ConcertinaWeb

abg creative geosynthetic engineering

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. They do not seek to address design matters; they do not seek to address unusual installation circumstances. If in doubt, consult ABG for further advice.

Description

ConcertinaWeb is a ground strengthening and stone retention system comprising cellular containment in the form of a narrow web. **ConcertinaWeb** is specifically formed to aid rapid and safe installation alongside carriageways by its longitudinal mode of expansion and by minimising the number of fixing pins required. **ConcertinaWeb** forms a stabilising layer filled with stone, reducing stone scatter and strengthening the area adjacent to a highway where vehicles can over-run the verge.

Supply

 ConcertinaWeb is supplied flat packed on pallets (Fig. 2).

Equipment Required

- Appropriate PPE
- Sharp knife
- Hammer for pins
- Compaction plant
- ABG Abpin fixing pins
- Terrex NW9 geotextile separator



Fig. 1: Close-up of ConcertinaWeb panel expanded



Fig. 2: Delivered on pallets



Fig. 3: Manually stretching out panels



Fig. 4: Panels being joined by Abpin

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Installation

Step 1

Excavate the area to a depth equal to the depth of **ConcertinaWeb** (150 mm or 200 mm). Prepare the formation to a good even profile and lay a non-woven geotextile separator such as **Terrex NW9** if required.

Step 2

Place one end of **ConcertinaWeb** panel into position and pin the end cells with **Abpin** to give the width stated on the label. Manually stretch the panel out to the 6m length and pin the cells at the other end into position **(Fig. 3)**. The form of **ConcertinaWeb** is such that a minimum number of **Abpin** are required, typically two at each end. Additional **Abpin** may be required when working around a curve.

Step 3

Abpin should be hammered to a depth sufficient to hold **ConcertinaWeb** temporarily in place until it is in-filled. Alternatively, pins should be hammered fully below the top of the web if to be left in permanently.

Step 4

Fill **ConcertinaWeb** with the specified crushed stone or other cohesive material, typically well graded from 40 mm down, so that the level of the stone is slightly higher than the top of **ConcertinaWeb** to allow for compaction.

Step 5

Remove **Abpin** (if temporary) and compact the stone or other fill material in accordance with the specification. (Fig. 6).

Step 6

Continue with the next web by positioning the projecting cells of the end of one web into the valleys of the previous web. (Fig. 4).(Fig. 5).



Fig. 5: Expanding additional panels



Fig. 6: Installed ConcertinaWeb Filled and compacted

Step 8

ConcertinaWeb does not require any on going maintenance. If any loss of fill material occurs it should be replaced and compacted.

Notes

- There are no known COSHH hazards associated with ConcertinaWeb
- For optimum strengthening the cells should be expanded symmetrically and not over stretched so as to become distorted in any direction.
- 3. If a short panel is required to complete a run, the web may be cut with a sharp knife or disc saw.

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.