TREX

Concrete Blanket Installation guide

Strengthening Every *Slope*: Durable Solutions with Concrete Blanket.

Concrete Blanket Installation Guideline: Solutions for Slope Protection.

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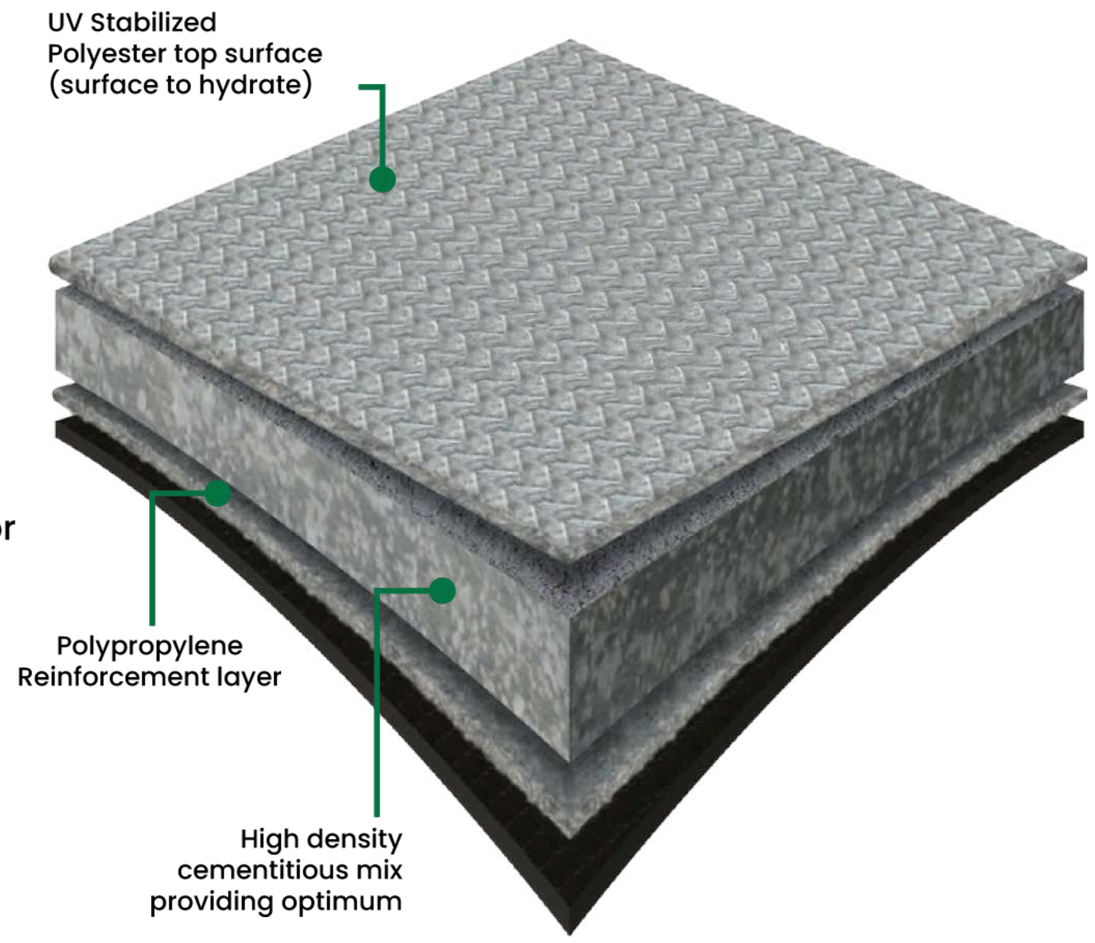
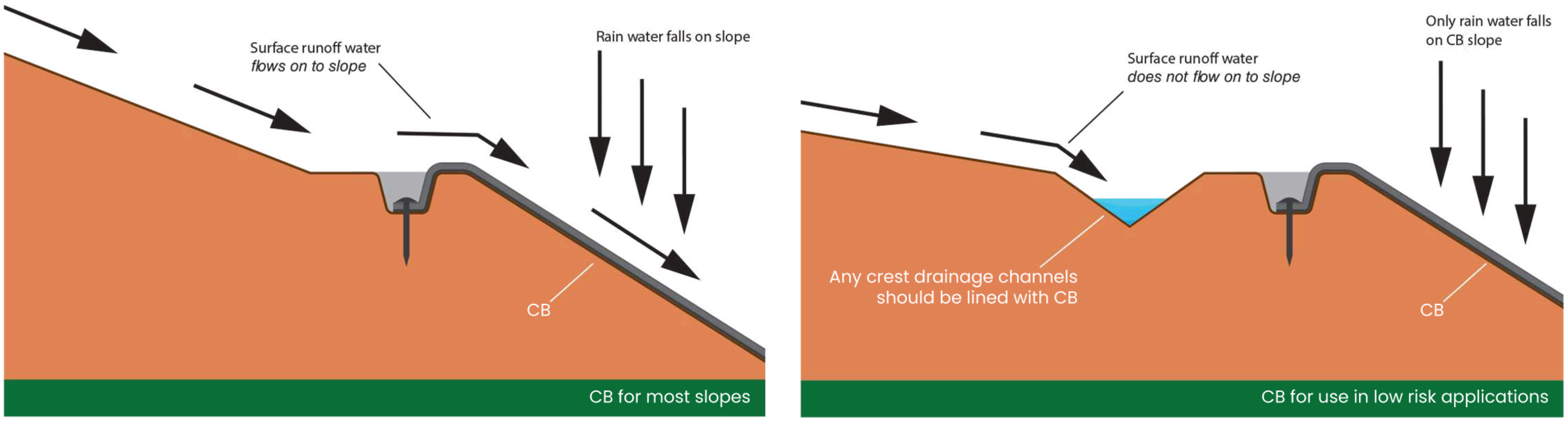
1.1 General

Concrete Blanket is part of a revolutionary class of construction materials. It is a flexible, concrete-filled geosynthetic that hardens on hydration to form a thin, durable, waterproof concrete layer.

