

# SOPRADRAIN ECO 10



VEGETATIVE  
SOLUTIONS

APPLICATIONS

FOUNDATIONS

CIVIL WORKS

GREEN ROOFS

TECHNICAL DATA SHEET

ANZ-TDS-58-SOPRADRAIN ECO 10

## DESCRIPTION

SOPRADRAIN ECO 10 is a two-core drainage sheet consisting of a non-woven geotextile filter layer thermally welded to a water impermeable, recycled HDPE (High Density Polyethylene) drainage membrane.

SOPRADRAIN ECO 10 provides outstanding drainage and protection to the outside face of basement walls, preventing the buildup of water pressure and protecting the structure from aggressive water, chemicals and toxins.

## FIELD OF APPLICATION

- Green roofs
- Bridge abutments
- Planter boxes
- Retaining Walls
- Foundations

Simple and rapid installation

ECO manufacturing process with no waste

Very high compressive strength

High chemical resistance

Root resistant & rot-proof

Light load on structures

## INSTALLATION PROCEDURE

### INSTALLATION

- Apply SOPREMA waterproofing membrane to walls in accordance with the product data sheets.
- **SOPRADRAIN ECO 10** is supplied in 2 m wide sheets. If the foundation wall is less than 2 m in height it is possible to install **SOPRADRAIN ECO 10** horizontally with no laps. For walls over 2 m, install **SOPRADRAIN ECO 10** in vertical sheets with the geotextile fabric layer facing the operative and the black drainage layer against the wall being treated. Ensure that the membrane is fitted level. Secure the membrane to the wall with MultiPlug at the top of the sheet above the waterproofing membrane. Drill 10 mm holes 70 mm into the substrate and hammer home the plugs with a club hammer.
- Overlap subsequent sheets of **SOPRADRAIN ECO 10** ensuring that the filter fabric of the next sheet overlaps the previous studded core, a section of filter fabric is separated from the drainage core for this purpose.
- Seal the edges of sheets using the 60 mm flat flange at the edge of each sheet using Waterseal Tape.
- Place Geopipe slotted drain to the base of the foundation so that the top of the drain is below the top of the internal slab level. Place the drain within a bed of clean graded 20 mm stone surrounded by a sheet of Geotex filter fabric ensuring that enough Geotex is available to lap to the **SOPRADRAIN ECO 10** to give continuity of the filter fabric.
- Ensure the Geopipe drains freely to a safe collection point. If gravity drainage is to be used ensure that the drainage terminates below the level of the internal slab so that drainage surcharge cannot prevent the removal of water from the system. If gravity drainage is not available, discharge the Geopipe to a sump system.
- Seal the Geotex fabric surrounding the Geopipe and clean stone to the filter fabric face of the **SOPRADRAIN ECO 10** with Waterseal tape, or alternatively carefully place the filter fabric to the face of the **SOPRADRAIN ECO 10** so that it is held in place by the back fill.
- Use Pressure Seal to the top edge of the membrane to prevent debris and back-fill from entering the cavity between the drainage core and the filter fabric.
- Carefully backfill the excavation. If graded stone is used, a protection board is not required but the stone should be placed in controlled layers of no more than 600 mm so as to prevent slump to the membrane. If the removed soil is re-used, ensure that it does not contain sharp stones and that the soil is compacted every 600 mm. If sharp stones exist within the re-used soil a protection board will be required.



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## PACKAGING

| SPECIFICATIONS               | TEST METHOD  | SOPRADRAIN ECO 10                       |
|------------------------------|--------------|-----------------------------------------|
| Colour                       | -            | Studded core: black / Geotextile: white |
| Roll dimensions              | -            | 20 m x 2.0 m                            |
| Area                         | -            | 40 m <sup>2</sup>                       |
| Roll weight                  | -            | 20 kg                                   |
| Compressive strength         | -            | >190 kN/m <sup>2</sup>                  |
| Service temperature range    | -            | -40 to +80 °C                           |
| Vertical water flow at 20kPa | EN ISO 12958 | 2.29 l/m <sup>2</sup> /s                |
| Chemical resistance          | EN 14030     | 100 %                                   |
| Oxidation resistance         | EN ISO 13438 | 100 %                                   |

## PROPERTIES

| STUDED CORE                 |             |                      |
|-----------------------------|-------------|----------------------|
| PROPERTIES                  | TEST METHOD | SOPRADRAIN ECO 10    |
| Material                    | -           | Recycled HDPE        |
| Density                     | -           | 500 g/m <sup>2</sup> |
| Stud depth                  | -           | 8.00 mm              |
| Thickness                   | -           | 8.50 mm              |
| Vicat softening temperature | -           | 148 °C               |

| GEOTEXTILE              |               |                   |
|-------------------------|---------------|-------------------|
| PROPERTIES              | TEST METHOD   | SOPRADRAIN ECO 10 |
| Material                | -             | Polypropylene     |
| Thickness at 2kPa       | EN ISO 9863-1 | 0.7 mm            |
| Puncture resistance CBR | EN ISO 12236  | 1800 N            |
| Horizontal water flow   | BS 6906-3     | 350 l/s/m         |

**NOTE:** SOPRADRAIN ECO 10 is resistant to a wide range of chemicals, impervious to root penetration, rot-proof and unaffected by soil bacteria and fungi. SOPREMA premium-quality products conform to applicable EN and national standards.

## STORAGE AND HANDLING

Rolls must be stored in the delivery packaging, in upright position in a dry and protected environment.

## STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this publication is based on the present state of our best knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, their representative and/or the contractor are responsible for checking the suitability of products for their intended use.



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