

Product Data Sheet - Geosynthetic Clay Liners

Bentofix® Thermal Lock® GCL's

Bentofix Thermolock GCL's are needlepunched re-inforced composite comprised of a uniform layer of granular sodium bentonite between woven and non-woven geotextiles. The needlepunched fibres are thermally fused to the bottom scrim reinforced non-woven geotextile to enhance the bond.

GEOTEXTILE PROPERTIES	TEST	FREQUENCY	VALUE
Thermal Lock® NW		METHOD	SI
Product Code			
Cap non-woven, Mass/Unit Area	ASTM D 5261	1/20,000m ²	200g/m ² typical
Botton scrim Nonwoven, Mass/Unit Area	ASTM D 5261	1/20,000m ²	200g/m ² typical
FINISHED GCL PROPERTIES			
Bentonite Mass/Unit Area	ASTM D 5993	1/4000m ²	4.34kg/m ² MARV
Grab Strength	ASTM D 4632	1/4000m ²	667 N Typical
Elongation	ASTM D 4632	1/4000m ²	100 % Typical
Peel Strength	ASTM D 4632	1/4000m ²	66 N
Hydraulic Conductivity	ASTM D 5084	1/week	5x10 ⁻⁹ cm/sec max
Index Flux	ASTM D 5887	1/week	1x10 ⁻⁸ m ³ /m ² /sec max
Internal Shear Strength	ASTM D 6243	Periodically	24 kPa Typical
Roll width x length	Typical	Every Roll	4.7m x 45.72m
Total area	Typical	Every Roll	216m ²
Packaged Weight	Typical	Every Roll	1179kg
Thermal Lock® NWL		METHOD	SI
Product Code			
Cap non-woven, Mass/Unit Area	ASTM D 5261	1/20,000m ²	200g/m ² typical
Botton scrim Nonwoven, Mass/Unit Area	ASTM D 5261	1/20,000m ²	200g/m ² typical
FINISHED GCL PROPERTIES			
Bentonite Mass/Unit Area	ASTM D 5993	1/4000m ²	3.66kg/m ² MARV
Grab Strength	ASTM D 4632	1/4000m ²	667 N Typical
Elongation	ASTM D 4632	1/4000m ²	100 % Typical
Peel Strength	ASTM D 4632	1/4000m ²	66 N
Hydraulic Conductivity	ASTM D 5084	1/week	5x10 ⁻⁹ cm/sec max
Index Flux	ASTM D 5887	1/week	1x10 ⁻⁸ m ³ /m ² /sec max
Internal Shear Strength	ASTM D 6243	Periodically	24kPa Typical
Roll width x length	Typical	Every Roll	4.7m x 45.72m
Total area	Typical	Every Roll	216m ²
Packaged Weight	Typical	Every Roll	980kg

Product Data Sheet - Geosynthetic Clay Liners

Bentofix® Thermal Lock® GCL's

GEOTEXTILE PROPERTIES	TEST	FREQUENCY	VALUE
Thermal Lock®NSL	METHOD		SI
Product Code			
Cap non-woven, Mass/Unit Area	ASTM D 5261	1/20,000m2	200g/m2 typical
Bottom scrim Woven, Mass/Unit Area	ASTM D 5261	1/20,000m2	105g/m2 typical
FINISHED GCL PROPERTIES			
Bentonite Mass/Unit Area	ASTM D 5993	1/4000m2	3.66kg/m2 MARV
Grab Strength	ASTM D 4632	1/4000m2	422 N Typical
Elongation	ASTM D 4632	1/4000m2	100 % Typical
Peel Strength	ASTM D 4632	1/4000m2	66 N
Hydraulic Conductivity	ASTM D 5084	1/week	5x10 ⁻⁹ cm/sec max
Index Flux	ASTM D 5887	1/week	1x10 ⁻⁸ m3/m2/sec max
Internal Shear Strength	ASTM D 6243	Periodically	24 kPa Typical
Roll width x length	Typical	Every Roll	4.7m x 45.72m
Total area	Typical	Every Roll	216m2
Packaged Weight	Typical	Every Roll	980kg
Thermal Lock® EC	METHOD		SI
Product Code			
Cap non-woven, Mass/Unit Area	ASTM D 5261	1/20,000m2	100g/m2 typical
Bottom scrim Woven, Mass/Unit Area	ASTM D 5261	1/20,000m2	105g/m2 typical
FINISHED GCL PROPERTIES			
Bentonite Mass/Unit Area	ASTM D 5993	1/4000m2	3.66kg/m2 MARV
Grab Strength	ASTM D 4632	1/4000m2	354 N Typical
Elongation	ASTM D 4632	1/4000m2	100 % Typical
Peel Strength	ASTM D 4632	1/4000m2	22 N Typical
Hydraulic Conductivity	ASTM D 5084	1/week	5x10 ⁻⁹ cm/sec max
Index Flux	ASTM D 5887	1/week	1x10 ⁻⁸ m3/m2/sec max
Internal Shear Strength	ASTM D 6243	Periodically	4.8 kPa Typical
Roll width x length	Typical	Every Roll	4.7m x 45.72m
Total area	Typical	Every Roll	216m2
Packaged Weight	Typical	Every Roll	980kg

Note:

This information is for reference purposes only, A&A Technical Services (A&A) assumes no liability in connection with the use of the information. Please contact A&A for current standard minimum quality assurance procedures and specifications.