Essentially, it can be described as Concrete on a Roll and is used for a wide variety of applications, including rapid lining of drainage channels, slope protection, weed suppression, culvert repair, and general concrete remediation.



Typical Concrete Blanket Cross Section



The information contained in this document is provided subject to the General Disclaimer on the last page. A printable copy of the current version of our **General Disclaimer** is maintained at the following link.

Subject to the above, this document provides general guidance procedures for the installation of **Concrete Blanket** for slope protection, however:

- This installation guidance should be read in conjunction with the construction drawings, taking account of the designer's project specifications. Note that **CB** is an erosion protection product and is not intended to be used as a structural facing for slope stabilization projects. Consult the **Concrete Blanket** Specification Guide: Slopes for standardized design and installation advice.
- The versatile nature of **CB** means that this document is not exhaustive and is intended for guidance purposes only. Exceptions may be required to address site-specific conditions.
- The performance of **CB** is wholly dependent on the quality of its design and installation. It is the installer's responsibility to adhere to these guidelines where applicable and to the project specifications and construction drawings.

2.0 Equipment Required

- Sufficient CB to complete the project (including allowance for edge fixings and overlaps)
- Suitable lifting equipment to dispense CB Rolls
- Safety mask and gloves
- Cutting equipment (snap-off knife or disc cutter)
- Metal or plastic fixing pins
- Lump hammer
- Mole grips or flat welding clamps
- Fixings for jointing and appropriate fixing equipment (consult the CB Jointing Guide)
- Water supply
- See the CB Equipment List for full details

For ordering, offloading, and storage information, see the CB Logistics Guide. Dust hazard—wear appropriate PPE. Consult the CB SDS document.

3.0 Substrate Preparation

- Divert water (if lining a slope to an existing watercourse).
- Remove vegetation and grade the slope to a uniform profile.
- Remove sharp or protruding rocks (>25mm) and fill large voids.
- If the perimeter edge of CB terminates in soil (not connected to existing infrastructure), excavate anchor trenches (crest, toe, and sides).
  - For slopes ≤4m, anchor trenches must be minimum 300mm x 300mm, set back ≥1m (or as specified by the designer).
  - Consult the designer for slopes >4m.
- Verify if additional substrate preparation (e.g., non-woven geotextile, drainage details) is required per construction drawings.

  All slopes must be geotechnically stable before deployment. CB is an erosion control product, not a structural facing for slope stabilization.

Substrate preparation

4.0 Deployment

- Remove packaging (note Roll ID) and unroll CB8 on the slope per design (vertical/horizontal layup).
- Fibrous top surface faces upwards.

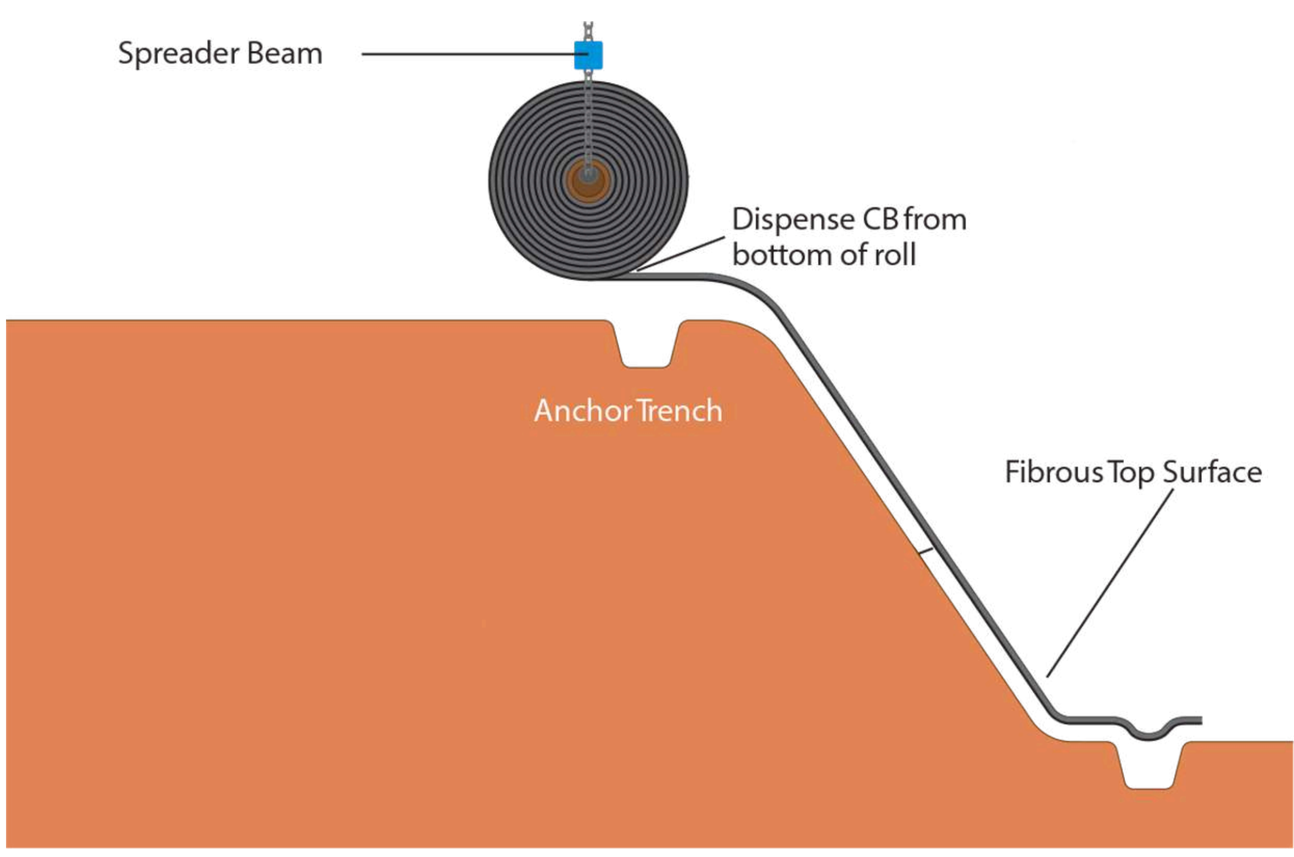
- Dispense by naturally unrolling—do not pull from the top to avoid snagging.
- Relax the material to relieve tension (lift and reposition by hand).
- Avoid walking on CB (use timber boards if necessary).
- Tuck edges into anchor trenches before cutting (leave 15-20mm allowance for unset material).
- For disc cutting, wet the cut to minimize dust.

