



March 20, 2014
IESI / Progressive Waste Solutions
1099 Miller Drive
Altamonte Springs, FL, 32701

Ref. : IESI JED Cell 10, FL
Customer P.O. # JED Cell 10
Product : TN 270-2-8

We certify that the TN 270-2-8 drainage geocomposite, meets the project requirements as stated in the specifications. The properties listed in this section are:

Property	Test Method	Unit	Required Value	Qualifier
Geonet⁴				
Thickness	ASTM D 5199	mil	200	Minimum
Carbon Black	ASTM D 4218	%	2.0 - 3.0	Range
Tensile Strength	ASTM D 5035	lbs/in	75	Minimum
Melt Flow	ASTM D 1238 ³	g/10 min	1.0	Maximum
Density	ASTM D 1505	g/cm ³	0.93	Minimum
Composite				
Ply Adhesion	ASTM D 7005	lb/in	1.0	MARV ⁶
Transmissivity ¹	ASTM D 4716	m ² /sec	1.0 x 10 ⁻⁴	MARV
Transmissivity ²	ASTM D 4716	m ² /sec	6.1 x 10 ⁻⁴	MARV
Geotextile^{4 & 5}				
Fabric Weight	ASTM D 5261	oz/yd ²	8.0	MARV
Grab Strength	ASTM D 4632	lbs	200	MARV
Tear Strength	ASTM D 4533	lbs	75	MARV
CBR Puncture	ASTM D 6241	lbs	500	MARV
Permittivity	ASTM D 4491	sec ⁻¹	0.50	MARV
AOS	ASTM D 4751	US Sieve	80	MARV
UV Resistance	ASTM D 4355	%/hrs	70/500	MARV

Notes:

- 1 Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.02 and a confining pressure of 15,000 psf between 60 mil textured HDPE geomembranes after 100 hours.
- 2 Transmissivity measured using water at 21 ± 2 °C (70 ± 4 °F) with a gradient of 0.02 and a confining pressure of 500 psf between 60 mil textured HDPE geomembranes after 24 hours.
- 3 Condition 190/2.16
- 4 Geotextile and Geonet properties are prior to lamination.
- 5 Geotextile data is provided by the supplier.
- 6 MARV is statistically defined as mean minus two standard deviations and it is the value which is exceeded by 97.5% of all the test data.

Sincerely,

Nilay Patel

Nilay Patel
QA Manager





Product : TN 270-2-8

Project : IESI JED Cell 10, FL

We, the Geocomposite Manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity (m ² /sec)
			Side A	Side B	Minimum	Average	
1	57871010001	57871010001 - N	5787.054	5787.039	1.49	2.74	
2	57871010002	57871010002 - N	5787.054	5787.039			
3	57871010003	57871010003 - N	5787.054	5787.039			
4	57871010004	57871010004 - N	5787.054	5787.039			
5	57871010005	57871010005 - N	5787.054	5787.039			
6	57871010006	57871010006 - N	5787.054	5787.039			
7	57871010007	57871010007 - N	5787.010	5787.011			
8	57871010008	57871010008 - N	5787.010	5787.011			
9	57871010009	57871010009 - N	5787.010	5787.011			
10	57871010010	57871010010 - N	5787.010	5787.011			
11	57871010011	57871010011 - N	5787.010	5787.011			
12	57871010012	57871010012 - N	5787.010	5787.011			
13	57871010013	57871010013 - N	5787.036	5787.025			
14	57871010014	57871010014 - N	5787.036	5787.025			
15	57871010015	57871010015 - N	5787.036	5787.025	1.63	2.69	
16	57871010016	57871010016 - N	5787.036	5787.025			
17	57871010017	57871010017 - N	5787.036	5787.025			
18	57871010018	57871010018 - N	5787.036	5787.025			
19	57871010019	57871010019 - N	5787.034	5787.022			
20	57871010020	57871010020 - N	5787.034	5787.022			
21	57871010021	57871010021 - N	5787.034	5787.022			
22	57871010022	57871010022 - N	5787.034	5787.022			
23	57871010023	57871010023 - N	5787.034	5787.022			
24	57871010024	57871010024 - N	5787.034	5787.022			
25	57871010025	57871010025 - N	5787.001	5787.057			
26	57871010026	57871010026 - N	5787.001	5787.057			
27	57871010027	57871010027 - N	5787.001	5787.057			



