

# **Senerflex Platinum Cl**

A continuously insulated wall system with drainage

### **DESCRIPTION**

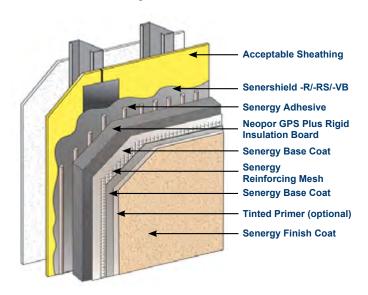
Senerflex Platinum CI (Continuous Insulation) is an exterior cladding system featuring Neopor GPS Plus advanced insulation technology. Silver-gray Neopor GPS Plus meets or exceeds ASTM C578 Type I requirements. Neopor GPS Plus is a patented insulation material with graphite embedded into the polymer matrix. Graphite reflects infrared energy, thus decreasing the material's thermal conductivity and increasing it's R-value. The boards are available in R-5, R-7.5 and R-10 thermal resistance for ease of design to ensure energy code compliance. Custom thicknesses are also available. The system uses a secondary air/water-resistive barrier and channels created by the trowel pattern of the adhesive to provide a cost-effective added level of protection of the sheathing and cavity against moisture and air intrusion. It offers design flexibility, aesthetic appeal and energy savings. Integrated system components include reinforced air/waterresistive barrier, adhesive, Neopor GPS Plus Insulation Board, reinforced base coat and 100% acrylic polymer finish. Finishes are available in a limitless color selection. Performance enhancement options include increased resistance to dirt pick-up and mildew, protection against high impact, and specialty finishes that create stone-like, metallic or mottled stucco appearances. Senerflex Platinum CI complies with ASTM E2568 and ASTM E2273 and has passed rigorous tests including Full-Scale Fire, Radiant Heat, Wind-Load, and Water Resistance.

Note: Neopor GPS Plus Rigid Insulation Board requires supplementary fasteners installed immediately after the board is adhesively attached and prior to the drying of the adhesive / base coat. See Platinum CI Neopor GPS Plus Supplementary Fasteners technical bulletin for fastener placement locations.

### Apply the system directly to the following acceptable substrates:

- ASTM C1177 type sheathings, including DensGlass<sup>™</sup> and DensElement<sup>™</sup> (as sheathing only) exterior sheathing, eXP<sup>™</sup> sheathing, GlasRoc<sup>®</sup> sheathing, Securock<sup>™</sup> glassmat sheathing, Weather Defense<sup>™</sup> Platinum sheathing, and GreenGlass<sup>®</sup> sheathing
- Huber Zip Sheathing (as sheathing only)
- PermaBase<sup>™</sup> cement-board by National Gypsum and other cement-boards (ASTM C1325 Type A Exterior)
- Untreated Exposure I OSB
- Untreated Exposure I or exterior plywood sheathing (grade C-D or better)
- Gypsum sheathing (ASTM C79/ASTM C1396)
- Poured concrete/unit masonry

## Senerflex Platinum Cl wall system over metal studs



#### **USES**

For exterior walls in new and retrofit commercial, institutional and residential construction when a continuous high effective R-value is needed to meet energy or eco-efficiency standards, and/or when a rainscreen is desired or required to satisfy code issues related to drainage, and where high wind-load requirements dictate the use of adhesive attachment.



