



 **PavingDirect**

Problems Associated with
Concrete Paving

www.pavingdirect.com



Problems Associated with **Concrete Paving**

INDEX

- Section 1** Differential Weathering
- Section 2** Efflorescence
- Section 3** Air Holes
- Section 4** Salt
- Section 5** Manhattan & Kera Linea - General Care



Possible Causes

Differential weathering is caused by varying moisture movement in the early curing process. The darker areas represent the moisture cured parts of the surface, and these are usually in the centre of the slab as the production technique can sometimes inhibit uniform surface drying.

Other causes of differential weathering:

Packaging – subjects the paving units to sweating within the pack.

Atmospheric conditions – the weather can affect the paving in its early curing process and when newly laid.

Paving laid on the spot bed method causes voids which can contribute to the drying out/curing process resulting in patches.

The appearance of a slab affected by differential weathering can sometimes give the impression that the concrete surface is flaking, which is not the case. The perceived flaking effect is purely the shade differential between area of the concrete surface which have been subjected to the varying moisture conditions during the products early curing process.

Solution

The effects are not detrimental to the product and not usually permanent and will become less apparent with natural weathering and with the passage of time.



Photo also shows spot bedding.

Possible Causes

Efflorescence is a natural phenomenon that can occur in any concrete product and does tend to disappear with the passage of time and natural weathering.

Efflorescence is known as 'lime bloom' and brought about as the result of the normal chemical reaction between cement and water. When it is wet, the deposit becomes transparent and seemingly disappears. The occurrence of efflorescence is spasmodic and unpredictable but forms more readily when concrete becomes wet and dries slowly and therefore, occurs more frequently in the winter.

Solutions

Although there are efflorescence cleaners on the market, these can be a temporary solution. Be assured that efflorescence will generally disappear with natural weathering and time.



Possible Causes

Mainly occur during the manufacture of wet-cast paving slabs.

Solution

Generally air holes/pin holes in concrete are small and not detrimental to the future performance of the paving.



Possible Causes

The break-up of paving surfaces can be due to the use of rock salt, which is generally applied on pathways or access routes. Rock salt should not be used on concrete paving and we state this in our brochure and on our website, most suppliers of rock salt will also state it's unsuitability for the use on concrete and asphalt roads and pathways.

The detrimental effects of rock salt use can be seen clearly over recent heavy winters with the appearance of the unprecedented number of pot-holes on roads across the country.

Solution

Once applied there are no resolutions, although without the further use of salt paving should not deteriorate any more, and in future winters the use of grit is recommended.



Manhattan and Kera Linea have a 10 year guarantee, however, they are not self-cleaning and still need to be maintained and looked after.

Prior to laying the paving should be handled with care and stacked face to face.

Use furniture feet on tables and chairs to protect against marking the paving.

Cleaning products recommended:

Every day cleaning – soapy water, broom or mop.

Deep clean – Lithofin Power Clean

Scratch repair kits are available.





Paving Direct Limited

Info@pavingdirect.com

www.pavingdirect.com