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We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m ² /sec)
57871010001 - N	ECUX 887269	0.9529	271	2.56	95	
57871010002 - N	ECUX 887269	0.9529				
57871010003 - N	ECUX 887269	0.9529				
57871010004 - N	ECUX 887269	0.9529				
57871010005 - N	ECUX 887269	0.9529				
57871010006 - N	ECUX 887269	0.9529				
57871010007 - N	ECUX 887269	0.9529				
57871010008 - N	ECUX 887269	0.9529				
57871010009 - N	ECUX 887269	0.9529				
57871010010 - N	ECUX 887269	0.9529				
57871010011 - N	ECUX 887269	0.9529				
57871010012 - N	ECUX 887269	0.9529				
57871010013 - N	ECUX 887269	0.9529				
57871010014 - N	ECUX 887269	0.9529				
57871010015 - N	ECUX 887269	0.9525	267	2.52	98	
57871010016 - N	ECUX 887269	0.9525				
57871010017 - N	ECUX 887269	0.9525				
57871010018 - N	ECUX 887269	0.9525				
57871010019 - N	ECUX 887269	0.9525				
57871010020 - N	ECUX 887269	0.9525				
57871010021 - N	ECUX 887269	0.9525				
57871010022 - N	ECUX 887269	0.9525				
57871010023 - N	ECUX 887269	0.9525				
57871010024 - N	ECUX 887269	0.9525				
57871010025 - N	ECUX 887269	0.9525				
57871010026 - N	ECUX 887269	0.9525				
57871010027 - N	ECUX 887269	0.9525				



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Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity (m ² /sec)
			Side A	Side B	Minimum	Average	
28	57871010028	57871010028 - N	5787.001	5787.057			
29	57871010029	57871010029 - N	5787.001	5787.057			
30	57871010030	57871010030 - N	5787.001	5787.057	1.68	2.09	
31	57871010031	57871010031 - N	5787.059	5787.028			
32	57871010032	57871010032 - N	5787.059	5787.028			
33	57871010033	57871010033 - N	5787.059	5787.028			
34	57871010034	57871010034 - N	5787.059	5787.028			
35	57871010035	57871010035 - N	5787.059	5787.028			
36	57871010036	57871010036 - N	5787.059	5787.028			
37	57871010037	57871010037 - N	5787.035	5787.004			
38	57871010038	57871010038 - N	5787.035	5787.004			
39	57871010039	57871010039 - N	5787.035	5787.004			
40	57871010040	57871010040 - N	5787.035	5787.004			
41	57871010041	57871010041 - N	5787.035	5787.004			
42	57871010042	57871010042 - N	5787.035	5787.004			
43	57871010043	57871010043 - N	5787.021	5787.033			
44	57871010044	57871010044 - N	5787.021	5787.033			
45	57871010045	57871010045 - N	5787.021	5787.033	1.34	1.94	
46	57871010046	57871010046 - N	5787.021	5787.033			
47	57871010047	57871010047 - N	5787.021	5787.033			
48	57871010048	57871010048 - N	5787.021	5787.033			
49	57871010049	57871010049 - N	5787.045	5787.051			
50	57871010050	57871010050 - N	5787.045	5787.051			
51	57871010051	57871010051 - N	5787.045	5787.051			
52	57871010052	57871010052 - N	5787.045	5787.051			
53	57871010053	57871010053 - N	5787.045	5787.051			
54	57871010054	57871010054 - N	5787.045	5787.051			



