Howto**lay**pavers

STEP 1 PREPARE THE SITE

Prepare an area larger than the paved area required. Clear area of all vegetation, bark and soft soils. Check that finished height is not going to be higher than a nearby door opening.

STEP 2 LAY A FOUNDATION

Lay certified road base and compact with a plate compactor. If the road base if very dry add a little water. If thicker than 1mm compact in layers (55-75mm for a walkway, 150-200mm for a drive way), if laying on clay or fine sand use geo-fabric first.

STEP 3 BEDDING SAND

The most common bedding type sand used is washed medium or course sand. A minimum 30mm layer is recommended. Level and compact this bedding sand layer.

STEP 4 SCREEDING BEDDING SAND

Using a screed, level an area to start from. For larger areas, break them up into smaller areas that are easier to manage. Lay a screed rail on your prepared area and using it as a guild screed at 90° allowing for a slight fall so the water will run away from your house toward the lawn or garden. Lay the screed rails where you have just prepared. Place the screed on the rails and using a sawing motion pull the screed towards you. For larger areas just repeat the process.

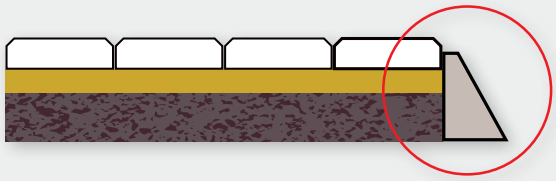
STEP 5 START PAVING

Set up a string line to suit the pattern you are going to lay and start laying along the longest straight edge of area. Leave a 2-4mm gap between the pavers to allow for gap sand.

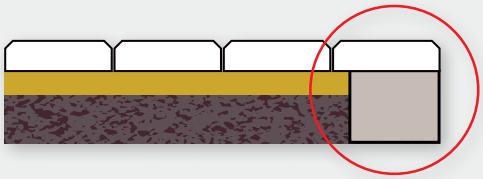
STEP 6 EDGING

Unless you paving is getting laid up against a house or slab, an edge restraint must up put in. See diagram example for two options.

Edge Restraint example 1
Using the left over sand, mix with cement at a 4:1 ratio.



Edge Restraint example 2
Create a cement beam approx. 100mm in from the edge of the paver. Sprinkle the beam with neat cement and lay the paver on the beam. This will lock the paver to the beam giving you a high quality edge ideal for the garden or grass to grow up to.



STEP 7 SWEEP IN THE SAND

Always use kiln dried sharp gap sand. Sweep the gap sand over the dry paving, ensuring that all the little gaps are filled.

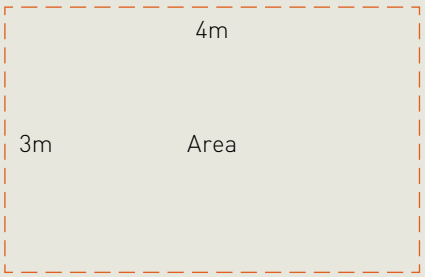
STEP 8 PACK IT IN

Pavers with a thickness of 50mm or greater need to be compacted with a plate compactor (whacker plate). Always remember to use a rubber mat or carpet under the place compactor to prevent damage to the pavers. For pavers with a thickness of 40mm the surface can be hand compacted with thick piece of timber and a rubber mallet.

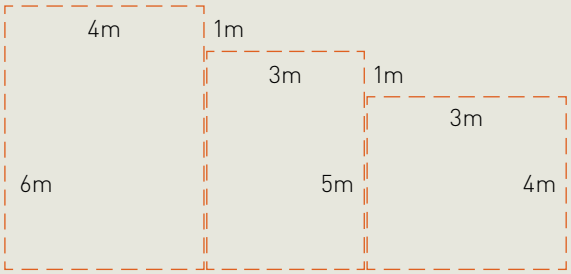
Paving
Handy Hints

QUANTITIY OF PAVERS REQUIRED

Measure your area to be paved to determine quantity of pavers required. This area is simply calculated by length (m) x width (m) = area (m^2) for basic square or rectangular spaces (m=metres).



4m x 3m = $12m^2$

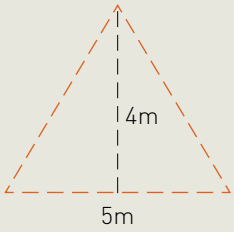


Area Total (4m x 6m) + (3m x 5m) + (3m x 4m) = $51m^2$

For triangular area:

½ x base (m) x height (m) = area (m^2)

e.g. ½ x 5m x 4m = $10m^2$



Allow up to 10% extra for wastage such as cuts & breakages.

