OA-4
4oz CIVIL NONWOVEN GEOTEXTILE

Ontario Agra has provided the containment and erosions control industries with the highest quality geotextiles available. Our nonwoven needle punched geotextiles are manufactured using polypropylene fibers, which are formed into a dimensionally stable network which allows the fibers to maintain their relative position. These products resist ultraviolet deterioration, rotting, biological degradation, and are inert to commonly encountered soil chemicals.

TESTED PROPERTY	TEST METHOD	UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)
Tensile Strength (Grab)	ASTM D 4632	lbs (N)	100 (445)
Elongation	ASTM D 4632	%	50
CBR Puncture	ASTM D 6241	lbs (N)	310 (1380)
Trapezoid Tear	ASTM D 4533	lbs (N)	45 (200)
U.V. Resistance	ASTM D 4355	%/hrs	70/500
Apparent Opening Size (AOS)*	ASTM D 4751	U.S. Sieve (mm)	70 (0.212)
Permittivity	ASTM D 4491	sec^{-1}	2.0
Water Flow	ASTM D 4491	gpm/ft^2 ($l/min/m^2$)	140 (5704)
TYPICAL ROLL DIMENSIONS			
Roll Dimensions		ft	12.5 x 360 15 x 360
Roll Area		yd^2	500/600
Estimated Roll Weight		lbs	146

NOTES:
*Maximum average roll value.
Mullen Burst ASTM D 3768 has been removed. It is not recognized by ASTM D 35 on Geosynthetics.
Puncture ASTM D 4833 has been removed. It is not recognized by AASHTO M288 and has been replaced with CBR Puncture ASTM D 6241.

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OA-6
6oz CIVIL NONWOVEN GEOTEXTILE

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TESTED PROPERTY	TEST METHOD	UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)
Tensile Strength (Grab)	ASTM D 4632	lbs (N)	160 (711)
Elongation	ASTM D 4632	%	50
CBR Puncture	ASTM D 6241	lbs (N)	410 (1825)
Trapezoid Tear	ASTM D 4533	lbs (N)	60 (267)
U.V. Resistance	ASTM D 4355	%/hrs	70/500
Apparent Opening Size (AOS)*	ASTM D 4751	U.S. Sieve (mm)	70 (0.212)
Permittivity	ASTM D 4491	sec^{-1}	1.5
Water Flow	ASTM D 4491	gpm/ft^2 ($l/min/m^2$)	110 (4482)
TYPICAL ROLL DIMENSIONS			
Roll Dimensions		ft	12.5 x 360 15 x 300
Roll Area		yd^2	500
Estimated Roll Weight		lbs	200

NOTES:
*Maximum average roll value.
Mullen Burst ASTM D 3768 has been removed. It is not recognized by ASTM D 35 on Geosynthetics.
Puncture ASTM D 4833 has been removed. It is not recognized by AASHTO M288 and has been replaced with CBR Puncture ASTM D 6241.

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OA-7
7oz CIVIL NONWOVEN GEOTEXTILE

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TESTED PROPERTY	TEST METHOD	UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)
Tensile Strength (Grab)	ASTM D 4632	lbs (N)	180 (800)
Elongation	ASTM D 4632	%	50
CBR Puncture	ASTM D 6241	lbs (N)	460 (2047)
Trapezoid Tear	ASTM D 4533	lbs (N)	75 (333)
U.V. Resistance	ASTM D 4355	%/hrs	70/500
Apparent Opening Size (AOS)*	ASTM D 4751	U.S. Sieve (mm)	70 (0.212)
Permittivity	ASTM D 4491	sec^{-1}	1.5
Water Flow	ASTM D 4491	gpm/ft^2 ($l/min/m^2$)	100 (4074)
TYPICAL ROLL DIMENSIONS			
Roll Dimensions		ft	12.5 x 360 15 x 300
Roll Area		yd^2	500
Estimated Roll Weight		lbs	220

NOTES:
*Maximum average roll value.
Mullen Burst ASTM D 3768 has been removed. It is not recognized by ASTM D 35 on Geosynthetics.
Puncture ASTM D 4833 has been removed. It is not recognized by AASHTO M288 and has been replaced with CBR Puncture ASTM D 6241.

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OA-8

8oz CIVIL NON WOVEN GEOTEXTILE

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TESTED PROPERTY	TEST METHOD	UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)
Weight	ASTM D 5261	oz/yd^2 (g/m^2)	8.0 (271)
Tensile Strength (Grab)	ASTM D 4632	lbs (N)	205 (911)
Elongation	ASTM D 4632	%	50
CBR Puncture	ASTM D 6241	lbs (N)	500 (2224)
Trapezoid Tear	ASTM D 4533	lbs (N)	80 (356)
U.V. Resistance	ASTM D 4355	%/hrs	70/500
Apparent Opening Size (AOS)*	ASTM D 4751	U.S. Sieve (mm)	80 (0.180)
Permittivity	ASTM D 4491	sec^{-1}	1.4
Water Flow	ASTM D 4491	gpm/ft^2 ($l/min/m^2$)	95 (3870)
TYPICAL ROLL DIMENSIONS			
Roll Dimensions		ft	12.5 x 360 15 x 300
Roll Area		yd^2	500
Estimated Roll Weight		lbs	250

