

# Troubleshooting

## STAIN REMOVAL

### ALGAE AND FUNGAL GROWTH

Apply a proprietary fungicide according to the manufacturer's instructions.

### BEVERAGE STAINS

Scrub the stain with hot soapy water and a stiff bristle brush before rinsing thoroughly with clean water.

### CHEWING GUM

For the best results, freeze the area with an ice cube before scraping the gum off.

### FRESH OIL STAINS

Soak up oil with an absorbent cloth or paper towels. Do not wipe. Then, cover the affected area with a dry absorbent powder and leave for 24 hours. Repeat until the powder has absorbed all or as much of the oil as possible. For persistent stains, apply a proprietary cleaner according to the manufacturer's instructions.

### PAINT, WOODSTAIN AND VARNISH

**Paint:** The stained area should be immediately scrubbed with scouring powder and water.

**Woodstain/varnish:** The stained area should be immediately scrubbed with detergent and water. Paint removers or solvents should not be used on stains that are less than a week old, as this will increase penetration into the concrete.

**Wet stain:** Soak up the spillage with an absorbent cloth or paper towels. Do not wipe.

**Dried stain:** Scrape off as far as possible. Apply an appropriate proprietary paint remover, preferably a thick gel. Follow the manufacturer's instructions or contact the paint manufacturer.

## EFFLORESCENCE AND DISCOLOURATION

### WHAT IS EFFLORESCENCE?

Efflorescence is a natural phenomenon and can occur with all cement-based products, as well as other paving products. It may appear randomly and will possibly appear more pronounced on coloured paving.

The white bloom may give the impression that the colour of the paving is fading but, when wet, you will find that the efflorescence vanishes and the paving returns to its original shade. The white bloom will often return once the paving dries. Rest assured that the efflorescence has no detrimental effect on the performance of the paving and will generally disappear with time.

### HOW DOES EFFLORESCENCE OCCUR?

All concrete products produce water soluble calcium oxide (lime). Concrete paving stones contain millions of tiny visible pores; when moisture penetrates these pores – either from rain, dew or condensation – it dissolves part of the lime to make calcium hydroxide.

When the paving dries out, the calcium hydroxide rises to the surface and reacts with the carbon dioxide in the air, sometimes leaving a white bloom of calcium carbonate once the water has evaporated.

## **WILL IT DISAPPEAR NATURALLY?**

Yes. The efflorescence action is arrested by carbon dioxide reacting with calcium oxide within the pores of the concrete, which blocks them. The efflorescence itself is then, over time, either converted back to soluble salts and washed away by rain or simply disappears through the action of trafficking, snow or ice.

Once the efflorescence has disappeared naturally, it does not usually reoccur. It is therefore not necessary to replace the paving or take other measures against efflorescence.

## **HOW LONG WILL EFFLORESCENCE LAST?**

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## **HOW LONG WILL EFFLORESCENCE LAST?**

This is difficult to predict as factors such as climate conditions, location and aspect (damp/shady or open/sunny) are variables that can affect the extent of the phenomenon.

## **WHY DO THE PAVING STONES HAVE DARKER PATCHES?**

This is due to differential weathering, where the surface of the paving has cured at different rates, causing darker colour variation.

Generally, this is exaggerated by the presence of efflorescence which, once removed, will reduce the effect of the dark patches. As with efflorescence, the dark patches will gradually disappear with time.