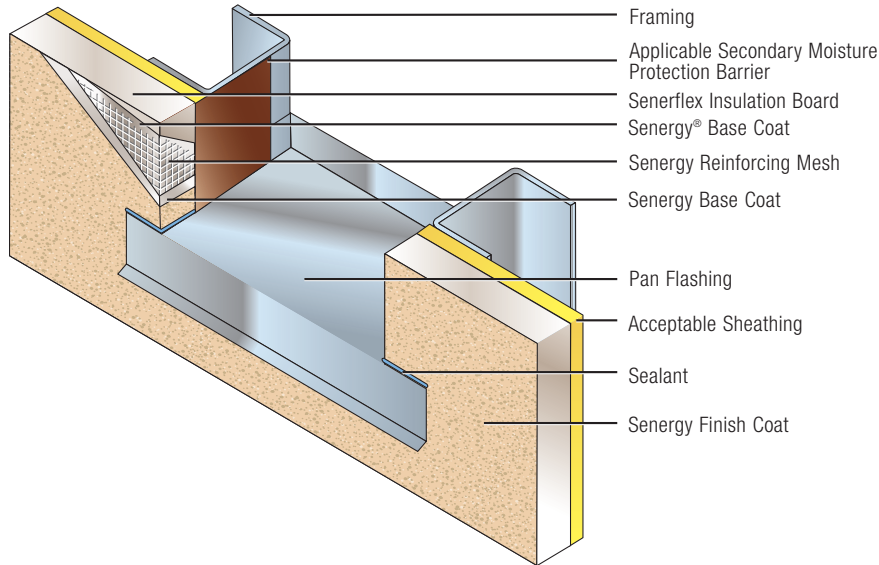


# Senerflex<sup>®</sup> Flashed Opening Design

Water-managed Class PB EIFS incorporating flashing and weather barriers at wall penetrations

SYSTEM GUIDE  
**1022477**



## Description

Senerflex Flashed Opening Design is an enhanced Class PB EIFS that incorporates flashings to redirect incidental moisture to the exterior from containment points around windows, doors and other through wall penetrations. The system is used when desired or when localized drainage is required. It offers design flexibility, aesthetic appeal and energy savings.

Integrated system components include reinforced air/weather resistive barrier, adhesive, EPS insulation board, reinforced base coat and 100% acrylic polymer finish. Apply the system directly to acceptable sheathings: PermaBase brand cement board (or other ASTM C1325 Type A Exterior approved cement boards), poured concrete/unit masonry, Fiberock Aqua-Tough Sheathing, Dens-Glass Gold sheathing (ASTM C1177), gypsum sheathing (ASTM C79/C1396), Exposure 1 or exterior plywood sheathing (Grade C-D or better), Exposure 1 OSB.

Senerflex Wall Systems have passed rigorous tests including Full-Scale Fire, Wind-Load, Wind-Driven Rain, and Large and Small Missiles.

Finishes are available in a limitless color selection and offer performance enhancement options including increased resistance to dirt pick-up and mildew.

Senerflex Flashed Opening Design features easy installation, proven durability and low maintenance.

## Uses

For exterior walls in commercial and institutional construction when local source drainage is required or desired at windows, doors and other wall penetrations.

Features	Benefits
Integrated flashing and weather barrier system	Drains incidental moisture at its point of entry to the exterior
Unlimited colors, textures and architectural details	Support design freedom, create details that would be impossible or cost prohibitive with other claddings
Exterior insulation	Reduces energy costs
100% Acrylic, reinforced base coats	Produce a weather-resistant barrier, provide crack resistance
100% Acrylic finish coats	Resist fading and abrasion, offer options for added dirt/mildew resistance