Senerflex Platinum CI Test Results Complies with ASTM E2568 & AC 235				
TEST	RESULT			
ASTM G153 Accelerated weathering	No deleterious effects after 2000 hours viewed under 5x magnification.			
ASTM E331 Water Penetration	No penetration after 15 minutes at 574 Pa (12psf).			
ASTM D2247 Water Resistance	No deleterious effects at 14 day exposure.			
ASTM E2486 Impact Resistance with Flexguard 4	Medium - 64 in-lbs			
UBC Standard 26-9 / NFPA 285 Intermediate Scale Multi-story Fire Test	Met test criteria with 12" thick insulation.			
NFPA 268 Radiant heat exposure	Met test criteria with 12" thick insulation.			
ASTM E 84 Surface burning	System Components - Flame spread <25; Smoke developed <450			
ASTM E119 Methods for fire tests of building construction and materials	1 hour rating with maximum 4" thick insulation			
ASTM E330 Wind-load Assembly description: Steel stud framing (20 gauge) 16"o.c., 1/2" gypsum sheathing, Sheathing Fabric over sheathing joints, Senershield-R/-RS/-VB, Senergy Adhesive, 1" NEOPOR GPS Plus Rigid Insulation Board, Senergy Base Coat, Flexguard 4 Reinforcing Mesh, Senergy Finish. Assembly description: Wood assembly (2' x 4') 16"o.c., 7/16" Exposure 1 OSB, Sheathing Fabric over sheathing joints, Senershield-R/-RS/-VB, Senergy Adhesive, Rigid Insulation Board, Senergy Base Coat, Flexguard 4 Reinforcing Mesh, Senergy Finish.	Average ultimate loads: - 3126 Pa (- 65 psf) + 2633 Pa (+ 55 psf) not taken to failure  Average ultimate loads: - 8379 Pa (- 175 psf) + 3591 Pa (+ 75 psf) not taken to failure			
ASTM E2273 Drainage efficiency	98.7% - Exceeds 90% minimum			

Neopor GPS Plus Rigid Insulation Board Test Results (ASTM C578, Type I, nominal 1 pcf)							
PHYSICAL PROPERTY	ASTM METHOD	UNITS	R-5	R-7.5	R-10		
R-Value, 75F	C518	Btu • in/ft² hr • deg F	5	7.5	10		
Thickness	-	inches	1 1/16"	1 1/2"	2 1/8"		
Compressive Strength	D1621	psi, min		10			
Flexural Strength	C203	psi, min		25			
Water Vapor Permeance	E96	perm, max		5.0			
Water Absorption	C272	% by volume max		4.0			
Water Affinity	BASF	-		Hydrophobic			
Water Capillarity	BASF	-		None			
Dimensional Stability	D2126	% linear change max		2.0			
Flame Spread	E84	-		<25			
Smoke Developed	E84	-		<450			
Oxygen Index min	D2863	min		24			

Senerflex Platinum CI
System Summary

### **ADVANTAGES**

- Highly energy efficient, easy to specify a design that meets ASHRAE design standards and IGCC/IECC code requirements for the use of continuous insulation
- Incorporates a monolithic secondary air/water-resistive barrier
- Provides a drainage plane for directing incidental moisture out of the wall assembly
- Provides the ability to achieve any architectural style with unlimited design options
- Economical architectural detailing
- Does not require control joints; flexible
- · Fade-, abrasion- and dirt-resistant
- Wide selection of finish textures, standard colors and unlimited custom colors

### **DESIGN CONSIDERATIONS**

- Maximum allowable deflection L/240, based on structural properties only.
- The design wind load shall not exceed the system's allowable wind load as stated in applicable code reports.
- Details shall conform with Master Builders Solutions Wall Systems' recommendations and shall be consistent with the project requirements.
- Consult the framing and sheathing manufacturer for design and application considerations.
- Expansion joints are required in the system where they
  exist in the substrate, where the system adjoins dissimilar
  construction, at changes in substrates and at floor lines in
  multilevel wood frame construction.
- System shall terminate at expansion joints.
- Sealant joints shall be detailed and installed per sealant manufacturer's recommendations.
- Minimum slope: 1:2 with maximum width of 30.5 cm (12")
   [e.g. 15 cm in 30.5 cm (6" in 12") width].
- Backer rod, sealant & flashing are required at door and window openings.
- Sheathing must be protected with Senershield-R/-RS/-VB.
- Create drainage channels with vertical adhesive ribbons, installed in accordance with Senerflex Platinum CI specification.
- Use high impact mesh for ground floor applications in hightraffic areas

Neopor GPS Plus R-5, R-7.5 and R-10 rigid insulation boards offer numerous advantages: - Zero thermal drift that ensures long-term R-value stability. - Contains no CFC's or HCFC's - Vapor permeable and water resistant for optimum drainage wall performance. - Silver-gray color reduces job site glare and is easier on the eyes of installers. - Is 100% recyclable and Greenguard Gold Certified.

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