TREX

# Installation Guide: Jointing & Edge Fixing Procedures

## A revolutionary concrete-on-a-roll solution for rapid, durable, and safe slope protection.

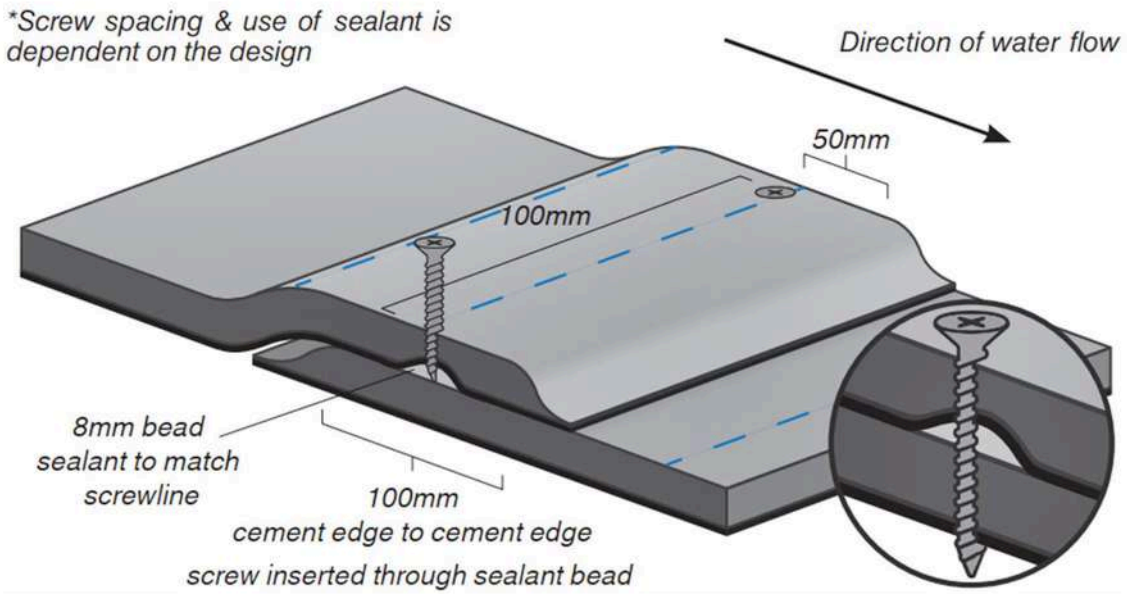
"Set it. Seal it. Secure it."