# Senerflex® Flashed Opening Design

## Limitations

1. Use only for above ground vertical walls.
2. Do not use in one- or two-family framed residential construction.
3. Apply Senerflex® Flashed Opening Design materials in accordance with *Senerflex Classic PB Wall System Specifications* and *Senerflex Flashed Opening Design* technical bulletin.
4. Install pan flashing and other flashing into openings.
5. Apply the [FLASHING PRIMER/SENERFLASH™ 4] [Senergy SELF-ADHERING MESH TAPE/SENERSHIELD™] [SHEATHING FABRIC/SENERSHIELD-R] in accordance with current product bulletins.
6. Install insulation board horizontally, butting edges tightly, staggering vertical joints and corners in a running bond pattern, attaching securely using Senergy Base Coat. Fill gaps between insulation boards with slivers of insulation board and rasp entire wall flush.
7. Embed Senergy Reinforcing Mesh into wet Senergy Base Coat so that no Reinforcing Mesh color is visible. Double layers of Reinforcing Mesh must be applied at all inside and outside corners. Window corners also require secondary reinforcement as per details. Apply multiple layers of Reinforcing Mesh and Base Coat where required for added impact resistance.
8. Apply Senergy ASAP/COLOR COAT into sealant joints after reinforced Base Coat has dried.
9. [Apply Senergy TINTED PRIMER to the dry reinforced Base Coat.]
10. Apply Senergy Finish Coat to match the specified Finish type, texture and color when Primer and/or reinforced Base Coat are dry.

## System Specifications

To perform in the expected manner, the System must be applied according to Senergy specifications, using only the listed and approved materials and components.

## Components

Senerflex Flashed Opening Design Wall System is comprised of SENERFLASH PRIMER/SENERFLASH membrane, SELF-ADHERING MESH TAPE/SENERSHIELD™ or SHEATHING FABRIC/SENERSHIELD-R Senergy Base Coat, an expanded polystyrene insulation board conforming to Senergy specifications, Senergy Reinforcing Mesh and a textured Senergy Finish. Optional TINTED PRIMER can enhance appearance and performance.

The system is applied over the following acceptable substrates: PermaBase Cement-Board (or other ASTM C1325 Type A Exterior approved cement boards), poured concrete/unit masonry, Fiberock Aqua-Tough sheathing, Dens-Glass Gold sheathing (ASTM C1177), gypsum sheathing (ASTM C79/C1396), Exposure I or exterior plywood sheathing (grade C-D or better), Exposure I OSB.

The system employs pan flashing at openings or penetrations in the system. Flashing should be designed and constructed of accepted flashing materials in accordance with industry recognized practices, methods and code requirements. Flashed Opening Design is used in conjunction with other Senergy EIFS.

## EPS Special Shapes

Used to enhance design aesthetics such as moldings, cornices, quoins, ogees, etc., these can be integrated into the system. They must be reinforced with Senergy Base Coat and Reinforcing Mesh prior to application of the TINTED PRIMER and Finish.

## Design Considerations

1. Maximum allowable deflection L/240, based on stud properties only.
2. The design wind-load shall not exceed the system's allowable wind-load as stated in applicable code reports.
3. Details shall conform with Senergy's recommendations and shall be consistent with the project requirements.
4. 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.
5. System shall terminate at expansion joints.
6. Sealant joints shall be detailed and installed per sealant manufacturer's recommendations.
7. A minimum 6:12 slope is required on all horizontal surfaces greater than 1".
8. Backer rod, sealant and/or flashing are required at door and window openings.
9. Use high impact mesh for ground floor applications in high traffic areas.
10. Consult the framing and sheathing manufacturer for design and application considerations.

## Technical Information

Consult the BASF Wall Systems Technical Services Department for specific recommendations concerning all other applications. Consult the Senergy website, [www.senergy.basf.com](http://www.senergy.basf.com), for additional information about products and systems and for updated literature.

### **Product Data—Sizes & Packaging**

SENERPRIME, sheathing primer for acceptable substrates, is packaged in 20.4-kg, 19-liter (45-pounds, 5 gallon) pails. Approximate coverage is 92–185 m<sup>2</sup> (1000–2000 ft<sup>2</sup>) per pail.

