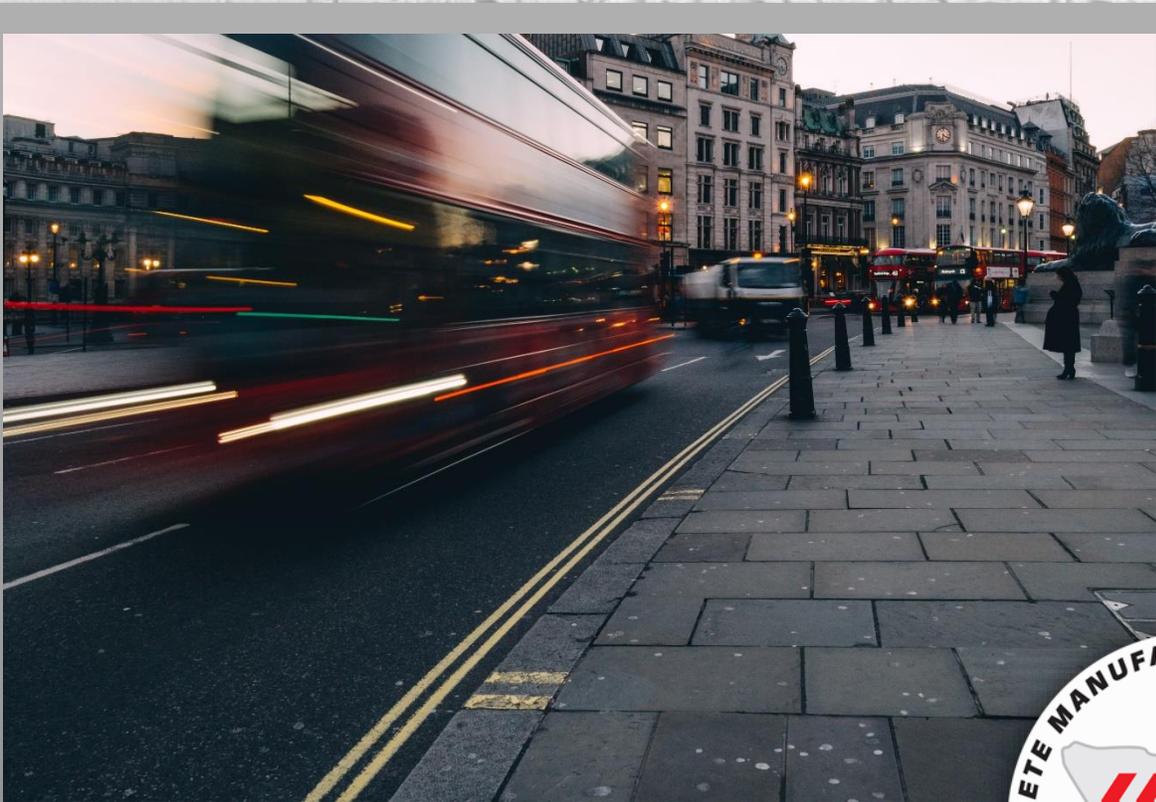


# CONCRETE BLOCK PAVING

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## Efflorescence

### Concrete Block Paving

*An overview of cost, looks and durability*

# About Efflorescence

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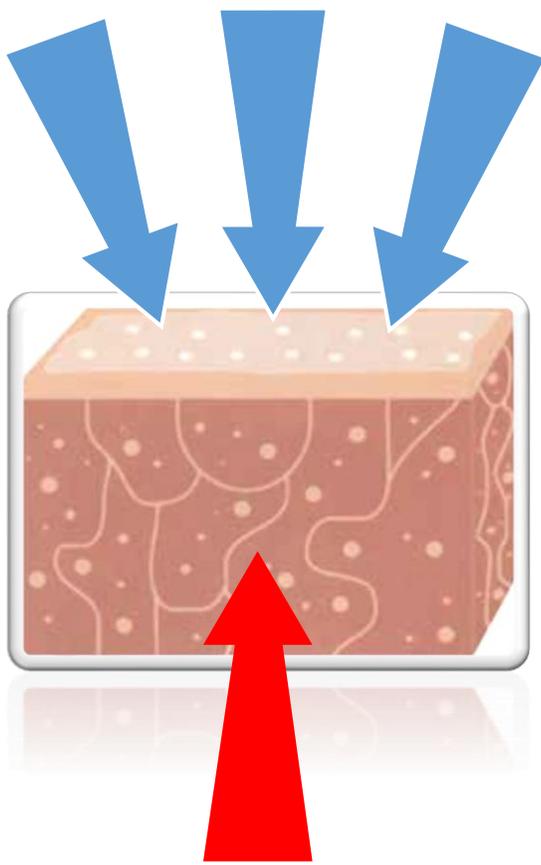
## What is Efflorescence?

