Neopor® Rigid Insulation Board Test Results

<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, 75°F</td>
<td>C518</td>
<td>Btu • in²/ft • degF</td>
<td>5</td>
<td>7.5</td>
<td>10</td>
</tr>
<tr>
<td>R-Value, 40°F</td>
<td>C518</td>
<td>Btu • in²/ft • degF</td>
<td>5.5</td>
<td>7.8</td>
<td>11</td>
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<tr>
<td>Compressive Strength</td>
<td>D1621</td>
<td>psi, min</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>Flexural Strength</td>
<td>C203</td>
<td>psi, min</td>
<td>40</td>
<td>40</td>
<td>40</td>
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<tr>
<td>Water Vapor Permeance</td>
<td>E96</td>
<td>perms, max</td>
<td>3.5</td>
<td>3.5</td>
<td>3.5</td>
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<tr>
<td>Water Absorption</td>
<td>C272</td>
<td>% by volume</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Water Affinity</td>
<td>BASF</td>
<td>-</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Water Capillarity</td>
<td>BASF</td>
<td>-</td>
<td>None</td>
<td>None</td>
<td>None</td>
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<tr>
<td>Dimensional Stability</td>
<td>D7146</td>
<td>% linear change</td>
<td>4.0</td>
<td>4.0</td>
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<tr>
<td>Flame Spread</td>
<td>E84</td>
<td>-</td>
<td>&lt;450</td>
<td>&lt;450</td>
<td>&lt;450</td>
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<tr>
<td>Oxygen Index min</td>
<td>D2834</td>
<td>min</td>
<td>24</td>
<td>24</td>
<td>24</td>
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</tbody>
</table>

Acrocrete Platinum CI Stucco Test Results - Complies with AC 11

<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>NFPA 286 Radiation heat exposure</td>
<td>Met test criteria with R10 NEOPOR insulation.</td>
</tr>
<tr>
<td>ASTM E 64 Surface burning</td>
<td>System Components</td>
</tr>
<tr>
<td></td>
<td>Flame spread &lt;25; Smoke developed &lt;450</td>
</tr>
<tr>
<td>ASTM E136 Behavior of materials in a vertical tube furnace at 750°C C</td>
<td>StuccoBase with PermaLath and PermaLath 1000 specimens met the weight loss criteria for passing the test.</td>
</tr>
<tr>
<td>ASTM E2273 Drainage efficiency</td>
<td>Exceeds 90% minimum</td>
</tr>
<tr>
<td>ASTM B117 Cold-spray resistance</td>
<td>No deleterious effects at 300 hours exposure period.</td>
</tr>
<tr>
<td>AC11 Freeze-thaw resistance</td>
<td>No deleterious effects after 10 cycles viewed under 5x magnification.</td>
</tr>
</tbody>
</table>

Warranty
BASF warrants this product to be free from manufacturing defects and to meet the technical properties on the current Product Bulletin. It is 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).

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System Overview

Acrocrete Platinum CI Stucco
A continuously insulated stucco system featuring Neopor® rigid insulation board
ACROCRETE PLATINUM CI STUCCO is a continuously insulated stucco system featuring Neopor® advanced insulation technology. Silver-gray Neopor® is the latest innovation in insulation from BASF that exceeds ASTM C578 Type I and Type II requirements. Neopor® 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 its R-value. ACROCRETE PLATINUM CI STUCCO utilizes a specially selected density (1.45 pcf) of Neopor rigid insulation board to optimize thermal performance. 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 water-resistive barrier to provide a cost-effective 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 Neopor rigid insulation board, lath, BASF STUCCOBASE, and Acrocrete finish. Finishes are available in a limitless color selection. Performance enhancement options include increased resistance to dirt pick-up and mildew, and specialty finishes that create stone-like, metallic or mottled stucco appearances. ACROCRETE PLATINUM CI STUCCO 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:
- 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.
- 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.

ADVANTAGES

- Highly energy efficient, easy to specify a design that meets ASHRAE design standards and ISCC/ECC code requirements for the use of continuous insulation.
- Neopor 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 and is manufactured with a foaming agent that has zero-ozone depletion potential to lower environmental impact.
  - 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.
- 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.
- Self-furred glass fiber reinforcing lath in durable plaster base that will not rust.
- Factory prepared STUCCOBASE minimizes potential site mixing errors; improves quality control.
- Acrylic modified base coat over STUCCOBASE enhances water resistance performance and finish coat aesthetics.
- Elasticomeric finish coat bridges hairline cracks.
- Reinforcing mesh option further increases crack resistance.
- Very resistant to impact and punctures; good for high traffic areas.
- Cost-effective.
- Provides the ability to achieve any architectural style with unlimited design options.
- Economical architectural detailing.
- Fade-, abrasion- and dirt-resistant.
- Wide selection of finish textures, standard colors and unlimited custom colors.

