

Geomembrane PVC Smooth

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

PROPERTY	TEST METHOD****	<b>UNIT</b> Imperial	Solmax 220-1000 PVC-20-000
CERTIFIED PROPERTIES †			
Thickness (Nominal ±5%)	ASTM D-5199	mils	20
Tensile Properties (min. avg. MD & TD)	ASTM D-882		
Strength at Break		ppi	48
Elongation at Break		%	360
Modulus at 100%		ppi	21
Tear Resistance (min. avg.)	ASTM D-1004	lbf	6
Dimensional Stability	ASTM D-1204	%	4
Low Temperature Impact (pass)	ASTM D-1790	°F	-15
Volatile Loss (max. loss)	ASTM D-1203	%	0.9
Weight	-	lbs/sf	0.136
INDEX PROPERTIES ††			
Specific gravity (typical)	ASTM D-792	g/cc	1.20
Water Extraction (max. loss)	ASTM D-1239	%	0.15
Average Plasticizer Molecular Weight (g/mole)	ASTM D-2124		400
Soil Burial (max. chg.)	ASTM G-160		
Break Strength		%	5
Elongation at Break		%	20
Modulus at 100%		%	20
Hydrostatic Resistance (min.)	ASTM D-751	psi	68
GENERAL INFORMATION †††			
Color	-		Grey (Gris)
Surface	-		Smooth (Lisse)
Panel Width Multiples	-	in	85
FACTORY SEAM STRENGTHS			
Shear Strength (min.avg.)	ASTM D-6392	ppi	38.4
Peel Strength (min. avg.)	ASTM D-6392	ppi	12.5

#### **NOTES**

MF-CQ-36 (Rev. 01 / 2008-03-06) Revision Date: 2007-04-01

<sup>†.</sup> Certified properties are tested once per lot, or once every 40,000 lbs of material (18,000 kg), whichever is more frequent. Tensile properties: 1" wide samples, 95 psi line pressure and 360 kgf (809 lbf) clamping force.

<sup>††.</sup> Index properties are tested once per formulation. A certified statement of the test results for the formulation is to be made available to the customer on request.

<sup>†††.</sup> Custom panel sizes are available and panel dimensions may vary  $\pm 1\%$ .

<sup>††††</sup> Modifications or further details of test are described in PGI 1104 Appendix B or ASTM D 7176 standard.

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PROPERTY	TEST METHOD****	<b>UNIT</b> Metric	Solmax 220FG-1000 PVC-20FG-000
CERTIFIED PROPERTIES †			
Thickness (Nominal ±5%)	ASTM D-5199	mm	0.50
Tensile Properties (min. avg. MD & TD)	ASTM D-882		
Strength at Break		kN/m	5.3
Elongation at Break		%	250
Modulus at 100%		kN/m	2.6
Tear Resistance (min. avg.)	ASTM D-1004	N	17.8
Weight	-	kg/sm	0.662
GENERAL INFORMATION †††			
Color	-		Black (Noir)
Surface	-		Smooth (Lisse)
Panel Width Multiples	-	m	1.83
FACTORY SEAM STRENGTHS			
Shear Strength (min.avg.)	ASTM D-6392	kN/m	3.7
Peel Strength (min. avg.)	ASTM D-6392	kN/m	2.2

### **NOTES**

MF-CQ-36 (Rev. 01 / 2008-03-06)

