

Technical Data Sheet

EnkaDrain™ ST/1-2s (30m) Data Sheet



EnkaDrain™ ST is a high-performance geocomposite drainage and vibration mitigation system featuring a resilient polyamide core bonded to durable geotextile layers. The three-dimensional pyramidal structure creates defined flow channels that efficiently collect and transmit water, even under high compressive loads, while maintaining long-term structural integrity. The polyamide core offers excellent mechanical strength, durability, and resistance to environmental stresses, and uniquely contributes to low-frequency vibration attenuation, having been shown to reduce associated structure-born noise by up to 30 dB(A). EnkaDrain™ ST is primarily used for subsurface drainage and structural protection in applications such as retaining walls, tunnels, basements, rail infrastructure, and other civil engineering projects where effective water management and vibration reduction are essential.

Properties geocomposite	Test Method	Unit	EnkaDrain™ ST/1-2s (30m)
Polymer			PA/PET
Weight	EN ISO 9864	g/cm ²	950
Thickness under 2 kPa	EN ISO 9863-1	mm	22
Tensile Strength - MD	EN ISO 10319	kN/m	15
Static puncture resistance (CBR)	EN ISO 12236	kN	3.2
Hydraulic gradient	Load kPa		Flow capacity (EN ISO 12958), rigid/foam
i = 1	20	m ² /s	4.2 x 10 ⁻³
	50	m ² /s	1.18 x 10 ⁻³
	100	m ² /s	0.5 x 10 ⁻³
	200	m ² /s	0.2 x 10 ⁻³
i = 0.1	20	m ² /s	0.86 x 10 ⁻³
	50	m ² /s	0.28 x 10 ⁻³
	100	m ² /s	0.11 x 10 ⁻³
	200	m ² /s	0.04 x 10 ⁻³
i = 0.03	20	m ² /s	0.4 x 10 ⁻³
	50	m ² /s	0.13 x 10 ⁻³
	100	m ² /s	0.05 x 10 ⁻³
	200	m ² /s	0.01 x 10 ⁻³
Properties fleece	Test Method	Unit	EnkaDrain™ ST/1-2s (30m)
Dynamic perforaton resistance (cone drop) top fleece	EN ISO 13433	mm	45
Static puncture resistance (CBR)	EN ISO 12236	kN	1.3
Characteristic opening size (O90)	EN ISO 12956	µm	160
Water permeability normal to the plane (Vlh50)	EN ISO 11058	mm/s	200
Dimensions		Unit	EnkaDrain™ ST/1-2s (30m)
Width x Length		m	1 x 30
Length / diameter of roll		m	1.02 x 1
Gross weight		kg	30

Maximum allowed time between installation and covering of the geosynthetic: 2 weeks



Doc ref: EDST13/V1/I0022026

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