The possibility exists that after a few weeks or months pass, a white haze may appear on the surface of the pavers. This white haze is known as efflorescence. It may appear randomly or in certain areas and will be more pronounced on colored pavers. The white haze might give the impression that the color is fading.

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## How long does it last?

Rain washes the efflorescence away within 1 to 2 years. If you do not want to wait that long - wash the pavers with diluted hydrochloric acid (1-part hydrochloric acid and 20 parts water) as a quick remedy. This will also wash the lime in the upper layers of the concrete. The acid should be washed off thoroughly with water afterwards



## Eliminating Efflorescence

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Care during the manufacture of colored pavers is the best recipe. Enough compaction of the concrete prevents excessive amounts of open pores, which open the way for water to penetrate inside. Most producers of concrete products add chemical additives to the concrete to reduce the likelihood of efflorescence. Eliminating efflorescence is partially impossible because the condition is a natural byproduct of hardened concrete. Efflorescence will decrease when no more calcium hydroxide is available to move to the surface of the concrete product. There are cleaners available that can remove efflorescence.

## Eliminating Efflorescence

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All concrete products contain cement, which produces lime or water-soluble calcium oxide. Lime can also be in the bedding sand, aggregate based materials and soil. Although concrete products are solid, strong and very dense, they contain millions of microscopic capillaries that run from the interior to the surface. Moisture from rain, irrigation, underground water sources, poor drainage or dew enters the microscopic capillaries and form calcium oxide. Inside the concrete product this reacts with the water in the capillaries and form calcium hydroxide. This rises to the surface, reacts with carbon dioxide in the air and forms a white haze of calcium carbonate. When the moisture on the surface of the concrete product evaporates, the white haze of efflorescence becomes

*Efflorescence emerged from pores within a magnified area of a concrete paver. The calcium has been carried to the surface by water.*

**RAIN, DEW, CONDENSATION**



**CEMENT PASTE**



**EFFLORESCENCE LASTING  
FOR 2 YEARS**

## Contact Details:



Tel: +27 11 805 6742

E-Mail: [marketing@cma.org.za](mailto:marketing@cma.org.za)

Website: [www.cma.org.za](http://www.cma.org.za)

4<sup>th</sup> Floor, Standard Plaza Building  
440 Hilda Street

Hatfield  
Pretoria  
0083

## CMA Concrete Paving Block Producer Members:

### Aveng Infraset



Tel: +27 12 652 0000

### Bosun Brick - Midrand



Tel: +27 11 310 1176

### Conframat



Tel: +27 861 33 55 99

### MVA Bricks



Tel: +27 12 368 0050

### Smartstone



Tel: +27 11 310 1161

### Technicrete - Gauteng



Tel: +27 11 206 8920

### Vanstone Precast



Tel: +27 12 541 2056/1808

### Vibro Bricks and Paving



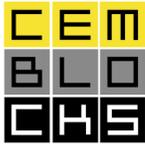
Tel: +27 12 374 5533

### Bosun Brick - Brits



Tel: +27 12 250 1711

**Cemblocks**



**Tel: +27 87 135 2445**

**Horizon Brick and Concrete**



**Tel: +27 12 943 3701**

**Bosun Brick - Port Elizabeth**



**Tel: +27 41 405 0100**

**Deranco Precast**



**Tel: +27 41 463 3338**

**Shukuma Bricks**



**Tel: +27 41 372 1013**

**Corobrick**



**Tel: +27 31 560 3111**

**Technicrete - Mpumalanga**



**Tel: +27 13 696 1153**

**C.E.L Paving Products**



**Tel: +27 21 905 5998**

**Inca Concrete Products**



**Tel: +27 87 944 8954**

**Lategan Cement Works**



**Tel: +27 21 873 1154**

**Mobicast**



**Tel: +27 44 878 0322**

**Revelstone**



**Tel: +27 21 761 9739**