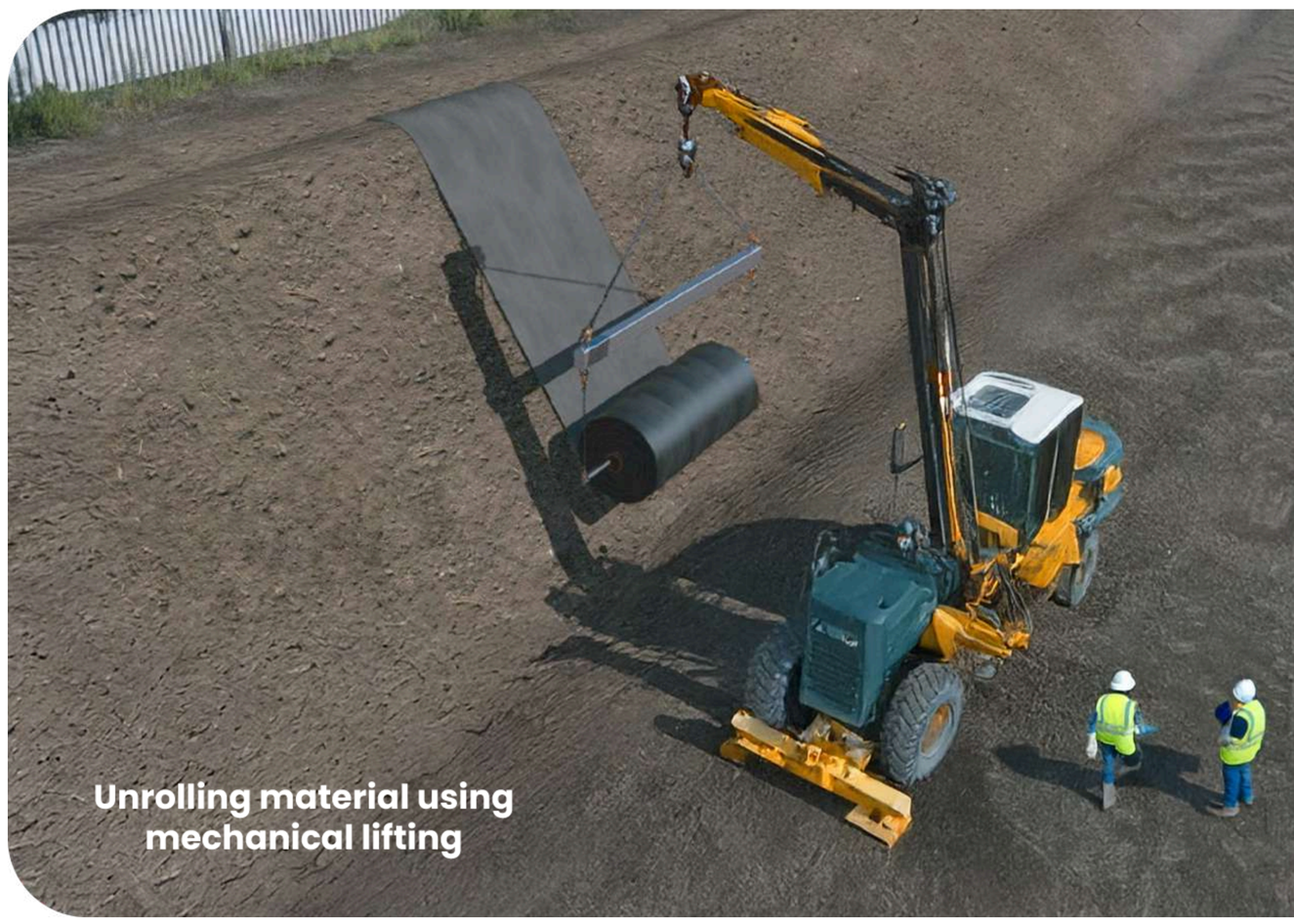
- Terminate edges into infrastructure or anchor trenches to prevent water ingress.
- Overlap subsequent layers 100mm (align with blue overlap marker line).
- For watercourses, overlap in the direction of water flow (shingled like roof tiles).
- Replace damaged sections before hydration.
- Use temporary ballast (sandbags) or pegs to prevent wind uplift and ensure conformity.

