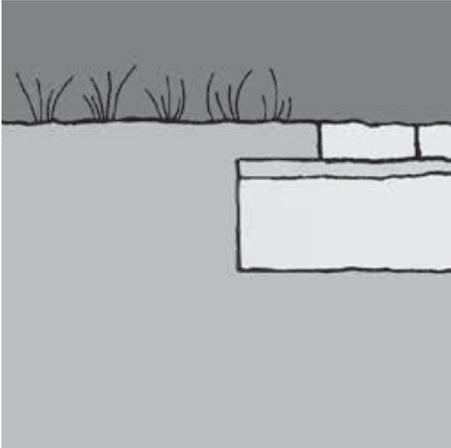


Installation and laying information

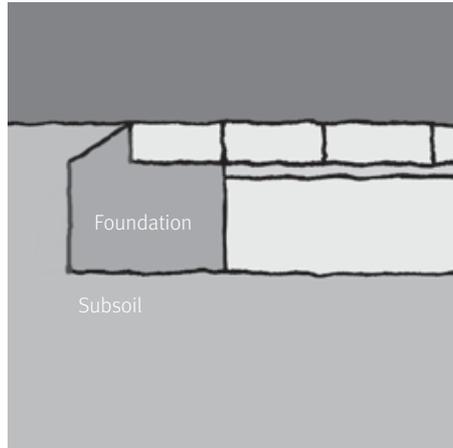
Paving stones and slabs

EDGE REINFORCEMENT

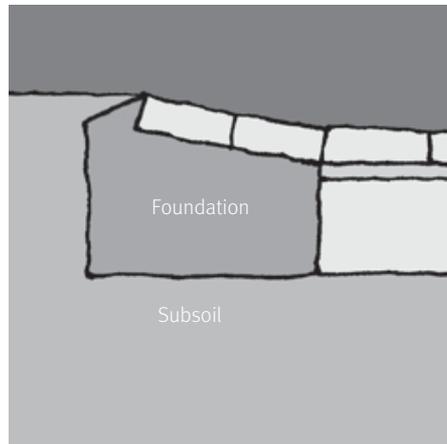


Unsecured Edge

A concrete border may not be necessary for ground that is sufficiently water-permeable and planted, as long as the surface is even and the soil allows rain-water to percolate quickly enough that there are no washouts. It is important that the superstructure goes beyond the edges so that the path does not tilt to one side.

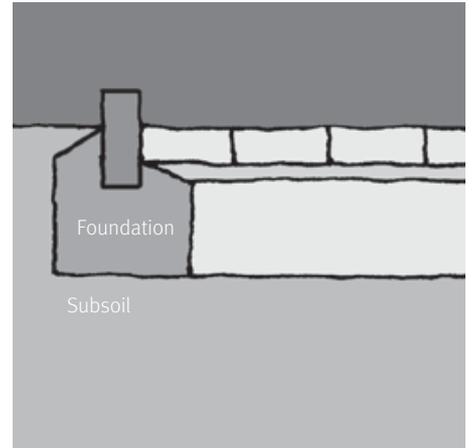


Secured edge – First row of paving in mortar bed



Secured edge – Paved edge border

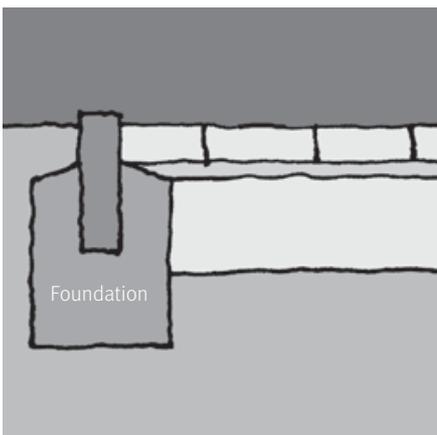
If the soil does not meet the conditions defined to the left, the paving edges should be stabilized with concrete by supporting the paving on a concrete wedge. At the edges of terraces or broader paths, the first row of paving slabs should also be laid in a mortar bed.



Edge boundary with paving stone

The edging stones must be laid in such a way that sideways slippage or subsidence of the paving blocks or slabs is impeded.

Paving blocks and slabs do not have any size tolerances. For this reason, it is useful to lay out a certain number of paving stones or slabs before setting the border, in order to determine exact spacing. Dig out a trench that is approximate the width of a spade and 20cm deep. Fill the excavation half-way up with earth-moist concrete and level the surface. Next, stretch the cord between the cord rods and lay the edging stones along the cord. Using a rubber mallet, press the edging stones to the right height into the concrete. Fill it up with a concrete shoulder inside and out along the whole length.



