

General Advice

These instructions should be read in conjunction with the contract specification and drawings. They are intended to provide guidance in normal installation situations and are addressed to the installer on site. If there are any questions related to the design, unusual installation challenges, or any doubt, consult ABG for further advice. In all situations, responsibility for installation remains with the Installer.

Description

Erosaweb TRP is a geocell mattress which is expanded on site and then filled with a clean no-fines stone. The strength of the system comes from the containment of the stone within the structure. Unlike traditional construction this is achieved without compacting the stone and the subsequent loss of permeability. It is manufactured from strips of high density polyethylene HDPE cross welded to form cells, the strips are perforated to allow the lateral movement of air and water through the structure.

Supply

Erosaweb TRP is supplied in panels which are coiled up and stacked on pallets.

Equipment Required (Fig. 3)

- Hammer
- Safety knife or disc saw
- Backfilling and compaction plant
- **Abpins**

Site Preparation and Setting

Excavate the area to the specified depth shown on the project drawings. This depth is likely to be greater than the depth of **Erosaweb TRP** to accommodate additional stone depth. Prepare the formation to a good even profile and lay a geotextile separator such as **Terrex NW9** if the ground is soft or wet (CBR = < 3%).



Fig. 1: Erosaweb TRP



Fig. 2: Area prior to installation



Fig. 3: Uncoiling Erosaweb TRP



Fig. 4: Erosaweb TRP being stretched into position

Panel Placement

Step 1

Place one end of **Erosaweb TRP** into position and pin the corner cells in place. Expand the panel until the required width is achieved (as stated on the label). Pin the edge cells². Repeat with each cell until every cell along both edges of the web is pinned. When expanded the cells should be approximately symmetrical and not distorted³ (**Fig. 6**).

Backfilling and compaction

Step 1

Backfill the **Erosaweb TRP** so that the top of the web is at the same level as the fill after compaction (**Fig. 7**). The fill material can be placed by end tipping from a dumper or excavator bucket. Plant and machinery cannot travel over **Erosaweb TRP** until it has been fully backfilled.

Step 2

Remove all temporary pins and compact in accordance with the project's compaction methodology. Ensure that the top of the **Erosaweb TRP** panel is not exposed during compaction.

Step 3

Continue placing adjacent **Erosaweb TRP** panels by positioning the projecting cells of one web into the valleys of the other web (**Fig. 6**).

Notes

1. Cuts must be at least 25mm from the welds. When cutting through a cell a width or length equal to the diameter of that cell is effectively lost.
2. The pin length will depend on the firmness of the ground. Permanently installed pins must be hammered fully below the top of the web.
3. For optimum strength the cells should be expanded symmetrically and not over stretched so as to become distorted. Each panel normally covers an area 4m wide x 6m long when expanded. During installation the panels have to be expanded to their full width as stated on the label.
4. **Erosaweb TRP** contains a UV stabiliser which means that it can be exposed to sunlight for up to 28 days in temperate climates. In climates with extreme sun then exposure should be limited to 7 days. Contact ABG's technical department for more specific advice.

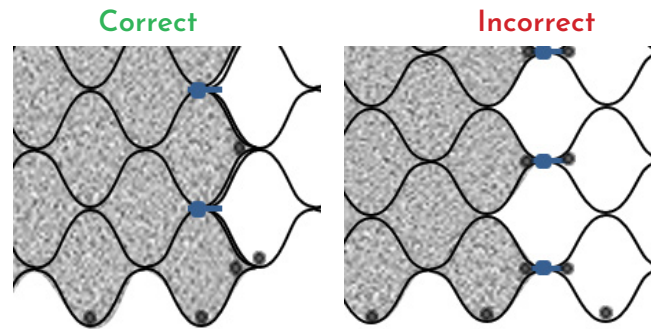


Fig. 5: Alignment of adjacent panels



Fig. 6: Erosaweb TRP fully pinned into position



Fig. 7: Webs being backfilled

Terms and Conditions

Site specific engineering design should be carried out after the site investigation has provided all the necessary information.

The assessment of suitable safety factors in relation to each particular project must always remain the responsibility of the design engineer.

ABG Erosaweb TRP INSTALL