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Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m ² /sec)
57871010028 - N	ECUX 887269	0.9525				
57871010029 - N	ECUX 887269	0.9525				
57871010030 - N	ECUX 887269	0.9528	270	2.43	96	
57871010031 - N	ECUX 887269	0.9528				
57871010032 - N	ECUX 887269	0.9528				
57871010033 - N	ECUX 887269	0.9528				
57871010034 - N	ECUX 887269	0.9528				
57871010035 - N	ECUX 887269	0.9528				
57871010036 - N	ECUX 887269	0.9528				
57871010037 - N	ECUX 887269	0.9528				
57871010038 - N	ECUX 887269	0.9528				
57871010039 - N	ECUX 887269	0.9528				
57871010040 - N	ECUX 887269	0.9528				
57871010041 - N	ECUX 887269	0.9528				
57871010042 - N	ECUX 887269	0.9528				
57871010043 - N	ECUX 887269	0.9528				
57871010044 - N	ECUX 887269	0.9528				
57871010045 - N	ECUX 887269	0.9523	265	2.70	94	
57871010046 - N	ECUX 887269	0.9523				
57871010047 - N	ECUX 887269	0.9523				
57871010048 - N	ECUX 887269	0.9523				
57871010049 - N	ECUX 887269	0.9523				
57871010050 - N	ECUX 887269	0.9523				
57871010051 - N	ECUX 887269	0.9523				
57871010052 - N	ECUX 887269	0.9523				
57871010053 - N	ECUX 887269	0.9523				
57871010054 - N	ECUX 887269	0.9523				



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Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity (m ² /sec)
			Side A	Side B	Minimum	Average	
55	57871010055	57871010055 - N	5787.038	5787.047			
56	57871010056	57871010056 - N	5787.038	5787.047			
57	57871010057	57871010057 - N	5787.038	5787.047			
58	57871010058	57871010058 - N	5787.038	5787.047			
59	57871010059	57871010059 - N	5787.038	5787.047			
60	57871010060	57871010060 - N	5787.038	5787.047	1.50	2.36	
61	57871010061	57871010061 - N	5787.041	5787.058			
62	57871010062	57871010062 - N	5787.041	5787.058			
63	57871010063	57871010063 - N	5787.041	5787.058			
64	57871010064	57871010064 - N	5787.041	5787.058			
65	57871010065	57871010065 - N	5787.041	5787.058			
66	57871010066	57871010066 - N	5787.041	5787.058			
67	57871010067	57871010067 - N	5787.002	5787.003			
68	57871010068	57871010068 - N	5787.002	5787.003			
69	57871010069	57871010069 - N	5787.002	5787.003			
70	57871010070	57871010070 - N	5787.002	5787.003			
71	57871010071	57871010071 - N	5787.002	5787.003			
72	57871010072	57871010072 - N	5787.002	5787.003			
73	57871010073	57871010073 - N	5787.005	5787.043			
74	57871010074	57871010074 - N	5787.005	5787.043			
75	57871010075	57871010075 - N	5787.005	5787.043	1.33	2.55	
76	57871010076	57871010076 - N	5787.005	5787.043			
77	57871010077	57871010077 - N	5787.005	5787.043			
78	57871010078	57871010078 - N	5787.005	5787.043			
79	57871010079	57871010079 - N	5787.006	5787.064			
80	57871010080	57871010080 - N	5787.006	5787.064			
81	57871010081	57871010081 - N	5787.006	5787.064			



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57871010055 - N	ECUX 887269	0.9523				
57871010056 - N	ECUX 887269	0.9523				
57871010057 - N	ECUX 887269	0.9523				
57871010058 - N	ECUX 887269	0.9523				
57871010059 - N	ECUX 887269	0.9523				
57871010060 - N	ECUX 887269	0.9530	278	2.48	97	
57871010061 - N	ECUX 887269	0.9530				
57871010062 - N	ECUX 887269	0.9530				
57871010063 - N	ECUX 887269	0.9530				
57871010064 - N	ECUX 887269	0.9530				
57871010065 - N	ECUX 887269	0.9530				
57871010066 - N	ECUX 887269	0.9530				
57871010067 - N	ECUX 887269	0.9530				
57871010068 - N	ECUX 887269	0.9530				
57871010069 - N	ECUX 887269	0.9530				
57871010070 - N	ECUX 887269	0.9530				
57871010071 - N	ECUX 887269	0.9530				
57871010072 - N	ECUX 887269	0.9530				
57871010073 - N	ECUX 887269	0.9530				
57871010074 - N	ECUX 887269	0.9530				
57871010075 - N	ECUX 887269	0.9526	268	2.35	99	
57871010076 - N	ECUX 887269	0.9526				
57871010077 - N	ECUX 887269	0.9526				
57871010078 - N	ECUX 887269	0.9526				
57871010079 - N	ECUX 887269	0.9526				
57871010080 - N	ECUX 887269	0.9526				
57871010081 - N	ECUX 887269	0.9526				



