# Care & Maintenance Instructions

# Tuscan Field Applied Limestone Coatings

Tuscan Limestone Coatings are a natural material consisting of limestone aggregates, Portland cement, admixtures and water. It is applied wet and hardens when it dries. For centuries it has been used as a coating for walls and ceilings and for decoration, both indoors and out. Tuscan Limestone Coatings may also be used to cover less visually appealing construction materials such as concrete, cinder block, clay brick and adobe.

# Re-dash, Never Paint Tuscan Limestone Coatings

The reason most home and building owners paint their stucco or Tuscan Limestone Coatings is because the typical cost of re-finishing (re-dashing) is more than just hiring a painter to paint over the existing finish. Although seemingly less expensive upfront, painting Tuscan Limestone Coatings causes significantly higher long-term maintenance costs and may even damage your building. Paint is a sealing agent and will seal all the pores, which consequently seals moisture inside of your building. Your building is not able to breathe and mold can grow between the layers of your building. This excess moisture will cause the paint layer to peel and crack. On a Tuscan Limestone Coatings surface, because of the trapped moisture, paint starts decaying more quickly than on a traditional surface. The correct repair is to hire a sandblasting contractor to remove the existing paint and then to re-apply Tuscan Limestone Coatings to the surface properly. Current methods of re-dashing provide a product that lasts decades and far longer than any paint job.

Re-dash consists of a single layer of Tuscan Limestone Coatings applied to cover and freshen the surface. Repairs are made to cracks and minor imperfections in the surface and then the new coat is applied. This will provide a new look and keep with the integrity of the existing finish. If a new texture is required a two coat system can be applied.

#### **Tuscan Limestone Coating Cracks**

It is the nature of Tuscan Limestone Coatings to experience some cracking. Tuscan Limestone Coatings are a finish coat that performs the same as the base coat; if the structure settles and cracks the base coat those cracks will come through the Tuscan finish coat, typically in the corners of doors and windows. These small cracks are normal and do not require any maintenance or repair. If a crack exceeds 1/8 of an inch in width then the crack should be repaired. Repairing Tuscan Limestone Coating cracks is completed by adding a small amount of Tuscan Limestone Coatings to the crack. Do not put caulk into the crack. If you experience a crack wider than 1/8 of an inch please contact your contractor so the proper resolution can be determined. Typically a larger crack can be broken back and patched or an expansion joint can be added.

#### Yearly Inspection and Cleaning of Tuscan Limestone Coatings

Tuscan Limestone Coatings should be inspected annually for holes, significant cracks, or separations. If Tuscan Limestone Coating repairs are needed, it is important to have the repairs completed in a timely fashion to prevent damage to your home or building. A mild cleaner and water can be used to remove most stains. Pre-wetting the surface will overcome some absorption of dirty wash water from being absorbed back into the finish. Use of a garden hose and a jet nozzle in combination with a mild cleaner will clean effectively. Pressure washers are not recommended because they will erode the finish and can cause damage.

#### **Efflorescence**

Efflorescence is a crystalline deposit, usually white, that may develop on the surface of an unsealed cementitious coating. Efflorescence is soluble salts that dissolved in water moving through concrete and then precipitated onto the surface. These salts can originate in the base coat, in the aggregates in the concrete, or in the cement paste. Many of these salts are water-soluble and can be removed easily after they are deposited on the surface. Applicators may have seen these white deposits on walls that have been exposed to rain or damp conditions. Weather conditions are the primary factor controlling the development of efflorescence. Generally, it is minimized in hot, dry conditions where rainwater evaporates quickly from the surface. Cold, damp weather conditions favor the development of efflorescence.

