STRONGHOLD

GRP FLAT ROOFING SYSTEMS

KEEPING OUT THE ELEMENTS
STRONGHOLDGRP.CQ.UK



25 YEAR GUARANTEE



F.AA FIRE CERTIFIED

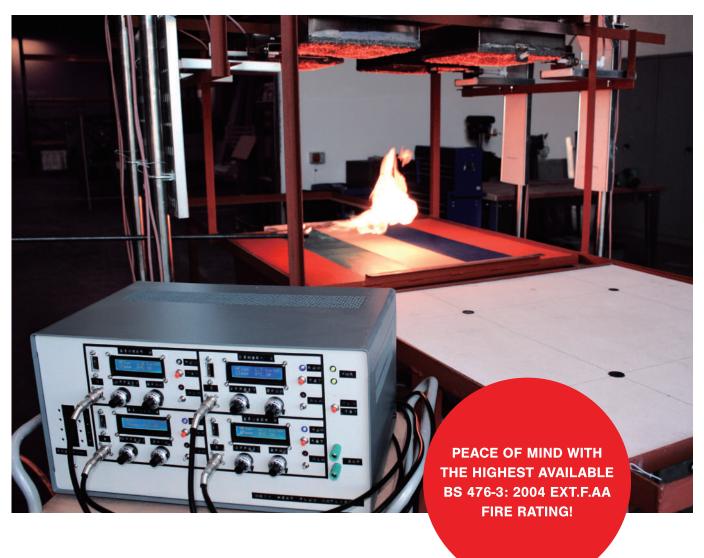


FROST & HEAT RESISTANT



FOOT TRAFFIC APPROVED





WHY CHOOSE **STRONGHOLD?**

The Glass Fibre Roofing Company started as a roofing contractor in 1998. GRP was rarely used for flat roofing when we started, although it was always suitable. What better roof covering than an upside-down boat?

Eventually, with improvements in manufacturing GRP became a more viable roofing option, which would go on to replace traditional felt roofing systems as a longer lasting, better looking alternative.

In 2001 we launched our Stronghold GRP Roofing System. Our aim was to set the standards for components, tools, and work methods. Today, we are a leading

manufacturer and distributor of GRP flat roofing materials across Europe.

Our extensive background as roofing contractors sets us apart from other manufacturers. We believe our expertise in GRP roofing installations allow us to understand the needs of our customers.

We constantly strive to manufacture and distribute only the highest quality products.

Roof owners benefit from a long-lasting flat roof that will look good for decades and is easily repairable in the unlikely event it becomes damaged. The roofer benefits from high quality products that are efficient to install, with bespoke tools designed with ease of use and longevity in mind.

Many of our innovations in the field of product and tool design have now become the standard across the industry, along with many of our installation procedures.

Our Stronghold resins incorporate fire retardants and improved elasticity as standard. This allows our systems to resist harsh conditions and withstand heavy foot traffic, if required.

These images are all taken in house at our manufacturing facility in South Wales, depicting some of the processes involved in manufacturing a class leading, fire rated GRP flat roofing system.

Whether you're the roof owner, the roofer or the merchant selling our product, we aim to provide the highest levels of service and support. If you encounter a problem, please contact us.

Why choose Stronghold GRP? We believe it's The Original & Best!

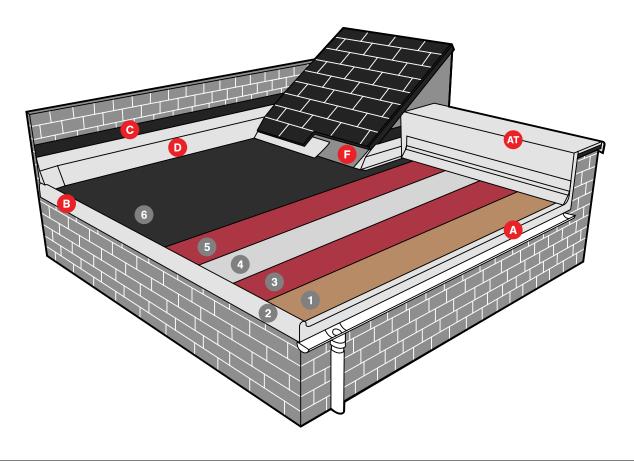






HOW TO INSTALL STRONGHOLD GRP

Our GRP Flat Roofing System is suitable for use as balconies, walkways and standard flat roofing applications, which can be applied year round. The information below is an overview of the installation process, please download our installation guide for full instructions.



