

NorGeoSpec 2002 Product Certificate



Product Certificate
 www.norgeospec.org
 No 1105-QC-1316
 TS 4 *
 NorGeoSpec 2002

Date: 2011-09-05
 Valid until: 2013-09-04
 Manufacturer: Bonar TF
 Product: TS 4 *
 Applicable to specification profile: 4
 Certificate No 1105-QC-1316
 Certification procedure: QC
 Required level of delivery control: 1 identification test for every 50000 m², but minimum 1 id.test for deliveries over 10 000 m²

Characteristic		Maximum tolerance (units)	Declared tolerance ¹	Declared value ¹	95% confidence limit ²	Certification value
Tensile strength	MD kN/m	-2,2	-2,2	22,3	20,1	
EN ISO 10319	CMD kN/m	-2,2	-2,2	22,3	20,1	20,1
Tensile strain	MD %	-9,0 %	-9 %	45 %	36,0 %	
EN ISO 10319	CMD %	-9,0 %	-9 %	45 %	36,0 %	36,0 %
Cone drop diam						
EN ISO 13433	mm	3	3,4	17	20	20
Energy index						
EN ISO 10319	kN/m		0,0	5,0	5,0	5,0
Velocity index						
EN ISO 11058	10 ⁻³ m/s	-17	-17	55	39	39
Opening size						
EN ISO 12956	O ₉₀ (mm)	0,024	0,024	0,080	0,104	0,104
Mass EN ISO 9864 ³	g/m ²	27	27	265	239 - 292	239 - 292
Static puncture						
EN ISO 12236 ³	N	-280	-280	2800	2520	2520
Application profile						4

¹Mean values and tolerances given on a CE document with revision date: The CE document is approved by Notified body ID no: 2011-08-09 1137

²The maximum tolerance is applied for determination of the 95% conf. limit when tolerances given on the CE-mark document exceeds the maximum allowable tolerance required in NorGeoSpec 2002. The products are continuously audited to verify that the characteristics fulfils the NorGoeSpec requirements.

³The certification values for these characteristics is to be used in delivery control. For the mass per unit area the allowable variation range is given while the minimum value is given for the static puncture strength.

SINTEF is **Notified as a competent body** related to directive 89/106/EEC by the Norwegian Royal Ministry of Trade and Industry

Notified body ID no: 1071
 Products: Geotextiles and geotextile related products
 Tasks: Inspection/Certification

Approved by the NorGeoSpec Technical committee 2011-09-05	Issued by Christian Recker	Approved by Arnstein Watn
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