

Erosaweb GWX - Pinned to Soil Slope < 30°

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.



Fig 1: Delivery and manhandling

Description

Erosaweb GWX is supplied in perforated panels which open up in a honeycomb fashion and expand to measure 4m x 6m (typical). It is typically comprised of eleven 300mm diameter cells per m². Although the products are resistant to UV light, they must be covered if stored for long periods (Fig 1).



Fig 2: Trim slope

Supply

- Erosaweb GWX panels— 100mm, 150mm, or 200mm thick panels weighing 24, 36, and 48 kg, respectively (Fig 1).
- Abpins (size varies)
- Abfix Ties (CTD 430/9 or 530/9)

Equipment required

- Excavator
- Dumper
- Sharp knife
- Hammer
- Rake



Fig 3: Excavate anchor trenches

Site Preparation and Setting Out

Form slope to an even surface, free from vegetation, roots and stones, filling any voids to level (Fig 2). The slope must be stable and properly compacted. Excavate an anchor trench at the crest and location trenches at the toe and sides (Fig 3). Anchor trench dimensions are usually shown in the drawings. Shown in Fig 9 and Table 1 are typical anchor trench dimensions.

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

Erosaweb GWX - Pinned to Soil Slope < 30°

Placing and Pinning

Step 1 - Place Erosaweb in the upper anchor trench.

Place one **Abpin** in every cell at the bottom 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 the **Erosaweb** down the slope and pin the bottom corners in place by measuring out the panel dimensions (**Fig 5**).



Fig 4: Place Erosaweb and pin into anchor trench

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 intimate contact with the ground IN ALL PLACES. Avoid walking on the surface until the cells have been backfilled.



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

Step 3 - Connect Erosaweb Panels.

Adjacent panels can be connected with **Abfix Ties** or additional **Abpins**. Panels placed down slope should have one tie or additional pin in each connecting cell (**Fig 6**).

Panels connected in the cross-slope direction should have one **Abfix Tie** per metre length in addition to pins placed at the frequency as defined by the design.

Once intermediate pins have been placed, and the downslope panel has been tied on, the pins that were placed at the base of the upslope panel can be removed, rotated 180° and re-placed in the top of the downslope panel (**Fig 10**).



Fig 6: Connect Erosaweb panels with Abfix Ties

Step 4

The Erosaweb should be pinned into the toe trench at 1m centres. Or as required 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**).



Fig 7: Backfill all trenches

Erosaweb GWX - Pinned to Soil Slope < 30°

Place Topsoil and Seed

Place topsoil gently into the Erosaweb using an excavator working from the bottom of the slope and moving upslope. Lightly compact the topsoil into each cell providing a cover of 10-25mm above the top of the Erosaweb (**Fig 8**). Seed with an appropriate mix or hydroseed as required.

Notes

- Fixing Pin Details.** Fixing pins are straight, "J" or "U" shaped and are specified dependant on ground conditions, slope and loadings. Contact ABG for advice on suitable pins for your site.
- Submerged Areas.** The use of crushed stone should be considered where **Erosaweb** is to be permanently submerged e.g. a stream bed (crushed stone to be placed prior to topsoil fill of upper section) (**Fig 11**). In areas of high turbulence or increased water velocities extra pinning should be used.
- Planting.** Shrubs and plants can be planted in the **Erosaweb** cells.
- Cutting.** Where the **Erosaweb** is cut to length ensure that the web is not cut through the welds.

Terms and Conditions

Site specific engineering design should be carried out after 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

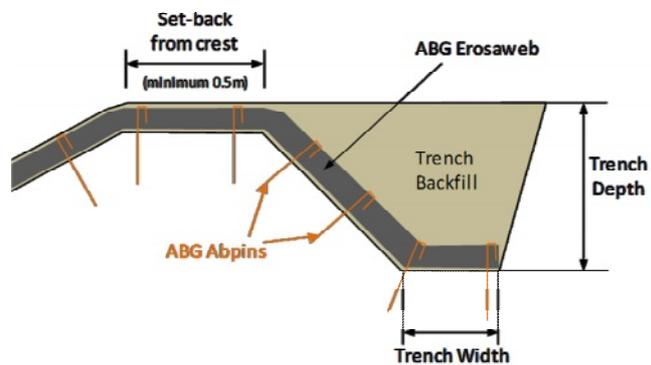


Fig 9: Typical trench details



Fig 10: Panel connection details



Fig 11: Erosaweb used in a Stream Bed