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Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity (m ² /sec)
			Side A	Side B	Minimum	Average	
82	57871010082	57871010082 - N	5787.006	5787.064			
83	57871010083	57871010083 - N	5787.006	5787.064			
84	57871010084	57871010084 - N	5787.006	5787.064			
85	57871010085	57871010085 - N	5787.029	5787.017			
86	57871010086	57871010086 - N	5787.029	5787.017			
87	57871010087	57871010087 - N	5787.029	5787.017			
88	57871010088	57871010088 - N	5787.029	5787.017			
89	57871010089	57871010089 - N	5787.029	5787.017			
90	57871010090	57871010090 - N	5787.029	5787.017	1.77	2.49	
91	57871010091	57871010091 - N	5787.056	5787.060			
92	57871010092	57871010092 - N	5787.056	5787.060			
93	57871010093	57871010093 - N	5787.056	5787.060			
94	57871010094	57871010094 - N	5787.056	5787.060			
95	57871010095	57871010095 - N	5787.056	5787.060			
96	57871010096	57871010096 - N	5787.056	5787.060			
97	57871010097	57871010097 - N	5787.062	5787.040			
98	57871010098	57871010098 - N	5787.062	5787.040			
99	57871010099	57871010099 - N	5787.062	5787.040			
100	57871010100	57871010100 - N	5787.062	5787.040			
101	57871010101	57871010101 - N	5787.062	5787.040			
102	57871010102	57871010102 - N	5787.062	5787.040			
103	57871010103	57871010103 - N	5787.031	5787.024			
104	57871010104	57871010104 - N	5787.031	5787.024			
105	57871010105	57871010105 - N	5787.031	5787.024	1.37	2.90	
106	57871010106	57871010106 - N	5787.031	5787.024			
107	57871010107	57871010107 - N	5787.031	5787.024			
108	57871010108	57871010108 - N	5787.031	5787.024			



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Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m ² /sec)
57871010082 - N	ECUX 887269	0.9526				
57871010083 - N	ECUX 887269	0.9526				
57871010084 - N	ECUX 887269	0.9526				
57871010085 - N	ECUX 887269	0.9526				
57871010086 - N	ECUX 887269	0.9526				
57871010087 - N	ECUX 887269	0.9526				
57871010088 - N	ECUX 887269	0.9526				
57871010089 - N	ECUX 887269	0.9526				
57871010090 - N	ECUX 887269	0.9533	275	2.59	93	
57871010091 - N	ECUX 887269	0.9533				
57871010092 - N	ECUX 887269	0.9533				
57871010093 - N	ECUX 887269	0.9533				
57871010094 - N	ECUX 887269	0.9533				
57871010095 - N	ECUX 887269	0.9533				
57871010096 - N	ECUX 887269	0.9533				
57871010097 - N	ECUX 887269	0.9533				
57871010098 - N	ECUX 887269	0.9533				
57871010099 - N	ECUX 887269	0.9533				
57871010100 - N	ECUX 887269	0.9533				
57871010101 - N	ECUX 887269	0.9533				
57871010102 - N	ECUX 887269	0.9533				
57871010103 - N	ECUX 887269	0.9533				
57871010104 - N	ECUX 887269	0.9533				
57871010105 - N	ECUX 887269	0.9530	272	2.73	92	
57871010106 - N	ECUX 887269	0.9530				
57871010107 - N	ECUX 887269	0.9530				
57871010108 - N	ECUX 887269	0.9530				



