

Substrate Specification Sheet 9

Armourcoat QA Working Specification For “Bluclad” Board Substrates Suitable For Wet Areas

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 method of using Bluclad board to provide a solid substrate and is made without responsibility for the execution of the work. Build quality is the responsibility of the installer/builder.

Architects, when specifying Polished Plaster, shall give special attention in their design to **wall line or flatness, avoidance of cracks and external corners.** Recommendations on these matters are contained in this specification.

This substrate is to be used in situations where Polished Plaster is likely to be splashed intermittently with water **but not submerged.** Methods are detailed for **INTERIOR** and **EXTERIOR** application. Not all Polished Plaster finishes are suitable for exterior application (see SSS10 – Exterior Application of Polished Plaster’).

The following construction relates to **non-loadbearing constructions up to 4 m in height. For additional heights in excess of 4 m contact Bluclad technical on +44 (0) 1763 264600. Please see Armourcoat Advice Sheet AS2 ‘Exterior Use of Polished Plaster’ for full details on exterior application.**

2 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 1 mm in 600 mm and plus or minus 3 mm in 1.8 metres. In the construction of the stud partition walls the vertical supports and cross supports shall be positioned to support all board joints. 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 of the seasoned quality of the timber, specify metal studding.

3 Movement

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

4 Fixing

Substrates should be constructed using 2 layer construction, the first layer being plasterboard or Bluclad followed by a second outer layer of Bluclad. **The board joints are to be staggered between layers both on horizontal and vertical joints.**

INTERIOR applications use 12.5 mm standard plasterboard as first layer .

EXTERIOR use 12.5 mm **Foil Backed** plasterboard for first layer. Ensure that wall is detailed to prevent ingress of moisture through edges. There are many other considerations when using polished plaster outside: please refer to SSS10.

Bluclad is to be fixed such that the textured face is exposed for coating by Armourcoat.

Fixings through plasterboard are to be made using standard drywall screws with heads countersunk 1mm without breaking the surface of the board. **FIXINGS THROUGH BLUCLAD** are to be made using No. 6 or 8 stainless steel screws with self embedding heads e.g. bugle heads, which must be screwed flush with the board surface (See Suppliers List 11).

Fixings must not be positioned with centres closer than 12 mm to edge of board or closer than 35 mm to a corner. Fixing centres must not be more than 300 mm apart.

Boards shall be fixed **vertically** for **straight** walls. Boards shall be fixed **horizontally** for **curved** and circular walls and the radius shall not be less than 4 m.

All edges must be continuously supported over full length of each edge on 50 mm minimum width studs.

The line of the boards shall be finished true with no discernible undulations, bumps, hollows or dives and within tolerances previously specified in 2.

Both Bluclad boards and plasterboards 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.

5 Fixing Details Summary

	1 st Layer Interior	2 nd Layer Interior	1 st Layer Exterior	2 nd Layer Exterior
Board type	12.5mm Plasterboard	10mm Bluclad	12.5mm Plasterboard Foil Backed 10mm Bluclad	10mm Bluclad
Treatment	None	Fill board joints and skim with Ardurit X7 & Ardion 90 and scrim entire surface (see sec 9.9)	None	Fill board joints and skim with Ardurit X7 & Ardion 90 and scrim entire surface (see sec 9.9)9.9)
Screw Length Use No.6 or No.8	Drywall 25mm into metal stud 38mm into timber stud	Stainless steel self-embedding head. 38mm into metal stud 50mm into timber stud	Drywall 25mm into metal stud 38mm into timber stud Bluclad – same as 2 nd layer fixing requirements	Stainless steel self-embedding head. 38mm into metal stud 50mm into timber stud
Width of Stud to fix into	50mm minimum	50mm minimum	50mm minimum	50mm minimum
Maximum Support Spacing	Flat wall 600mm Curved wall 300mm	Flat wall 600mm Curved wall 300mm	Flat wall 600mm Curved wall 300mm	Flat wall 600mm Curved wall 300mm
Fixing Centres	300mm maximum	300mm maximum	300mm maximum	300mm maximum
Board Joint Gaps	None	4 to 5 mm	None	4 to 5 mm

6 Internal Corners

No special treatment required

7 External Corners

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 end of document for contact details).

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

7.1 Installation

Cut to the required length guarding against flaring top and bottom. Fix using gap filling adhesive mastic such as 'Gripfill' in addition to screws which can only pin the trim in place. Double boarding means that the screws will miss the studs and therefore have very limited mechanical strength.

8 Obtuse Angles

Armourcoat Limited recommends Gyproc corner-tape for 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. The procedure for fixing the corner tape is the same as in 9 .

9 Do not simply tape and joint boards

Instead of taping and jointing the boards, the entire board surface is to be coated as follows; Bluclad is supplied already primed. Prior to application check that it is clean and free of dust and if necessary wipe with a damp cloth and allow to dry.

Trowel a stiff mix of **White Ardurit X7** mixed with **Ardion 90 admix** (see suppliers list 11) in accordance with manufacturers instructions into board joints and strike off flush with the board face.

When this is done, trowel a wetter 2 mm coat of **White Ardurit X7** mixed with **Ardion 90 admix** in accordance with manufacturers instructions across surface.

Press a layer of 1 metre wide reinforcement scrim (see suppliers' list 11) into the Ardurit to completely cover the surface with mesh. The mesh must be a fine one with holes of roughly 2x2 mm. It is important that the joins in the mesh are not closer than 50 mm to any board joints and that all the mesh is bedded in to the Ardurit. Allow first coat to set and then trowel on a second coat to flatten any undulations on the surface caused by the mesh to keep substrate in accordance with tolerances stated in section 2.

10 Feature Beads

For drylining systems a specially designed range of aluminium feature beads are available from British Gypsum and SAS (see suppliers' list 11).

11 Suppliers List

Bluclad:

Eternit Tel: +44 (0)1763 264600

Stainless Steel Self Embedding Head Screws:

I.T.W.Buildex Tel: +44 (0) 1293 523372

Arthur Fischer Tel: +44 (0) 1491 827 900

Angle Beads:

SAS Tel: +44 (0) 118 9290 900

British Gypsum Tel:+44(0) 800 225 225

Ardurit X7 and Ardion 90 admix:

Ardex +44 (0)1440 714939

www.ardex.co.uk

Reinforcement Mesh

2mm hole Black Glass Fibre Scrim 1mx50m

Principal Building Products Ltd.

Tel: +44 (0) 114 261 1106

12 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

Whilst every attempt has been made to ensure the accuracy and reliability of the information contained in this document, the information should not be relied upon as a substitute for formal advice. Armourcoat Ltd, its employees and agents will not be liable for any loss or damage, of any kind, arising out of or in connection with the use of this document. Please refer to the company disclaimer for further details.

SAT SSS9 0504©

Armourcoat Limited
 Morewood Close London Road
 Sevenoaks Kent TN13 2HU United Kingdom
 Tel: +44 (0)1732 460 668 Fax +44 (0)1732 450 930
 Email: technical@armourcoat.co.uk

web: www.armourcoat.com