STAGE 1	Install new OSB3 T&G Timber Decking. Ensure the surface is completely clean, dry and free from any surface contamination.
STAGE 2	Fit any edging profiles needed to the perimeter of the roof deck.
STAGE 3	Apply catalysed Stronghold Resin generously to the deck with an application roller at a rate of 1kg - 1.5kg per metre, depending on the weight of CSM selected. (450gram = 1kg & 600gram = 1.5kg)
STAGE 4	Roll out CSM to the wetted area, ensuring that there are no folds.
STAGE 5	Apply more catalysed Stronghold Resin to the CSM at the rate of 1kg per sq metre. Consolidate the glass reinforcing into the Stronghold Resin with a paddle roller until fully immersed.
STAGE 6	When the base layer is cured, apply catalysed Stronghold Topcoat with an application roller at a rate of 0.5kg per square metre.

A TRIMS	A200 Gutter Trim - (3m) Standard drip. Compatible with B260 trim. Suitable with C1 and C4 corner trims.
B TRIMS	B260 Raised Edge Trim - (3m) Standard parapet side. Compatible with A200 trim. Suitable with C1, and C4 corner trims.
C TRIMS	C100 Simulated Lead Flashing - (3m) Dark grey, non adhesive finish to simulate the appearance of lead. Replaces traditional lead flashing. Compatible with C7 Int. and C7 Ext. corner trims.
CORNERS	Find a range of pre-formed corner options to suit a wide range of flat roof applications. Suitable with multiple trim configurations.
D TRIMS	D260 Wall Fillet Trim - (3m) Provides expansion. Compatible with C3 Int. and C3 Ext. corner trims.
E TRIMS	E280 Raised Ridge Roll - (3m) Expansion Joint. Compatible with C5 roof ridge closure.*
F TRIMS	F300 Flat Flashing - (20 metre) Flat section for use as continuous flashing under slates at a roof junction. It can also be used as a gutter lining.

AT195 Int. & Ext. Angle Trims - (3m) High adhesion surface on

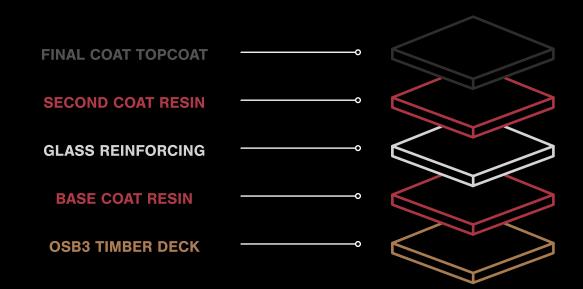
inner face for forming internal up stands, gutter floors etc. High adhesion finish on outer face for dressing parapet walls, etc.

G180 Gulley Trim - (3m) Used on larger roofs to aid drainage.*

G TRIMS

AT TRIMS

Visit www.strongholdgrp.co.uk for our installation guide, and to see a fuller range of Stronghold edge trims, tools and components.



^{*} E Trims & G Trims not shown on diagram left.



STRONGHOLD

PREMIUM RESIN

The highest quality resin available, with added fire retardant to achieve the highest F.AA fire safety certification, allowing unrestricted use under building regulations. For use with 450 or 600 gram glass reinforcing and liquid MEKP catalyst.

Protect your property with our Premium Resin GRP Flat Roofing System, which we will proudly guarantee for 25 years!

Stronghold Premium Resin provides excellent strength and versatility. Suitable for flat roofing, walkways and balconies. Choose our Premium System for a smooth, high quality, waterproof finish that's built to keep those unwanted elements out!

The strongest and most durable Flat Roofing System available, that guarantees a perfect finish.

Available with a free 25 Year Guarantee available to download at: www.strongholdgrp.co.uk.

