



Should You Mortar Set Concrete Paving Stones Over Concrete?

One of the beauties of interlocking concrete paving stones is that they make up part of a flexible pavement system comprised of an aggregate base, an aggregate bedding layer, interlocking concrete pavers and some sort of edge restraint, be it plastic edging, modified concrete edging or curbing.

The flexible and interlocking nature of this system allows it to move small amounts to accommodate for environmental forces both internal and external. This flexibility allows loads to be spread out over many pieces, which diminishes the load on an individual piece, much like how a Kevlar bulletproof vest works.

Inversely, mortar setting, by its very nature, is highly inflexible. It requires an extremely rigid base (concrete or similar) and cannot handle varying loads as well as a flexible pavement because the load is concentrated in one spot. Therefore, mortar is a poor base option for concrete paving stones, especially any sort of area that will receive vehicular traffic. Because the mortar cannot flex at all, there will be issues with adhesion, and over time, the mortar will crack and crumble, causing the pavers to work loose. Because of this, we do not recommend mortar setting concrete pavers.

Secondly, it is almost impossible to prevent mortar from getting on the face of the pavers because of the horizontal nature of paving stones. Any mortar that does get on the surface will be extremely difficult to remove, as it is cementitious and will bond directly to the surface. Therefore, we do not recommend mortar setting pavers.

Thirdly, mortar setting will not allow the pavers to breathe adequately. This can increase the likelihood of efflorescence occurring on the pavers. Trapped water will draw minerals out of the mortar and concrete base and transfer them to the pavers as the system slowly respire. For this reason, we do not recommend mortar setting concrete pavers.

Lastly, it is simply not cost effective. The traditional sand set paver method has been validated for hundreds if not thousands of years in millions of square feet of installations. Gravel and sand are inexpensive and effective. The additional labor and costs involved with mortar setting are just not necessary.

We cannot recommend installing interlocking concrete paving stones with any kind of mortar setting. We also will not warranty product that is installed in this manner.

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