

## ITL Reinforced Concrete Roll®

## ITL RCR® Solutions

# SAVE TIME AND INSTALLATION COSTS WITH ITL REINFORCED CONCRETE ROLL®



**Bank Stabilization** 



**Bunker Liner** 



**Irrigation Canal** 



**Erosion Control** 



**Swale** 



Splash Pad

## UNROLL AND GO IN A FRACTION OF THE TIME.

#### STRONG & VERSATILE

ITL Reinforced Concrete Roll® is a dry powdered cement mix that is needle-punched between two sheets of non-woven polypropylene. When rolled out and hydrated, ITL RCR® takes shape into a durable structure suitable for reinforcement or protective lining.

#### **REDUCE CARBON FOOTPRINT**

ITL Reinforced Concrete Roll® is a friendlier solution to conventional erosion control methods such as traditional concrete, shotcrete, grout blankets and rip-rap.



Available in two thicknesses: 7mm and 12mm.

#### **U.S. Distribution Centers**

## **ITL Reinforced Concrete Roll®**

## **ITL RCR® Solutions**

	ITL RCR®	Imperial	Metric
TECHNICAL DATA	Roll Width/Length	16' 4" x 65' 7"	5m x 20m
TECHNICAL DATA	Total Coverage	1.076 ft <sup>2</sup>	100m
	rotal coverage	1,070 11	100111
Properties of geotextile	Test Method	Imperial	Metric
Grab Tensile Stength	ASTM D4632	80 lbs	356 N
Grab Tensile Elongation	ASTM D4632	50%	50%
Trapezoid Tear	ASTM D4533	30 lbs	133 N
CBR Puncture	ASTM D6241	210 lbs	934 N
Permittivity	ASTM D4491	2.2 sec <sup>-1</sup>	2.2 sec <sup>-1</sup>
WaterFlow Rate	ASTM D4491	160 gpm/ft²	6,519 l/min/m²
Apparent Opening Size (AOS)	ASTM D4751	70 USSieve	0.212mm
UV Stability @ 500 hrs	ASTM D4355	70%	70%
Properties of cement	Test Method	Imperial	Metric
Chemical Composition	XRF Spectroscopy	Sand-Cement Mix	Sand-Cement Mix
Initial Setting Time	PN-EN 196-3	≥ 25 minutes	≥ 25 minutes
Properties of ITL RCR® - Before Hydration	Test Method	Imperial	Metric
Thickness	ASTM D5199	0.51 inches	13.1 mm
Mass / Unit Area	ASTM D5993	397.1 oz/sq.yd	13,465 gsm
	ASTM D6768	MD = 136 lbs/inch	MD = 23.9 N/mm
Tensile Strength	ASTM D6768	TD = 191 lbs/inch	TD = 33.5 N/mm
•	ASTM D4595 ASTM D4595	MD = 135 lbs/inch TD = 188 lbs/inch	MD = 23.6 N/mm TD = 32.8 N/mm
Weight of RCR-12®	Certified Trade Scale		1,290 kg/roll
Weight of RCR-7®	Certified Trade Scale Certified Trade Scale		770 kg/roll
Weight of North	Cortinoa Trade Codie	1,700 100/1011	770 Ng/Toll
Properties of ITL RCR® - After Hydration	Test Method	Imperial	Metric
Properties of ITL RCR® - After Hydration Large-Scale Channel Testing Determination by Trapezoidal Channel	Test Method ASTM D6460	Imperial 0.022 Manning's <i>n</i>	<b>Metric</b> 0.022 Manning's <i>n</i>
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure	ASTM D6460 ASTM C109	0.022 Manning's <i>n</i> 5,303 psi	0.022 Manning's <i>n</i> 36.6 MPa
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure	ASTM D6460 ASTM C109 ASTM C109	0.022 Manning's <i>n</i> 5,303 psi 6,823 psi	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure	ASTM D6460 ASTM C109 ASTM C109 ASTM C109	0.022 Manning's <i>n</i> 5,303 psi 6,823 psi 7,222 psi	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496	0.022 Manning's <i>n</i> 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496 ASTM D6496	0.022 Manning's <i>n</i> 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496 ASTM D6496 ASTM D5199	0.022 Manning's <i>n</i> 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496 ASTM D6496 ASTM D5199 ASTM D5261	0.022 Manning's <i>n</i> 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496 ASTM D5199 ASTM D5261 ASTM D8058	0.022 Manning's <i>n</i> 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496 ASTM D6496 ASTM D5199 ASTM D5261 ASTM D8058 ASTM D8058	0.022 Manning's <i>n</i> 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength Puncture Resistance	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496 ASTM D6496 ASTM D5199 ASTM D5261 ASTM D8058 ASTM D8058 ASTM D8058	0.022 Manning's <i>n</i> 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi 280 lbs	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa 1,245 N