Add additional protection to your flat roof with Kevlar® reinforcing. 2x stronger guaranteed longer.

STRONGHOLD TOPCOAT

Our topcoat is manufactured to the highest standard possible, creating amazing finishes with both our Premium and Trade grade resins. When installed correctly our topcoat creates a smooth, seamless and strong membrane, eliminating weak points.

When used with our resins and glass reinforcing it achieves an F.AA fire certification, so you can be confident in knowing our systems are fully fire retardant. Use with liquid MEKP catalyst.

We are the only manufacturer that can offer the same F.AA performance on our coloured topcoats, without the need for further coverings of slate granules. So, the colour you choose is the colour you get!

Stronghold Guaranteed for 20 - 25 years subject to GRP Roofing System selected

We stock medium grey (RAL 7046), dark grey (RAL 7011) and clear.



YOUR FLAT ROOF DOESN'T HAVE TO BE GREY

Choose from any British Standard or European RAL colour range and we will make your chosen coloured topcoat to order. Contact us or your nearest stockist for further information. What colour will you choose?



STRONGHOLD TRADE RESIN

The best value resin available, with all the added benefits of our Premium Resin System. It contains fire retardant to achieve the highest F.AA fire safety certification, allowing unrestricted use under building regulations. For use with our 450 or 600 gram glass reinforcing.

Our Stronghold Trade Flat Roofing System comes with a trusted 20 year guarantee!

Our Trade System creates a seamless waterproof membrane with a crack resistant finish. Choose our Stronghold Trade GRP Flat Roofing System for a smooth, quick, economical, waterproof finish built to last.

The most affordable GRP Flat Roofing System available, that achieves excellent results.

Available with a free 20 Year Guarantee available to download at: www.strongholdgrp.co.uk.

Use with liquid MEKP catalyst. The safest and easiest way to catalyse your polyester resins!

STRONGHOLD PRODUCT RANGE



All Stronghold products are manufactured by us or specially for us. Our resins and topcoats are modified with fire retardants and plasticisers to improve flexibility and lifespan. Glass from the world's leading filament manufacturers are formed into mats and offered in a range of sizes.

Our catalyst includes a unique measuring dispenser for accurate application. We were the first manufacturer to use brass bushes in our laminating rollers. Our application roller inserts are designed specifically to allow for quick roller head changing, critical when applying catalysed products. Our packaging and tools are carefully considered, usable and reusable where possible.

USE • LEARN • IMPROVE • REPEAT



PREMIUM RESIN
High quality resin for use with liquid MEKP catalyst.
Available in 10kg & 20kg



TOPCOAT
High performance topcoat stocked mid & dark grey.
Available in 10kg & 20kg



TRADE RESIN

Best value resin for use with liquid MEKP catalyst.

Available in 10kg & 20kg



CHOPPED STRAND MAT Exceptionally strong glass reinforcing. Available in 450 & 600 gram m².



CATALYST
High quality liquid MEKP catalyst. Available in 250g, 500g, 1kg & 5kg.



APPLICATION ROLLER For resin & topcoat use. (Full roller or sleeve only) Available as 3", 6" & 9".



PADDLE ROLLER
For consolidating CSM.
(Reusable if kept clean)
Available as 3", 6" & 9".



ACETONE
Solvent cleaning solution for resins & topcoats.

Available in 1ltr & 5ltr.