SENERQUICK™ Adhesive, for attaching EPS to acceptable substrates, is packaged in 22.6-kg, 19-liter (50-pound, 5-gallon) pails. Approximate coverage is 25.5–30.1 m<sup>2</sup> (275–325 ft<sup>2</sup>) per pail.

SENERSHIELD™, trowel-applied liquid air/weather barrier, is packaged in 27.2-kg, 19-liter (60-pound, 5-gallon) pails. Approximate coverage rate is 16.7–17.7 m<sup>2</sup> (180–190 ft<sup>2</sup>) per pail at proper thickness.

SENERSHIELD-R, roller or brush-applied liquid air/weather barrier, is packaged in 27.2-kg, 19-liter (60-pound, 5-gallon) pails. Approximate coverage rate per pail at 10 mils (wet) thickness varies depending upon substrate: Dens-Glass Gold [27.9–30.6 m<sup>2</sup> (300–330 ft<sup>2</sup>) (1 coat)], cement-board [27.9–37.2 m<sup>2</sup> (300–400 ft<sup>2</sup>) (1 coat)], exterior gypsum [46.1–53.3 m<sup>2</sup> (500–600 ft<sup>2</sup>) (1 coat)], OSB [23–32.2 m<sup>2</sup> (250–350 ft<sup>2</sup>) (2 coats)], plywood [23–32.2 m<sup>2</sup> (250–350 ft<sup>2</sup>) (2 coats)].

4" SHEATHING FABRIC for use with SENERSHIELD-R is packaged in 10.2 cm x 54.8 m (4" x 180') rolls.

9" SHEATHING FABRIC for use with SENERSHIELD-R is packaged in 22.9 cm x 54.8 m (9" x 180') rolls.

SELF ADHERING MESH TAPE (4") for use with SENERSHIELD is packaged in 10.2 cm x 45.7 m (4" x 150') rolls.

SELF ADHERING MESH TAPE (9") for use with SENERSHIELD is packaged in 22.9 cm x 45.7 m (9" x 150') rolls.

SENERFLASH 4 is available in 10.2 cm x 30.5 m (4" x 100') rolls, and SENERFLASH 9 is available in 22.9 cm x 30.5 m (9" x 100') rolls.

FLASHING PRIMER is packaged in 19-liter (5-gallon) pails and 3.8-liter (1-gallon) bottles. Coverage varies depending upon substrate.

FLEXGUARD 4, standard-weight Reinforcing Mesh at approximately 4.5 oz/yd<sup>2</sup> is available in 96.5 cm x 45.7 m (38" x 150') rolls. For wall system areas not expected to receive abnormal traffic or abuse.

INTERMEDIATE 6, standard-weight Reinforcing Mesh at approximately 5.6 oz/yd<sup>2</sup> is available in 96.5 cm x 45.7 m (38" x 150') rolls. For wall system areas not expected to receive abnormal traffic or abuse.

INTERMEDIATE 12, intermediate-weight Reinforcing Mesh at approximately 11 oz/yd<sup>2</sup> is available in 96.5 cm x 22.8 m (38" x 75') rolls. For use either alone or with FLEXGUARD 4 or INTERMEDIATE 6 to provide added impact resistance at specific areas such as around doors and walkways.

STRONG 15, medium-heavy weight Reinforcing Mesh at approximately 15 oz/yd<sup>2</sup> is available in 96.5 cm x 22.8 m (38" x 75') rolls. For wall system areas expected to receive traffic and abuse.

HI-IMPACT 20, heavy-weight Reinforcing Mesh at approximately 20 oz/yd<sup>2</sup> is available in 99.0 cm x 22.8 m (39" x 75') rolls. For wall system areas expected to receive a high degree of traffic and abuse.

CORNER MESH, intermediate-weight mesh at approximately 9.1 oz/yd<sup>2</sup> for use at exterior corners, is available in 22.9 cm x 45.7 m (9" x 150') rolls.

