



## Direct Finish System for Soffits and Ceilings Only

### Section - 09 25 13.13

*Seneflex reinforced acrylic surfacing application for soffits and ceilings.*

#### INTRODUCTION

This specification has been assembled to enable the design professional to select or delete sections to suit the project requirements and is intended to be used in conjunction with Senergy® typical details, product bulletins, technical bulletins, etc.

#### DESIGN RESPONSIBILITY

It is the responsibility of both the specifier and the purchaser to determine if a product is suitable for its intended use. The designer selected by the purchaser shall be responsible for all decisions pertaining to design, detail, structural capability, attachment details, shop drawings and the like. The Senergy® brand of Sika Corporation US (herein referred to as “Sika”) has prepared guidelines in the form of specifications, typical application details, and product bulletins to facilitate the design process only. Sika is not liable for any errors or omissions in design, detail, structural capability, attachment details, shop drawings or the like, whether based upon the information provided by Sika or otherwise, or for any changes which the purchasers, specifiers, designers or their appointed representatives may make to Sika published comments.

#### Designing and Detailing a Direct Finishing System for Soffits & Ceilings Only

General: The system shall be installed in strict accordance with current recommended published details and product specifications from the system’s manufacturer.

#### A. Substrate Systems

1. Acceptable substrates are: PermaBase® brand cement board (or other ASTM C1325 Type A Exterior approved cement boards); ASTM C1177 type sheathings including DensGlass™ exterior sheathing, eXP™ sheathing, GlasRoc® sheathing, Securock™ glass-mat sheathing, Weather Defense™ Platinum sheathing and GreenGlass® sheathing; poured concrete/unit masonry; stucco or exterior gypsum soffits board (ASTM C931 or ASTM C1396).
2. Painted and otherwise coated surfaces of brick, unit masonry, stucco and concrete shall be inspected and prepared as approved by Senergy before application. The applicator shall verify that the proposed substrate is acceptable prior to the Direct Finishing System for Soffits and Ceilings installation.
3. The substrate systems shall be engineered with regard to structural performance by others.

#### B. System Joints

1. Expansion and control joint design and placement are the sole responsibility of the project design team, including the architect, engineer, etc. Detail specific locations in construction drawings. Consult The Gypsum Association document GA-216 and ASTM C840 and/or the ceiling system manufacturer instructions for guidelines.
2. Sealant joints are required at all penetrations through the Direct Finishing System for Soffits and Ceilings.
3. Specify compatible closed cell backer rod and acceptable sealant that has been evaluated in accordance with ASTM C 1382, “Test Method for Determining Tensile Adhesion Properties of Sealants” and that meets minimum 50% elongation after conditioning.

#### TECHNICAL INFORMATION

Consult Sika Facades’ Technical Services Department for specific recommendations concerning all other applications. Consult the Senergy website, [usa.sika.com/senergy](http://usa.sika.com/senergy), for additional information about products, systems and for updated literature.

# Senergy Direct Finishing System for Soffits and Ceilings

## PART 1 GENERAL

**NOTE TO SPECIFIER: Items in blue/underlined indicate a system option or choice of options. Throughout the specification, delete those which are not required or utilized.**

### 1.01 SECTION INCLUDES

- A. Refer to all drawings and other sections of this specification to determine the type and extent of work therein affecting the work of this section, whether or not such work is specifically mentioned herein.
- B. Direct Finishing System for Soffits and Ceilings: consist of base coat, reinforcing mesh and finish coat.
- C. Senergy products are listed in this specification to establish a standard of quality. Any substitutions to this specification shall be submitted to and receive approval from the Architect at least 10 days before bidding. Proof of equality shall be borne by the submitter.
- D. The system type shall be Direct Finishing System for Soffits and Ceilings as manufactured by Sika, Lyndhurst, NJ.