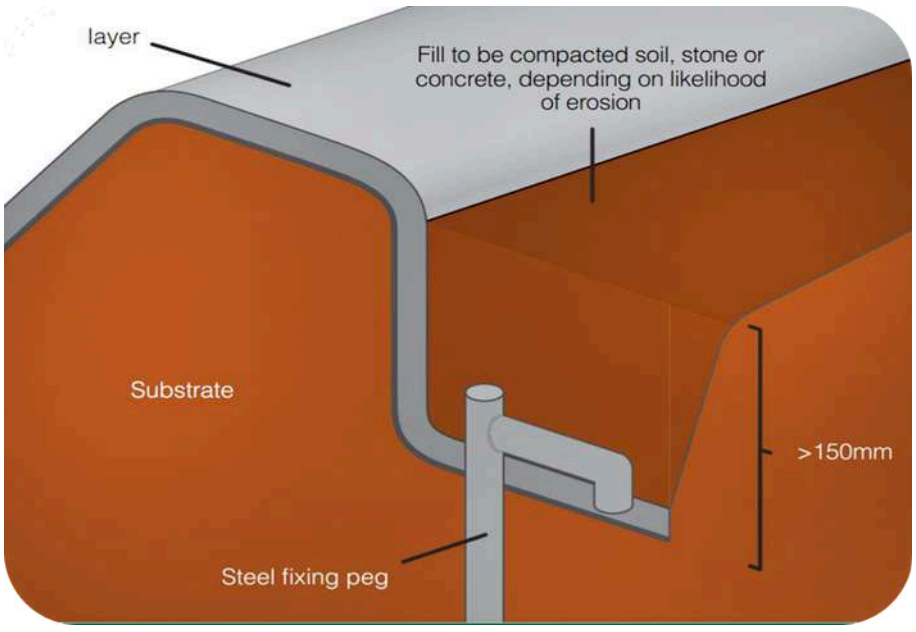
TREX

# Jointing

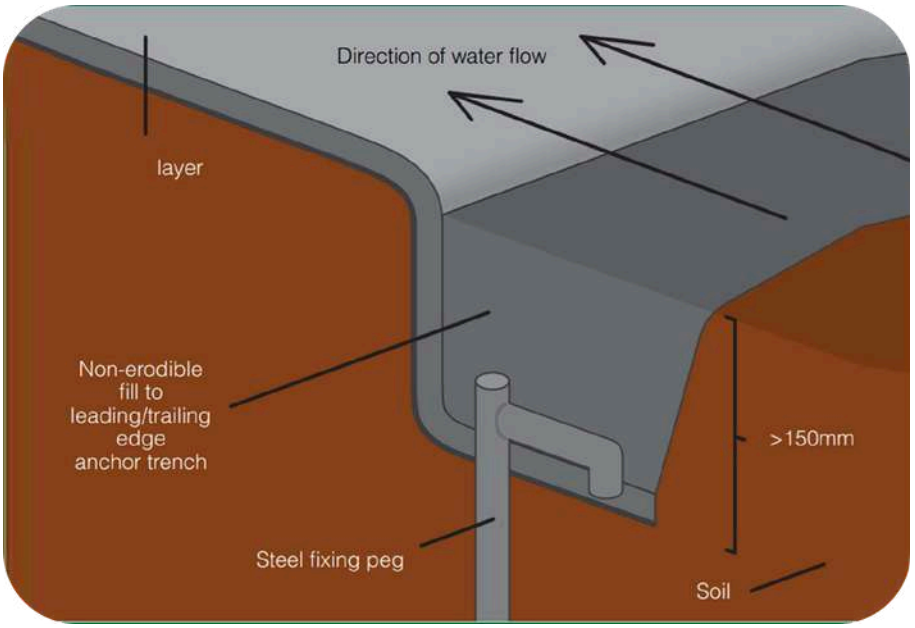
- It is important that the correct CB joint method is used to meet the project permeability requirements. Verify the specified joint method to be installed from the project engineer and follow the detailed guidance in the CB Jointing Guide.

Ensure there is no rucking at the joint and both layers are in contact with each other.