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength Puncture Resistance Puncture Resistance - Rigid Substrate	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496 ASTM D6496 ASTM D5199 ASTM D5261 ASTM D8058 ASTM D8058 ASTM D4833 ASTM D5494	0.022 Manning's <i>n</i> 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi 280 lbs 3,782 lbs	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa 1,245 N 16,824 N
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength Puncture Resistance	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496 ASTM D6496 ASTM D5199 ASTM D5261 ASTM D8058 ASTM D8058 ASTM D8058	0.022 Manning's <i>n</i> 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi 280 lbs	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa 1,245 N
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength Puncture Resistance Puncture Resistance - Rigid Substrate	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496 ASTM D5199 ASTM D5261 ASTM D8058 ASTM D8058 ASTM D4833 ASTM D5494 ASTM D5887	0.022 Manning's n 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi 280 lbs 3,782 lbs 3.20E-11 ft/sec	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa 1,245 N 16,824 N 9.74E-12 m/sec
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength Puncture Resistance Puncture Resistance - Rigid Substrate Index Flux (& Permeability)	ASTM D6460  ASTM C109  ASTM C109  ASTM C109  ASTM D6496  ASTM D6496  ASTM D5199  ASTM D5261  ASTM D8058  ASTM D8058  ASTM D4833  ASTM D5494  ASTM D5887  ASTM D5887	0.022 Manning's n 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi 280 lbs 3,782 lbs 3.20E-11 ft/sec 5.25E-09 ft³/ft²/sec	0.022 Manning's n 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa 1,245 N 16,824 N 9,74E-12 m/sec 1.60E-09 m³/m²/sec
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength Puncture Resistance Puncture Resistance - Rigid Substrate Index Flux (& Permeability) Abrasion Resistance - Mass Loss	ASTM D6460  ASTM C109  ASTM C109  ASTM C109  ASTM D6496  ASTM D5496  ASTM D5261  ASTM D8058  ASTM D8058  ASTM D8494  ASTM D5887  ASTM D5887  ASTM D5887  ASTM C1353	0.022 Manning's n 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi 280 lbs 3,782 lbs 3.20E-11 ft/sec 5.25E-09 ft³/ft²/sec 0.18 oz	0.022 Manning's <i>n</i> 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa 1,245 N 16,824 N 9.74E-12 m/sec 1.60E-09 m³/m²/sec 5.17 grams
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength Puncture Resistance Puncture Resistance - Rigid Substrate Index Flux (& Permeability)	ASTM D6460  ASTM C109  ASTM C109  ASTM C109  ASTM D6496  ASTM D5199  ASTM D5261  ASTM D8058  ASTM D8058  ASTM D4833  ASTM D5494  ASTM D5887  ASTM D5887  ASTM D5887  ASTM D5887  ASTM D6768  ASTM D6768  ASTM D6768  ASTM D6768	0.022 Manning's n 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi 280 lbs 3,782 lbs 3.20E-11 ft/sec 5.25E-09 ft³/ft²/sec 0.18 oz MD = 207 lbs/inch TD = 255 lbs/inch MD = 189 lbs/inch	0.022 Manning's n 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa 1,245 N 16,824 N 9,74E-12 m/sec 1.60E-09 m³/m²/sec 5.17 grams MD = 36.2 N/mm TD = 44.6 N/mm MD = 33.1 N/mm
