

# SPECIFICATION FOR TOP SEAL WATER REPELLANT FOR PROTECTION OF CONCRETE AND NATURAL STONE STRUCTURES

## 1. PREAMBLE

Evercrete Top Seal is a non-toxic material, which penetrates the surface of both concrete and natural stone to provide an invisible layer, which waterproofs the material and prevents the formation of stains, mould and algae.

The following specification is designed for the use of Evercrete Top Seal (TS) material on normal, sound construction grade concrete be it a new or old structure, and also on stonework or brickwork.

However for concrete or stonework found to have abnormal deterioration such as delamination, carbonation, alkali aggregate reaction, high permeability or other significant factors affecting the material, this specification may have to be modified to suit specific cases. The supplier of the material will be able to advise further.

## 2. GENERAL

Treatment will be carried out to the surfaces described in the contract in accordance with the manufacturer's instructions. All works to be in accordance with the relevant Occupational Health and Safety requirements. No works shall be carried out on the site without the Engineer or his representative in attendance, unless agreed.

#### 3. MATERIAL STORAGE

- 3.1 Materials shall be stored in an enclosed cool dry area, protected from direct sunlight.
- 3.2 The material shall remain in its original sealed containers until time of use.
- 3.3 The contractor shall provide the Engineer, upon delivery, a certificate from the supplier confirming the material is Evercrete TS. No material shall be used on site until this certificate has been provided and accepted by the Engineer. The material shall be used as supplied and not diluted.
- 3.4 The contractor shall deliver to site sufficient material to carry out the entire works in sealed containers bearing a label, which shall list the manufacturer's name, trade name, application rate and precautionary methods required.

## 4. APPLICATION EQUIPMENT

- 4.1 By brush, roller or spray in accordance with the manufacturer's instructions.
- 4.2 No water shall be permitted to enter any part of the system.
- 4.3 Low pressure spray (max 20-30 psi).

## 5. SURFACE PREPARATION

All surfaces to be treated shall be clean, dry and free from voids, loose aggregate and mortar, concrete, dirt and oil; nail holes and any voids shall be filled and concrete surfaces rubbed smooth if required. No surface shall be treated that is not clean.

## 6. PROTECTION

All surfaces not to be treated shall be protected from spillage, dripping, or splattering of the Top Seal material.



#### 7. MATERIAL

- 7.1 The material shall be clear, colorless, odorless, nonflammable and non-toxic, environmentally friendly water based, spray applied water repellent system. When sprayed onto concrete or natural stone surfaces it forms a clear invisible layer that will completely repel water, seal and water proof the surface.
- 7.2 The material shall not be diluted by solvent or any other fluid.
- 7.3 The material shall possess the following properties:

Water based: yes

Specific gravity:  $1.01 \sim 1.11$ Flash point: non-flammable

Non-toxic: yes pH:  $10 \sim 12$ 

## 8. TRAINING AND SITE SUPERVISION

In all cases where Top Seal shall be applied by a contractor, who is not an approved applicator, Evercrete shall offer to train the contractor's site staff and labourers if required to apply the material in accordance with the requirements. Training will include cleaning of the area, equipment usage and spay methods.

## 9. APPLICATION

#### 9.1 Records

The contractor shall maintain a record of the quantity of material used and the areas treated for each application to verify that the minimum required coverage rate has been achieved. The format of such record shall be agreed with the Engineer and kept up to date and available for the Engineer's inspection throughout the course of the work.

## 9.2 Top Seal Application

- 1. Work sequence to be agreed by the Engineer.
- 2. Shake or stir Evercrete Top Seal prior to use.
- 3. Ensure the concrete or stone surface is dry, clean and free from oil and grease.
- 4. Apply using a low-pressure garden-type sprayer, bush, roller or mop.
  - a. Ensure all areas are treated.
  - b. Vertical walls should be applied from the bottom up to ensure uniformity of application.
  - c. On horizontal surfaces the material should be applied so that the surface has a mirror wet look for at least 5 seconds after application. It should not be excessively applied so as to cause ponding.
  - d. On soffit areas the material shall be applied by continuous spray/ roller/ brush technique. The treated surfaces shall have a "mirror wet look" for at least 5 seconds.
- 5. Normal coverage rate depends on the porosity of the concrete or stone and varies from project to project. Under normal conditions a one-coat application is required.
- 6. Ensure the surface is dry before commencing application.
- 7. Do not apply to glass or aluminum surfaces, as etching will occur.
- 8. Clean up equipment with water.
- 9. Excess Top Seal will result in white dry powder on the surface and can be removed with dry cloth.





## 10. WARRANTY

Evercrete Top Seal is guaranteed to give the results as represented when used as directed. The manufacturers liability is limited to supplying sufficient material for a re-application. The product performance is related to the quality of workmanship in the application of the material. The contractor may at his discretion issue a performance warranty.