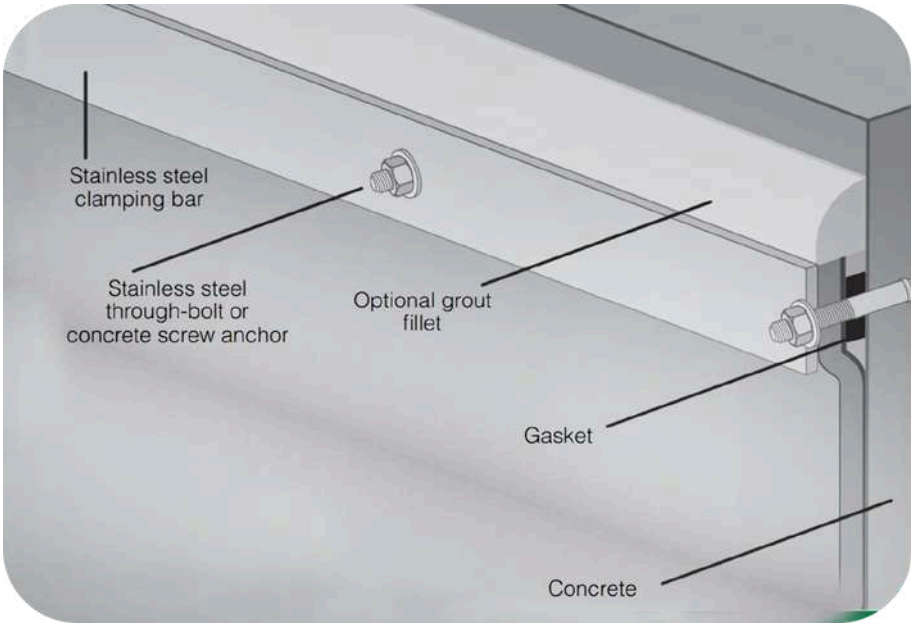



It is essential that all exposed (i.e., unjointed) edges of the CB should be secured during the installation to prevent water ingress underneath the CB, which may cause wash-out of the substrate and subsequent undermining.




## 2.1 When fixing to Soil (i.e., using anchor trenches):




Position the CB over the shoulder of the channel and into the anchor trench.

- Fix the CB in the anchor trench by inserting fixing pegs through each overlap or at a minimum of 2m intervals for longitudinal installations.
- The CB should be hydrated before backfilling with non-erodible fill. This may be soil or concrete depending on the design. Consult the construction drawings.

### 2.2 When fixing to Concrete/Masonry/Rock:

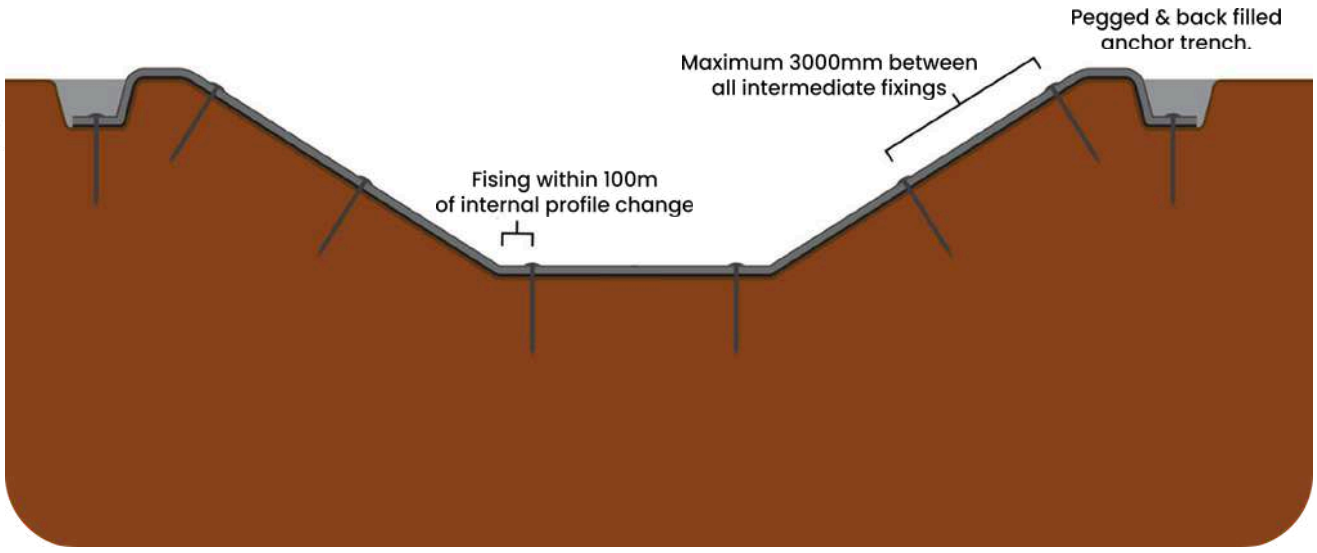
- Consult the construction drawings for the mechanical fixing specifications and fixing spacings.
- Position the CB against the structure and drill a pilot hole through the CB and the structure before inserting the mechanical fixing.
- Use appropriate sealant/gasket and washers/clamping bar as specified by the designer to ensure a strong, watertight seal. Ensure the leading edge of the final layer of CB is either suitably terminated into existing infrastructure and fixed to prevent water ingress (e.g., using stainless steel or galvanized clamping bar and gasket), or tucked into an anchor trench which is backfilled to prevent scour beneath CB.

