



# TURF REINFORCEMENT MESH

TR4



## INSTALLATION GUIDELINES

TR4 is a flexible lightweight turf reinforcement mesh designed to allow trafficking on grassed areas when normally this would not be considered. Easy to install and maintain TR4 turf reinforcement mesh works best when applied to areas that are reasonably flat, even, well drained and with well-established grass growth.

The plastic mesh is applied directly on top of the grass, held in place by steel u-pins and the grass encouraged to grow and entangle with the mesh. In the growing season, September to March generally, the mesh would be expected to have 'disappeared' into the grass and be no longer visible within 5 to 6 weeks and then open to use. A spring / early summer installation will allow TR4 turf reinforcement mesh to reach optimum working condition quickly. However the product can be installed and used any time of the year when allowances are made for grass growing conditions.

### 1) Basic requirements to achieve the best results.

- The grass area needs to be relatively flat and no steeper than 1 in 20 fall is advisable.
- The area needs to be generally even. Gentle undulations in the region are usually acceptable but abrupt ruts and raised areas will need filling in or levelling out and re-turfed. Laying turf rather than re-seeding is better as this will always allow the area to be used quicker as seeding can take a whole growing season to develop the necessary grass structure.
- A strong, robust well established grass in a consolidated soil. This is needed for two main reasons. Firstly the pins required to secure the mesh, needs the grass root structure and firm soil in place to provide a hold for the pins. Secondly a strong grass root structure is needed to add strength to the mesh to allow the desired trafficking.
- The grassed area needs to drain reasonably well. Badly draining land at times of heavy rainfall may allow the ground to become soft and pliable underneath the reinforcement mesh. This may lead to the mesh to be compromised and not perform as expected.

### 2) Installation of the TR4 Turf reinforcement mesh

- Prior to installation the grass needs to be cut short. This will help in making sure the plastic mesh lays tight against the ground to allow the swiftest entanglement of grass roots and mesh.
- Unroll the roll of mesh and allow to 'relax' for an hour or so to reduce any undulations in the plastic mesh.
- Fix TR4 mesh to the existing grass at 500mm centres ensuring that the mesh is flush with the grass with minimal high areas. Fixing is provided by using steel fixing u-pins. As a guide we suggest that for a 2m x 30m roll, that at least 150 pins are required. The U-pins have

been designed to fit flush with or just below the mesh so they are not a trip hazard and the grass can be safely mowed. Refer to diagram A.

- When installing the rolls next to each other or in a row the edges of the adjacent rolls should be overlapped by 100mm. Pin through the mesh at the overlap so each roll is joined to each other.

### 3) General notes

- For the mesh to reach optimum working condition, the grass needs to be fully intertwined with the plastic mesh. During the growing season this is





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usually after about 6 to 8 weeks. Another way to gauge readiness is to start to use the mesh after 3 to 4 cuts of the grass.

b. When the first cutting is done set the mower blades slightly higher than normal and allow the cuttings to fall back on to the mesh. When the installed areas is ready for use, the mesh should be well intertwined with the grass roots and sward and be less visible. Cutting of the grass can be as normal.

c. TR4 turf reinforcement mesh has been designed to reach their full working potential in the quickest time-period with areas that have an established grass structure. When it is the intention to lay the mesh in a region that is devoid of grass, and the area is going to be seeded to establish grass, time will be needed for the grass to develop a strong grass root structure before the mesh is planned to be used. This is usually a full growing season – September to March. Turf reinforcement meshes can still be laid on the new growing grass and the grass allowed to grow into the mesh. It would be advisable that a test is done with a pin on site to make sure the

pin will stay in place as there would be no existing grass root structure to help to hold the pin in place. This can be a problem especially with sandy soils.

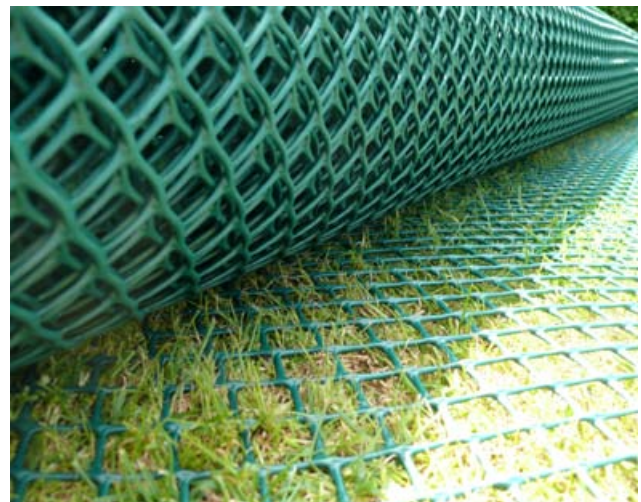
d. When TR4 plastic turf reinforcement mesh is installed in hot weather, the sun may cause the roll to expand and ripples to occur in the mesh. This is quite normal and the mesh will settle down as the temperature cools and the grass grows into the mesh.

e. Care must be taken when first installed prior to the mesh becoming covered and entangled by the grass as TR4 mesh can be slippery especially when wet. It is advisable that any newly laid areas are cordoned off until the grass has 'taken over'

**Note:-** TR4 turf reinforcement mesh can be and often are used in conjunction with heavier meshes / pavers in applications including parking bays only or on very well drained soils when the trafficking is very infrequent and never intense. Often all the access routes would be a heavier mesh like GR11 or GR14 grass reinforcement meshes that could manage the increased loadings.



DIAGRAM A



*Please note that the information above is given as a guide only. All Stake Supply cannot be liable for damage caused by incorrect installation of this product. Final determination of the suitability of any information or material for the use contemplated and the manner of its use is the sole responsibility of the user and the user must assume all risk and responsibility in connection therewith.*