

## Substrate Specification Sheet 4

### Armourcoat (ASF) QA Working Specification For Glasroc and GRG Substrates

#### 1 Introduction

*This specification which, particularly, emphasises the considerations required on build quality and surface flatness has not been written for Armourcoat's benefit, but seeks to provide a quality of finish which will receive the long term approval of the client and meet or exceed the expectations of the Architect and Project Managers.*

The specification is for guidance only. It describes good working practice. It does not claim to be the right or only way of using Glasroc and (GRG) and is made without responsibility for the execution of the work. Build quality is the responsibility of the installer/builder.

#### 2 Prime Construction Considerations.

- **Applying Polished Plaster puts a lot of pressure on the substrate. Polished plaster does not shrink or crack on its own but being very hard, cracks in the substrate will penetrate through the finish.**
- **2 mm board joints filled with plaster are much more crack resistant than butted board joints.**
- **Substrates must be dry. Dampness will affect our finish**

#### 3 GRG Substrates

GRG may be used as a substrate for Armourcoat's Polished Plaster for flat, curved and circular walls. These guidance notes state build requirements when GRG is specified for Polished Plaster.

#### 4 Construction

The walls shall be firmly constructed in timber or metal studwork which shall be vertically plumb and built to a true horizontal line without undulations, bumps, hollows or dives, and shall be built to within plus or minus 1 mm in 600 mm and plus or minus 3 mm in 1.8 metres in the vertical and horizontal planes. Timber supports for GRG shall be seasoned timber with a moisture content not exceeding that recommended in BS5268 Part 2 1984. If in doubt in the seasoned quality of the timber, always revert to metal studding.

#### 5 Movement

The walls when boarded out shall have no discernible movement when subjected to rocking (intermittent pressures) or impact.

#### 6 Fixing Boards

GRG boards shall be fixed vertically for straight walls and horizontally for curved (concave and convex) and circular walls. The GRG shall be used in two layers each 10 or 12.5 mm thickness or 3 layers of 6 mm and each layer shall be supported on all four edges. All joints are to be staggered.

Each layer of board shall be independently fixed in accordance with the fixing details in the table below. The boards shall be finished to a true plane (curved or straight as appropriate) to correct line and flatness with no discernible undulations, bumps, hollows or dives and within tolerances of plus or minus 1 mm in 600 mm and plus or minus 3 mm in 1.8 metres. Fix the top layer of boards with open joints 2 mm (penny gap) between adjacent boards for filling in depth.

#### Recommended fixing details for Glasroc GRG Board

Construction	Board Thickness (mm)	Length of Fixing Screws (mm) Board layer			Max Fixing Centre mm	Max Support Centre (mm)
		1st	2nd	3rd		
<b>Timber Frame</b>						
Support using Gyproc Drywall Screws	6 10 12.5	32 32 36	32 42 50	42 - -	200 200 200	400 400 400
<b>Metal Frame</b>						
Supports 0.55mm to 0.7mm use Gyproc Drywall Screws	6 10 12.5	25 25 25	38 38 38	38 - -	230 230 230	400 400 400
2.5mm use Gyproc Jack-Point Screws						
For curved or circular walls reduce support centres to 300 mm						

The GRG board shall be fixed in the following prescribed manner. Place the first board in position and fix the board first along one vertical edge. Press the board flat against the next vertical support and fix to it; continue to work progressively across the board. Do not fix both vertical edges before fixing to the intermediate supports. This can cause the formation of bellies between supports affecting tolerances.

## 7 Screw Heads

All screw heads shall be countersunk by 1 mm without breaking the surface of the board - see table on page 1 ref 6 for fixing centres. Use corrosive resistant drywall or jack-point screws.

## 8 Cut Edges

Cut edges shall be avoided but where unavoidable the edges shall be lightly sandpapered to remove any burrs and loose particles and left open 2 mm (penny gap) to facilitate strong jointing.

## 9 Plastering

GRG should be plastered with an approved plaster such as British Gypsum Multi-Finish. In order to achieve a smooth flat surface, the joints need to be taped and the boards skimmed. British Gypsums guidelines are that the Glasroc Multiboard is suitable for plastering with no prior surface preparation being necessary. For further information please contact the British Gypsum Drywall Academy (+44 (0) 8705 456 123).

## 10 Internal Corners

First fill the gap of 2 mm between corner boards full depth with jointing compounds. The joint tape is folded and pressed into the angle using a taping knife to bed the tape making sure that bubbles are removed.

## 11 Obtuse Angles

It is often difficult to produce a sharp straight line when forming an obtuse angle. By using Gyproc corner tape (zinc coated steel strips set on fibre paper) a good line can be formed where the directional change occurs.

## 12 External Angles

Unlike normal skim coat plastering where the apex of the corner bead sits flush with the finish, Polished Plaster looks better if the finish is applied continuously around the corner. Angle beads are available to do this from various sources including British Gypsum (see ref 14 for contact details).

For corners where corner damage can be anticipated, consider wood or metal end cappings.

**Installation:** Cut to the required length guarding against flaring top and bottom. Bring finish plaster flush with the corner radius of trims.

## 13 Feature Beads

A specially designed range of aluminium feature beads is available from British Gypsum and SAS (see 14 for contact details).

## 14 Sourcing Beads

British Gypsum Stockists Tel +44 (0)800 225 225.  
SAS Ltd Tel +44(0)118 9290 900

## 15 Additional Literature

DOCUMENT	REF
Full Set of Building Substrate Specification Sheets are available.(See web site)	
Plasterboard/Drylining Installation and Finishing	SSS1
Plasterboard/Drylining with AntiCrack Substrates	SSS2
Plaster on Brick, Block or Concrete Substrates	SSS3
Glasroc and GRG Substrates	SSS4
Previously Decorated Substrates	SSS5
Sand/Cement Substrates	SSS6
MDF Substrates	SSS7
Duturo Background and Application	SSS8
Bluclad Board Substrates	SSS9
Exterior Application	SSS10

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