ESTIMATING MATERIALS REQUIRED

A base layer of road base should be laid across the whole are. To a total depth of between 100 to 150mm for driveways and 50 to 80mm for pathways.

Bottom Layer: ROAD BASE

You'll need road base if you want a firm foundation for the paving. Particularly if you're doing a driveway. Spread road base around the entire area to a total depth of 100 to 150mm in 50mm layers compacting between the layers for driveways or 50mm to 80mm for pathways.
1 cubic metre will cover 9m2 when compacted to 100mm.
1 cubic metre will cover 18m2 when compacted to 50mm.

_____ m^2 (area) x 0.1 = _____m^3
ROAD BASE

Middle Layer: BEDDING SAND

The next step is to lay bedding sand evenly over the area to a depth of 40mm. 1 cubic metre will cover approximately $20m^2$ to a depth of 40mm.

_____ m^2 x 0.04 = _____ m^3
BEDDING SAND (The area your are paving) to a depth of 40mm.

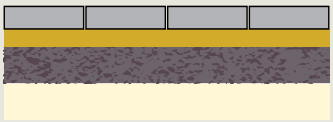
Top Layer: PAVER JOINT FILLING SAND

When you lay pavers it's recommended that you leave a 2-3mm gap between pavers, joint fill sand is broomed into the gaps. A 20 kg bag should cover between 20-30 m^2 at the recommended 2-3mm gap.

Restraining Edge: Prebagged CEMENT and SAND mix
To keep all the pavers securely in place you need to make concrete restraints around the edge of your pavers. You can easily make this with a mixture of concrete block and cement. 1 cubic metre of concrete will cover 20 linear metre of restraint and 6 bags of cement are needed to make 1 cubic metre of concrete.

_____m/0.005 = _____m^3
CONCRETE BLEND (Length of restraint are you'll need around paved area)

_____ m^3 x 6 = _____
BAGS OF CEMENT (Concrete blend)



Paver
40mm Bedding Sand
50-80mm Road Base (Pathway)
100-150mm Road Base (Driveway)

Maintaining your outdoor project
Prevention is better than cure

Pre-sealing admixtures are incorporated during the manufacture of these products. These admixtures significantly enhance waterproofing and assist in maintaining the appearance of your blocks for years to come.

PAVERS

- Frequent sweeping with a bristled broom to keep area free of debris.
- It is recommended sealing concrete pavers after installation. Two options are available – a topical wet-look sealer or a penetrating sealer.
  Sealing products recommended are from Klen International - www.klen.com.au
- If constructing in and around the paved area, cover the pavers to protect against damage.
- Protect your pavers against possible staining from mortar, oxides, cement and rust.
- Do not use acid to clean pavers.
- Avoid using high pressure cleaning apparatus to clean pavers.
- Joint maintenance - Any loss of sand in the joints must be promptly rectified. Repeat STEP 7 of the 'How to pave'.
- Control weeds by periodic applications of weedicide. Best results will be achieved in dry weather conditions.

Routine cleaning will keep your project in pristine condition, however should staining occur - follow these simple steps:

- Identify type of stain carefully before taking action.
- Assess the efficacy of the cleaning compound or procedure by a trial on a small inconspicuous area of the pavement.
- Remove the worst stains first.
- Where abrasives, detergents or chemicals are used, ensure that all residues are immediately removed.

RETAINING WALLS

- If constructing in and around the area, cover the wall to protect against damage.
- Protect your retaining wall against possible staining from mortar, oxides, cement and rust.
- Do not use acid to clean retaining wall.

Routine cleaning will keep your project in pristine condition, however should mould growth occur - follow these simple steps:

- Initially try wet brush cleaning with warm water and household detergent or high pressure water blasting (ONLY use fan jet) with or without detergent or use ordinary bleach diluted down as per specifications then scrub with stiff brush. Make sure this area is flushed down with water.

EFFLORESCENCE

The most common cause of concrete product discolouration is efflorescence. It is a transitory occurrence and will usually disappear in time under abrasion by pedestrian and vehicular traffic and general weathering. Efflorescence does not affect the structural integrity or strength of the product. Efflorescence will usually diminish and disappear in the course of time as the product is exposed to the elements. Efflorescence may be removed by stiff brush or the application of Anti-Eff (Klen International product) – Read suppliers instructions before use.

COLOUR VARIATION

Due to the changes in raw material, variation in colour can occur. When ordering your product, order all elements of your project together to reduce the possibility of colour variation. We do not guarantee different batches will be the same colour.