

Product data sheet

COLETANCHE ES3

Description

Coletanche ES3 is an elastomeric modified bituminous geomembrane.

Use

Extreme level of mechanical constraints, exposed or covered (puncturing materials, thick cover layer, high pressures). For example:

- Mining and industrial waste storage facilities,
- Bottom of landfill cells,
- Deep hydraulic ponds,
- Dams.

The product use must be validated by consultation.

Application method

By torch welding or other similar process.

Storage

Rolls must not be stored directly on the ground. Provide suitable supports (blocks, slides, wooden planks) with a minimum height of 35 cm to be placed under the ends of the mandrel.

Composition (indicative)

| | | |
|-------------------|----------------------|-----------------------|
| Reinforcement: | Geotextile | 300 g/m ² |
| Reinforcement: | Glass fleece | 50 g/m ² |
| Binder: | Elastomeric bitumen | 4800 g/m ² |
| Surface finish: | Sand | 250 g/m ² |
| Underside finish: | Silicone coated film | 15 g/m ² |

Characteristics

| | | Standards | Units | Average | Minimum |
|---|------------------------|---------------|---|--------------------|---------|
| Dimensions | Length | EN 1868-1 | m | 65 | 64 |
| | Width | | m | 5,10 | 5,01 |
| Thickness (on finished product) | | EN 1869-1 | mm | 4,80 | 4,20 |
| Surface mass | | EN 1869-1 | kg/m ² | 5,80 | 5,00 |
| Tensile properties: Strength | Longitudinal direction | EN 12311-1 | N/50 mm | 1400 | 1000 |
| | Cross direction | | | 1200 | 850 |
| Tensile properties: Elongation | Longitudinal direction | | % | 45 | 30 |
| | Cross direction | | | 45 | 30 |
| Flexibility at low temperature | | EN 1109 | °C | -20 | -16 |
| Static puncture | Resistance | EN ISO 12236 | kN | 3,9 | 3,2 |
| | Displacement | | mm | 50 | 40 |
| Water permeability | | EN 14150 | m ³ /m ² /d | 1.10 ⁻⁶ | < |
| Gas permeability | | ASTM D1434-82 | m ³ /(m ² .d.atm) | 2.10 ⁻⁴ | < |
| Dangerous substances according to the database "Dangerous substances" available on: http://europa.eu.int/comm/enterprise/construction/internal/dangsub/dangmain.htm | | - | - | None | - |

Durability

| | | Standards | Units | Average | Minimum |
|------------|--|-----------|-------|--------------------|---------|
| Oxidation | Tensile strength according to EN 12311-1 | EN 14575 | % | 100 | 75 |
| | | | | Maximum elongation | 100 |
| Weathering | Residual value according to EN 12226 | EN 12224 | % | 100 | 75 |
| | | | | Maximum elongation | 100 |