MATERIALS AREA GUIDE

	ROOF AREA (m²)	CSM (kg)	RESIN (kg)	TOPCOAT (kg)	1% CATALYST (Ltr.)	4% CATALYST (Ltr.)
	1	1	2	0.5	0.03	0.1
	2	1.5	4	1	0.05	0.2
\geq	4	2.5	8	2	0.1	0.4
ш	6	3.5	12	3	0.15	0.6
	8	4.5	16	4	0.2	0.8
S	10	5.5	20	5	0.25	1
	12	6.5	24	6	0.3	1.2
10	14	7.5	28	7	0.35	1.4
	16	8.5	32	8	0.4	1.6
	18	9.5	36	9	0.45	1.8
	20	10.5	40	10	0.5	2
\triangleleft	25	13	50	12.5	0.63	2.5
	30	15	60	15	0.75	3
	35	18	70	17.5	0.88	3.5
E	40	20	80	20	1	4
	45	23	90	22.5	1.13	4.5
	50	25	100	25	1.25	5
	75	37	150	37.5	1.88	7.5
	100	50	200	50	2.5	10
	1	1.2	2.5	0.5	0.03	0.12
	2	2	5	1	0.06	0.24
	4	3.2	10	2	0.12	0.48
Ш	6	4.6	15	3	0.18	0.72
	8	6	20	4	0.24	0.9
CO	10	7.2	25	5	0.3	1.2
	12	8.5	30	6	0.36	1.44
10	14	9.9	35	7	0.42	1.68
U	16	11	40	8	0.48	1.96
	18	12.5	45	9	0.54	2.16
	20	14	50	10	0.6	2.4
S	25	17	62.5	12.5	0.75	3
	30	20	75	15	0.9	3.6
9	35	24	87.5	17.5	1.05	4.2
	40	27	100	20	1.2	4.8
	45	30	112.5	22.5	1.35	5.4
	50	34	125	25	1.5	6
	75	50	187.5	37.5	2.25	9
	100	67	250	50	3	12

Stronghold Catalyst is added at a rate between 1% - 4% depending on ambient temperature. 1% - hot weather, 2% - mild weather, 3% - cold weather & 4% - very cold weather. e.g. 80kg Resin + 20kg Topcoat both with 2% Catalyst = $100 \times 0.02 = 2$ ltrs

MATERIALS REQUIRED

	PRODUCT NAME	AMOUNT	PRICE
ALS	450 gram Chopped Strand Mat (16.6kg)		
	450 gram Chopped Strand Mat (33kg)		
	600 gram Chopped Strand Mat (16.6kg)		
	600 gram Chopped Strand Mat (33kg)		
8	350g Reinforcing Tape (100mm x 50m)		
A	450g CSM Bandage (100mm x 73m)		
≥	10kg Premium Resin		
N.	20kg Premium Resin		
O	10kg Medium Grey Topcoat (RAL 7046)		
GRP ROOFING MATERIALS	10kg Dark Grey Topcoat (RAL 7011)		
	20kg Medium Grey Topcoat (RAL 7046)		
	20kg Dark Grey Topcoat (RAL 7011)		
	1ltr Catalyst (1% - 4%)		
	5ltr Catalyst (1% - 4%)		
	A200 Gutter Trim		
CD.	B260 Parapet / Side Trim		
N	C100 Simulated Lead Flashing		
PREMADE EDGING	C1 Universal Corner		
Щ	D260 Wall / Back Trim		
IAD I	F300 Flat / Eaves Trim (6.5 metre)		
Ä	F300 Flat / Eaves Trim (20 metre)		
2	AT195 Internal Angle Trim		
	AT195 External Angle Trim		
10	1ltr Acetone		
TOOLS	5ltr Acetone		
0	3" Application Roller (75mm)		
2	6" Application Roller (150mm)		
E E	9" Application Roller (225mm)		
APPLICATIO	3" Paddle / Consolidation Roller (75mm)		
4	6" Paddle / Consolidation Roller (150mm)		
AF	9" Paddle / Consolidation Roller (225mm)		
RAS			
	OSB3 T&G Polyurethane Brushes Decking Boards Sealant / Mastic (2", 3" or 4"	Latex Gloves) (size L or XL)	Hand Cleaner (available as 1ltr)
EXTRAS	Mixing Buckets Extension Poles Battens	Clout Nails	Ringshank Nails

Use the blank space on overleaf to sketch and calculate your roof dimensions. Looking for something not mentioned above?

Please speak to your stockist or contact us where we will be happy to help.

ROOF AREA SKETCH

Use this space to calculate your roof dimensions.

Decide between our 450gram or 600gram systems and use our Materials Area Guide overleaf, to work out the amount of materials needed for the roof area. Then carefully select the edge trims required from the Premade Edging section from our Materials Required list, also found overleaf.

ROOF AREA ______ M² ROOF EDGES ______ N

GET IN TOUCH

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