5.0 Jointing

- Verify the specified joint method from the project engineer and follow the CB Jointing Guide.

Substrate preparation

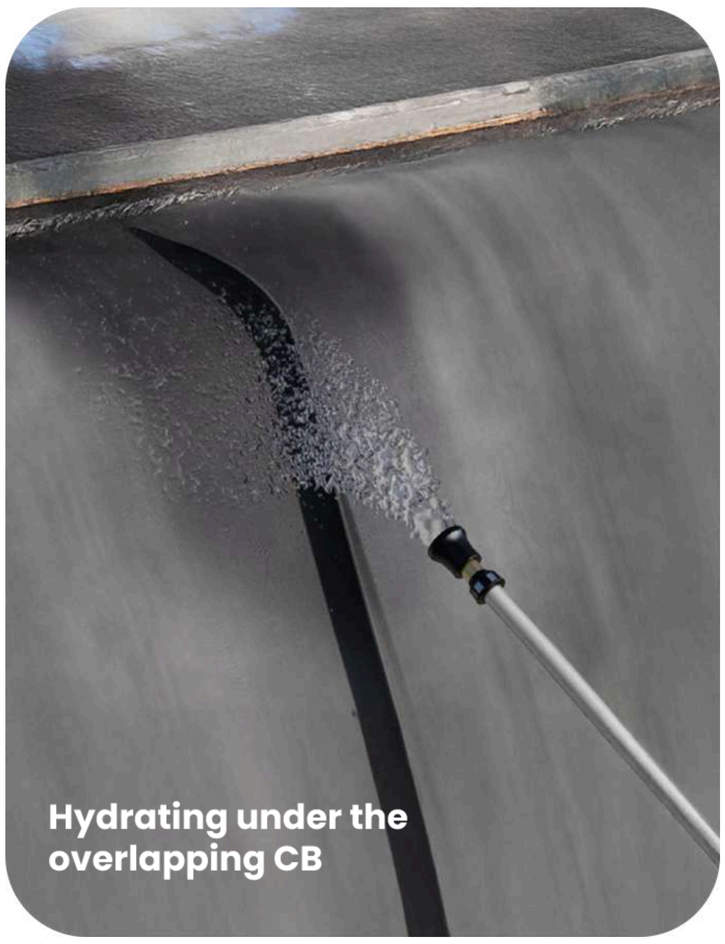




Unrolling material using mechanical lifting

Cutting of CB to relevant length

