Senerflex Platinum CI
Exterior cladding system with drainage featuring Neopor GPS Plus Rigid Insulation Board

System Overview
DESCRIPTION

SENERFLEX PLATINUM CI (Continuous Insulation) is an exterior cladding system featuring NEOPOR® GPS PLUS advanced insulation technology. Silver-gray NEOPOR GPS PLUS is the latest innovation in insulation from BASF that 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-resistant 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/water-resistant barrier, adhesive, NEOPOR GPS PLUS Rigid 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.

The system features easy installation, proven durability and low maintenance.

Apply the system directly to the following acceptable substrates:

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.

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

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.

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
- 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
- Incorporates a monolithic secondary air/water-resistive barrier
- Provides a drainage plane for directing incidental moisture out of the wall assembly
- Seamless wall surface provides high resistance to potential water intrusion from rain and other environmental sources
- 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 BASF 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 high traffic areas.

BEST PRACTICES FOR INSTALLERS

- All flashing should be installed per codes prior to the installation of SENERFLEX PLATINUM CI.
- A mock-up of the SENERFLEX PLATINUM CI system showing all components should be prepared using the same tools and skills that will be used in actual construction, and the sample should be kept at the jobsite during construction.
- Follow the application instructions for each component.
- Do not use below grade; system must terminate a minimum of 200 mm (8") above grade.
- Pail components must be kept at a minimum of 4°C (40°F) during shipping & storage. A minimum temperature of 4°C (40°F) is required during application of all components and until completely dried.
- Protect dry (bagged) products from moisture.
- No additives are permitted to any components unless approved by BASF Wall Systems.
- Expansion joints are required: where SENERFLEX PLATINUM CI meets dissimilar materials; where substrate materials change; at floor lines in wood frame construction where movement or cross grain shrinkage are anticipated; and anywhere else that movement is anticipated. Expansion joint sized shall be determined by a design professional.
- All substrates must be clean, dry and sound without planar irregularities greater than 6 mm in 3 m (1/4" in 10").
## Physical Property

<table>
<thead>
<tr>
<th>Physical Property</th>
<th>ASTM Method</th>
<th>Units</th>
<th>R-5</th>
<th>R-7.5</th>
<th>R-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-Value, 75F</td>
<td>C518</td>
<td>Btu • in/ft² • hr • degF</td>
<td>5</td>
<td>7.5</td>
<td>10</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>D1621</td>
<td>psi, min</td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Water Vapor Permeance</td>
<td>E96</td>
<td>perm, max</td>
<td>5.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Affinity</td>
<td>BASF</td>
<td></td>
<td></td>
<td></td>
<td>Hydrophobic</td>
</tr>
<tr>
<td>Dimensional Stability</td>
<td>D2126</td>
<td>% linear change max</td>
<td>2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoke Developed</td>
<td>E84</td>
<td>-</td>
<td>&lt;450</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Senerflex Platinum CI Test Results - Complies with ASTM E2568 & AC 235

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM G153 Accelerated weathering</td>
<td>No deleterious effects after 2000 hours viewed under 5x magnification.</td>
</tr>
<tr>
<td>ASTM D2247 Water Resistance</td>
<td>No deleterious effects at 14 day exposure.</td>
</tr>
<tr>
<td>ASTM E 84 Surface burning</td>
<td>System Components Flame spread &lt;25; Smoke developed &lt;450</td>
</tr>
</tbody>
</table>

## 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, 1” NEOPOR GPS PLUS 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

## Warranty

BASF warrants this product to be free from manufacturing defects and to meet the technical properties on the current Product Bulletin, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. BASF MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive remedy of Purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is shipment to purchaser of product equal to the amount of product that fails to meet this warranty or refund of the original purchase price of product that fails to meet this warranty, at the sole option of BASF.

In the absence of an extended warranty issued by BASF, any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. BASF WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on BASF’s present knowledge and experience. However, BASF assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. BASF reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.