

Substrate Specification Sheet 10

Exterior Application Of Armourcoat Polished Plaster

Armourcoat polished plaster is primarily made from crushed marble, lime and cement and is suitable for external use.

1 Design Considerations

Polished Plaster will absorb water in the same way as limestone, darkening when wet and then drying back to its original colour. This effect may be minimised by the application of penetrative sealers but they do not eliminate the effect altogether.

Design consideration should be given to ensure that water does not continually run down the surface of the plaster anywhere as this will undoubtedly lead to streaking on the surface.

As with all marble or limestone products, Armourcoat will lose a certain amount of its surface sheen over a prolonged period of time due to the gradual effect of acid rain etching into the surface. The speed of this will depend on the surrounding level of pollution and whether the wall will be splashed with salt spray.

Over long periods of time, the Pitted, Dragged and Travertine finishes are least prone to hairline cracks or loss of surface sheen.

Please see Armourcoat Advice Sheet AS2 'Exterior Use of Polished Plaster' for full details on exterior application.

2 Colours

- We generally recommend light colours for external use as they tend to reflect sunlight rather than absorb it thus minimising the problem of thermal stressing within the substrate.
- Armourcoat use the best pigments available on the market but they are not all totally stable in ultra violet light. Generally speaking, earth pigments are much more stable than the synthetic pigments that give the brightest and most vibrant colours.

3 Surface Treatments

- The finishes can be treated with a silicone based water sealer/impregnator to reduce its water absorbency which will improve freeze thaw resistance and streaking due to contact with water.
- Armourcoat have a range of coatings which offer an improved resistance to graffiti and are constantly under review as new products come on the market. Ask for samples if you wish to test the latest treatment for yourself. We have been able to completely remove marker pen and cellulose based aerosol from most finishes including the textured ones, but particularly for textured finishes this has involved using solvents. Health and Safety legislation may dictate what chemicals may and may not be used for cleaning. Smooth finishes are the easiest ones to clean. Please contact Armourcoat technical to discuss your requirements / job situation.

4 Substrates

The two substrates that Armourcoat recommend for Exterior application of Polished Plaster are:-

- 1 Bluclad board (see SSS9)
- 2 Sand and Cement render (see SSS6)

Sand and cement renders are more temperamental in terms of giving problems with hairline cracking if materials / mix / application / curing are not done correctly.

Sand and cement should be kept damp for 28 days to aid crack free curing but then needs to dry out before Polished Plastering can commence. A wall that is damp in some areas and dry in others will give an uneven finish.

Bluclad is essentially like plasterboard in shape and installation but is made from water-tolerant minerals rather than paper and gypsum plaster. Bluclad offers a fast construction method with minimal drying time (1 day for prep coat).

5 Protection during application and in first week afterwards

The application of Polished Plaster is a skilled job that requires the tradesmen to assess the site conditions in terms of temperature, airflow and humidity prior to commencing work. Failure to assess these conditions correctly can lead to an uneven finish as the drying rate versus stages of trowelling need to be carefully handled. It is therefore very important that the conditions are controlled in terms of giving shelter from rain wind and direct sunlight. This becomes more critical the larger the area and these aspects of jobs should be discussed with the Armourcoat Site Agents.

It is essential that Polished Plaster be allowed to dry out fully before it is exposed to the elements. This is necessary to both fix the colour within the plaster and for the plaster to achieve its full weather resistance. It is impossible to quantify the amount of time required because it will depend on these factors.

- 1 How much moisture was trapped in the substrate.
(Use of Bluclad substrate overcomes this problem that exists with render)
- 2 Atmospheric humidity
- 3 Temperature
- 4 Air movement

In warm dry conditions and with a render substrate that has been constantly drying for 2 weeks prior to application, protect the polished plaster from rain for 2 days before any sealer coat is applied and for a further 2 days after application.

6 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 SSS10 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