

ROK-ON™ Building Systems Testing Summary

Over 70 separate ASTM/UL Tests Completed

Testing Reports available upon Request



Fire Performance

ROK-ON™ and ROK-ON™ XT Structural Insulated Sheathing

PRODUCT	TEST STANDARD	REQUIREMENTS	TEST RESULTS
ROK-ON™ Structural Insulated Sheathing (SIS)	Surface Burning Characteristics. ASTM E84, UL 723, NFPA 255, UCB 8-1, ANSI 2.5	5 smoke 10 flame contribution	0 smoke 0 flame contribution
ROK-ON™ Structural Insulated Sheathing (SIS)	Surface Burning Characteristics over Foam Plastics. CAN/ULC-S124	15 minutes	Class A rating 30 min
ROK-ON™ Structural Insulated Sheathing (SIS)	NFPA 285	Per assembly*	Pass - Wall did not combust - 0 flame spread. Heat transfer was 30% below the requirement.
ROK-ON™ Structural Insulated Sheathing (SIS)	ASTM-E119/UL 263 - CAN/ULC S101	Per Assembly*	1-hour and 2-hour fire endurance rating depending on assembly - Contact ROK-ON™ representative for report detail.

ROK-ON™ FRCC board 1/2" (12mm) / 1/4" (6mm)

PRODUCT	TEST STANDARD	REQUIREMENTS	TEST RESULTS
ROK-ON™ FRCC 12mm and 6mm	Combustibility ASTM E136	No surface burning	100% Non-Combustible
ROK-ON™ FRCC 12mm and 6mm	Surface Burning Characteristics. ASTM E84, UL 723, NFPA 255, UCB 8-1, ANSI 2.5	5 smoke 10 flame contribution	0 smoke 0 flame contribution
ROK-ON™ FRCC 12mm - 2x6 Wood Frame	ASTM-E119/UL 263 - CAN/ULC S101	Per assembly*	2 Hour Fire Endurance Rating - Both Directions
ROK-ON™ FRCC 12mm - 2x4 Steel Frame	ASTM-E119/UL 263 - CAN/ULC S101	Per assembly*	2 Hour Fire Endurance Rating - Both Directions
ROK-ON™ FRCC 6mm - 2x6 Steel Frame	ASTM-E119/UL 263 - CAN/ULC S101	Per assembly*	1 Hour Fire Endurance Rating - Both Directions

*test reports available

Structural Testing

ROK-ON™ and ROK-ON™ XT Structural Insulated Sheathing

Please Contact ROK-ON™ Representative for report details

PRODUCT	TEST STANDARD	REQUIREMENTS	TEST RESULTS
ROK-ON™ SIS with Steel Frame 3.5" 20 ga studs. (350S150-33). (Several different configurations - see report)	ASTM E 2126 Monotonic Shear, ASTM E 564 Cyclic Shear, ASTM E72 Transverse Loading *Ultimate Values	Monotonic Shear 831 lbs/ft Cyclic Shear 943 lbs/ft Transverse Loading Positive 261 lbs/ft - Negative 133 lbs/ft	Contact ROK-ON™ representative for report details

ROK-ON™ FRCC board 1/2" (12mm)

PRODUCT	TEST STANDARD	REQUIREMENTS	TEST RESULTS
ROK-ON™ FRCC with 2x6 Wood Frame	ASTM E 72 Transverse 1/8 in deflection Wet Racking and Shear	Positive pressure 260psf recorded. (Assembly exceeded test frame capabilities). Negative Pressure 201 psf 5270 lbs 658.8plf 1483 lbs 185.4 plf	Contact ROK-ON™ representative for report details
ROK-ON™ FRCC with 2x4 Steel Frame (350S150-43)	ASTM E 72 Transverse 1/8 in deflection. Wet Racking Shear	Positive pressure 237psf Pressure 102psf 7494 lbs 936.67plf See report performance tables	Contact ROK-ON™ representative for report details

Physical Properties Testing

ROK-ON™ FRCC board 1/2" (12mm)

TESTING CATEGORY	TEST STANDARD	REQUIREMENTS	TEST RESULTS
Flexural Strength	ICC-ES AC308 ASTM C1185-08	min 580 psi both wet and dry	Dry parallel 1576 psi, dry perpendicular 2251 psi, wet parallel 1291 psi, wet perpendicular 2041 psi
Humidified Deflection	ICC-ES AC308 ICC-ES AC378 ASTM 473-07	< 0.3125" (ceiling)	.053 in.
Water Absorption	ICC-ES AC308: ASTM C1185-08	Submerged in water at 73F for 48 hours	29.8% when immersed for 48 hours
Freeze Thaw	ASTM-ES AC308 ASTM C 666 Procedure B	Degradation of surface of board	No degradation of board
Dimensional Tolerances	ICC-ES. AC308 ASTM C1185	Length, width, thickness, edge square, edge straightness. All +/- .25%	Pass
Moisture Movement	ICC-ES AC308 ASTM C1185	Linear Movement from 30% humidity to 90% humidity	0.0002
Water Vapour Transmission	ICC-ES AC 308. ASTM E96/E96M-05	As Tested	2.46 perms. .63 Perms for ROK-ON™ SIS with Vaporpermeable AWB
Compression Indentation	ICC-ES AC308 ASTM D2394	>1250 psi <.05 inch	Pass 1736 PSI
Falling Ball Impact	ICC-ES AC308 ASTM D1037-99:	no damage at 12" drop	Pass
Mold and Mildew	ASTM G21 ASTM D3272	Non Nutrient	Pass Non Nutrient
Fungus Testing	ASTM D3273	Pass	No evidence of fungal growth ASTM rating of 10

Fastener Pull Through, Pull Out, Lateral Resistance, Mortar Adhesion, AWB Adhesion

TESTING CATEGORY	TEST STANDARD	REQUIREMENTS	TEST RESULTS
Nail Head Pull Through	ICC-ES AC308 ASTM D1037-99:	>90 lb.	292 lb - board - >505 lbs ROK-ON™ panel
Screw Pull Out Test	ICC-ES AC308 ASTM D1037-99:	>90 lb.	220.9 lb - pass SDS screw. 301- 311 lbs wood screw
Lateral Nail Resistance	ICC-ES AC378 ASTM D1037-99 :	>90 lb.	Pass dry 1/4" 115 lb, wet 1/4" 41lb, dry 3/8" 196lb, wet 3/8" 113 lb, dry 1/2" 261lb, wet 1/2" 157lb, dry 3/4" 337 lb, wet 3/4" 209lb
7 day Shear Bond Strength Portland Cement	ANSI A 118.1	50 PSI at 7 day curing	98 PSI
7 Day Shear Bond Strength Organic Mortar	ANSI 136.1	50 PSI at 7 day curing	189 PSI
Latex Portland Cement Mortar	ANSI A 118.4	50 PSI at 7 day curing	201 PSI
Organic Mortar	ANSI 136.1	50 PSI at 7 day curing	Pass
Air Water Barrier Adhesion. Most major brands have been tested for adhesion - WRB's Peel and Stick and Liquid Applied.	Manufacturer's Specifications - Contact ROK-ON™ Representative for brand performance	15 lbs	Pass

Testing Completed by Intertek®, QAI Labs, NTA, The Council of North America, University of North Texas.