Fortunately, there are some simple steps which can be taken to essentially prevent the formation of efflorescence:

- 1. When possible, avoid poor drying conditions. For instance, application on a cool damp day could result in the formation of heavy efflorescence. Work in the sun when temperatures are low.
- 2. Comply with Tuscan Stoneworx specifications requiring protection of materials from inclement weather until they are dry. If rain, sleet, dew, or sprinkler water come in contact with a partially dried wall, efflorescence will form on the surface. Of course, freezing temperatures should always be avoided until the material is fully cured.
- 3. Heavy, localized deposits of efflorescence may result from water migrating from behind the base coat. The installation should be checked for proper detailing, flashing, caulking, etc.
- 4. Aesthetic joints or outside corners that were brushed smooth with water are also prone to localized efflorescence, as are areas below un-guttered roof valley or scuppers. Particular attention should be paid to protecting these areas.
- 5. Do not over water the cementitious material since the excess water will dissolve more salts and lead to efflorescence. The resulting material is more porous, allowing easier migration of water.

Efflorescence is easily removed by washing with diluted acid solutions. Vinegar diluted with water 2:1, Muriatic acid diluted with water 1:9 or commercially available acidic cleaners may be used. The following procedure is recommended.

- 1. Pre-wet the surface with water.
- 2. Apply a solution of one (1) part Sure Klean No. 600 (www.prosoco.com) mixed with twenty (20) parts water. Efflorescence cleaners from other companies may also be used. The surface will "fizz" indicating that the salts are being dissolved by the acid solution. Light scrubbing with a soft bristle brush may be necessary to remove all the efflorescence.
- 3. Rinse thoroughly with water.
- 4. Allow the treated area to dry thoroughly prior to application of Tuscan Flat Exterior Sealer.

### **Tuscan Limestone Coatings Coloration**

Tuscan Limestone Coatings come in an infinite number of colors. These colors are made by placing iron oxide pigments into the cement mixture prior to application. The color is throughout the layer and will not fade like a painted finish. The full curing time for Tuscan Limestone Coatings is typically several years. During this time you will notice several color changes from dark to light, and then back to dark as the finish sets and the excess moisture evaporates. Color will vary depending on the amount of water used in the mixing process. In order to have consistent color the same amount of water must be used every single time. For consistent color do not overwork any one area of the wall, bringing the cream to the surface will lighten that area.

A typical Tuscan Limestone Coatings application requires a 30 day cure time between the base coat application and the final Tuscan Finish coat. It is required that the final coat be done in dry, warm weather.

#### **Decorative Items**

The Tuscan Limestone Coating on your home or building has not been installed to stop moisture penetration. The stucco substrate that the Tuscan Limestone Coating is applied over, if properly installed per lath and plaster standard practices will stop moisture penetration. If incidental moisture does enter through the Tuscan Limestone Coatings and cementations base coat, a water-resistant membrane installed behind the cementations base coat will prevent it from entering your home or building and causing damage. It is essential not to penetrate the wall or the weather-resistant membrane with nails, screws, staples, or any other fastener without proper measures being taken. Should it be required to attach items to your Tuscan Limestone Coating walls, it is important to hire a professional craftsman to ensure that the proper hardware fasteners are used.

### Water and Sprinkler Systems

Gutters or sprinkler systems should direct water away from the Tuscan Limestone Coated walls of your home or building. The continual spraying of water onto the walls can damage the Tuscan Limestone Coating, create stains, and allow green algae to grow on your walls. Water should be kept away from Tuscan Limestone Coating walls in colder climates were continual freeze thaw takes place, as damage can occur.

#### Windows, Doors, and Other Penetrations

Where Tuscan Limestone Coatings meets a window, door, electrical box, dryer vent, or any other wall penetration, you may notice a small expansion gap. Gaps are normal and should be expected since dissimilar materials expand at different rates. Such gaps can allow for excessive amounts of water to get past the Tuscan Limestone Coatings and therefore should be caulked on an annual basis. Using a quality tube caulking, apply the caulk to the cracks using a small putty knife or your finger to ensure it fills the gaps. Several weepholes are at the bottom of each windowsill. They allow water to exit from the windowsill track. Using a small pin or paperclip annually inspect these holes to ensure they are clear of debris.

## **DISCLAIMER**

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