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Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity (m ² /sec)
			Side A	Side B	Minimum	Average	
109	57871010109	57871010109 - N	5787.053	5787.026			
110	57871010110	57871010110 - N	5787.053	5787.026			
111	57871010111	57871010111 - N	5787.053	5787.026			
112	57871010112	57871010112 - N	5787.053	5787.026			
113	57871010113	57871010113 - N	5787.053	5787.026			
114	57871010114	57871010114 - N	5787.053	5787.026			
115	57871010115	57871010115 - N	5787.061	5787.048			
116	57871010116	57871010116 - N	5787.061	5787.048			
117	57871010117	57871010117 - N	5787.061	5787.048			
118	57871010118	57871010118 - N	5787.061	5787.048			
119	57871010119	57871010119 - N	5787.061	5787.048			
120	57871010120	57871010120 - N	5787.061	5787.048	1.70	2.85	
121	57871010121	57871010121 - N	5787.027	5787.015			
122	57871010122	57871010122 - N	5787.027	5787.015			
123	57871010123	57871010123 - N	5787.027	5787.015			
124	57871010124	57871010124 - N	5787.027	5787.015			
125	57871010125	57871010125 - N	5787.027	5787.015			
126	57871010126	57871010126 - N	5787.027	5787.015			
127	57871010127	57871010127 - N	5787.018	5787.050			
128	57871010128	57871010128 - N	5787.018	5787.050			
129	57871010129	57871010129 - N	5787.018	5787.050			
130	57871010130	57871010130 - N	5787.018	5787.050			
131	57871010131	57871010131 - N	5787.018	5787.050			
132	57871010132	57871010132 - N	5787.018	5787.050			
133	57871010133	57871010133 - N	5787.023	5787.019			
134	57871010134	57871010134 - N	5787.023	5787.019			
135	57871010135	57871010135 - N	5787.023	5787.019	1.39	2.42	



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57871010109 - N	ECUX 887269	0.9530				
57871010110 - N	ECUX 887269	0.9530				
57871010111 - N	ECUX 887269	0.9530				
57871010112 - N	ECUX 887269	0.9530				
57871010113 - N	ECUX 887269	0.9530				
57871010114 - N	ECUX 887269	0.9530				
57871010115 - N	ECUX 887269	0.9530				
57871010116 - N	ECUX 887269	0.9530				
57871010117 - N	ECUX 887269	0.9530				
57871010118 - N	ECUX 887269	0.9530				
57871010119 - N	ECUX 887269	0.9530				
57871010120 - N	ECUX 887269	0.9524	266	2.61	94	
57871010121 - N	ECUX 887269	0.9524				
57871010122 - N	ECUX 887269	0.9524				
57871010123 - N	ECUX 887269	0.9524				
57871010124 - N	ECUX 887269	0.9524				
57871010125 - N	ECUX 887269	0.9524				
57871010126 - N	ECUX 887269	0.9524				
57871010127 - N	ECUX 887269	0.9524				
57871010128 - N	ECUX 887269	0.9524				
57871010129 - N	ECUX 887269	0.9524				
57871010130 - N	ECUX 887269	0.9524				
57871010131 - N	ECUX 887269	0.9524				
57871010132 - N	ECUX 887269	0.9524				
57871010133 - N	ECUX 887269	0.9524				
57871010134 - N	ECUX 887269	0.9524				
57871010135 - N	ECUX 887269	0.9528	277	2.34	98	



