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Reinforced Concrete Roll-12® Technical Data Sheet

Technical Data		ITL RCR-12®	Imperial	Metric
		Roll Width / Length	~16' 4" x ~65' 7"	5m x 20m
		Total Coverage	~1,076 ft²	100m²
		Roll Weight	~2,863 lbs	~1,299 kg
Properties of ITL RCR® - Before Hydration		Test Method	Imperial	Metric
Thickness		ASTM D5199	> 0.4 inches	> 12 mm
Mass / Unit Area		ASTM D5993	> 2.5 lb/ft²	> 13.5 kg/m²
Tensile Strength	Machine Direction	ASTM D6768	> 55 lbs/in	> 15 kN/m
	Transverse Direction		> 200 lbs/in	> 35 kN/m
Density		Calculation	> 60 lb/ft³	> 1,000 kg/m³
Properties of ITL RCR® - After Hydration		Test Method	Imperial	Metric
Compressive Strength		ASTM D8329 cured 28 days	> 3,900 psi	> 27.5 MPa
Thickness		ASTM D5199 cured 24 hours	> 0.5 inches	> 14 mm
Tensile Strength	M.D. Initial Flexural	ASTM D4885 cured 28 days	> 40 lb/in	> 7 kN/m
	M.D. Final Flexural		> 170 lb/in	> 30 kN/m
	T.D. Initial Flexural		> 45 lb/in	> 8 kN/m
	T.D. Final Flexural		> 250 lb/in	> 45 kN/m
Flexural Strength	M.D. Breaking Load	ASTM D8058 cured 24 hours	> 3 lb/in	> 675 N/m
	M.D. Initial Flexural		> 95 psi	> 0.6 MPa
	M.D. Final Flexural		> 265 psi	> 1.5 MPa
	T.D. Breaking Load		> 3 lb/in	> 640 N/m
	T.D. Initial Flexural		> 100 psi	> 0.6 MPa
	T.D. Final Flexural		> 250 psi	> 1.5 MPa
	M.D. Breaking Load		> 8 lb/in	> 1,450 N/m
	M.D. Initial Flexural		> 250 psi	> 1.5 MPa
Freeze / Thaw Resistance	M.D. Final Flexural	ASTM C1185	> 750 psi	> 5 MPa
	T.D. Breaking Load		> 7 lb/in	> 1,250 N/m
	T.D. Initial Flexural		> 200 psi	> 1.5 MPa
	T.D. Final Flexural		> 600 psi	> 4 MPa
Permeability	Index Flux	ASTM D5887	5.3 E-08 m³/m²/sec	
	Hydraulic Conductivity		3.5 E-08 cm/sec	
Puncture Resistance		ASTM D5494 cured 28 days	> 2,500 lbs	> 12 kN
Large-Scale Channel Testing Determination by Trapezoidal Channel		ASTM D6460	0.022 Manning's <i>n</i>	
ITL RCR® Certifications - MSHA IC#-375/01		Test Method		
Mine Safety and Health Administration U.S. Department of Labor		Acceptance of Flame-Resistant Solid Products Taken into Mines		
Information is provided based on current test data and may be subject to change as new information becomes available. ITL makes no warranties and assumes no liability in connection with the above information. Project specific testing may be required to determine the suitability of ITL RCR® material use in a particular application.				

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