

TM400i-T SERIES

TECHNICAL DATASHEET

Geomembrane (GMB) type	Textured/textured (T)
Composition	High density polyethylene (HDPE)
Main function	Impermeabilisation

Property	Test Method	Unit	Frequency ⁽¹⁾	TM430i-T	TM440i-T	TM460i-T	TM480i-T	TM4-100i-T
Physical								
Nominal thickness	-	mils	-	30.0	40.0	60.0	80.0	100.0
Thickness (min. avg.)	ASTM D5199	mils	Every roll	28.5	38.0	57.0	76.0	95.0
Lowest individual 8/10 values	ASTM D5594	mils	Every roll	27.0	36.0	54.0	72.0	90.0
Lowest individual 10/10 values	ASTM D5594	mils	Every roll	25.5	34.0	51.0	68.0	85.0
Asperity height (min. avg.)	ASTM D7466	mils	Every roll	16	16	16	16	16
Resin density	ASTM D1505	g/cc	1/batch	> 0.932	> 0.932	> 0.932	> 0.932	> 0.932
Melt index-190/2.16 (max.)	ASTM D1238	g/10 min	1/batch	1.0	1.0	1.0	1.0	1.0
Sheet density ⁽²⁾	ASTM D792	g/cc	Every 10 rolls	≥ 0.940	≥ 0.940	≥ 0.940	≥ 0.940	≥ 0.940
Carbon black content ⁽³⁾	ASTM D4218	%	Every 2 rolls	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon black dispersion	ASTM D5596	Category	Every 10 rolls	Cat. 1 / Cat. 2	Cat. 1 / Cat. 2	Cat. 1 / Cat. 2	Cat. 1 / Cat. 2	Cat. 1 / Cat. 2
OIT - standard (avg.)	ASTM D3895	min	Formulation	100	100	100	100	100
Mechanical								
Stength at yield ⁽²⁾	ASTM D6693	kN/m	Every 2 rolls	66	88	132	176	220
Elongation at yield ⁽²⁾	ASTM D6693	%	Every 2 rolls	12	12	13	13	13
Stength at break ⁽²⁾	ASTM D6693	kN/m	Every 2 rolls	66	88	132	176	220
Elongation at break ⁽²⁾	ASTM D6693	%	Every 2 rolls	150	150	150	150	150
Tear resistance ⁽²⁾	ASTM D1004	N	Every 5 rolls	23	30	45	60	75
Puncture resistance ⁽²⁾	ASTM D4833	N	Every 5 rolls	68	90	120	152	180
Dimensional stability	ASTM D1204	%	Certified	± 2	± 2	± 2	± 2	± 2
Stess crack resistance (SP-NCTL)	ASTM D5397	hr	1/batch	500	500	500	500	500
Oven aging - % retained 90 days HP-OIT ⁽⁴⁾	ASTM D5721 ASTM D5885	%	Formulation	80	80	80	80	80
UV resistance-% retained 1600h HP-OIT ⁽⁴⁾	GRI -GM11 ASTM D5885	%	Formulation	50	50	50	50	50
Dimensions (may vary ± 1%)								
Width X length	N/A	m	N/A	22.3 X 1000	22.3 X 780	22.3 X 540	22.3 X 420	22.3 X320

This technical informations comes from the manufacturer and was transcribed by Texel.

All values are nominal test results, except when specified as minimum or maximum.

1-Testing frequency based on standard roll dimensions and one batch is approximately 18,000 lbs (or one railcar). / 2 - ASTM D1505 and ASTM D792 give the same results /

3 - ASTM D1603 and ASTM D4218 give the same results / 4 - Minimum average value on the basis of 5 specimens each direction (MD & TD)

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