Approximate coverage rate for ALPHA GENIE BASE COAT, ALPHA BASE COAT, STANDARD BASE COAT, and XTRA-STOP BASE COAT to adhere EPS insulation board to substrate and to embed FLEXGUARD 4 is 11.1 m<sup>2</sup> (120 ft<sup>2</sup>) per 27.2-kg, 19-liter (60-pound, 5-gallon) pail.

Approximate coverage rate for ALPHA DRY BASE COAT to adhere EPS insulation board to substrate and to embed FLEXGUARD 4 is 4.6 m<sup>2</sup> (50 ft<sup>2</sup>) per 22.6-kg (50-pound) bag.

Approximate coverage rate for Senergy TINTED PRIMER is 69.6–116.1 m<sup>2</sup> (750–1,250 ft<sup>2</sup>) per 24.9-kg, 19-liter (55-pound, 5-gallon) pail.

SENERFLEX® and SILCOAT® Finishes are packaged in 31.7-kg, 19-liter (70-pound, 5-gallon) pails. Approximate coverages per pail for various textures are: CLASSIC [13 m<sup>2</sup> (140 ft<sup>2</sup>)], BELGIAN LACE [14.8 m<sup>2</sup> (160 ft<sup>2</sup>)], FINE [14.8 m<sup>2</sup> (160 ft<sup>2</sup>)], SAHARA [11.1 m<sup>2</sup> (120 ft<sup>2</sup>)], COARSE [8.3 m<sup>2</sup> (90 ft<sup>2</sup>)], TEXTURE (coverage varies depending upon application).

Specialty Finishes are packed in 31.7-kg, 19-liter (70-pound, 5-gallon) pails. Approximate coverages per pail for various textures are: AURORA TC-100 [6.5–9.2 m<sup>2</sup> (70–100 ft<sup>2</sup>)], AURORA STONE [6.5 m<sup>2</sup> (70 ft<sup>2</sup>)], BOREALIS [6.5–9.2 m<sup>2</sup> (70–100 ft<sup>2</sup>)], ALUMINA [8.4–9.2 m<sup>2</sup> (90–100 ft<sup>2</sup>)].

### **Storage**

Store material in a cool, dry place. Avoid direct sunlight. Maintain temperature above 4°C (40°F) (10°C/50°F for AURORA TC-100, AURORA STONE, ALUMINA and BOREALIS Finishes).

### **Health and Safety**

Follow good safety and industrial hygiene practices during handling and installing products and systems. Take necessary precautions and wear the appropriate personal protective equipment as needed. Read material safety data sheets and related literature on products before specification and/or installation.

# Senerflex® Flashed Opening Design

## Submittal Approvals

**Job Name:** \_\_\_\_\_

**Contractor:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Distributor:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Note

BASF Wall Systems is an operating unit of BASF Construction Chemicals, LLC. (herein after referred to as "BASF Wall Systems")

## Residential Policy

On one and two-family residential framed construction, BASF Wall Systems requires that the wall system selected be one that includes provisions for water drainage. The choices include Senturion® line of water drainage EIFS, commercial Senerflex® Channeled Adhesive or Channeled Insulation Design, Senergy Stucco Wall System, and Senergy Cement-Board Stucco™ Systems. There are no exceptions to this policy. Under no circumstances will BASF Wall Systems warrant the use of any other system on this type of construction without expressed written authorization from BASF Wall Systems [Residential construction using EIFS on masonry (CMU) or poured concrete does not require the additional water drainage provisions described above. Senergy Exterior Surfacing Systems for insulating concrete forms are also acceptable.] See the Senergy Residential Policy Bulletin for a more detailed discussion of this topic. Consult BASF Wall Systems Technical Services Department for specific recommendations concerning all other applications. Consult the Senergy website, [www.senergy.basf.com](http://www.senergy.basf.com) for additional information about products and systems and for updated literature.

## Disclaimer

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## BASF Wall Systems

3550 St. Johns Bluff Road South  
Jacksonville, FL 32224-2614  
Phone 800 • 221 • 9255  
Fax 904 • 996 • 6300  
[www.senergy.basf.com](http://www.senergy.basf.com)