

# PERFO INSTALLATION GUIDELINES - GENERAL

## 1. Options for installing PERFO

There are various options for the installation of the PERFO ground reinforcement system, depending on the application and existing ground conditions, which must be taken into consideration. In many cases it is possible to roll the PERFO tiles directly into soft ground.

## 2. Installation with ground preparation.

In cases of extreme water-logging, very soft or uneven ground and heavy expected loads, some drainage is advisable and/or some ground preparation or foundation may be required. The top turf can be removed and a layer of ballast between 20-40 cm deep (depending on conditions) laid down. This should be levelled and compacted. A layer of finer material approx. 2 cm deep follows and finally a layer of sand or a sand/soil mixture of approx. 5-7 cm depth (grass seed can be mixed in with the sand/soil). This should also be compacted. PERFO can also be rolled directly into fine gravel, which is best mixed with a binding agent such as fine-grained recycled bitumen. The surface should be levelled & compacted and the sand and/or soil moist when the PERFO is installed. The PERFO sections are placed in position and joined together using foot pressure on the hooks. If a roller is to be used, no more than 3-4 rows of Perfo sections should be laid in the intended direction of rolling before commencing with rolling (see below) They can then be rolled or vibrated into the prepared area.

## 3. Installation on existing grass surface

When PERFO is to be laid directly on the existing grass surface, the grass should be cut as short as possible beforehand. Small undulations can be levelled out using sand or a sand/soil mixture. The PERFO sections are laid out in position and clipped together using foot pressure. If the ground below is quite soft, the tiles can be supported using a wooden or metal plate or strip, to help the process. If a roller is to be used, no more than 3-4 rows of Perfo sections should be laid in the intended direction of rolling before commencing with rolling (see below). **Installation should only take place when the ground is soft to ensure the sections can be rolled into the surface easily.**

## 4. Rolling/pressing PERFO sections into the ground

The ideal method to be used will depend on the prevailing ground conditions size and shape of the area to be installed. On very soft ground (eg. after levelling/grading), a heavy duty compactor plate (300500 kg) should be used initially. On grassed areas, less soft ground and particularly large areas, a tandem vibrating roller (approx. 2.5 to 5 tonnes) is the better option. **In the case of a roller, it is important that not more than 3-4 rows of Perfo sections are laid in front of the roller, otherwise sections may bunch up and form a hump in front of the roller, making the rolling process difficult.** At least 1 row should be left unrolled, to which up to a further 2 rows of Perfo sections can be attached (see diagram).

The individual sections are specially designed with expansion tabs to allow for expansion during hot temperatures. Therefore, care should be taken when rolling or pressing the PERFO sections into the ground to ensure the tiles are not pushed completely together and that a small gap between each tile remains. The installed area can be rolled over at least 4-5 times. **The sections must be pressed into the ground completely for correct installation and to give the optimum load bearing capabilities.** After initial installation, the PERFO sections should be checked regularly to see that they remain flat and plane with the surface, especially after a ground frost or very hot temperatures. They can be rolled or pressed in again if there has been some initial movement. Once sufficient grass has grown back through the tiles, this will further strengthen the bond between the PERFO sections and the ground below, which should prevent further undulations occurring.

**Note:** if the tiles are not laid correctly or laid against immovable objects such as posts or curbs which could prevent expansion, this could result in small undulations forming during hot weather or extreme frosts.

## 5. Removing or repositioning individual tiles

Individual tiles can be separated from neighbouring tiles, by simply levering out the clips from above with a medium-sized flat screwdriver (see attached photo).

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. We recommend that adequate trials are undertaken by the customer, to ascertain the product's suitability for the particular application in question.

## PERFO INSTALLATION GUIDELINES - GENERAL



Sections arranged on the ground



Perfo sections clipped together using foot pressure on the clips



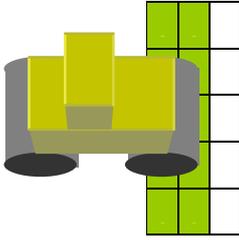
After about 3-4 rows are laid out, they should be rolled in leaving the last row unrolled.

### Recommended method for rolling-in PERFO sections

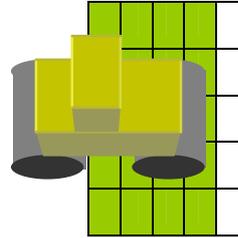
 Rolled sections

 Unrolled sections

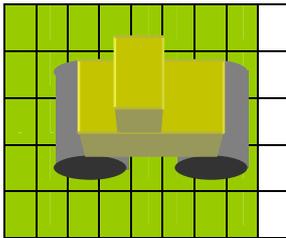
- 1 Perfo strip laid out 3 sections deep & first 2 sections rolled in, leaving last row unrolled.



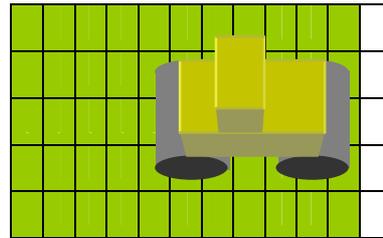
- 2 Max. 2 further rows of Perfo sections added and rolled in leaving last row unrolled.



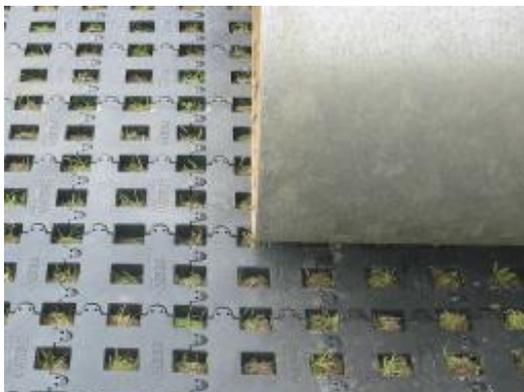
- 3 Continue to add 1-2 rows at a time and roll in always leaving last row unrolled



- 4 Large areas are progressively built up and rolled in, using this method



**Avoid running the edge of the roller directly over the joins between tiles**



**Individual tiles can be removed by levering open clips with a screwdriver**

