

Laying methods

How To

Note: These suggestions are guides only. Conditions such as soil, pool surrounds and driveways will vary from site to site, and therefore the contractor should use discretion as to whether these recommendations are suitable or adequate. Advice from an Engineer should be sought in the design of all concrete bases. Expansion joints are suggested on concrete foundations. See Australian Standards for more information.

Foundation

For an area to be successfully paved, the foundation preparation is very important. For an area expecting pedestrian traffic only, 75 mm thick reinforced concrete or 75 mm thick compacted crushed rock is suggested. In the case of vehicle traffic, a 100 mm thick (min 25MPA) reinforced concrete base is suggested.

Laying Methods

Paving stones should be laid on a mortar bed made of 4:1 brick, sand and cement mixture. This mixture should be slightly wetter than a bricklayer's mix. The pavers should not be laid on a sand bed only. We suggest adding a bonding and waterproofing admixture. We also suggest using a brick, sand and grey cement only.

The mortar bed should be 15 to 20 mm thick. The underside of the slabs should be wet before placing them on the mortar bed. The paver should be bedded in well; this is best done by tapping pavers with a rubber mallet, ensuring there are no air pockets left under pavers and the entire paver has full coverage. Paving stones may fail if the mortar bed is uneven or if there are air pockets between the pavers and the mortar bed.

Ensure any loose material that may interfere with adhesion of the bedding is removed from the rear of the paver prior to laying.

To increase adhering qualities, we suggest applying a bonding agent to the underside of the stones before placing them on a mortar bed, especially in the case of steps or pool copings. Alternatively, a paste may be made using either cement and water or cement and a bonding agent. This paste is then brushed onto both the concrete and the paver before the paver is laid.

During laying the pavers should be kept as clean as possible. Spills on the pavers and site dirt should be sponged off immediately to prevent staining.

After an area is laid, it should not be loaded for a period of time. Where pedestrian traffic only is expected, 2 days is sufficient. In the case of vehicle traffic, 2-3 weeks is required.

Due to the variances in the natural colour of Stone pavers, it is recommended that pavers be sourced from all pallets while an area is being laid. This will enhance the natural look of the product and the overall effect of the area that has been laid.

Grouting methods

Coloured grout can be obtained from Stone. Follow the directions for the mixture obtained on purchase. Do not use more water than stated as this can affect the colour and strength of the grout.

A 1 x 20 kilogram bag of grout will cover an area of 12-15 m² when joints are 6 – 7 mm.

The paving stones should be wet down before the grouting commences.

The grout can be applied either with a grouting gun or a stiff mix trowelled into the joints. All excess grout must be cleaned off immediately to avoid staining or sticking.

Expansion joints at suggested intervals should be placed throughout the paving (see Engineers Specifications or Australian Standards). This allows for some movement in the base, mortar and stone. Expansion joints in the concrete base must be continued through the mortar bed and grout joint. Expansion joints in the paving and bullnosing can be filled using flexible mastic. These can be purchased in a wide range of colours to match the paving and grouting.

Cleaning methods

The paving should be lightly acid-washed the day after the grouting takes place to remove any mortar/grout residue. Firstly, the slabs should be thoroughly wet down. Then, using a solution of 1 part hydrochloric acid to 20 parts water, clean the stones with a stiff broom. Remember to always add acid to water. Finally, hose all the stones clean with water.

Sealing

Stone suggests sealing the paving to protect it from oil-based stains. Contact us for more information.