Border with deep edging/palisade as edging stone

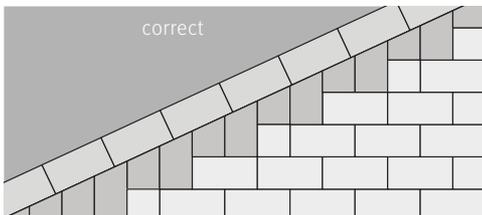
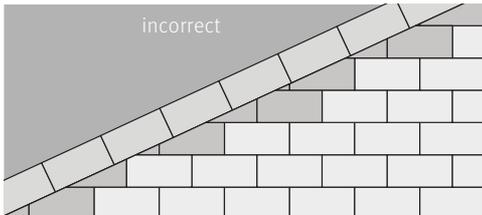
Pavements under heavy loads, e.g. garage entrances or surfaces on the edge of a slope need even more stable edging. These are created with special end stones that are concreted in. End stones can be deep edging stones or palisades.

Installation and laying information

Paving stones and slabs

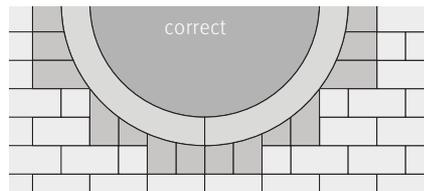
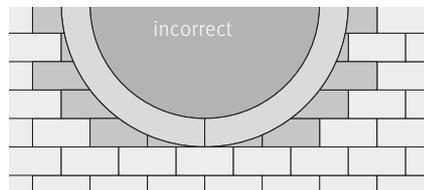
EDGE FINISHING ON PAVED SURFACES

To avoid unnecessary cutting in the edge area, during paving the spacing of the edging stones should always be drawn up in accordance with the grid measurements of the stones. If it is still necessary, stones should be cut according to the following sketches.



Connection to angled edging

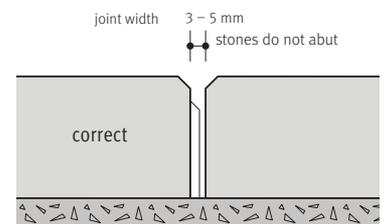
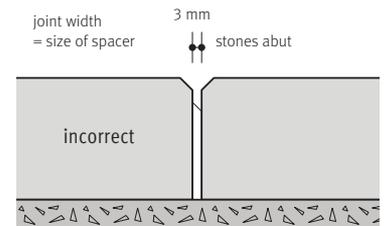
Care must be taken here that the side lengths of the cut stones are not too small, and that the cut edge is also laid in the surface, i.e. it is first paved around with whole stones. For broken materials such as natural stone, a hammer and chisel suffice to divide them up. For paving slabs and slabs, professional devices are needed to break and cut them. These can be borrowed from specialist construction dealerships. It is recommended that all fitting pieces be cut and laid when the paving is near completion.



Connection to round edging

JOINT FORMATION

The joint width must be 3 - 5 mm. The lower value may not be undershot so that complete filling of the joints can be achieved. In order to make the joint material rigid, do not exceed the upper value. Spacers are no replacement for the stipulated joint measurement.



BEDDING AND JOINT MATERIAL

The bedding and joint material must be clean and free from discolouring agents. Pointing sands with a large fine particulate component encourage rising damp and lead to dark edges. Concrete slabs, especially light coloured ones, must not be soiled by loamy filling sand, topsoil or old mortar. The joints should be filled with sand, gravel sand or crushed sand in suitable grades.

Installation and laying information

Paving stones and slabs

BEDDING



LAYING



Material mixes 0/4, 0/5, 0/8 and 0/11 mm are suggested as materials for the bedding. The bedding should have a thickness of 3 - 5 cm in its compacted state and struck off with a lath. It should not exceed the value above, in order to prevent deformations to the surface caused by excessive loads. The bedding, once struck off, may no longer be walked on and must already have the same gradient as the later paving layer. The bedding material must be constituted in such a way that, when the stones are compacted, i.e. when the height tolerances are evened out, no problems arise. Uncompactable bedding material can lead to vibration damage to the paving slabs. The bedding must be applied at an even thickness. It must not be used to even out unacceptable irregularities in the base course. Irregularities in the thickness of the paving bedding can already lead to deformation at the vibration stage, which will only become more pronounced through later loading by traffic.

Because of the addition of natural raw materials, concrete paving slabs are subject to natural, slight colour variations.

For this reason, always lay stones from at least three packages and from different layers within the packages simultaneously. This is especially the case for shaded paving slabs. In this way you avoid large scale colour concentrations and will achieve a harmonious overall appearance. The laying takes place from the laid surface onwards so that the recently laid bedding is not trodden on in the process. The stones must be laid flush, level and aligned using a cord or lath. Never crush paving slabs too close to each other, as in this way the edges will flake off and production tolerances cannot be compensated for. On paths, the rows of paving should run perpendicular to the direction of travel.

LAYING LARGE FORMATS

Depending on the material, weight and permeability of large-format stones and slabs, various vacuum lifting devices are available for rational use when laying. We will be happy to recommend specialist firms where you can hire these devices.

Installation and laying information

Paving stones and slabs

JOINTING



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Unbound paving joints:

Material mixes 0/2, 0/4, 0/5, 0/8 and 0/11 mm are suggested as materials for the bedding.

Suitable grain sizes: Sand 0/2 mm to 0/4 mm or 2/5 mm or a graded mixture of crushed fines and grit 0/3 mm or 0/5 mm, depending on joint width.