



Würzburg Germany

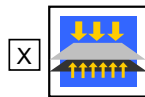
Via Paolo Paoletti 10, 51037 Montale (PT) Italy - EUROPE



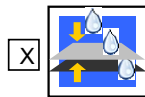
# ECOFELT PES-SB 15

NONWOVEN NEEDLED FABRIC  
PRODUCED WITH PES (POLYESTER) FIBER, WITHOUT CHEMICAL TREATMENTS

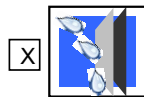
Funzioni / Function / Anwendungen / Function



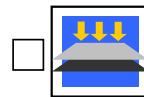
Separazione / Separation /  
Séparation / Trennung



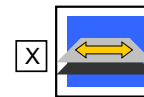
Filtrazione / Filtering /  
Filtration / Filterung



Drenaggio / Drainage /  
Drainage / Dränung



Protezione / Protection /  
Schutzfunktion / Protection/



Rinforzo / Reinforcement /  
Renforcement / Verstärkung

FEATURES	NORM	U.M	AVERAGE	TOLLERANCE
AERIC MASS	UNI EN ISO 9864	gr/mq	150	+/- 10%
THICKNESS (2kPa)	UNI EN ISO 9863	mm.	0,6	-0,18
LONGITUDINAL TRACT. RESISTANCE	EN ISO 10319	kN/m	1,5	-0,45
TRASNVERSAL TRACT. RESISTANCE	EN ISO 10319	kN/m	1,65	-0,495
LONGITUDINAL ELONGATION	EN ISO 10319	%	50	-20%
TRANSVERSAL ELONGATION	EN ISO 10319	%	50	-20%
ENERGY ABSORPTION INDEX	EN ISO 10318	kJ/m <sup>2</sup>	0,6	-0,18
STATIC PUNCHING	EN ISO 12236	kN	0,28	-0,08
DYNAMIC PUNCHING	UNI EN ISO 13433	mm.	>50	+30%
OPENING SIZE	EN ISO 12956	um.	80	+/- 30%
WATER PERMEABILITY PERP. ON PLANE	EN ISO 11058	m/s	0,078	+/- 30%
DRAINING CAPACITY IN PLANE (20kPa)	EN ISO 12958	m <sup>2</sup> /s	1,00E-06	+/- 30%
DURABILITY	UNI EN 12224	Predicting durability of minimum 5 years in natural soils with 4 <pH <9 and soil temperature <25 °. Be covered within 2 weeks from installation.		

 EN 13249 Strade / Roads Strassen / Routes	 EN 13250 Ferrovie / Railways Schienenbau / Rail	 EN 13251 Fondazioni / Foundations Fundamenten / Fondations	 EN 13252 Drenaggio / Drainage System Draensystem / Drainage	 EN 13253 AntiErosione / Erosion Control Erosionsschutz / Erosion
 EN 13254 Bacini / Dams Staudaemme / Barrages	 EN 13255 Canali / Canals Kaenalenbau / Canaux	 EN 13256 Tunnel / Tunnels Tunnelbau / Tunnel	 EN 13257 Rifiuti Solidi / Solid Waste Deponiebau / Dechets Solid	 EN 13265 Rifiuti Liquidi / Liquida waste Fluessige Deponieabfall / Dechets Liquides

The above mentioned values have been obtained in Ecofibre SRL laboratory and in accredited outer Laboratories.

The values are real and correct according to our knowledge.

Roll length tolerance +/-2%, width tolerance +/-3cm

Montale 11-apr-17

Quality Control Manager  
**ECOFIBRE s.r.l.**