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength Puncture Resistance Puncture Resistance - Rigid Substrate Index Flux (& Permeability) Abrasion Resistance - Mass Loss Tensile Strength	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496 ASTM D6496 ASTM D5199 ASTM D5261 ASTM D8058 ASTM D8058 ASTM D4833 ASTM D5494 ASTM D5887 ASTM D5887 ASTM C1353 ASTM C1353 ASTM D6768 ASTM D6768 ASTM D4595 ASTM D4595	0.022 Manning's n 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi 280 lbs 3,782 lbs 3.20E-11 ft/sec 5.25E-09 ft³/ft²/sec 0.18 oz MD = 207 lbs/inch TD = 258 lbs/inch MD = 189 lbs/inch TD = 228 lbs/inch TD = 228 lbs/inch	0.022 Manning's n 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa 1,245 N 16,824 N 9.74E-12 m/sec 1.60E-09 m³/m²/sec 5.17 grams MD = 36.2 N/mm TD = 44.6 N/mm MD = 33.1 N/mm TD = 40.0 N/mm
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength Puncture Resistance Puncture Resistance - Rigid Substrate Index Flux (& Permeability) Abrasion Resistance - Mass Loss	ASTM D6460  ASTM C109  ASTM C109  ASTM C109  ASTM D6496  ASTM D5199  ASTM D5261  ASTM D8058  ASTM D8058  ASTM D4833  ASTM D5494  ASTM D5887  ASTM D5887  ASTM D5887  ASTM D5887  ASTM D6768  ASTM D6768  ASTM D6768  ASTM D6768	0.022 Manning's n 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi 280 lbs 3,782 lbs 3.20E-11 ft/sec 5.25E-09 ft³/ft²/sec 0.18 oz MD = 207 lbs/inch TD = 255 lbs/inch MD = 189 lbs/inch	0.022 Manning's n 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa 1,245 N 16,824 N 9,74E-12 m/sec 1.60E-09 m³/m²/sec 5.17 grams MD = 36.2 N/mm TD = 44.6 N/mm MD = 33.1 N/mm
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength Puncture Resistance Puncture Resistance - Rigid Substrate Index Flux (& Permeability) Abrasion Resistance - Mass Loss Tensile Strength	ASTM D6460 ASTM C109 ASTM C109 ASTM C109 ASTM D6496 ASTM D6496 ASTM D5199 ASTM D5261 ASTM D8058 ASTM D8058 ASTM D4833 ASTM D5494 ASTM D5887 ASTM D5887 ASTM C1353 ASTM C1353 ASTM D6768 ASTM D6768 ASTM D4595 ASTM D4595	0.022 Manning's n 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi 280 lbs 3,782 lbs 3.20E-11 ft/sec 5.25E-09 ft³/ft²/sec 0.18 oz MD = 207 lbs/inch TD = 258 lbs/inch MD = 189 lbs/inch TD = 228 lbs/inch TD = 228 lbs/inch	0.022 Manning's n 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa 1,245 N 16,824 N 9.74E-12 m/sec 1.60E-09 m³/m²/sec 5.17 grams MD = 36.2 N/mm TD = 44.6 N/mm MD = 33.1 N/mm TD = 40.0 N/mm B,s1,d0
Large-Scale Channel Testing Determination by Trapezoidal Channel Compressive Strength - 24 hour cure Compressive Strength - 7 day cure Compressive Strength - 28 day cure Peel Strength Thickness Mass / Unit Area Flexural Strength Puncture Resistance Puncture Resistance - Rigid Substrate Index Flux (& Permeability) Abrasion Resistance - Mass Loss Tensile Strength Reaction to Fire	ASTM D6460  ASTM C109  ASTM C109  ASTM C109  ASTM D6496  ASTM D6496  ASTM D5199  ASTM D5261  ASTM D8058  ASTM D8058  ASTM D4833  ASTM D5494  ASTM D5887  ASTM D5887  ASTM C1353  ASTM D6768  ASTM D6768  ASTM D4595  PN EN 12467:5.6	0.022 Manning's n 5,303 psi 6,823 psi 7,222 psi 6.94 lb/in 5.77 lb/in 0.54 inches 486.1 oz/sq.yd MD = 578 psi TD = 538 psi 280 lbs 3,782 lbs 3.20E-11 ft/sec 5.25E-09 ft³/ft²/sec 0.18 oz MD = 207 lbs/inch TD = 258 lbs/inch MD = 189 lbs/inch TD = 228 lbs/inch TD = 228 lbs/inch	0.022 Manning's n 36.6 MPa 47.0 MPa 49.8 MPa 121.6 N/10cm 1,009.9 N/m 13.6 mm 16,480 gsm MD = 3.98 MPa TD = 3.71 MPa 1,245 N 16,824 N 9.74E-12 m/sec 1.60E-09 m³/m²/sec 5.17 grams MD = 36.2 N/mm TD = 44.6 N/mm MD = 33.1 N/mm TD = 40.0 N/mm

## Contact us for a free product sample!

### **Leo Cortez**

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