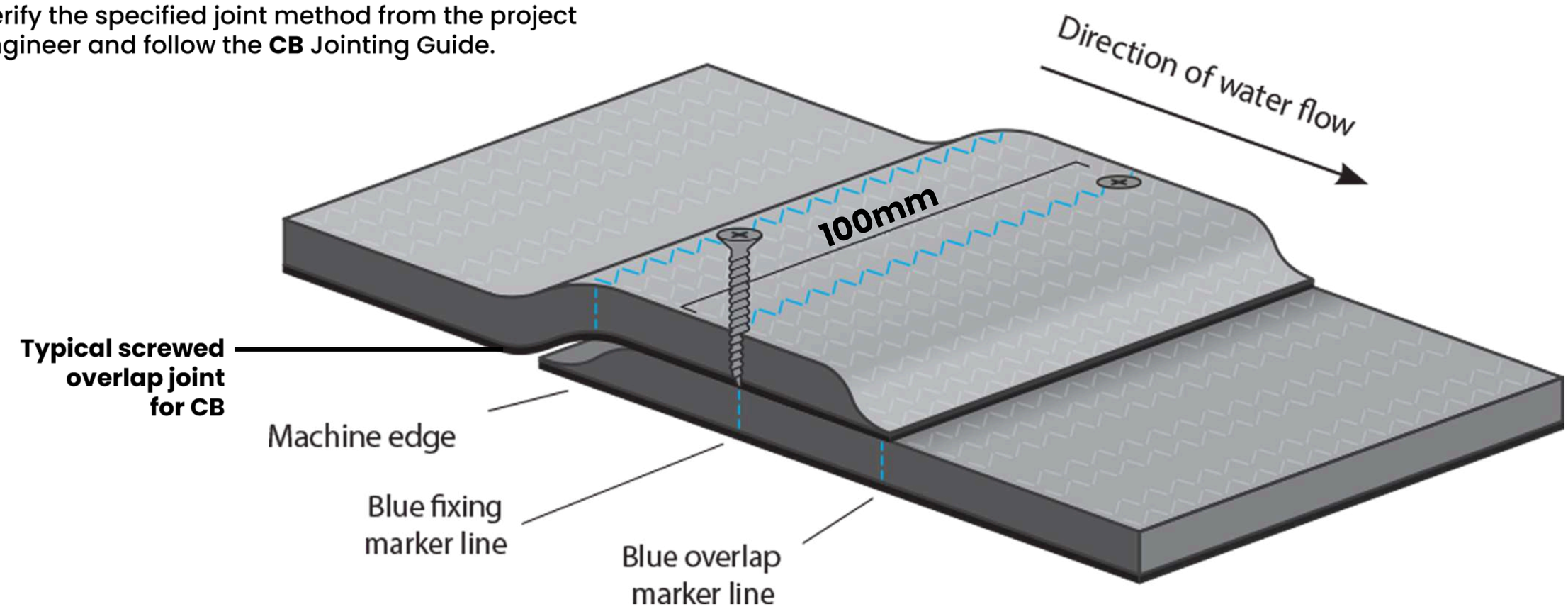
Overlapping CB



Hydrating under the overlapping CB

5.0 Jointing

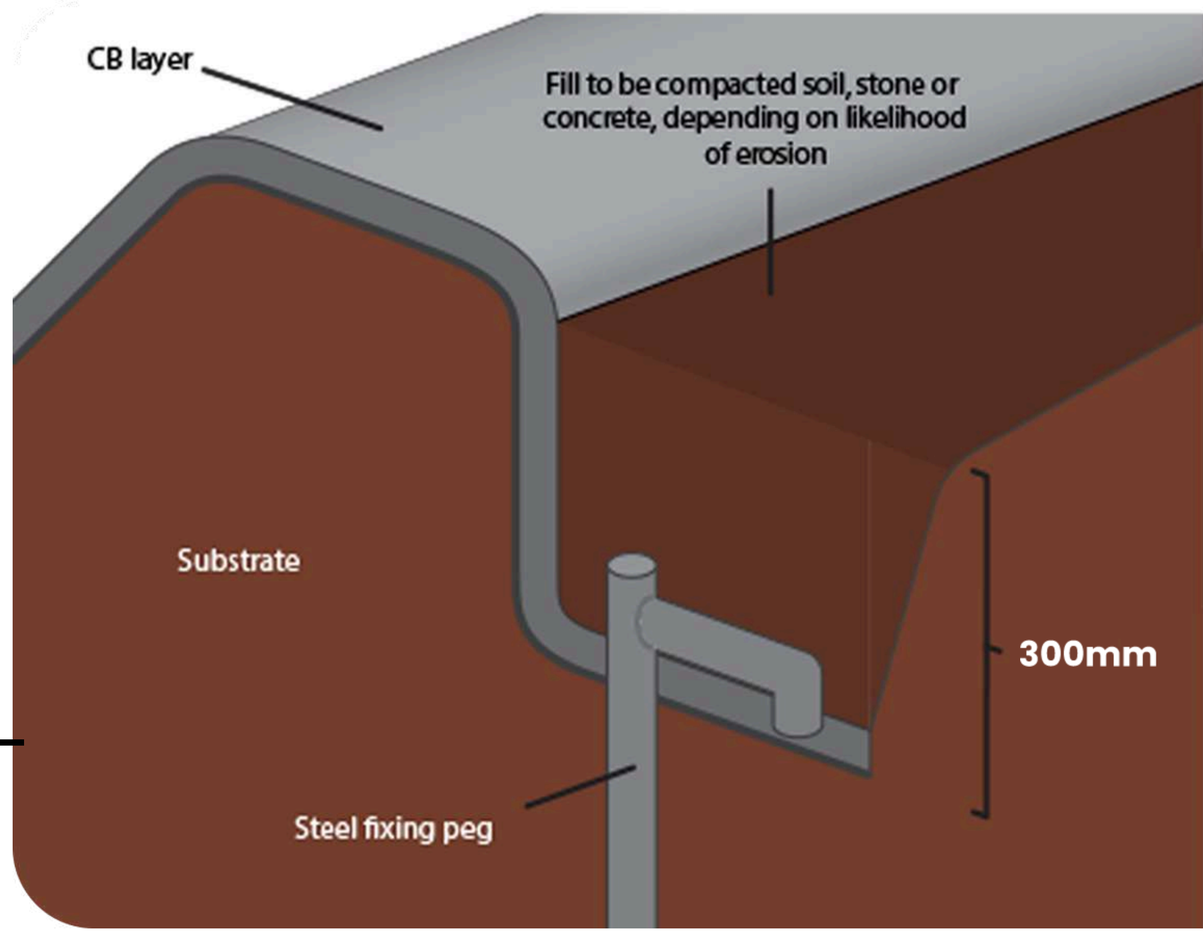
Verify the specified joint method from the project engineer and follow the **CB** Jointing Guide.



