

General

These inert materials provide an excellent surface for painting once clean and dry. The key differences for surface preparation are; surface porosity, hard/smooth surfaces and weak/powdery surfaces. Porous surfaces will require a sealer, hard/smooth surfaces will require a special adhesion primer and weak/powdery surfaces will require a penetrative primer.

Surface preparation

Earthenware, terracotta and unglazed brick

These materials are inert and porous, but offer an excellent surface for painting. The surface simply needs to be thoroughly clean and dry. Their porous nature may mean that inadvertent stains may be pulled deep into the surface, which may make removal difficult. This may be a particular problem when clear finishes are applied.

D802.1 Wash surfaces

Thoroughly wash surface with Resene Paint Prep and Housewash (see [Data Sheet D812](#)) using a nylon bristle brush or broom. Thoroughly scrub the surface to ensure complete removal of all grease and other contaminants. Rinse thoroughly with clean water and allow to dry.

D802.2 Remove all moss and mould

Thoroughly clean down to remove all loosely adhered material. Treat areas of moss or mould infestation with Resene Moss & Mould Killer (see [Data Sheet D80](#)) correctly diluted with clean water. Leave for up to 48 hours to achieve full kill. For heavy infestations further applications may be needed. Wash thoroughly with clean water to remove residues.

D802.3 Seal surfaces

Allow to thoroughly dry out then seal with a full coat of Resene Sureseal (see [Data Sheet D42](#)) or Resene Waterborne Smooth Surface Sealer (see [Data Sheet D47a](#)).

D802.4 Seal smooth surfaces

Allow to thoroughly dry out then seal with a full coat of Resene Waterborne Smooth Surface Sealer (see [Data Sheet D47a](#)).

Glass, glazed brick and vitreous tiles

These materials are similar to that described immediately above except their surfaces are even smoother. Surface preparation requires careful cleaning followed by a coating with high specific adhesion properties, such as Resene Waterborne Smooth Surface Sealer (see [Data Sheet D47a](#)).

Refer above for the following surface preparation clauses.

D802.1 Wash surfaces

D802.2 Remove all moss and mould

D802.4 Seal smooth surfaces

**Earthenware,
hard fired
non-absorbent
tiles,
terracotta
and unglazed
brick**

**Glass, glazed
brick, hard stone,
slate, soft stone,
synthetic stone
and vitreous tiles**

Referred to in Resene
specification sheets:

- 13 Brick and terracotta
- 14 Clay tiles, decorative
aggregate flooring,
hard fired non-absorbent
tiles, slate and stone

For smoke damaged surfaces
see [D86](#)

For repaints see [D87](#)



Hard fired non-absorbent tiles (quarry tiles), hard stone (including aggregate flooring) and slate

These materials, although slightly textured, are non-absorbent. Cleaning with detergent or Resene Emulsifiable Solvent Cleaner (see [Data Sheet D804](#)) will prepare the surface satisfactorily for painting. These non-absorbent surfaces will require coating with specific adhesion primers particularly if the surface is to be stressed, such as a floor.

Refer above for the following surface preparation clauses.

- D802.1 Wash surfaces
- D802.2 Remove all moss and mould
- D802.4 Seal smooth surfaces

Soft stone (Oamaru stone and sand stone)

These materials have generally weak surfaces that are not particularly suitable for overcoating. Deeply penetrative primers may be used to consolidate the surface, but such treatments may result in spalling of the entire consolidated surface. Strengthening may be accomplished with Resene Stone Strengthener (see [Data Sheet D904](#)), which deposits silica crystals into the matrix of the stone without changing the essential morphology of it. Cleaning should be as gentle as possible in order not to damage the surface. Steam cleaning following fungicidal washing is the preferred method. Penetrating siloxane waterproofing treatments are often the best coating option. For further information refer to the Historic Places Trust Conservation Bulletin No. 3 for the conservation of historic stone structures.

Refer above for the following surface preparation clauses.

- D802.1 Wash surfaces
- D802.2 Remove all moss and mould
- D802.5 Steam clean
Steam clean surfaces to remove weak unbound layers of sand, dirt and grit for a sound paintable surface.
- D802.6 Treat with water repellent
Saturate soft stones with Resene Aquapel (see [Data Sheet D65](#)).

Synthetic stone

These materials are generally based on cementitious binders or use a polymer matrix such as epoxy or unsaturated polyester. The former should be prepared as for cementitious substrates (see [surface preparation D83](#)) and the polymer based materials prepared as for GRP and GRE (see [surface preparation D803](#)).