

Solmax International Inc., 2801 Boul. Marie-Victorin, Varennes, Qc, Canada, J3X 1P7  
 Tel.: (450) 929-1234 Fax: (450) 929-2550 www.solmax.com

PROPERTY	TEST METHOD	FREQUENCY <sup>(1)</sup>	UNIT Imperial	Solmax 460W-1000	Solmax 480W-1000	Solmax 500W-1000
<b>SPECIFICATIONS</b>						
Thickness (min. avg.)	ASTM D-5199	Every roll	mils	60.0	80.0	100.0
Thickness (min.)	ASTM D-5199	Every roll	mils	54.0	72.0	90.0
Resin Density	ASTM D-1505	1/Batch	g/cc	> 0.932	> 0.932	> 0.932
Melt Index - 190/2.16 (max.)	ASTM D-1238	1/Batch	g/10 min	1.0	1.0	1.0
Sheet Density (8)	ASTM D-1505	Every 2 rolls	g/cc	≥ 0.940	≥ 0.940	≥ 0.940
Carbon Black Content (9)	ASTM D-4218	Every 2 rolls	%	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	ASTM D-5596	Every 6 rolls	Category	Cat. 1 & Cat. 2	Cat. 1 & Cat. 2	Cat. 1 & Cat. 2
OIT - standard (avg.)	ASTM D-3895	1/Batch	min	100	100	100
Tensile Properties (min. avg) (2)	ASTM D-6693	Every 2 rolls				
Strength at Yield			ppi	130	177	210
Elongation at Yield			%	13	13	12
Strength at Break			ppi	243	326	380
Elongation at Break			%	700	700	700
Tear Resistance (min. avg.)	ASTM D-1004	Every 6 rolls	lbf	42	57	70
Puncture Resistance (min. avg.)	ASTM D-4833	Every 6 rolls	lbf	122	155	180
Dimensional Stability	ASTM D-1204	Certification	%	± 2	± 2	± 2
Stress Crack Resistance (SP-NCTL)	ASTM D-5397	1/Batch	hr	500	500	500
Oven Aging - % retained after 90 days	ASTM D-5721	Per formulation (5)				
HP OIT (min. avg.)	ASTM D-5885		%	80	80	80
UV Resistance - % retained after 1600 hr	GRI-GM-11	Per formulation (5)				
HP-OIT (min. avg.)	ASTM D-5885		%	50	50	50
<b>SUPPLY SPECIFICATIONS</b> (Roll dimensions may vary ±1%)						
Roll Dimension - Width	-	-	ft	22.3	22.3	22.3
Roll Dimension - Length	-	-	ft	520	400	320
Area (Surface/Roll)	-	-	sf	11,596	8,920	7,136
Color (one side) (4)	-	-		White	White	White



# TECHNICAL DATA SHEET

## Solmax HDPE Reflective Smooth - Imperial Values

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### NOTES

1. Testing frequency based on standard roll dimensions and one batch is approximately 180,000 lbs (or one railcar).
2. Machine Direction (MD) and Cross Machine Direction (XMD or TD) average values should be on the basis of 5 specimens each direction.
4. Smooth edge may not have the same consistent shade of color as the membrane itself. The colored layer may cause the carbon black content results to be higher than 3%.
5. Certified by black formulation on geomembrane roll or molded plaque.
8. Correlation table is available for ASTM D792 vs ASTM D1505. Both methods give the same results.
9. Correlation table is available for ASTM D1603 vs ASTM D4218. Both methods give the same results.

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

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PROPERTY	TEST METHOD	FREQUENCY <sup>(1)</sup>	UNIT Imperial	Solmax 460WST-1000	Solmax 480WST-1000	Solmax 500WST-1000
<b>SPECIFICATIONS</b>						
Nominal Thickness	-	-	mils	60.0	80.0	100.0
Thickness (min. avg.)	ASTM D-5994	Every roll	mils	57.0	76.0	95.0
Lowest individual for 8 out of 10 values			mils	54.0	72.0	90.0
Lowest individual for 10 out of 10 values			mils	51.0	68.0	85.0
Asperity Height (min. avg.) (3)	ASTM D-7466	Every roll	mils	16	16	16
Resin Density	ASTM D-1505	1/Batch	g/cc	> 0.932	> 0.932	> 0.932
Melt Index - 190/2.16 (max.)	ASTM D-1238	1/Batch	g/10 min	1.0	1.0	1.0
Sheet Density (8)	ASTM D-1505	Every 2 rolls	g/cc	≥ 0.940	≥ 0.940	≥ 0.940
Carbon Black Content (9)	ASTM D-4218	Every 2 rolls	%	2.0 - 3.0	2.0 - 3.0	2.0 - 3.0
Carbon Black Dispersion	ASTM D-5596	Every 6 rolls	Category	Cat. 1 & Cat. 2	Cat. 1 & Cat. 2	Cat. 1 & Cat. 2
OIT - standard (avg.)	ASTM D-3895	1/Batch	min	100	100	100
Tensile Properties (min. avg) (2)	ASTM D-6693	Every 2 rolls				
Strength at Yield			ppi	132	176	210
Elongation at Yield			%	13	13	13
Strength at Break			ppi	132	167	150
Elongation at Break			%	150	150	150
Tear Resistance (min. avg.)	ASTM D-1004	Every 6 rolls	lbf	45	60	70
Puncture Resistance (min. avg.)	ASTM D-4833	Every 6 rolls	lbf	120	150	150
Dimensional Stability	ASTM D-1204	Certification	%	± 2	± 2	± 2
Stress Crack Resistance (SP-NCTL)	ASTM D-5397	1/Batch	hr	500	500	500
Oven Aging - % retained after 90 days	ASTM D-5721	Per formulation (5)				
HP OIT (min. avg.)	ASTM D-5885		%	80	80	80
UV Resistance - % retained after 1600 hr	GRI-GM-11	Per formulation (5)				
HP-OIT (min. avg.)	ASTM D-5885		%	50	50	50
<b>SUPPLY SPECIFICATIONS</b> (Roll dimensions may vary ±1%)						
Roll Dimension - Width	-	-	ft	22.3	22.3	22.3
Roll Dimension - Length	-	-	ft	560	440	320
Area (Surface/Roll)	-	-	sf	12,488	9,680	7,136
Color (one side) (4)	-	-		White	White	White

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2. Machine Direction (MD) and Cross Machine Direction (XMD or TD) average values should be on the basis of 5 specimens each direction.
3. Lowest individual and 8 out of 10 readings as per GRI-GM13 / 17, latest version.
4. Smooth edge may not have the same consistent shade of color as the membrane itself. The colored layer may cause the carbon black content results to be higher than 3%.
5. Certified by black formulation on geomembrane roll or molded plaque.
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Roll Dimension - Length	-	-	ft	540	420	320
Area (Surface/Roll)	-	-	sf	12,042	9,240	7,136
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4. Black or grey spots may be visible on the textured surface. Smooth edge may not have the same consistent shade of color as the membrane itself. The colored layer may cause the carbon black content results to be higher than 3%.
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