Product : TN 270-2-8

Project : IESI JED Cell 10, FL

We, the Geocomposite Manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity (m ² /sec)
			Side A	Side B	Minimum	Average	
136	57871010136	57871010136 - N	5787.023	5787.019			
137	57871010137	57871010137 - N	5787.023	5787.019			
138	57871010138	57871010138 - N	5787.023	5787.019			
139	57871010139	57871010139 - N	5787.032	5787.013			
140	57871010140	57871010140 - N	5787.032	5787.013			
141	57871010141	57871010141 - N	5787.032	5787.013			
142	57871010142	57871010142 - N	5787.032	5787.013			
143	57871010143	57871010143 - N	5787.032	5787.013			
144	57871010144	57871010144 - N	5787.032	5787.013			
145	57871010145	57871010145 - N	5787.008	5787.052			
146	57871010146	57871010146 - N	5787.008	5787.052			
147	57871010147	57871010147 - N	5787.008	5787.052			
148	57871010148	57871010148 - N	5787.008	5787.052			
149	57871010149	57871010149 - N	5787.008	5787.052			
150	57871010150	57871010150 - N	5787.008	5787.052	1.62	2.23	
151	57871010151	57871010151 - N	5787.042	5787.020			
152	57871010152	57871010152 - N	5787.042	5787.020			
153	57871010153	57871010153 - N	5787.042	5787.020			
154	57871010154	57871010154 - N	5787.042	5787.020			
155	57871010155	57871010155 - N	5787.042	5787.020			
156	57871010156	57871010156 - N	5787.042	5787.020			
157	57871010157	57871010157 - N	5787.007	5787.049			
158	57871010158	57871010158 - N	5787.007	5787.049			
159	57871010159	57871010159 - N	5787.007	5787.049			
160	57871010160	57871010160 - N	5787.007	5787.049			
161	57871010161	57871010161 - N	5787.007	5787.049			
162	57871010162	57871010162 - N	5787.007	5787.049			



Product : TN 270-2-8
Project : IESI JED Cell 10, FL

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m ² /sec)
57871010136 - N	ECUX 887269	0.9528				
57871010137 - N	ECUX 887269	0.9528				
57871010138 - N	ECUX 887269	0.9528				
57871010139 - N	ECUX 887269	0.9528				
57871010140 - N	ECUX 887269	0.9528				
57871010141 - N	ECUX 887269	0.9528				
57871010142 - N	ECUX 887269	0.9528				
57871010143 - N	ECUX 887269	0.9528				
57871010144 - N	ECUX 887269	0.9528				
57871010145 - N	ECUX 887269	0.9528				
57871010146 - N	ECUX 887269	0.9528				
57871010147 - N	ECUX 887269	0.9528				
57871010148 - N	ECUX 887269	0.9528				
57871010149 - N	ECUX 887269	0.9528				
57871010150 - N	ECUX 887269	0.9532	274	2.30	97	
57871010151 - N	ECUX 887269	0.9532				
57871010152 - N	ECUX 887269	0.9532				
57871010153 - N	ECUX 887269	0.9532				
57871010154 - N	ECUX 887269	0.9532				
57871010155 - N	ECUX 887269	0.9532				
57871010156 - N	ECUX 887269	0.9532				
57871010157 - N	ECUX 887269	0.9532				
57871010158 - N	ECUX 887269	0.9532				
57871010159 - N	ECUX 887269	0.9532				
57871010160 - N	ECUX 887269	0.9532				
57871010161 - N	ECUX 887269	0.9532				
57871010162 - N	ECUX 887269	0.9532				



Product : TN 270-2-8

Project : IESI JED Cell 10, FL

We, the Geocomposite Manufacturer, hereby certify the following for the material delivered to the above referenced project :