6.0 Perimeter Edge Fixing

6.1 Fixing to Soil (Anchor Trenches)

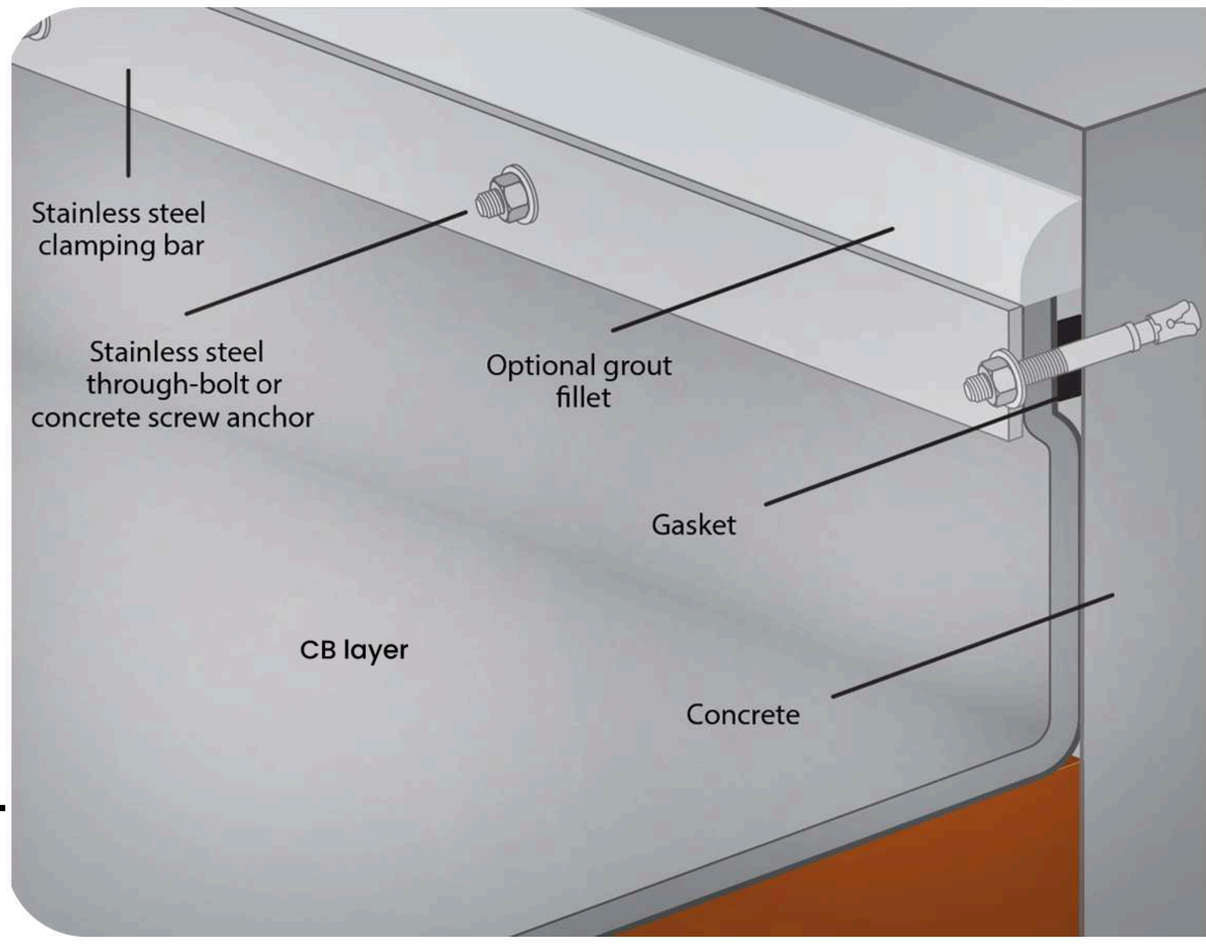
- Position **CB** into the trench.
- Insert fixing pegs at overlaps or ≤2m intervals (horizontal installations).
- **Hydrate before backfilling** (use non-erodible fill per design).



Cross section at crest: pinned & backfilled crest anchor trench

6.2 Fixing to Concrete/ Masonry/Rock

- Drill pilot holes through CB and structure.
- Use sealant/gasket and washers/clamping bar for a watertight seal.



