

Substrate Specification Sheet 2

Armourcoat (ASF) QA Working Specification For Plasterboard/Drylining Substrates Including Armourcoat AntiCrack

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 creating a satisfactory substrate 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.**
- **4-5 mm board joints filled with Armourcoat (ASF) AntiCrack are much more crack resistant than butted board joints.**
- **Substrates must be dry. Dampness will affect our finish**

3 Build Quality

The walls shall be firmly constructed in metal stud partition which shall be vertically plumb and built to a true horizontal line without undulations, bumps, hollows or dives and within strict tolerances of plus or minus 3 mm in 1.8 metres or 1mm in 600 mm. In the construction of the stud partition walls the vertical supports and cross supports shall be positioned to support board joints for two layers of plasterboard on all four edges. Timber supports may be specified in limited circumstances but to minimise the risk of cracking shall be in seasoned timber to a moisture content not exceeding that recommended in BS5268 Part 2 1984. If in doubt in the seasoned quality of the timber specify metal studding.

4 Movement

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

5 Fixing

Plasterboard shall be fixed vertically for straight walls and horizontally for curved and circular walls. Two layers of 12.5 mm plasterboard shall be used and each layer shall be supported on all four edges. The joints in the two layers shall be staggered to avoid fault lines that could induce cracking. The plasterboard shall not be cut beyond that necessary to end a run or to accommodate the stagger in two-layer work. The second (top) layer of plasterboard shall be constructed with open joints 4-5 mm apart.

Self-drilling and self-tapping corrosion resistant drywall or jack-point screws shall be used positioned 15mm from cut edges of boards and 12 mm from bound edges. The line of the plasterboard shall be finished true with no discernible undulations, bumps, hollows or dives and within tolerances previously specified in 3.

The drylining boards shall be fixed to maintain tolerances and avoid the formation of bellies between supports. Place the first board in position and fix the first vertical edge. Press the board flat against the next vertical support and fix to it. Continue to work progressively across the wall. **DO NOT** fix both vertical edges before fixing to the intermediate supports.

Sticking plasterboard onto walls with dabs is not a fixing method recommended by Armourcoat as the results will vary depending on both the skill and diligence of the applicator, and it is much less predictable than mechanical fixing to studs.

The application of polished plaster involves the material being heavily trowelled as it is finished. The forces involved are much greater than normal plastering and will only highlight any weaknesses in the substrate at the final stages. If the dabs are not well adhered to the plasterboard, the pressure applied to the surface during trowelling can split the bond and cause subsequent problems.

6 Fixing Plasterboard

Recommended Fixing Details for Plasterboard Walls In One and Two Layer Work

Construction	Board Thickness (mm)	Length of Fixing Screws (mm)		Max Fixing Centre (mm)	Max Support Centre (mm)
		1st Board	2nd Board		
Timber Frame Support using Gyproc Drywall Screws	12.5	36	50	300	600
Metal Frame Supports 0.55mm to 0.7mm use Gyproc Drywall Screws 0.75mm to 2.5mm use Gyproc Jack-Point Screws	12.5	25	38	300	600

For curved or circular walls reduce support centres to 300mm

7 Taping & Jointing Requirements

If Armourcoat (ASF) AntiCrack is specified, the dry lining installer shall **not** tape and joint between board joints

8 Screw Heads

All screw heads shall be countersunk by 1mm without breaking the surface of the board.

9 Cut Edges

Cut edges shall be avoided but where unavoidable the edges shall be lightly sandpapered to remove any burrs ensuring that all surfaces are free from dust prior to the application of Armourcoat (ASF) AntiCrack. To mitigate cracking, wallboards in the top layer shall be positioned with open joints (4-5 mm) to allow the joints to be filled in depth.

10 Feature Beads

Detail 13 (below) shows an external angle detail - 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 and SAS International. Please also note Detail Drawings 14 (Shadow Gap Detail), 15 (Expansion Joint Detail), 16 (Skirting Detail) and 17 Edge Trim Detail. The decision to use an expansion joint shall be based on advice from a structural engineer.

