



## ROOF TILE CARE AND MAINTENANCE

### Roof Tile Care and Maintenance Tips

In general, Crown roof tiles require very little maintenance or special care. However, there are certain issues that could require attention so we have included the following tips that should help to preserve the beauty and functionality of your Crown Roof.

### Can I walk on my roof?

Walking on a tile roof surface should be avoided or kept to a minimum. Caution should be exercised to ensure your personal safety and prevent damage to roof tiles that may void your warranty.

For added safety the use of soft-soled shoes is recommended so as to minimize slipping. In case of having to walk on the roof tiles for the application of paint or other work that the roof may need, it is recommended that a small gangway be installed to protect workers as well as the roof tile. The underside of these pads may be fitted with softer material such as carpet or rigid foam that will help distribute the weight and prevent slippage.

There are certain methods of traversing the roof that may minimize damage. It is recommended you step at the bottom three inches of the installed tile. This section is supported by the lapped tile beneath it and the weight is then transferred through it to the deck below. Remember the following tips:

- Orient your feet in a horizontal direction. Try to distribute your weight evenly and walk as softly as possible.
- On high profile tiles, distribute your weight on the high points of adjacent tiles.
- Avoid walking on hips, ridges or valleys to avoid damaging specially cut tiles which are more difficult to replace.
- Valleys can be ideal access paths, if the tiles are separated wide enough to allow foot traffic on the valley flashing instead of the tile. Take special care when walking on valley flashing as the metal can be slippery.
- Roof tiles broken by foot traffic should be replaced as soon as possible. The broken tiles may cause damage to the underlayment due to water or UV exposure.

Keep in mind that activities such as gutter cleaning and holiday light hanging can be accomplished from a ladder rather than walking on your roof. Ladder braces may be attached to avoid damage to your gutters and tile.

Whenever possible, place antennas or mechanical units away from areas that will necessitate walking on the roof tiles.





## **What if your tile roof starts to look dirty?**

Mildew, Algae and Moss

Many climates across the country are conducive to the growth of mildew, algae and moss growth on everything from glass, stucco, siding, and driveways, to roofing products including concrete tiles, giving them a dirty appearance. Mildew, algae and moss do not grow directly on the tile, but grow on the accumulation of dust and other organic materials that settle on the tile. When enough cycles of heat, moisture and light are present, these spores start to grow.

Many environmental variables such as the location of the house, the direction the house is facing to the sun, and the quantity of trees, canals and lakes in the area, contribute to mildew growth. While research continues, currently there is no known manufacturing procedure or job site coating that would have any long-term effect on this condition.

Fortunately, mildew, algae and moss can be removed or treated. If the growth returns, the treatment can be repeated, as necessary.

When algae, mildew or moss forms on your tile roof, you can seek out a roof cleaning or painting company to clean the surface of your tile. To help maintain the finish of the roof tiles, avoid the use of strong acid and/or alkaline solutions or contact with strong oxidizers. Furthermore, avoid placing heavy objects on the roof tile surface as they may damage or scrape the tiles.

**We recommend that a professional cleaning company be used, so you avoid the many dangers associated with walking on a wet tile roof.**

### **Cleaning, re-coating, or painting your tile roof.**

The following method is recommended to properly pressure clean the surface of your roof to remove dirt, algae, mildew or moss. Different methods may be required depending on whether your tile is slurry coated or color-thru. In most applications, though, a pressure cleaner set at approximately 1200 psi should be used. The tip of the nozzle of the pressure cleaner should be kept approximately one to two feet from the tile. The limited pressure and distance from the tile is used to prevent damaging the surface. **Crown recommends that you hire an experienced professional to clean your tile roof.**

Most modern pressure cleaners have an induction system to deliver a 10% solution of chlorine to water. This will help temporarily remove the mildew, algae or moss when using the recommended reduced pressure.

If you want to coat the roof tile after the roof has been pressure cleaned, it is recommended that the roof be primed with a clear alkyd primer, following the manufacturer's recommendations for application and curing.

If you also want to change the color of your roof by painting it, the surface should be painted with a good quality 100% acrylic paint, after the pressure cleaning and priming is completed and dried.

If you don't want to change the color of your roof tile, you should coat the surface with a 100% clear acrylic sealer after the pressure cleaning and priming.





**It is strongly recommended that any cleaning or coating of your roof tiles be done by an experienced professional specializing in this type of work.**

**What if your roof has a patchy, chalky look?**

### **Efflorescence**

Efflorescence is a temporary surface condition which is common to all concrete products. The process is caused by the chemical nature of cement. Manufactured cement contains free lime, and when water is added, a series of chemical reactions takes place. These reactions are accompanied by the release of calcium hydroxide that can form a white chalky crystalline salt deposit on the tile surface when reacting with carbon dioxide.

This reaction can appear as an overall chalky bloom (a softening of color) or in more concentrated patches.

It is difficult to predict how long the effects of efflorescence will last. It depends on the type and amount of deposit as well as local weather conditions.

The action of carbon dioxide and rainwater will gradually remove the deposit, in most cases, leaving the original color of the roof intact without further efflorescence occurring.

Efflorescence is temporary in nature. It is superficial and in no way affects the quality or functional properties of the tile.

### **Weathering effects on concrete tile**

Crown concrete roof tiles will be subjected to the worst nature can offer. The combination of elements that destroy most other roof coverings will not, however, seriously affect the protective properties of tile.

Over time, the surface of any product left unattended will show signs of aging, and concrete roof tiles are no exception.

Tiles are normally colored by either adding pigment into the body of the tile during the mixing stage or by applying a concentrated slurry coat of cementitious pigment to the top surface following extrusion and forming.

Slurry coated tiles are usually selected when high contrast, bright colors are desired while integral colored tiles provide a more subtle appearance. Slurry coated tile can oxidize and turn chalky before gradually wearing down to the concrete base.

The integral colored tile on the other hand may experience some surface lightening but will retain its base color indefinitely.

This lightening can be the result of surface erosion that essentially exposes the grains of aggregate. When tiles are formed, the colored cement will be drawn to the surface of the tile, giving it the initial color shade. This layer, also known as slurry, is slightly softer than the body of the tile and will typically erode away within the first twenty years, depending on climate, exposing a larger percentage of the sand aggregate than the new tile. After this initial change, future erosion happens at a dramatically slower pace and will never reach a point that the physical properties of the tile are affected.

Periodic cleaning and resealing can rejuvenate and prolong the surface finish of either type of tile.