Edge anchor to concrete: clamping bar with neoprene gasket and grout fillet

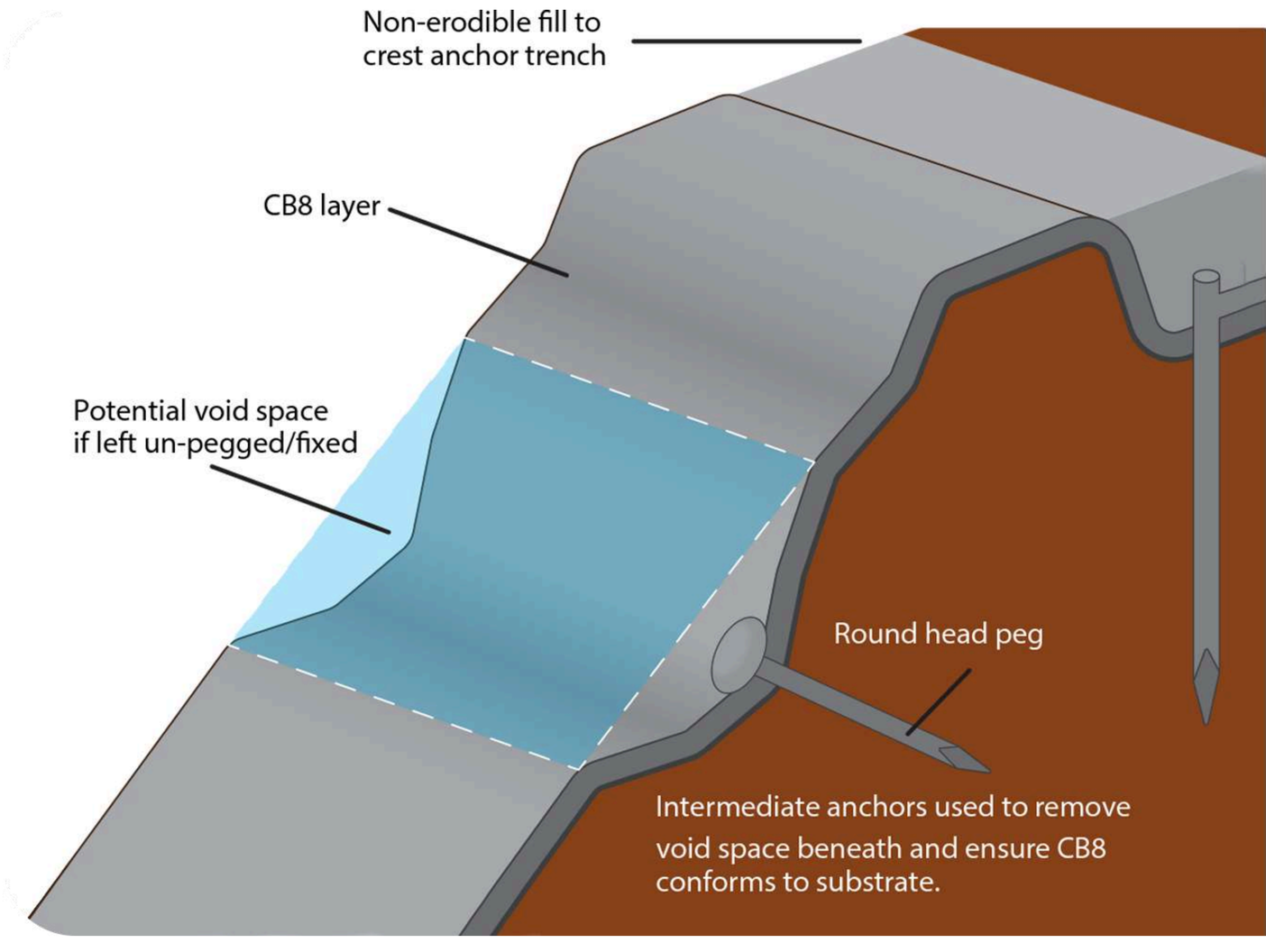
7.0 Intermediate Fixings

Required for:

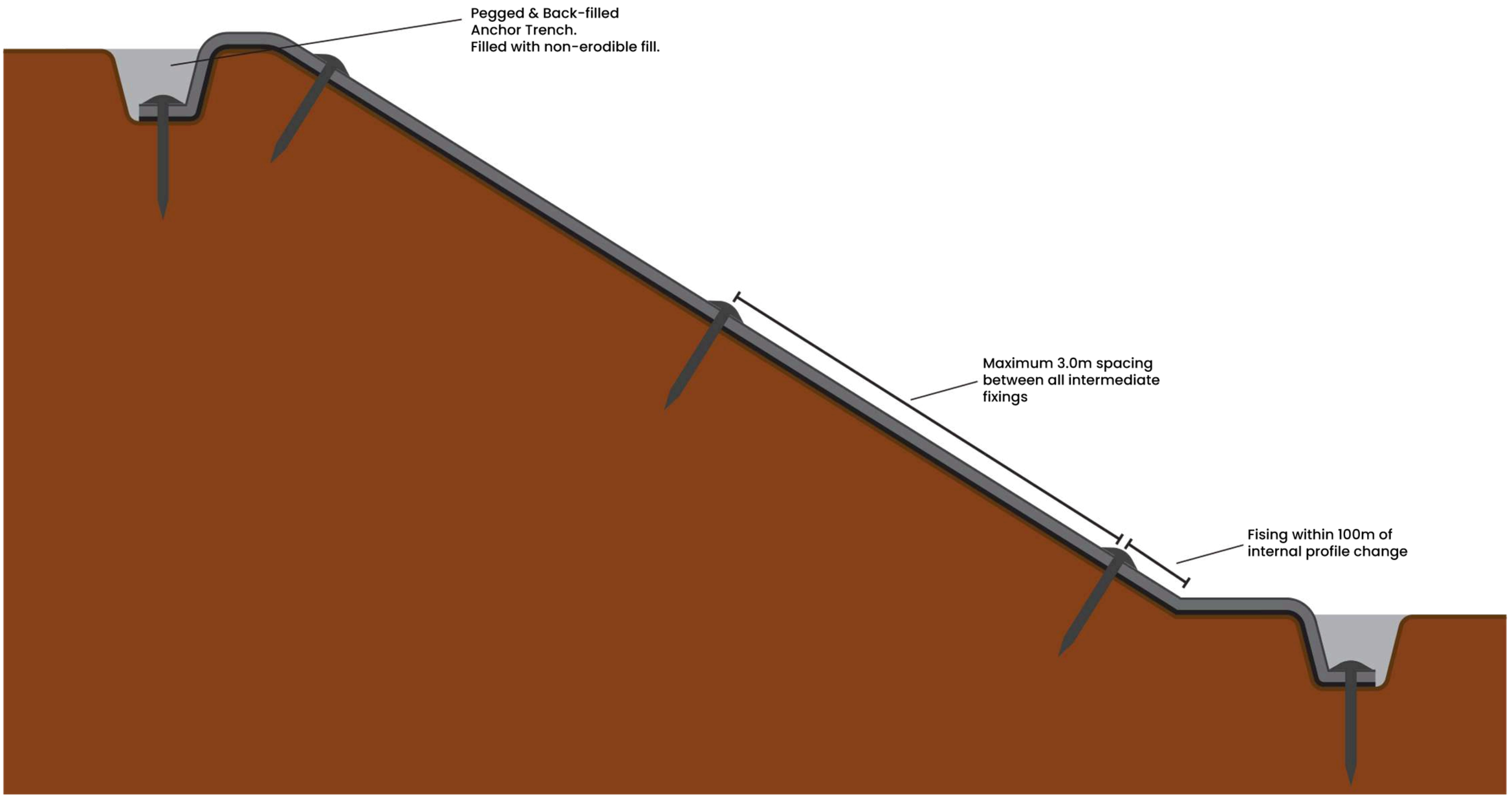
- Uneven substrates (to remove voids).
- Large structures (>3m profile lengths).
- Wind loads (slopes >12m in exposed areas).
- Hydraulic shear (slopes >10% gradient in watercourses).