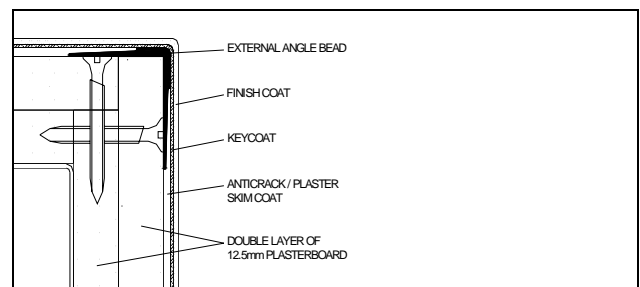
11 Armourcoat (ASF) AntiCrack Skimcoat

The Use of Armourcoat (ASF) AntiCrack excludes the need for tape and jointing. Once the wall has been boarded out and beads applied to all corners and perimeter lines, it is ready to receive the Armourcoat Anti-crack Skim coat. The application of Anti-crack is the responsibility of the Armourcoat (ASF) operative or respective agent. If walls are not built to the tolerances as specified in 3 it may be necessary “dub-out” dives or hollows to ensure a true and flat surface. “Dubbing out” the walls because of poor substrate build is an additional cost.

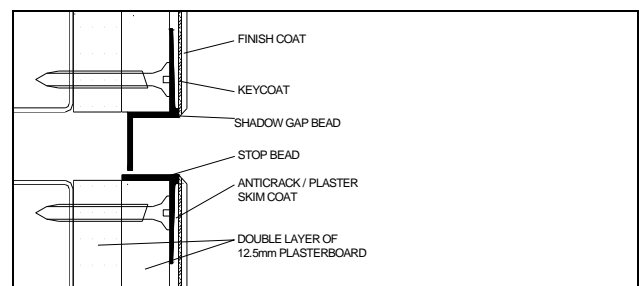
12 Sourcing Beads

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

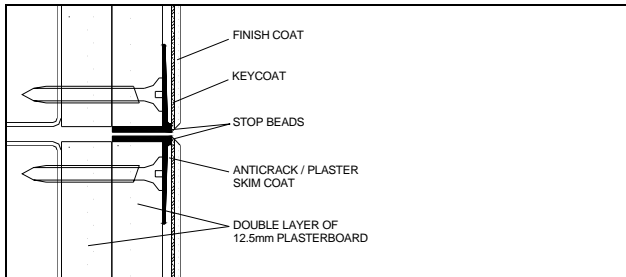
13 External Angle Detail



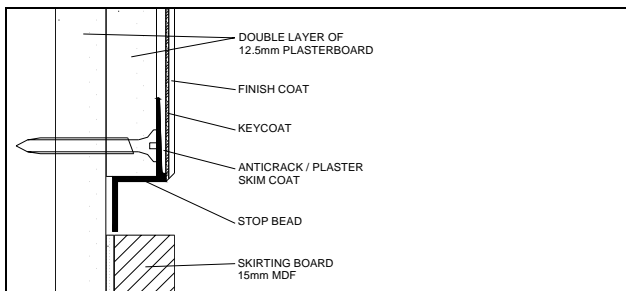
14 Shadow Gap Detail



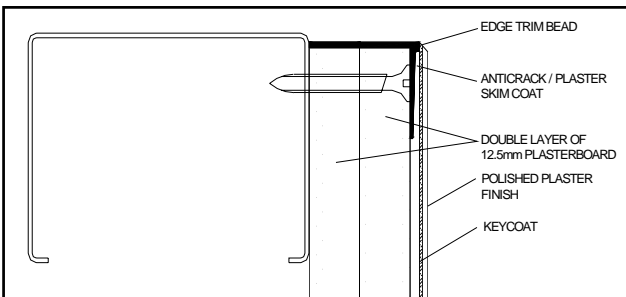
15 Expansion Joint Detail



16 Skirting Detail



17 Edge Trim Detail



18 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 Backgrounds and Application	SSS8
Bluclad Board Substrates	SSS9
Exterior Application	SSS10

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