

## ROUND CASING FOR COLUMNS

With these prefabricated elements from Gforms, you can efficiently achieve the cladding of any load-bearing structure, such as a column, with high-quality round finishing.



### MOUNTING

The round casing can be fixed directly around the iron, wood, concrete column, etc., allowing for the quick masking of the unfinished elements mentioned above. It is aligned using a laser or a bubble level and is secured with drywall screws.

Subsequently, the joints are finished to the same level of finish as the drywall, using a paper tapejoint tape of 3000 mm



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## 1. Glass Reinforced Composite - GRG

### 1.1. General

Glass Reinforced Composite (GRG) is a white 'thin shell' alpha plaster reinforced with fiberglass mats. Because of its light weight, strength and finish, it can be used in interior finishing.

### 1.2. Compound

#### 1.2.1 Alpha Plaster

Alpha plaster is made entirely of Calcium (II) sulfate Hemi hydrate ( $\text{CaSO}_4 \cdot 1/2 \text{H}_2\text{O}$ ) alpha plaster with an addition of a curing additive. The composition can be formulated as follows:

- Calcium (II) sulfate Hemi hydrate ( $\text{CaSO}_4 \cdot 1/2 \text{H}_2\text{O}$ ) : 99.98%
- Patented inorganic additive : 0.02%

#### 1.2.2 Fiberglass Mats

E-glass mat on a roll consisting of randomly oriented fibers in several layers composed with a suitable binder and silane coupling agent.

The E-glass fiber combines the electrical and mechanical properties of traditional E-glass with the acid corrosion resistance of E-CR glass.<sup>7</sup>

Dimensionering	Binder type	Oplosbaarheid in styreen	Lineaire gewicht van fundamentele onderdelen (tex)	Hechttingsverlies %	Vochtgehalte %	Gewicht Kg/m <sup>2</sup>
Sylane	Polyester	Laag	25	8	< 0.15	0.3

### 1.3 Performance Requirements

The product is generally 7mm. thick, except for parts that require more durability. The final product has a nominal weight of 7-9 kg/m<sup>2</sup> and a Rockwell hardness of M72.

Gforms GRG with regard to its reaction to fire behavior achieves the following classification:

A1 according to standard EN13501-1:2018

A2-S1-D0 according to standard EN13501-1:2018

G.R.G. is generally supplied as a painter-ready product (the natural color of the product ranges from white to grey-white with a visible fiberglass pattern). Unevenness, screw holes still need to be finished and sanded.

G.R.G. is subject to water damage if constantly placed in a very wet place. It is recommended to use a relatively dry place to avoid damage.

### 1.3.1 Tolerances

The final dimensions of the finished G.R.G. product should be such that when installed, all dimensions meet the following permissible criteria or architectural requirements:

- For a total length and height of maximum 3 meters, the deviation may only be  $\pm 3$  mm per m1.
- The edges show a deviation of  $\pm 3$  mm. and the evenness, i.e. the deviation over 1 meter of straight edge line placed at any point on a slab, should show a smooth surface with deviation understood to be around  $\pm 3$  mm.
- Squareness of corners: it concerns the difference between the work performed compared to the prescribed angles (reveals, fireplaces, ...), which can be straight or oblique. The predetermined angle may not differ from the design by more than  $5^\circ$ .

Important: A finished surface should never be produced under glancing light or backlighting. According to the rules of the art, delivery takes place in daylight, with the naked eye and from a distance of 2 m, perpendicular to the surface to be checked. All control methods that deviate from this are not allowed.

### 1.4 Installation

Given the special aspect of each individual product, fewer structures will be required for a G.R.G. installation than with conventional systems for installing gypsum panels and other materials.

G.R.G. usually installed on lightweight components placed around plasterboard ceilings.

These components can be used for both vertical and horizontal surfaces and this is therefore the most efficient way of working. If necessary, due to a special design, a second more solid steelwork can be placed first.

The ceiling parts are suspended by sprung quick hangers. The maximum intermediate distance is 1200 mm, connection quick hanger and GRG element is done by a bound metal ceiling profile.

The interconnection of two GRG elements is always done by vulcanization along the non-visible side and the eruption along the visible side is removed with a spatula. All screw holes and gaskets are filled with the same plaster mixture used in the production process. Traditional sealants can also be used for this.

G.R.G. is installed using traditional gantry systems and, if weight is a factor, standard lifting equipment can always be used.

G.R.G. can be cut either with a handsaw, with an angle grinder with diamond or metal blades or with a jigsaw, so only standard hand tools are required for installation purposes.

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