### System Bulletin



# StoVentec<sup>®</sup> Fiber Cement

Rainscreen wall system with high-density fiber cement panels, continuous insulation and air and water-resistive barrier



Structural Back-up Wall (by others): Steel or wood frame with glass mat gypsum sheathing in compliance with ASTM C1177 or code compliant OSB or plywood sheathing, concrete or core filled concrete masonry, existing structurally sound, uncoated brick or other masonry wall construction.

1)	Air and Water-Resistive Barrier: Sto AirSeal <sup>®</sup>		
2)	Sub-construction: StoVentro™ Brackets, StoVentro™ L and T-Profiles + EPDM Foam Tape		
3)	Thermal Insulation: Rockwool Cavityrock <sup>®</sup> mineral wool		
4)	StoVentec <sup>®</sup> Fiber Cement cladding panels Primara Line (PL) and Strata Line (SL) Thicknesses: 8 or 10mm Standard Dimensions: • 4 feet (1220mm) x 8 feet (2440mm) • 4 feet (1220mm) x 10 feet (3050mm)		
	Visible Fixing <ul> <li>Rivets or Screws with centering sleeves</li> </ul> Concealed fixing <ul> <li>StoVentro Carrier Profile Hangers with Agraffes</li> </ul>		

Specialty hidden fasteners

### System Description

StoVentec Fiber Cement is a drained and back-ventilated rainscreen wall system from a single source that combines superior air and weather tightness with excellent thermal performance and fire protection. It incorporates noncombustible continuous exterior insulation and an air and water-resistive barrier with Sto Ventro<sup>™</sup> Subconstruction and high-density StoVentec Fiber Cement panels to produce an advanced wall assembly.

#### Uses

StoVentec Fiber Cement can be used on interior or exterior residential, commercial, and institutional wall construction.

Features	Benefits	
Drained and back- ventilated rainscreen wall design	Excellent moisture control	
Open joints	Rainscreen ventilation and drainage, reduced building maintenance, ease of replacement	
High-density fiber cement	Durable, temperature stable, can be installed in cold weather, resilient against high wind loads	
High-density mineral wool insulation	Continuous noncombustible exterior thermal control layer	
Fully integrated seamless air and water-resistive barrier	Compatible air, water, and vapor control layer from a single source	
Properties		
ASTM C1186 compliant	Type A, Grade IV	
Panel and insulation combustibility, flame spread	Noncombustible, 0 flame spread, 0 smoke development	
Insulation RSI value (R-value)	0.75 m <sup>2</sup> •K / W per 25mm (4.3 hr•ft <sup>2</sup> •°F / Btu per in)	
Finishes	Surface painted on grey body and/or integrally colored	
Warranty		
Ten year limited warranty		
Maintenance		
Requires periodic cleaning of panels to maintain appearance.		



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#### **Precautions and Limitations**

Not for use on horizontal or low slope surfaces, below grade, roofs or roof-like surfaces, or in areas of water immersion, pooling or ponding water. Soffit and ceiling applications are acceptable.

Structural back-up wall must be level to within 6 mm in 3.0 m (~¼ inch in 10 ft).

Pull-out or withdrawal capacity of fasteners into structural wall must be sufficient to resist negative wind loads (with appropriate safety factor as required by applicable building code).

Wind load resistance: structural back-up wall construction must be designed for maximum allowable deflection of L/240, normal to the plane of the wall. Stud spacing: 406 mm (~16 inches) on center typical. Refer to StoVentec Fiber Cement Design Guide and Detail Booklet and code reports for wind load ratings.

Insulation board thickness: (Standard) 25-152mm (1-6 inches) range in  $\frac{1}{2}$ " increments. Also available in 7 and 8 inch (178 and 203mm) thicknesses. Cavityrock<sup>®</sup> Black is available and features black mineral fiber facing for open-joint cladding systems.

Ventilation cavity depth: 20-50 mm (~3/16 - 2 inches).

Fiber cement weight: 15.7 kg/m<sup>2</sup> if 8mm thick (~3.2 lb/ft<sup>2</sup> if 5/16"), 19.6 kg/m<sup>2</sup> if 10mm thick (~4 lb/ft<sup>2</sup> if 3/8")

Aesthetics: no color restrictions apply. Smooth with opaque solid color acrylic paint colors on grey (PL) or through-color bodied panels (SL). Semi-transparent top-coated, through-body color panels with light sanded texture (PL- *high minimum order quantity required*).

Refer to specific component product bulletins and packaging for other limitations that apply on use, handling and storage of component materials.

Regulatory Compliance and Standards Testing			
ASTM C1186	Fiber cement compliant with Type A, Grade IV requirements. Materials have minimum density of 1600 kg/m <sup>3</sup> (~100 lb/ft <sup>3</sup> ).		
ASTM E84	Fiber cement panels and mineral wool insulation have 0 flame spread, 0 smoke development index ratings		
ASTM E330	System tested for wind load capacity up to -190 lb/ft <sup>2</sup> (-9.1 kN/m <sup>2</sup> ) without failure.		
ASTM E136/E2652	Fiber cement panels are noncombustible		
IECC, ASTM E2178 Air barrier component complies with 2015 and 2018 IECC Section C402.5 as an air barrier mate			
ASTM C612	M C612 Insulation conforms to applicable standard for board thermal insulation		
NFPA 220 Insulation complies with criteria for non-combustibility			
IBC, IRC, ASTM E 2570	System WRB conforms with requirements of 2015 IBC Section 1408, 2018 IBC Section 1407, and 2015 and 2018 IRC Section R703.9.2		
IECC	System meets requirements for continuous insulation and ci R-value requirements for above grade walls of 2015 and 2018 IECC Section 402.2, and contributes to U-value for above grade walls when figuring compliance based on U-factor		

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