NOTES:
MARV. Minimum Average Roll Value.
Maximum average roll value ASTM D 4751- AOS.
Mullen Burst ASTM D 3768 has been removed. It is not recognized by ASTM D 35 on Geosynthetics.
Puncture ASTM D 4833 has been removed. It is not recognized by AASHTO M288 and has been replaced with CBR Puncture ASTM D 6241

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OA-10

10oz CIVIL NONWOVEN GEOTEXTILE

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TESTED PROPERTY	TEST METHOD	UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)
Tensile Strength (Grab)	ASTM D 4632	lbs (N)	250 (1110)
Elongation	ASTM D 4632	%	50
CBR Puncture	ASTM D 6241	lbs (N)	650 (2890)
Trapezoid Tear	ASTM D 4533	lbs (N)	100 (444)
U.V. Resistance	ASTM D 4355	%/hrs	70/500
Apparent Opening Size (AOS)*	ASTM D 4751	U.S. Sieve (mm)	80 (0.150)
Permittivity	ASTM D 4491	sec^{-1}	1.2
Water Flow	ASTM D 4491	gpm/ft^2 ($l/min/m^2$)	80 (3251)
TYPICAL ROLL DIMENSIONS			
Roll Dimensions		ft	15 x 300
Roll Area		yd^2	500
Estimated Roll Weight		lbs	320

NOTES:
*Maximum average roll value.
Mullen Burst ASTM D 3768 has been removed. It is not recognized by ASTM D 35 on Geosynthetics.
Puncture ASTM D 4833 has been removed. It is not recognized by AASHTO M288 and has been replaced with CBR Puncture ASTM D 6241.

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OA-12

12oz CIVIL NONWOVEN GEOTEXTILE

Ontario Agra has provided the containment and erosions control industries with the highest quality geotextiles available. Our nonwoven needle punched geotextiles are manufactured using polypropylene fibers, which are formed into a dimensionally stable network which allows the fibers to maintain their relative position. These products resist ultraviolet deterioration, rotting, biological degradation, and are inert to commonly encountered soil chemicals.

TESTED PROPERTY	TEST METHOD	UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)
Tensile Strength (Grab)	ASTM D 4632	lbs (N)	300 (1335)
Elongation	ASTM D 4632	%	50
CBR Puncture	ASTM D 6241	lbs (N)	825 (3671)
Trapezoid Tear	ASTM D 4533	lbs (N)	115 (511)
U.V. Resistance	ASTM D 4355	%/hrs	70/500
Apparent Opening Size (AOS)*	ASTM D 4751	U.S. Sieve (mm)	100 (0.150)
Permittivity	ASTM D 4491	sec^{-1}	1.0
Water Flow	ASTM D 4491	gpm/ft^2 ($l/min/m^2$)	75 (3055)
TYPICAL ROLL DIMENSIONS			
Roll Dimensions		ft	12.5 x 360 15 x 300
Roll Area		yd^2	500
Estimated Roll Weight		lbs	375

NOTES:
*Maximum average roll value.
Mullen Burst ASTM D 3768 has been removed. It is not recognized by ASTM D 35 on Geosynthetics.
Puncture ASTM D 4833 has been removed. It is not recognized by AASHTO M288 and has been replaced with CBR Puncture ASTM D 6241.

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OA-16

16oz CIVIL NONWOVEN GEOTEXTILE

Ontario Agra has provided the containment and erosions control industries with the highest quality geotextiles available. Our nonwoven needle punched geotextiles are manufactured using polypropylene fibers, which are formed into a dimensionally stable network which allows the fibers to maintain their relative position. These products resist ultraviolet deterioration, rotting, biological degradation, and are inert to commonly encountered soil chemicals.

TESTED PROPERTY	TEST METHOD	UNIT ENGLISH (METRIC)	VALUE ENGLISH (METRIC)
Tensile Strength (Grab)	ASTM D 4632	lbs (N)	380 (1690)
Elongation	ASTM D 4632	%	50
CBR Puncture	ASTM D 6241	lbs (N)	1025 (4561)
Trapezoid Tear	ASTM D 4533	lbs (N)	145 (644)
U.V. Resistance	ASTM D 4355	%/hrs	70/500
Apparent Opening Size (AOS)*	ASTM D 4751	U.S. Sieve (mm)	100 (0.150)
Permittivity	ASTM D 4491	sec^{-1}	0.7
Water Flow	ASTM D 4491	gpm/ft^2 ($l/min/m^2$)	50 (2037)
TYPICAL ROLL DIMENSIONS			
Roll Dimensions		ft	15 x 150
Roll Area		yd^2	250
Estimated Roll Weight		lbs	250

NOTES:
*Maximum average roll value.
Mullen Burst ASTM D 3768 has been removed. It is not recognized by ASTM D 35 on Geosynthetics.
Puncture ASTM D 4833 has been removed. It is not recognized by AASHTO M288 and has been replaced with CBR Puncture ASTM D 6241.

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