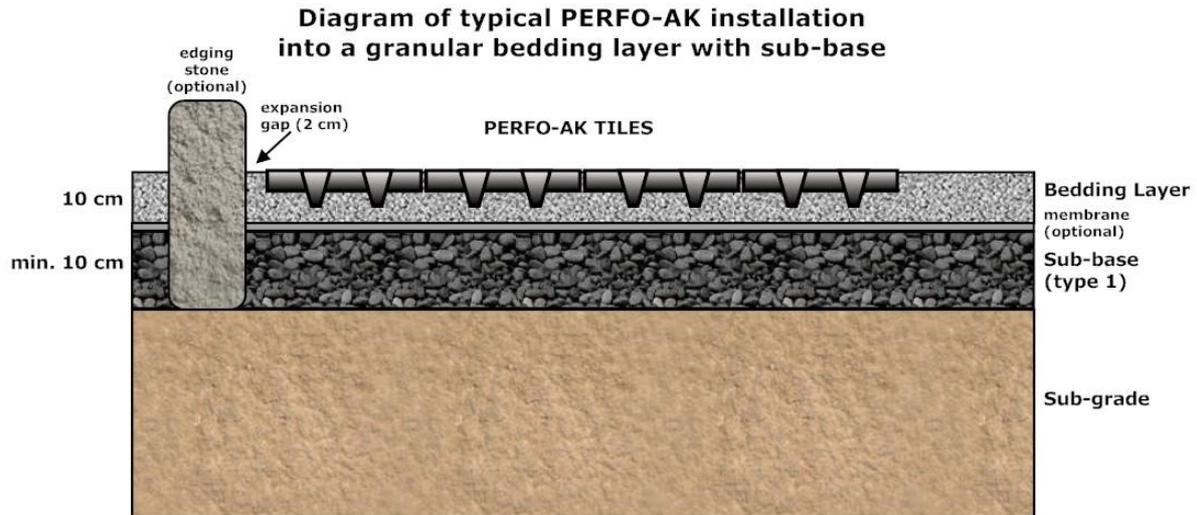


# PERFO-AK

## Installation Guidelines For Applications With A Granular Bedding Layer

PERFO-AK anchor tiles are particularly well suited for installation into a granular bedding layer, such as crushed granite or similar materials. The bedding layer is usually prepared on top of a suitable sub-base (e.g. consisting of MOT Type 1 material). The depth of the sub-base will depend on the existing ground conditions and expected traffic loads. For regular cars and light vans, a sub-base depth of 10-15 cm should be sufficient. This should be increased for heavier loads or on particularly unstable ground. The PERFO-AK tiles cannot be installed directly into the sub-base. We recommend the preparation of a bedding layer of crushed stone, such as granite, with a depth of approx. 10 cm after light compaction.



The particle size of the bedding material should be between 1 mm (grit) to max. 15 mm, with sufficient finer particles to ensure the material binds together well as the tiles are compacted in. We do not recommend washed/rounded pea gravel for the bedding layer as it does not bind together as well as more angular crushed rock materials. Most commonly crushed granite is used, although limestone or a mixture of sharp sand and gravel may also be suitable. A very high dust content should be avoided as it can make installation more difficult and also clog the surface during wet weather. The pictures below show examples of the bedding materials typically used.



*Crushed granite is particularly well suited as a bedding material*

## PERFO-AK

### Installation Guidelines For Applications With A Granular Bedding Layer



*Preparing a 10 cm layer of finer bedding material (crushed granite 1-15 mm) on top of a type 1 sub-base.  
The type 1 sub-base material is in the foreground, with the finer bedding layer in the background.*

Once the bedding layer is prepared and lightly compacted, the first 3-4 rows of PERFO-AK mats should be clipped together in position. The integrated clips are snapped together using foot pressure or a rubber mallet. Angles are achieved by offsetting the clips or cutting the mats.



*Laying out the PERFO-AK mats*



*PERFO-AK mats being clipped together*

The first 2-3 rows are then compacted into the bedding layer row by row. Initial compaction of the tiles should be carried out with either trench compactors (rammers) or a heavy duty wacker plate (approx. 750 kg). Lightweight wacker plates are not suitable. We do not recommend laying out the entire area with PERFO-matting before beginning with compaction. Instead the area should be gradually built up and compacted row by row.



*750 kg forward/reverse wacker plate*



*Rammer (trench compactor)*

# PERFO-AK

## Installation Guidelines For Applications With A Granular Bedding Layer

Subsequently the area can be rolled with a tandem vibrating roller which should have an operating weight of at least 4-5 tonnes (or heavier). We recommend that the bedding layer is moistened before compaction to help binding and to avoid too much dust is generated. The area must be thoroughly compacted to ensure a durable and stable surface is created.



*5 tonne tandem vibrating roller subsequently used for further compaction of the reinforced area.*

During the compaction process most of the voids in the top surface of the PERFO-AK tile will fill up with material from the bedding layer, so that minimal back-filling will be necessary, if at all. However the top surface of the PERFO matting can be "dressed" with additional crushed stone or gravel following the compaction process, if desired.

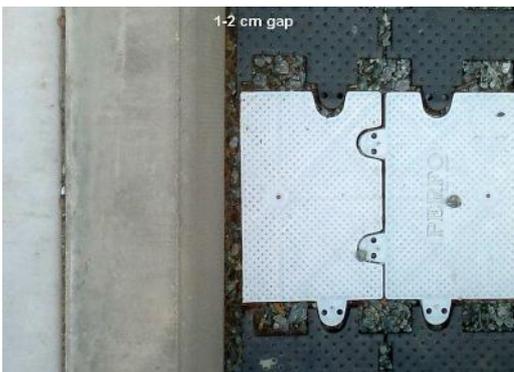


*PERFO-AK after compacting into bedding layer*



*Finished car park surface*

An expansion gap of 1-2 cm should be left between the edge of the PERFO matting and any immovable objects, such as curb stones or man-hole covers. This will minimize the risk of edges lifting during hot periods or due to lateral forces. The tiles can be cut with a disc cutter or saw.



*1-2 cm expansion gap should be left between the edge of the PERFO matting and immovable objects*

## PERFO-AK

### Installation Guidelines For Applications With A Granular Bedding Layer

Marking of lanes and parking bays can be achieved using PERFO marker tiles which are compatible with the PERFO-AK tiles and which can be integrated into the layout. Alternatively the tiles can be painted with highway marker paint.



*Parking bay with PERFO marker tiles*



*Line marking using highway paint*

Correct installation will result in a smart, durable and environmentally sustainable porous surface.



*PERFO-AK car park after completion.*

Further pictures of PERFO-AK installations on a granular bedding layer are available here:

[http://www.perfo.co.uk/gallery/hockley\\_woods.html](http://www.perfo.co.uk/gallery/hockley_woods.html)

and here:

<http://www.perfo.co.uk/gallery/shoeburyness.html>

Please contact us if you require further information on [info@perfo.co.uk](mailto:info@perfo.co.uk) or [info@s2t-perfo.com](mailto:info@s2t-perfo.com) .

S2T Group, January 2013

Disclaimer:

As ground conditions, installation procedures and intended use of the PERFO system vary from site to site, we cannot accept any guarantee for suitability of the system for a specific application. For this reason we also cannot accept any liability resulting from use of the PERFO system and recommend that adequate trials are undertaken by the customer to ascertain the product's suitability for the particular application in question.