

## **Concrete Paver Installation and Maintenance Guidelines**

Congratulations on your purchase of concrete paving products from Urban Paving!

We have manufactured the pavers in a controlled process, which includes known quantities of cement, water, premix, oxides, any additives and initial temperature by curing in a kiln. What we cannot control is the environment the pavers are exposed to (once they leave our yard) nor how they are handled when installed – this is your responsibility.

With this in mind, we have put together paver guides and advice to help you get the best possible finish for your landscaping project. Please bear in mind that this guide is not exhaustive and will not substitute for experience and relevant trade practices to achieve a good finish.

- Concrete is made from natural products which create a chemical reaction by curing. This curing process slows over time, but with the right conditions can continue for more than one year. It is important to note that while this process is still active, exposure to different elements may impact on the reaction, which can in turn change the shade and appearance of the concrete.
- You will notice the pavers appear damp when they come off the pallet. This is the curing moisture and is needed to strengthen the concrete. We recommend seasoning the pavers, which means installing paving in dry, settled conditions and allowing the pavers to breathe out the curing moisture. Once this moisture has left the paver (*over 500ml in a 500x500mm paver!*), the ongoing curing process has become relatively inert and the paver is more stable.
- Concrete will age and weather over time and therefore change depending on the environment it is exposed to (similar to timber and most other construction materials). The way pavers are handled influences their shade and colour variation these colour variations are normal and do not affect quality or functionality.
- The best and recommended permanent material to lay pavers on is a fully supported sand-and-cement mortar mix of appx 5 parts sand to 1 part cement (to lock pavers in), on top of a compacted base course or a concrete pad. We refer to this as the 'Professional Method' of installing pavers. It allows any paving thickness variation to be taken up and makes it easier to achieve a level, solid surface.

We recommend a full bed of mortar under the paver to provide extra support and strength for the paver. A more consistent base also helps to control the effects of underground elements impacting on the paver (such as water affecting the surface colour of the paver). Please ensure the underside of the paver is clean and dry and any debris or scaling is removed where required.

- We recommend a 4-10mm gap between the pavers at the bottom to give a 9-15 mm grouting gap on the surface and allow for variations in paver size. If installing various textured pavers adjacent to each other, please check with Urban Paving to ensure sufficient gaps are applied to allow for different nominal sizes.
- Ensure the pavers are laid so water is able to drain off. A free-draining base is absolutely necessary to ensure the pavers or mortar do not have wet feet, or continually suck up moisture through the paver (*evapotranspiration*), causing efflorescence, shade variation and possible mottling.
- Do not leave objects or tools on new pavers for an extended time (*overnight*) as they may leave a shadow.
- When you get your pavers home, store uncovered pallets of pavers in a dry place and protected from the elements to avoid water marks. If the pavers are to be shifted from the pallet, restack them as they were on the pallet. Diamond stacking (can lead to shadows on the paver surface) or flat stacking of pavers is not recommended.
- When installing from multiple pallets we recommend mixing them as they are laid, to allow for any variation in colour and natural appearance.
- Efflorescence is the phenomenon of natural salts migrating to the surface of the concrete as water moves in and out, leaving a whitish, powder-like discolouration on the surface of your pavers. Efflorescence will settle

For further information or if in doubt please contact a recognised landscaper, paving installer or Urban Paving. Urban Paving and Landscape Supplies, 575 Sawyers Arms Road, Harewood, Christchurch. (03) 359 8625.



and cease over time. Often, the better the quality and strength of concrete, the more cement – and often the more efflorescence.

- In much the same way as wood, concrete is a porous product and can absorb stains. It is therefore recommended that you immediately remove any material that is likely to stain the paver.
- If you are requiring a more uniform look to your paving project by reducing the effects of colour fading, or if staining is a potential issue, pre-sealing is a good option. Sealing can reduce staining and fungal growth and can also enhance the concrete colour. It will slow the weathering process by preserving the colour and reducing water absorption, thereby reducing the effects of mottling and efflorescence. It is important to be aware that sealing can enhance the colour and variation in paving; effectively 'locking-in' the current look of your paving. Please remember that once laid, pavers may continue to soak up surface or ground water which often continues to react with the concrete. Sealing is NOT the answer to stopping pavers continue to change as noted above.
- Size our concrete pavers have a 2–3-degree taper on all four sides. The base of the paver is the larger dimension, narrowing to the top. The width therefore will vary by 1-2mm and up to 2mm in thickness. This is normal for handmade products. The same can be said for mixing sizes. Two 300mm pavers will take up more lineal room than one 600mm paver. To ensure you get the right number of pavers for your job, please check with our staff.

Concrete pavers are made from natural products. The natural processes of concrete and the environment in which they are installed will influence the appearance of pavers beyond our control. Urban Paving cannot guarantee perfect shade consistency and therefore accepts no responsibility for variation in the shade, colour or mottling of pavers that has occurred naturally, or as a result of the pavers not being cared for/installed in the recommended manner.

NB: All samples are indicative only. All concrete pavers are a nominal 40mm thick except lawn borders and air con slabs. Colour and texture may vary.

On receiving, please inspect the product. If there are any issues, please report them immediately and do not commence installation. Contact us on 03 359 8625. Claims for faulty product will not be entertained after installation.