Roll	Geocomposite Roll Number	Geonet Roll Number	Geotextile Roll Number		Ply Adhesion (lb/in)		Geocomposite Transmissivity (m ² /sec)
			Side A	Side B	Minimum	Average	
163	57871010163	57871010163 - N	5787.063	5787.014			
164	57871010164	57871010164 - N	5787.063	5787.014			
165	57871010165	57871010165 - N	5787.063	5787.014	1.73	1.99	
166	57871010166	57871010166 - N	5787.063	5787.014			
167	57871010167	57871010167 - N	5787.063	5787.014			
168	57871010168	57871010168 - N	5787.063	5787.014			
169	57871010169	57871010169 - N	5787.055	5787.009			
170	57871010170	57871010170 - N	5787.055	5787.009			
171	57871010171	57871010171 - N	5787.055	5787.009			
172	57871010172	57871010172 - N	5787.055	5787.009			
173	57871010173	57871010173 - N	5787.055	5787.009			
174	57871010174	57871010174 - N	5787.055	5787.009			
175	57871010175	57871010175 - N	5787.016	5787.030			
176	57871010176	57871010176 - N	5787.016	5787.030			
177	57871010177	57871010177 - N	5787.016	5787.030			
178	57871010178	57871010178 - N	5787.016	5787.030			
179	57871010179	57871010179 - N	5787.016	5787.030			
180	57871010180	57871010180 - N	5787.016	5787.030	1.35	2.17	
181	57871010181	57871010181 - N	5787.046	5787.012			
182	57871010182	57871010182 - N	5787.046	5787.012			
183	57871010183	57871010183 - N	5787.046	5787.012			
184	57871010184	57871010184 - N	5787.046	5787.012			
185	57871010185	57871010185 - N	5787.046	5787.012			
186	57871010186	57871010186 - N	5787.046	5787.012			
187	57871010187	57871010187 - N	5787.044	5787.037			
188	57871010188	57871010188 - N	5787.044	5787.037			
189	57871010189	57871010189 - N	5787.044	5787.037			



Product : TN 270-2-8
Project : IESI JED Cell 10, FL

We, the Geonet Manufacturer, hereby certify the following for the material sent to the above referenced project :

Geonet Roll Number	Resin Lot Number	Geonet Density (gm/cc)	Thickness (mils)	Carbon Black (%)	Tensile Strength (MD) (lb/in)	Transmissivity (m ² /sec)
57871010163 - N	ECUX 887269	0.9532				
57871010164 - N	ECUX 887269	0.9532				
57871010165 - N	ECUX 887269	0.9534	276	2.40	99	
57871010166 - N	ECUX 887269	0.9534				
57871010167 - N	ECUX 887269	0.9534				
57871010168 - N	ECUX 887269	0.9534				
57871010169 - N	ECUX 887269	0.9534				
57871010170 - N	ECUX 887269	0.9534				
57871010171 - N	ECUX 887269	0.9534				
57871010172 - N	ECUX 887269	0.9534				
57871010173 - N	ECUX 887269	0.9534				
57871010174 - N	ECUX 887269	0.9534				
57871010175 - N	ECUX 887269	0.9534				
57871010176 - N	ECUX 887269	0.9534				
57871010177 - N	ECUX 887269	0.9534				
57871010178 - N	ECUX 887269	0.9534				
57871010179 - N	ECUX 887269	0.9534				
57871010180 - N	ECUX 887269	0.9531	273	2.69	95	
57871010181 - N	ECUX 887269	0.9531				
57871010182 - N	ECUX 887269	0.9531				
57871010183 - N	ECUX 887269	0.9531				
57871010184 - N	ECUX 887269	0.9531				
57871010185 - N	ECUX 887269	0.9531				
57871010186 - N	ECUX 887269	0.9531				
57871010187 - N	ECUX 887269	0.9531				
57871010188 - N	ECUX 887269	0.9531				
57871010189 - N	ECUX 887269	0.9531				

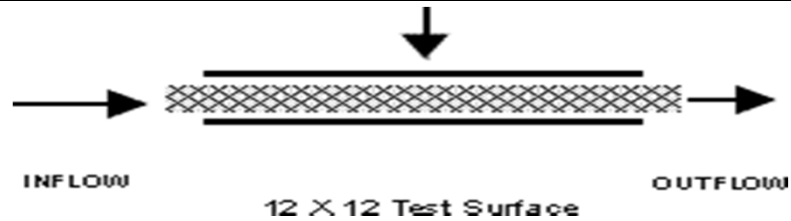


ASTM D 4716

Client: IESI / Progressive Waste Solutions
Project: IESI JED Cell 10, FL
Product: TN 270-2-8

Job # 5787

Test Configuration:



Test Information:

Boundary Conditions: 60 mil Textured HDPE Geomembrane
Geocomposite
60 mil Textured HDPE Geomembrane

Normal Load: 15000
Gradient: 0.02
Seating Time: 100 hours
Flow Direction: MD

Test Results:

Roll No.	Pressure, psf	Gradient	Transmissivity, m ² /sec
			100 hours
57871010001	15000	0.02	4.18 x 10 ⁻⁴
57871010035			4.27 x 10 ⁻⁴
57871010070			4.54 x 10 ⁻⁴
57871010105			4.28 x 10 ⁻⁴
57871010140			4.35 x 10 ⁻⁴
57871010175			4.26 x 10 ⁻⁴

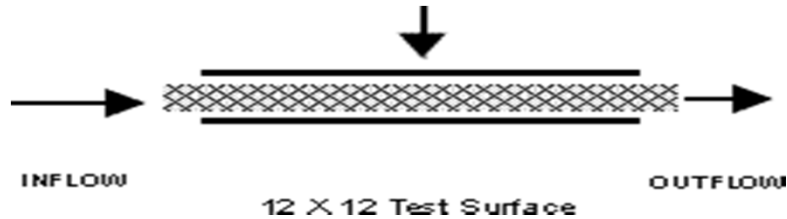


ASTM D 4716

Client: IESI / Progressive Waste Solutions
Project: IESI JED Cell 10, FL
Product: TN 270-2-8

Job # 5787

Test Configuration:



Test Information:

Boundary Conditions: 60 mil Textured HDPE Geomembrane
Geocomposite
60 mil Textured HDPE Geomembrane

Normal Load: 500
Gradient: 0.02
Seating Time: 24 hours
Flow Direction: MD

Test Results:

Roll No.	Pressure, psf	Gradient	Transmissivity, m ² /sec
			24 hours
57871010001	500	0.02	1.21 x 10 ⁻³
57871010035			1.44 x 10 ⁻³
57871010070			1.29 x 10 ⁻³
57871010105			1.33 x 10 ⁻³
57871010140			1.38 x 10 ⁻³
57871010175			1.32 x 10 ⁻³



POLYETHYLENE RESIN CERTIFICATION

Customer Name : IESI / Progressive Waste Solutions
Project Name : IESI JED Cell 10, FL
Geocomposite Manufacturer : SKAPS Industries
Geocomposite Production Plant : Commerce, GA
Geocomposite Brand Name : TN 270-2-8

We, the Geonet Manufacturer, hereby certify the following for the material delivered to the above referenced project:

Resin Supplier	Resin Production Plant	Resin Brand Name	Resin Lot Number	Property	Test Method	Units	Resin Supplier Value	Tested Value*
Osterman and Company	Chevron, TX	HDPE	ECUX 887269	Density	ASTM D1505	gm / cc	0.9460	0.9471
				Melt flow Index	ASTM D1238 ^(a)	gm / 10 min	0.12	0.17

(a) Condition 190/2.16

* Data from SKAPS Quality Control



Product : TN 270-2-8
Project : IESI JED Cell 10, FL

We, the Geocomposite Manufacturer, hereby certify the following for the material delivered to the above referenced project :

GEOCOMP ROLL#	FABRIC ROLL#	WEIGHT oz/sq yd	MD TENSILE lbs.	XMD TENSILE lbs.	MD TRAP lbs.	XMD TRAP lbs.	CBR PUNCTURE lbs.	AOS us sieve	PERM- ITY sec ⁻¹
57871010001	5787.054	8.26	226	245	100	119	653	80	1.39
	5787.039	8.37	229	232	100	105	669	80	1.39
57871010035	5787.059	8.20	231	241	96	117	660	80	1.39
	5787.028	8.24	234	244	101	111	684	80	1.36
57871010070	5787.002	8.38	233	240	99	114	685	80	1.36
	5787.003	8.38	233	240	99	114	685	80	1.36
57871010105	5787.031	8.34	226	235	104	116	662	80	1.39
	5787.024	8.39	227	237	103	120	694	80	1.36
57871010140	5787.032	8.34	226	235	104	116	662	80	1.39
	5787.013	8.33	235	243	105	106	659	80	1.36
57871010175	5787.016	8.36	231	241	96	115	690	80	1.36
	5787.030	8.34	226	235	104	116	662	80	1.39