ACROCRETE PLATINUM CI STUCCO System over metal studs

DESCRIPTION

DESIGN CONSIDERATIONS

- Maximum allowable deflection L/360, 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.
- Control joints and trim accessories required. Control joint placement is required in the ACROCRETE PLATINUM CI STUCCO Wall System every 144 ft² 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.
- A minimum 0.12 slope is required on all horizontal surfaces greater than 1:1.
- Backer rod, sealant and flashing are required at door and window openings.

BEST PRACTICES FOR INSTALLERS

- It is recommended that the building should carry a minimum of 90 percent of the dead building load and that the interior gypsum should be installed prior to installation of the stucco.
- Coordination of other trades is recommended so that wall penetrations for cable, electricity, water and vents are installed with proper enclosures prior to installation of the stucco.
- Pail components must be kept at a minimum of 4°C (40°F) and at a maximum of 43°C (110°F) during shipping and storage.
- A minimum temperature of 4°C (40°F) is required during application of liquid components and until completely dried.
- Protect dry (bagged) products from moisture.
- No additives are permitted to any components unless specifically approved by BASF Wall Systems.
- Follow the application instructions for each component.
- Windows and doors may permit some water to pass through the frame materials or joints. To reduce the potential for intruding water to degrade water-sensitive sheathing and framing, and to keep water out of the stud cavity, rough openings must be properly protected and a means provided to allow intruding water to escape.

Acrocrete Finish

BASF StuccoBase

Insulation Board

Water-Resistive Barrier

PermaLath, PermaLath 1000 or Metal Plaster Base

BASF StuccoBase

AcrocretePrime (Optional)

Acceptable Sheathing

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Acrocrete Platinum CI Stucco System over wood 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.

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  - Silver-gray color reduces job site glare and is easier on the eyes of installers.
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ACROCRETE PLATINUM CI STUCCO System over wood studs

DESCRIPTION

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- System shall terminate at expansion joints.
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BEST PRACTICES FOR INSTALLERS

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- Protect dry (bagged) products from moisture.
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- Follow the application instructions for each component.
- Windows and doors may permit some water to pass through the frame materials or joints. To reduce the potential for intruding water to degrade water-sensitive sheathing and framing, and to keep water out of the stud cavity, rough openings must be properly protected and a means provided to allow intruding water to escape.
**Acrocrete Platinum CI Stucco System over wood studs**

**DESIGN CONSIDERATIONS**
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<td>5</td>
<td>7.5</td>
<td>10</td>
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<tr>
<td>R-Value, 40F</td>
<td>C518</td>
<td>Btu • in²/ft² • degF</td>
<td>5.5</td>
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<td>Thickness</td>
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<td>Inches</td>
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<td>1 5/8&quot;</td>
<td>2 1/4&quot;</td>
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<tr>
<td>Compressive Strength</td>
<td>D1621</td>
<td>psi, min</td>
<td>20</td>
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<td>% by volume max</td>
<td>3.0</td>
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</tr>
<tr>
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<td>BASF</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Capillarity</td>
<td>BASF</td>
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<td></td>
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<td>Hydrophobic</td>
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<tr>
<td>Dimensional Stability</td>
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<td>Flammability</td>
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<td>Smoke Developed</td>
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<td>&lt;450</td>
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<td>Oxygen Index min</td>
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<td>min</td>
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<tr>
<td>Adhesive Compatibility</td>
<td>BASF</td>
<td></td>
<td></td>
<td></td>
<td>Excellent</td>
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</tbody>
</table>

Acrocrete Platinum CI Stucco Test Results

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<td>Met test criteria with R10 thick NEOPOR insulation.</td>
</tr>
<tr>
<td>NFPA 268 Radiant heat exposure</td>
<td>Met test criteria with R10 NEOPOR insulation.</td>
</tr>
<tr>
<td>ASTM E 64 Surface Burning</td>
<td>System Components. Flam spread &lt;25; Smoke developed &lt;450</td>
</tr>
<tr>
<td>ASTM E119 Methods for fire tests</td>
<td>1 hour rating with maximum R10 NEOPOR insulation.</td>
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