

Technical Data Sheet

COLETANCHE ES 4 Geomembranes

1. Description	Coletanche ES 4 is an elastomeric modified bituminous geomembrane.
2. Use	<p>Extreme level of mechanical constraints, exposed or covered (aggressive materials, reinforced precautions). For example:</p> <ul style="list-style-type: none"> • Storage of harmful waste. • Large dams. • Railways (use directly under ballast). • Railway bridges. <p>Product use must be validated by Axter Ltd.</p>
3. Application Method	By torch welding or similar technique.
4. Storage	Rolls must not be stored directly on the ground. Provide suitable supports (blocks, slides, wooden planks) with a minimum height of 35cm, to be placed under the ends of the mandrel.
5. Composition	(Indicative).

Reinforcement (g/m²)	Glass-fibre	50
Reinforcement (g/m²)	Non-woven geotextile	400
Binder (g/m²)	Elastomeric SBS	5400
Surface finish (g/m²)	Sand	250
Under surface finish (g/m²)	Silicone coated film	15

Characteristics		Standards (BS)	Units	Values	Min Tolerance
Dimensions	Length	EN 1848-1	m	55	54
	Width		m	5.10	5.01
Thickness (on finished product)		EN 1849-1	mm	5.6	4.8
Surface mass		EN 1849-1	kg/m ²	6.40	5.90
Tensile properties: maximum tensile force	Longitudinal	EN 12311-1	N/50mm	1600	1150
	Cross direction			1400	1000
Tensile properties: elongation	Longitudinal		%	45	30
	Cross direction			45	30
Flexibility at low temperature		EN 1109	°C	-20	-16
Static Puncture	Resistance	EN ISO 12236	kN	4	3.5
	Displacement		mm	50	40
Water permeability		EN 14150	m ³ /m ² /d	1.10 ⁻⁶	<
Gas permeability		ASTM D 1434-82	m ³ / (m ² .d.atm)	3.10 ⁻⁴	<
Durability					
Oxidation	Tensile strength according to EN 12311-1 Residual value according to EN 12226	EN 14575	%	100	75
				Maximum elongation	100
Weathering		EN 12224	%	100	75
				Maximum elongation	100

The manufacturer reserves the right to modify, at any time, the characteristics of these products.

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