

PRODUCT DATA SHEET

COLETANCHE ES 4 HFA



Certified to
NSF/ANSI 61
Certified for use in contact with
and safe on the water contact system.

DESCRIPTION

COLETANCHE ES 4 HFA is an SBS elastomeric modified bituminous geomembrane.

USE

Extreme level of mechanical resistance, for use as environmental protection and underground works waterproofing (aggressive materials, reinforced precautions), in particular :

- Railways, directly under ballast,
- Dams

The membrane has the same friction angle on both sides.

Product use must be validated by Axter.

APPLICATION METHOD

By torch welding or other similar technique.

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 (oz/yd ²) :	Glass mat	1.5
Reinforcement (oz/yd ²) :	Non-woven geotextile	11.8
Binder (oz/yd ²) :	Elastomeric SBS	159.2
Surface finish (oz/yd ²) :	Sand	7.4
Under surface finish (oz/yd ²) :	Peel-off silicone film	1.2

CHARACTERISTICS

		STANDARD	UNITS	AVERAGE	Min
Dimensions	Length	-	ft	180	177
	Width		ft	16.7	16.4
Thickness (on finished product)		ASTM D 5199	mils	220	189
Surface mass		ASTM D 3776	oz/yd ²	189	174
Resistance to tearing	Longitudinal	ASTM D 4073	lbf	275	207
	Cross direction			230	173
Tensile properties : maximum tensile strength	Longitudinal	ASTM D 7275	lbf/in.	200	167
	Cross direction			171	132
Tensile properties : elongation	Longitudinal		%	50	35
	Cross direction			50	35
Static Puncture		ASTM D 4833	lbf	146	132
Flexibility at low temperature	Longitudinal	ASTM D 5147	°F	-4	5
	Cross direction			-4	5
Water permeability (liquid tightness)		ASTM E 96	m/s	6.10 ⁻¹⁴	<
Gas permeability (gas tightness)		ASTM D 1434-82	m ³ /(m ² .j.atm)	2.10 ⁻⁴	<

NOTE: AXTER COLETANCHE INC. may modify the composition and/or utilisation of its products without prior notice. Consequently orders will be filled according to the latest specification.

