## **SLOTTED-Z**<sup>®</sup> FG

## **TECHNICAL DATA SHEET**

## **Product Description**

Slotted-Z FG, by Cladiator, is a 100% FRP (fiber-reinforced polymer) thermally isolated Z-girt exterior cladding support system with an innovative continuous insulation (CI) securing system; ROCKETStick®. Simply slide the ROCKETStick into the Slotted-Z FG slots and the CI is secured without penetrating the air and water resistive barrier layer. Together, the patent-pending system offers superior thermal performance, reduced field installation time, and improved wall cavity performance.

Approvals/ Standards	Test	Performance	
ASTM E283 <sup>1</sup>	Air Leakage	Air Infiltration at 6.27 PSF	<0.01 cfm/ft <sup>2</sup>
		Air Exfiltration at 6.27 PSF	<0.01 cfm/ft <sup>2</sup>
ASTM E331 <sup>1</sup>	Water Penetration	Water Penetration Test @ 15.04 PSF	Pass. No Leakage.
ASTM E330 <sup>1</sup>	Uniform Load Deflection (at the center of the panel)	+4788 Pa (+100.0 PSF)	10.92 mm (0.43")
		+6943 Pa (+145.0 PSF)	25.91 mm (1.02")
	Uniform Load Structural (permanent set at the center of the panel)	+4788 Pa (+100.0 PSF) -4070 Pa (-85.0 PSF)	1.02 mm (0.04") 2.03 mm (0.08")
		+6943 Pa (+145.0 PSF) -5506 Pa (-115.0 PSF)	4.57 mm (0.18") 15.24 mm (0.60")
Gravity Load Testing (Uniform Distributed Static Vertical Load)	Gravity Load Testing, Permanent Set	@ 3035 Pa 50 PSF	0.254 mm (0.01")
	Gravity Load Testing, Deflection	@ 3035 Pa 50 PSF	0.508 mm (0.02")
NFPA 285 <sup>2</sup>	Fire Test - Exterior Non-Load-Bearing Wall Assembly		Pass
CAN/ULC-S134	Standard Method of Fire Test of Exterior Wall Assemblies		Pass
Thermal Performance	The Effectiveness of The Overall Assembly - Exterior Insulated Steel Stud Wall	2" mineral wool 4" mineral wool	Fiberglass standard performance is 95-99% effective
Screw Pullout Load <sup>3</sup>	ASTM D1761	866 lbf (392.8 kgf)	
Bearing Load <sup>3</sup>	ASTM D5961 (Proc. A)	1438 lbf (652.3 kgf)	
Screw Head Pull-Through Load <sup>3</sup>	ASTM D7332 (Proc. B)	1645 lbf (746.2 kgf)	

<sup>1</sup> Using CL-580 CLADIATORS ACM Panel.

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CLADIATOR\* is a manufacturer of thermally isolated structural cladding attachment systems. Our mission is to accelerate the advancement of smart building design & construction by providing unique and cleverly engineered systems. For Installers, working with intuitive installation components means a safer, faster and more cost-effective option to complete projects on time. For Architects & Engineers it means a simple yet robust solution where one core design offers the freedom of limitless creativity. This "smart-track" system also offers improved thermal efficiencies for rainscreen/continuous insulation applications and advanced structural support using long-lasting globally responsible materials. We remain dedicated and driven by our commitment to continuous improvement..

<sup>&</sup>lt;sup>2</sup> Tested using Nichiha AWP 3030 Fiber Cement Panels

<sup>&</sup>lt;sup>3</sup> Tested using #14 hex head 3" self-drilling, galvanized screws on Cladiator 5" Slotted-Z FG. Complete test report available upon request.

 $<sup>^{\</sup>scriptscriptstyle 1,2}$  All test results provided by Intertek.



## **MECHANICAL AND PHYSICAL PROPERTIES VERIFICATION**

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SLOTTED-Z® FG PROFILE				
Property	Test Method	Minimum Requirements	Tested Performance	
Barcol hardness	ASTM D-2583	45	62	
Section compression test	Full Section Test	2,500,000 psi	3,451,898 psi	
Tension modules axial	ASTM D-638	2,490,000 psi	2,683,198 psi	
Tension strength axial	ASTM D-638	30,000 psi	60,654 psi	
Compressive Modulus axial	ASTM-D695	2,490,000 psi	3,451,898 psi	
Compressive Modulus transverse	ASTM-D695	1,000,000 psi	1,812,971 psi	
Compressive Stress axial	ASTM-D695	30,000 psi	47,427 psi	
Compressive Stress transverse	ASTM-D695	15,000 psi	20,464 psi	
Pin-bearing strength axial	ASTM D-953	30,000 psi	39,957 psi	
Flexural strength axial	ASTM D-790	30,000 psi	71,605 psi	
Flexural modulus axial	ASTM D-790	1,500 psi	3,306 psi	
Water absorption test	ASTM D-570	Max 0.6%	0.025%	
Fire Resistance Test (Flame/Smoke Index)	ASTM E-84	Max 25, 450	25, 250	
Density	ASTM D-792		112 lb/ft^3	
Shear Modulus	Full Section Test	420 psi	690 psi	
Short beam shear	ASTM-D2344	4,500 psi	4,517 psi	

<sup>\*</sup>Tests have been performed according to CTI-137 standard