### 1.02 RELATED SECTIONS

- A. Section 03 00 00 Concrete substrate
- B. Section 04 00 00 Masonry substrate
- C. Section 05 40 00 Cold-formed metal framing
- D. Section 06 16 00 Sheathing
- E. Section 06 11 00 Wood framing
- F. Section 07 62 00 Sheet Metal Flashing and Trim
- G. Section 07 65 00 Flexible flashing
- H. Section 07 90 00 Joint protection
- I. Section 09 22 00 Supports for plaster and gypsum board
- J. Section 09 22 16 Non-structural metal framing
- K. Section 09 29 00 Gypsum board

### 1.03 SUBMITTALS

- A. Submit under provisions of Section [01 33 00]
- B. Product Data: Provide data on Direct Finishing System for Soffits and Ceilings materials, product characteristics, performance criteria, limitations and durability.
- C. Samples: Submit [two] [x] [millimeter] [inch] size samples of Direct Finishing System for Soffits and Ceilings illustrating finish coat color and texture range.
- D. Certificate: System manufacturer's approval of applicator.
- E. Sealant: Sealant manufacturer's certificate of compliance with ASTM C1382.
- F. System manufacturer's current specifications, typical details, system overview and related product literature which indicate preparation required, storage, installation techniques, jointing requirements and finishing techniques.

### 1.04 QUALITY ASSURANCE

- A. Manufacturer: More than 10 years in the EIFS industry, with more than 1000 completed EIFS projects.
- B. Applicator: Approved by Sika in performing work of this section.
- C. Field Samples
  - 1. Provide under provisions of Section [01 43 36] [01 43 39].
  - 2. Construct one field sample panel for each color and texture, [x] [meters] [feet] in size of system materials illustrating method of attachment, surface finish color and texture.
  - 3. Prepare each sample panel using the same tools and techniques to be used for the actual application.
  - 4. Locate sample panel where directed.
  - 5. Accepted sample panel [may] [may not] remain as part of the work.
  - 6. Field samples shall be comprised of all wall assembly components including substrate, base coat, reinforcing mesh, primer (if specified), finish coat and typical sealant conditions.
- D. Testing:

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## 1. Senerflex Finish

TEST	METHOD	CRITERIA	RESULTS
Surface Burning	ASTM E84 / UL 723	Flame spread < 25 Smoke developed < 450	All components of the system meet Class A performance (FS < 25; SD < 450)
Water resistance of Coatings in 100% R.H.	ASTM D2247	No deleterious effects after 14 days	Pass
Salt Fog Resistance	ASTM B117	No change after 300 hours	Pass
Mildew Resistance	Mil. Std. 810B Method 508	No fungus growth after 28 days	Pass
Abrasion Resistance	ASTM D968	Finish Coat not worn through after 686 liters of falling sand	Pass
Accelerated Weathering	ASTM G53	No deleterious effects after 7500 hours	Pass
Accelerated Weathering	ASTM G23	No deleterious effects after 2000 hours	Pass
Tensile Bond	ASTM C297, E2134	Greater than 15 psi	Pass

## 2. Reinforcing Mesh Testing and Impact Resistance

TEST	METHOD	CRITERIA	RESULTS
Alkali Resistance of Reinforcing Mesh	ASTM E 2098	Greater than 120 pli (21 dN/CM) retained tensile strength	Pass (all mesh)
Flexguard 4	ASTM E2486 (formerly EIMA 101.86)	25-49 inch-lbs. (2.8-5.6 j)	Pass
SikaWall Intermediate 6	ASTM E2486 (formerly EIMA 101.86)	25-49 inch-lbs. (2.8-5.6 j)	Pass
SikaWall Intermediate 12	ASTM E2486 (formerly EIMA 101.86)	50-89 inch-lbs. (5.7-10.1 j)	Pass
SikaWall Intermediate 12 & Flexguard 4	ASTM E2486 (formerly EIMA 101.86)	90-150 inch-lbs. (10.2-17.0 j)	Pass
SikaWall Strong 15 & Flexguard 4	ASTM E2486 (formerly EIMA 101.86)	150 inch-lbs. (17 j)	Pass
SikaWall Ultra HI 20 & Flexguard 4	ASTM E2486 (formerly EIMA 101.86)	150 inch-lbs. (17 j)	Pass

