Installation Guide: Erosaweb GWX

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 installaton challenges, or any doubt, consult ABG for further advice.

Description

Erosaweb GWX is supplied in perforated panels which expand in a honeycomb fashion to measure 4m x 6m. It typically comprises nine x 330mm diameter cells per m^2. Although the products are resistant to UV light, they must be covered if stored for long periods.

Supply

Erosaweb GWX is supplied in panels of 100mm, 150mm, or 200mm depth, weighing 24, 36 and 48 kg respectively. **Abpins** and **cable ties** will also be required.

Equipment required

- Excavator
- Dumper
- Safety knife
- Hammer
- Rake

Site Preparation and Setting Out

Form the slope to an even surface, free from vegetation, roots and stones, filling any voids to level. The slope must be stable and properly compacted. Excavate an anchor trench at the crest and location trenches at the toe and sides (**Fig. 2**). Anchor trench dimensions are usually shown in the drawings. **Fig. 3** and **Table 1** are typical anchor trench dimensions.

Fig. 1: Delivery of and carrying panels

Fig. 2: Excavate anchor trenches

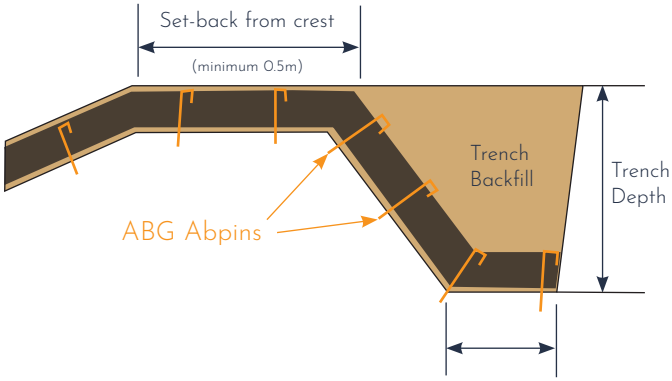

Fig. 3: Typical trench details

Slope angle	EROSAWEB GWX100 & GWX150			EROSAWEB GWX200		
	Trench Depth	Trench Width	Set-back from crest	Trench Depth	Trench Width	Set-back from crest
0° - 30°	0.3	0.3	0.5	0.5	0.5	0.5
30° - 60°	0.5	0.3	0.75	Site specific technical advice required		

Table 1: Typical anchor trench dimensions

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Placing and Pinning

Step 1 - Place **Erosaweb** in the anchor trench at the crest of the slope. Place one **Abpin** in every cell at the base of the trench or as specified on the drawings (**Fig. 4**). The cells must be evenly spaced to ensure the expanded panel is uniformly distributed across the slope. Expand **Erosaweb** down the slope and pin the bottom corners in place (**Fig. 5**). When correctly extended, each panel should be approximately rectangular and the cells will appear symmetrical.

Step 2 - Install intermediate **Abpins**. Pins should be placed at the frequency as defined by the design (e.g. 'pin every second cell') (**Fig. 5**). The pins should be placed at the top of each cell. Pins should be inserted into the ground to ensure that the **Erosaweb** is in direct contact with the ground in all places. Avoid walking on the surface until the cells have been backfilled.

Step 3 - Connecting **Erosaweb** Panels. Adjacent panels can be connected with **cable ties** or additional **Abpins**. Panels placed on the down slope direction should have one **cable tie** or additional pin in each connecting cell (**Fig. 6**). Panels connected in the cross slope direction should have one **cable tie** or additonal pin per metre length. When using **cable ties** to connect panels in the down slope direction, once the lower panel has been pinned to the panel above, the pins that were placed at the base of the upper panel can be removed, rotated 180° and re-placed in the top of the lower panel (**Fig. 9**).

Step 4 - The **Erosaweb** should be pinned into the toe trench at 1m centres, or as necessary to ensure it remains securely fixed when expanding the web, or as specified in the drawings. All trenches can be backfilled with arisings unless specified otherwise in the drawings (**Fig. 7**). Place topsoil gently into **Erosaweb** using an excavator working from the bottom of the slope.

Fig. 4: Place **Erosaweb** and pin into anchor trench

Fig. 5: Expand Erosaweb down-slope and pin in place

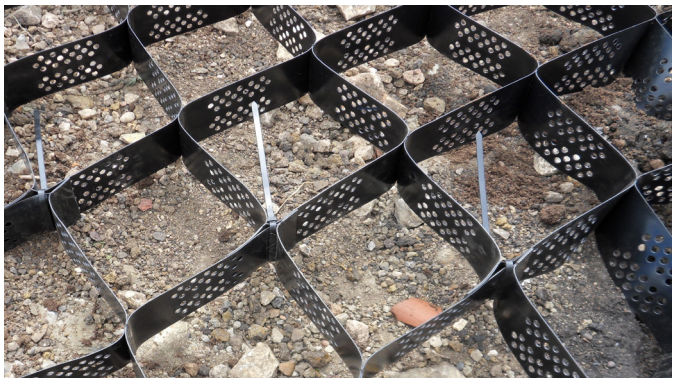

Fig. 6: Connect Erosaweb panels with cable ties

Fig. 7: Backfill all trenches

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Lightly compact the topsoil into each cell providing a cover of 10-25mm above the top of **Erosaweb** (**Fig. 8**). Seed by hand or hydroseed as required.

Notes

1. **Fixing Pin Details**. Fixing pins are either straight "J" or "U" shaped. They are specified dependant on ground conditions, slope and loadings. Contact ABG for advice on suitable pins for your site.

2. **Submerged Areas**. The use of crushed stone should be considered where **Erosaweb** is to be permanently submerged i.e. a stream bed. In areas of high turbulence or increased water velocities extra pinning is essential.

3. **Planting.** Shrubs and plants can be planted in the **Erosaweb** cells.

4. **Cutting.** Where **Erosaweb** panels are cut to shape on site, cuts should be made as close to welds as possible without damaging the weld.

5. **Geomembrane Barriers**. If installing above a geomembrane barrier, please contact ABG's technical department for guidance.

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.

Fig. 8: Place topsoil from bottom up

A) Remove pin at base of panel B) Rotate 180° C) Replace pin at top of downslope panel

Fig. 9: Panel connection details

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