



General Information

On delivery, the product should be inspected. If there are **any** issues, please report them immediately and do not commence installation.

Before installation commences a certain amount of sorting of the product may be required to ensure consistency of colour, texture and dimensional tolerance.

Natural stone products are unique and you can expect colour and veining variances between each unit.

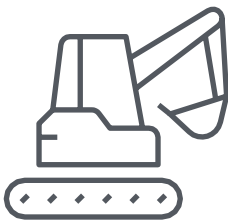


Health and Safety Information

Safe working practices should be employed at all times during the construction process and all necessary Personal Protective Equipment (PPE) should be worn.

Drainage

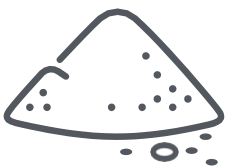
All paved surfaces require drainage. Where kerbs or edging are laid, this will restrict natural water flow off the paved area, so provision needs to be made to dispose of this water. This can be in the form of using cross fall and longitudinal fall to run water into areas of soft landscaping (i.e. a flowerbed or grassed area). However, where this is not possible, some form of drainage channel will need to be utilised. If laying kerbs or edgings next to a building, then care should be taken that the laid products are at least 150mm below the damp proof course level.



Excavation

To allow new kerb or edging to be installed correctly a certain amount of excavation will normally be required. The depth of this excavation will depend on several factors; the height of the kerb or edging selected, which way up it will be laid, and what upstand is intended. (i.e. the difference in height between the top of the kerb or edging and the paved surface in front of it).

All organic materials such as grass should be removed from the excavation as this will rot and could cause possible settlement of the kerbs or edging and paving at a later stage. When the desired level has been reached the bottom of the excavation should be compacted to give an even surface.



Sub-base

The inclusion of a sub-base beneath the kerbs is not necessary as the kerbs and edgings are normally laid on a separate concrete bed. This bed, and the kerb unit, will restrain the sub base for any adjacent paving.

Bedding

Kerb and edging units are laid onto a concrete foundation. The foundation should typically be around 100mm thick, of well compacted semi-dry concrete, typically a 1:2:4 (cement: sand: aggregate) mix will be sufficient, depending upon the expected loadings and ground conditions. A minimum of a third of the unit must be fully bedded into the mortar mix.



Laying Instructions

Set up string lines to both the top and front faces to ensure the correct line, levels can be achieved by tapping the unit with a rubber mallet. Kerbs and edgings can be laid close jointed (around 2 - 4mm joints) which is used most commonly or wide jointed (5 - 10mm) and pointed, as preferred. Butt jointing (i.e. with products touching) is not recommended. Fittings are bedded in the same way as standard units but may require more care to achieve a good level due to manufacturing tolerances.

Where wide mortared joints are used, allowance should be made for expansion by omitting mortar from a joint every 15 metres.

The mortar should be allowed to harden before the kerbs or edgings are 'backed' and protected from adverse weather conditions. Backing concrete (haunching) should be installed in order to support the kerbs or edgings up to around two thirds of the height of the kerb or edging. This backing may have to be reduced to accommodate the materials that will be at the back of the kerb or edging when the work is completed (e.g. more paving).

Allow the concrete and mortar to harden sufficiently to avoid displacement when completing other work, such as block paving to the front of the kerbs or edgings.



Cutting

Cutting may be carried out using a water and dust suppressed diamond tipped power saw. It must however be noted that the aesthetic finish achieved will depend greatly upon the choice of cutting mechanism and level of skill. Specific equipment or blade types should be used when cutting natural stone units as those designed for cutting concrete only may blunt easily.

Tolerances

All products are manufactured with small variations in size. Bedding onto mortar allows variations in height to be accommodated during installation kerbs and edgings can typically be laid to very close tolerances on site. It is common practice for some fittings, due to their shape, to be manufactured using a slightly different processes, so additional care should be taken when bedding these units.

Finishing

Where close joints have been used, then the joints should be left as dry joints. Wide joints should be fully filled with compacted mortar. The use of pigmented mortar can enhance the appearance of the finished kerbs.



Inclement Weather

Installation should be discontinued (and any open work face covered) if weather conditions are such that the performance of the paving may be jeopardised. Laying operations should not be undertaken when the temperature is below 3°C on a falling thermometer and 1°C on a rising thermometer. All unfinished areas and stockpiles of materials should be covered in the advent of inclement weather to prevent saturation.



For more information

Please contact Marshalls Group Technical Services on **0370 411 2233** or email grouptechnicalservices@marshalls.co.uk