Revision Date : 201

2011-04-26

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PROPERTY	TEST METHOD****	<b>UNIT</b> Metric	Solmax 230-1000 PVC-30-000
CERTIFIED PROPERTIES †			
Thickness (Nominal ±5%)	ASTM D-5199	mm	0.75
Tensile Properties (min. avg. MD & TD)	ASTM D-882		
Strength at Break		kN/m	12.8
Elongation at Break		%	380
Modulus at 100%		kN/m	5.6
Tear Resistance (min. avg.)	ASTM D-1004	N	35
Dimensional Stability	ASTM D-1204	%	3
Low Temperature Impact (pass)	ASTM D-1790	$^{\circ}\mathrm{C}$	-29
Volatile Loss (max. loss)	ASTM D-1203	%	0.7
Weight	-	kg/sm	0.957
INDEX PROPERTIES ††			
Specific gravity (typical)	ASTM D-792	g/cc	1.20
Water Extraction (max. loss)	ASTM D-1239	%	0.15
Average Plasticizer Molecular Weight (g/mole)	ASTM D-2124		400
Soil Burial (max. chg.)	ASTM G-160		
Break Strength		%	5
Elongation at Break		%	20
Modulus at 100%		%	20
Hydrostatic Resistance (min.)	ASTM D-751	kPa	690
GENERAL INFORMATION †††			
Color	-		Grey (Gris)
Surface	-		Smooth (Lisse)
Panel Width Multiples	-	m	2.16
FACTORY SEAM STRENGTHS			
Shear Strength (min.avg.)	ASTM D-6392	kN/m	10
Peel Strength (min. avg.)	ASTM D-6392	kN/m	2.6

#### **NOTES**

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PROPERTY	TEST METHOD****	<b>UNIT</b> Metric	Solmax 235FG-1000 PVC-35FG-000
CERTIFIED PROPERTIES †			
Thickness (Nominal ±5%)	ASTM D-5199	mm	0.89
Tensile Properties (min. avg. MD & TD)	ASTM D-882		
Strength at Break		kN/m	12.2
Elongation at Break		%	350
Modulus at 100%		kN/m	4.4
Tear Resistance (min. avg.)	ASTM D-1004	N	33.34
Weight	-	kg/sm	1.11
GENERAL INFORMATION †††			
Color	-		Black (Noir)
Surface	-		Smooth (Lisse)
Panel Width Multiples	-	m	1.83
FACTORY SEAM STRENGTHS			
Shear Strength (min.avg.)	ASTM D-6392	kN/m	4.2
Peel Strength (min. avg.)	ASTM D-6392	kN/m	2.2

### **NOTES**

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Revision Date: 2011-04-26

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PROPERTY	TEST METHOD <sup>††††</sup>	<b>UNIT</b> Metric	Solmax 240-1000 PVC-40-000
CERTIFIED PROPERTIES †			
Thickness (Nominal ±5%)	ASTM D-5199	mm	1.00
Tensile Properties (min. avg. MD & TD)	ASTM D-882		
Strength at Break		kN/m	17.0
Elongation at Break		%	430
Modulus at 100%		kN/m	7.0
Tear Resistance (min. avg.)	ASTM D-1004	N	44
Dimensional Stability	ASTM D-1204	%	3
Low Temperature Impact (pass)	ASTM D-1790	°C	-29
Volatile Loss (max. loss)	ASTM D-1203	%	0.5
Weight	-	kg/sm	1.33
INDEX PROPERTIES ††			
Specific gravity (typical)	ASTM D-792	g/cc	1.20
Water Extraction (max. loss)	ASTM D-1239	%	0.20
Average Plasticizer Molecular Weight (g/mole)	ASTM D-2124		400
Soil Burial (max. chg.)	ASTM G-160		
Break Strength		%	5
Elongation at Break		%	20
Modulus at 100%		%	20
Hydrostatic Resistance (min.)	ASTM D-751	kPa	830
GENERAL INFORMATION †††			
Color	-		Grey (Gris)
Surface	-		Smooth (Lisse)
Panel Width Multiples	-	m	2.16
FACTORY SEAM STRENGTHS			
Shear Strength (min.avg.)	ASTM D-6392	kN/m	14
Peel Strength (min. avg.)	ASTM D-6392	kN/m	2.6

