- C.** Poor preparation. Tape high risk area that could get splashed, use a splash guard on the roller.
- A.** Use acetone wipes to clear splashes of resin immediately, if cured then scrape off, taking care not to cause further damage.



Primer			
Roof Area	Smooth	Medium	Rough
1m ²	200g	300g	500g
5m ²	1kg	1.5kg	2.5kg
10m ²	2kg	3kg	5kg
15m ²	3kg	4.5kg	7.5kg
20m ²	4kg	6kg	10kg
25m ²	5kg	7.5kg	12.5kg
30m ²	6kg	9kg	15kg
40m ²	8kg	12kg	20kg
50m ²	10kg	15kg	25kg
70m ²	14kg	21kg	35kg
100m ²	20kg	30kg	50kg

Resin			
Roof Area	10 Year	20 Year	CSM Roll Size
1m ²	1.5kg	2kg	6.75kg
5m ²	7.5kg	10kg	6.75kg
10m ²	15kg	20kg	6.75kg
15m ²	22.5kg	30kg	6.75kg
20m ²	20kg	40kg	6.75kg
25m ²	37.5kg	50kg	6.75kg
30m ²	45kg	60kg	16.5kg
40m ²	60kg	80kg	16.5kg
50m ²	75kg	100kg	16.5kg
70m ²	105kg	140kg	35kg
100m ²	150kg	200kg	35kg

Primer & Resin	Catalyst			
	5% 5°C 10°C Pumps 30g Asphalt	4% 10°C 15°C Pumps 30g Asphalt	3% 15°C 20°C Pumps 30g Asphalt	2% 20°C 25°C Pumps 30g Asphalt
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