

Squash Plaster Working Instructions SWI3

ARMOURCOAT (ASF) BUDGET RENOVATION IN WHITE PLASTER OVERCOATING SYSTEM

Armourcoat Limited, originator of resin based Hard Plaster Squash Court Systems, offers the first overcoating system to eliminate the overnight wait between processes, condensing a two-day job into one.

1 Armourcoat Squash Court Plaster

Armourcoat's Squash Court Plasters may be used with confidence to repair all traditionally built squash courts. They are not suitable for repairing prefabricated plastic-faced panel courts.

2 Contractor Responsibilities

Contractors must provide their own guarantees of work. Armourcoat Plasters are guaranteed by Armourcoat Limited for the purposes for which they are designed.

Armourcoat Limited accepts no responsibility for application failure.

It is the responsibility of the Contractor to ensure proper application control and management.

3 Substrate

Remove all paint from substrates before applying the Overcoating System.

The Armourcoat Overcoating System uses Armourcoat's white Topcoat Plaster only and is designed for use on all types of existing plastered play walls, provided they are sound, or can be repaired to a satisfactory state. Existing plasters must be properly bonded between layers and to the structural substrate.

4 Wall Preparation

Before starting work, inspect walls thoroughly to confirm that they are sound and that this type of repair will offer a long-term solution. Do not waste client's money by overcoating walls, which are breaking up or delaminating.

4.1 Wall Inspection

- Test by tapping wall with a coin. Delamination can be detected by a hollow sound. Small, isolated patches can be cut out and made good. If more than 3 or 4 patches are identified in one wall, do not overcoat.

- See Armourcoat QA Working Instructions (New Build) Ref SWI1 for further guidance.
- Make necessary repairs. See Armourcoat QA Working Instructions (Repairs) Ref: SWI2.

5 Wall Repairs

- With an orbital or multi-sander, fitted with grade P40 production paper and dust extraction, remove all surface contaminants from existing surfaces and create a key for plastering. Dense cementitious renders, pre-cast concrete panel courts, Squashwall or Fibrocem courts should also be sanded. In addition, after sanding they must be well washed with a detergent solution to remove any trace of hand grease and contaminants which could affect bonding. A pneumatic needle gun may be used to roughen cementitious renders, but the decision to do so must rest with the contractor, based on render strength assessment, experience and knowledge.

Proper preparation of smooth finished cementitious renders is critical for successful overcoating. Armourcoat recommends total removal of these finishes, but if overcoating is chosen, the judgement to proceed must be based on the applicator's experience.

- With sanding and cleaning completed, wet the wall to a depth of 3-4 mm. This may take several soakings.
- Let the wall dry for 5-10 minutes to restore suction.
- Test for suction at random points on the wall by wetting the tips of ones fingers and placing them on the wall. The wall is ready for plastering when the water disappears just as soon as it touches the wall. Some suction is necessary to draw the polymers into the existing plaster and bond new with old. If there is no suction, contact the Armourcoat Technical Advisory Service before continuing.
- Prepare the Topcoat mixing (gauging) solution, for use in the first and second coats of plaster, by mixing Armourcoat R13 Resin 1:3 with clean water.
- Add Armourcoat Topcoat Plaster to the mixing solution in a high-side container. Whisk to a smooth, sloppy consistency using a slow speed electric drill fitted with an Armourcoat paddle. Leave for 5 minutes and mix again, adding more mixing solution, if necessary, to achieve the working consistency.
- Apply a first coat, squeezed tight into the original plaster and repaired areas. Before the first coat loses tackiness, apply a second coat, 2.0 mm – 2.5 mm thick, wet-on-wet.
- On completion of the second application, setting will have begun at the start point - the plaster being firm but tacky.

- Flatten the surface and apply a final 0.5 mm – 1.0 mm coat, mixed with clean water only, in the normal way.

6 Material Requirements

Armourcoat Topcoat Plaster, when used for overcoating to a uniform thickness of 3 mm, requires 4.5 kg/m². When ordering materials, follow the quantities guide below:

6.1 Topcoat Plaster

Four wall court	18 x 25 kg
Glass rear wall court	16 x 25 kg
Front wall	5 x 25 kg
Side wall	6 x 25 kg

6.2 R13 Resin

Four wall court	60 litres
Glass rear wall court	50 litres
Front wall	15 litres
Side wall	20 litres

Armourcoat R13 Resin is available in 5 and 25 litre packs, for dilution on site as indicated.

7 Curing

Courts may be put into play **only when plaster is visually dry**. This varies with building temperature and humidity, but should be within four days of completion under normal conditions.

8 Potential Problems and Solutions

8.1 Temperature

Do not plaster when the court temperature is too low or too high. 5°C – 23°C is the optimum range. Install heaters or coolers to adjust the temperature. Both the walls and the air must be roughly at the same temperature.

8.2 Delamination

This is the most common cause of squash court plaster failure. It is usually the result of incorrect substrate preparation or failure to press and scrape the first layer of Basecoat Plaster into the substrate, with subsequent layers applied wet on wet, to achieve effective layer bonding.

8.3 Wet Plaster on Dry

Armourcoat Topcoat plaster is a three-layer system, applied wet on wet, to a total 3 mm thickness. If the first or second layers are allowed to lose stickiness or become touch-dry, subsequent layers will not bond sufficiently to withstand stresses of play and may delaminate. Armourcoat QA contractors must ensure that all Topcoat Plaster layers are applied wet on wet.

3.8.4 Surface Blisters

If blisters appear when trowelling, **DO NOT** press them back onto the wall and hide them. Remove them and refill with fresh, wet Topcoat Plaster applied tight to the Basecoat. If this is not done, the 'blisters' will detach under impact, with financial cost to the applicator.

8.5 Discolouration

Armourcoat Squash Court plaster should be trowelled to a finish without additional water. Scouring or using excessive water during the final trowelling may result in a patchy surface finish when dry. Titanium Dioxide (the whitener) is drawn out of the plaster and trowelling re-distributes it unevenly. Use a sponge float to give the plaster 'life' only as a last resort, as this can have the same effect. While patchiness may not be acceptable. The strength and integrity of the plaster are unaffected.

9 Additional Literature

DOCUMENT	REF
Armourcoat Racket Sports Brochure	ARB
Squash Plaster Working Instructions New Build (White Plaster) and Re-plastering	SWI1
Squash Plaster Working Instructions (Repairs) (White Plaster)	SWI2
Squash Plaster Working Instructions (Overcoating System) (White Plaster)	SWI3
Squash Plaster Working Instructions (Four Hour Repairs) (White Plaster)	SWI4
Squash Plaster Working Instructions (Armourcolor)	SWI5
Squash Plaster Working Instructions for Armourcolor Overcoating System	SWI6
Armourcoat QA Advice Sheet on Plastering in Hot Climates (White Plaster)	SWI7
Armourcoat QA Advice Sheet on Cleaning Squash Court Plaster	SWI8

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.

JMMM SWI3 0102©

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