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2007-04-01

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PROPERTY	TEST METHOD****	<b>UNIT</b> Metric	Solmax 250-1000 PVC-50-000
CERTIFIED PROPERTIES †			
Thickness (Nominal ±5%)	ASTM D-5199	mm	1.27
Tensile Properties (min. avg. MD & TD)	ASTM D-882		
Strength at Break		kN/m	20.3
Elongation at Break		%	430
Modulus at 100%		kN/m	8.8
Tear Resistance (min. avg.)	ASTM D-1004	N	58
Dimensional Stability	ASTM D-1204	%	3
Low Temperature Impact (pass)	ASTM D-1790	°C	-29
Volatile Loss (max. loss)	ASTM D-1203	%	0.5
Weight	-	kg/sm	1.67
INDEX PROPERTIES ††			
Specific gravity (typical)	ASTM D-792	g/cc	1.20
Water Extraction (max. loss)	ASTM D-1239	%	0.20
Average Plasticizer Molecular Weight (g/mole)	ASTM D-2124		400
Soil Burial (max. chg.)	ASTM G-160		
Break Strength		%	5
Elongation at Break		%	20
Modulus at 100%		%	20
Hydrostatic Resistance (min.)	ASTM D-751	kPa	1030
GENERAL INFORMATION †††			
Color	-		Grey (Gris)
Surface	-		Smooth (Lisse)
Panel Width Multiples	-	m	1.83
FACTORY SEAM STRENGTHS			
Shear Strength (min.avg.)	ASTM D-6392	kN/m	17
Peel Strength (min. avg.)	ASTM D-6392	kN/m	2.6

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PROPERTY	TEST METHOD <sup>††††</sup>	<b>UNIT</b> Metric	Solmax 260-1000 PVC-60-000
CERTIFIED PROPERTIES †			
Thickness (Nominal ±5%)	ASTM D-5199	mm	1.50
Tensile Properties (min. avg. MD & TD)	ASTM D-882		
Strength at Break		kN/m	24.0
Elongation at Break		%	450
Modulus at 100%		kN/m	10.5
Tear Resistance (min. avg.)	ASTM D-1004	N	67
Dimensional Stability	ASTM D-1204	%	3
Low Temperature Impact (pass)	ASTM D-1790	$^{\circ}\mathrm{C}$	-29
Volatile Loss (max. loss)	ASTM D-1203	%	0.5
Weight	-	kg/sm	1.96
INDEX PROPERTIES ††			
Specific gravity (typical)	ASTM D-792	g/cc	1.20
Water Extraction (max. loss)	ASTM D-1239	%	0.20
Average Plasticizer Molecular Weight (g/mole)	ASTM D-2124		400
Soil Burial (max. chg.)	ASTM G-160		
Break Strength		%	5
Elongation at Break		%	20
Modulus at 100%		%	20
Hydrostatic Resistance (min.)	ASTM D-751	kPa	1240
GENERAL INFORMATION †††			
Color	-		Grey (Gris)
Surface	-		Smooth (Lisse)
Panel Width Multiples	-	m	1.55
FACTORY SEAM STRENGTHS			
Shear Strength (min.avg.)	ASTM D-6392	kN/m	17
Peel Strength (min. avg.)	ASTM D-6392	kN/m	2.6

#### **NOTES**

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PROPERTY	TEST METHOD****	<b>UNIT</b> Metric	Solmax 260PG-1000 PVC-60PG-000
CERTIFIED PROPERTIES †			
Thickness (Nominal ±5%)	ASTM D-1593	mm	1.50
Tensile Properties (min. avg. MD & TD)	ASTM D-882		
Strength at Break		kN/m	17.5
Elongation at Break		%	400
Modulus at 100%		kN/m	6.1
Tear Resistance (min. avg.)	ASTM D-1004	N	44
Dimensional Stability	ASTM D-1204	%	4
Low Temperature Impact (pass)	ASTM D-1790	°C	-20
Volatile Loss (max. loss)	ASTM D-1203	%	1.0
Weight	-	kg/sm	1.96
INDEX PROPERTIES ††			
Specific gravity (typical)	ASTM D-792	g/cc	1.20
Water Extraction (max. loss)	ASTM D-1239	%	0.40
Average Plasticizer Molecular Weight (g/mole)	ASTM D-2124		400
Soil Burial (max. chg.)	ASTM G-160		
Break Strength		%	5
Elongation at Break		%	20
Modulus at 100%		%	20
Hydrostatic Resistance (min.)	ASTM D-751	kPa	621
GENERAL INFORMATION †††			
Color	-		White (Blanc)
Surface	-		Smooth (Lisse)
Panel Width Multiples	-	m	1.55
FACTORY SEAM STRENGTHS			
Shear Strength (min.avg.)	ASTM D-6392	kN/m	12.3
Peel Strength (min. avg.)	ASTM D-6392	kN/m	3.5

#### **NOTES**

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Revision Date :

2008-11-25

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