Consult construction drawings for bespoke details (e.g., pipe penetrations, drainage channels).

Intermediate anchors for profiling.



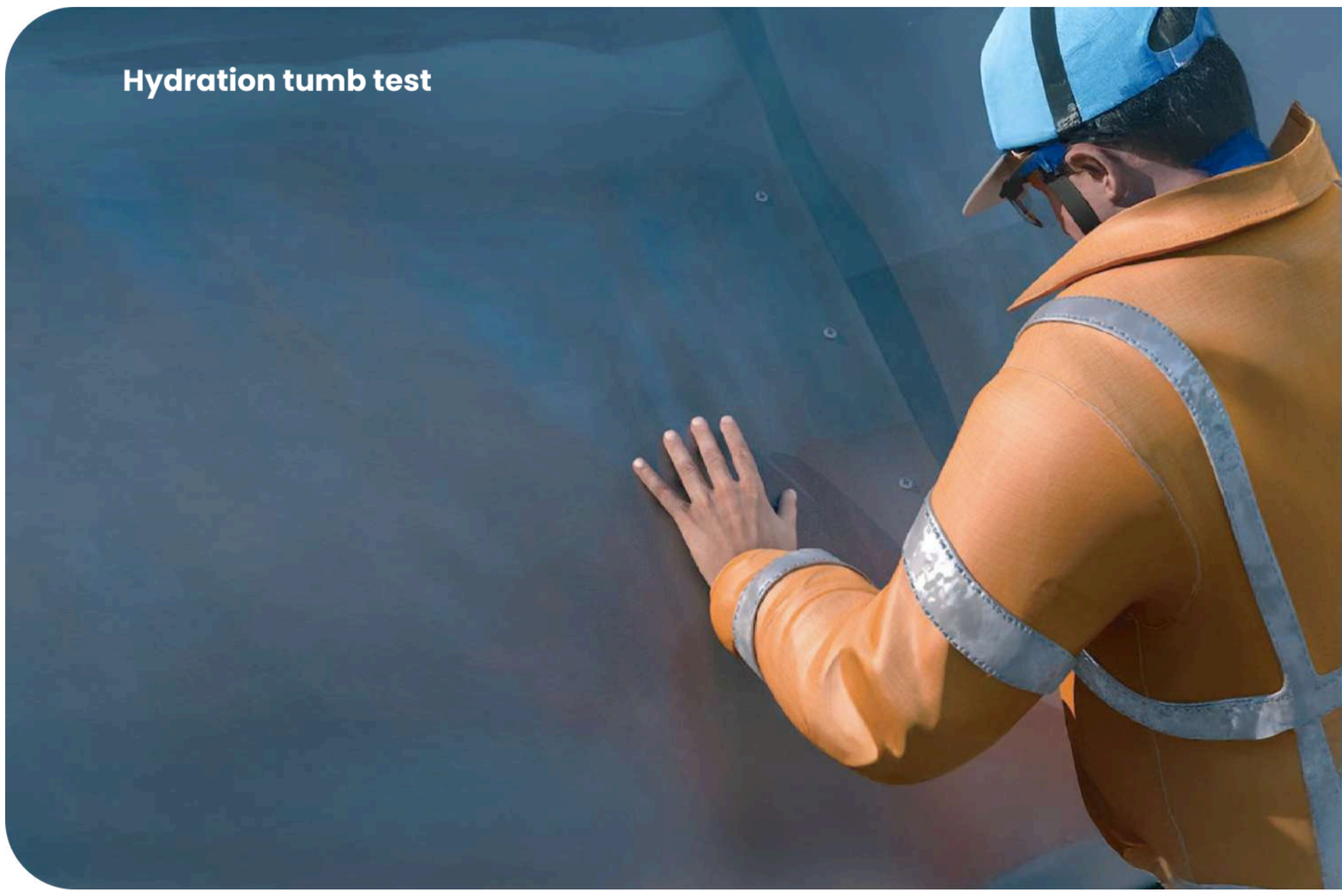
Intermediate anchors for large structure detailing



9.0 Hydration

Brush clean before hydration.

- Spray fiber surface **multiple times until saturated** (≥7.5L/m²).
  - **Do not use high-pressure water.**
- Re-spray within 30 minutes.
- **Thumb test:** If water pools in depression, hydration is sufficient.
- Follow **CB** User Guide: Hydration for high/low-temperature conditions.
- Do not rely on rainfall.



10.0 Setting

- **30-minute working** time after hydration.
- Backfill anchor trenches per design.
- **Sets in 24 hours, fully cures in 48 hours.**
- Avoid surface treatments (e.g., jet washing, painting) until fully cured.
- **Do not rely on rainfall.**

11.0 Installation Sequence

- Morning: Deploy and secure perimeter edges.
- Afternoon: Joint panels, install intermediate fixings.
- Late afternoon: Hydrate (follow environmental guidance).
- Protect unjointed edges overnight with waterproof sheeting.

12.0 Inspection, Maintenance & Repair

- Typically maintenance-free unless silt traps are installed.
- For damage inspection/repair, consult CB8 User Guide: Inspection, Cleaning & Maintenance.

General Disclaimer

The information in this document is for general guidance only. Neither the manufacturer nor its affiliates accept liability for any loss arising from reliance on this information. Third-party designers/contractors bear sole responsibility for product suitability and project-specific design.

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Shaping the future