### 3.0 Intermediate Fixings

Additional intermediate fixings may be necessary to profile CB on uneven substrates to ensure it conforms to the underlying surface and removes voids, or to resist the following load conditions:

- Hydraulic Shear Loads: e.g., lining channels with an incline >10%
- Warmer Climate Detailing: e.g., where CB profile lengths exceed 3m.
- Detailing for Large Structures: e.g., where lengths between profile changes exceed 5m.

The intermediate fixing type, performance requirements, and installation locations should be specified by the designer to suit the anticipated load conditions. 'Round Head' fixing pegs are typically used for profiling and warmer climate detailing. When a greater head plate diameter or pull-out strength is required, for example when designing to resist hydraulic shear or wind uplift, larger intermediate fixings such as Earth Percussion Anchors may be specified. Mid-channel anchor trenches (known as check slots) may also be required by the designer or incorporated into large installations at the end of the working day to prevent scour and undermining of the CB before returning to continue the installation. Consult the construction drawings



Refer to the construction drawings for custom details like baffling and pipe penetrations. Concrete Blanket can offer guidance on unexpected bespoke elements.

### 5.0 Hydration

- After fixing and jointing, the surface of the CB can be brushed clean to remove marks and debris before spraying with water to hydrate.
- Spray the fiber surface multiple times until the CB is fully saturated. Follow the CB8 User Guide: Hydration.
- Do not spray high-pressure water directly onto the CB as this may wash a channel in the material.
- CB can be hydrated using raw water, it is not possible to overhydrate CB, and it will hydrate and set underwater.
- A minimum volume of water of 7.5 liters per square meter of CB should be used and always respray within 30 minutes of initial hydration. An excess of water is always recommended.
- To check proper hydration, the CB should feel wet to the touch several minutes after hydration. Press your thumb into the CB and release. If water is present in the depression in the CB, it has been suUiciently hydrated. If no water is observed, then more water must be applied. RINSE HANDS IMMEDIATELY AFTER THE TOUCH TEST.
- Specific hydration methods are required in drying conditions (installing in high ambient temperatures (>22°C), wind (>12km/h), strong direct sunlight or low humidity (<70%)) and in low-temperature conditions. Please consult the CB8 User Guide: Hydration, which is also attached to all CB rolls.
- It is not recommended to rely on rainfall to provide hydration.

### 6.0 Setting

- There is a 30-minute working time after initial hydration. Backfill anchor trenches with nonerodible fill as specified in the construction drawings to create a neat termination and encourage surface water runoU to flow over the anchor trench and into the CB channel.
- CB hardens to strength in 24 hours and is then ready for use. Allow the CB8 to cure for at least 48 hours before applying any post-installation surface treatments such as jet washing or painting.

### 7.0 Installation Sequence

Planning of CB installations is necessary to ensure tools and materials (e.g., hydration water) are available when required.

Only install what can be fully jointed, fixed, and hydrated before the end of the construction day to minimize any adverse eUect on the installation and/or performance capabilities of the product.

If installation continues the following working day, protect the edge of the last layer of CB overnight with waterproof sheeting to enable jointing on return to work. Alternatively, install check slots

An example install sequence is described below:

- Morning - Deploy CB panels and secure along the perimeter edges.
- Early afternoon - Jointing of panels, install intermediate fixings.
- Late afternoon - Hydration (following drying/low-temperature condition guidance as required).

### 8.0 Inspection, Maintenance, and Repair

CB-lined structures should be inspected 24 hours after hydration and at regular intervals thereafter. Consult the CB User Guide: Inspection, Cleaning, and Maintenance for more details. For many projects, CB does not require cleaning or maintenance