## 3. General Air/Water-Resistive Barrier Minimum Performance:

TEST	METHOD	CRITERIA	RESULTS
Water-resistive barrier coatings used under EIFS	ASTM E2570		Meets all performance requirements
Air Leakage of Air Barrier Assemblies	ASTM E2357	0.2 l/(s.m <sup>2</sup> ) @75 Pa (0.04 cfm/ft <sup>2</sup> @ 1.57 psf)	0.0007 l/s.m <sup>2</sup> (0.0001 cfm/ft <sup>2</sup> ) @ 75 Pa (1.57 psf) positive / post conditioning 0.0014 l/s.m <sup>2</sup> (0.0003 cfm/ft <sup>2</sup> ) @ 75 Pa (1.57 psf) negative / post conditioning
Air Permeance of Building Materials	ASTM E2178	0.02 l/(s.m <sup>2</sup> ) @75 Pa (0.004 cfm/ft <sup>2</sup> @ 1.57 psf)	0.0049 l/s.m <sup>2</sup> @ 75 Pa (0.00098 cfm/ft <sup>2</sup> @ 1.57 psf)
Rate of Air Leakage	ASTM E283		0.0185 l/s.m <sup>2</sup> @ 75 Pa (0.0037 cfm/ft <sup>2</sup> @ 1.57 psf)
Water Vapor Transmission	ASTM E96	Report value	Senershield-R - 18 Perms (grains/Hr. in Hg. ft <sup>2</sup> ) @ 10 mils wet film thickness Senershield-RS 18 Perms (grains/Hr. in Hg. ft <sup>2</sup> ) @ 12 mils wet film thickness Senershield-R/RS - 14 Perms (grains/Hr. in Hg. ft <sup>2</sup> ) @ 20 mils wet film thickness Senershield-VB - 0.09 Perms (grains/Hr. in Hg. ft <sup>2</sup> ) @ 26 mils wet film thickness
Pull-Off Strength of Coatings	ASTM D4541	Min. 110 kPa (15.9 psi) or substrate failure	Pass - Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood; PVC and galvanized flashing

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Nail Sealability (without Sheathing Fabric)	ASTM D1970	No water penetration at galvanized roofing nail penetration under 127 mm (5") head of water after 3 days at 4° C (40° F)	Pass
Surface Burning	ASTM E84	Flame Spread < 25 Smoke Development < 450	Meets Class A: Flame spread =15 Smoke developed = 95

### 4. Air/Water-Resistive Barrier ICC-ES AC-212:

TEST	METHOD	CRITERIA	RESULTS
Sequential Testing: 1. Structural 2. Racking 3. Restrained Environmental Conditioning 4. Water Penetration	1. ASTM E 1233 Procedure A 2. ASTM E 72 3. ICC-ES AC-212 4. ASTM E 331	No cracking at joints or interface of flashing No water penetration after 15 min @ 137 Pa (2.86 psf)	Pass - Tested over OSB and gypsum sheathing No water penetration after 90 min @ 299 Pa (6.24 psf)
Sequential Testing: 1. UV Light Exposure 2. Accelerated Aging 3. Hydrostatic Pressure Test	1. ICC-ES AC-212 2. ICC-ES AC-212 3. AATCC 127-1985	No cracking or bond failure to substrate No water penetration after 21.7 in (550 mm) water for 5 hours	Pass
Freeze-Thaw	ASTM E 2485 (Method B)	No sign of deleterious effects after 10 cycles	Pass - Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood
Water Resistance	ASTM D2247	No deleterious effects after 14 day exposure	Pass - Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood
Tensile Bond	ASTM C 297	Minimum 103 kPa (15 psi)	Pass - Tested over exterior gypsum sheathing, ASTM C1177 glass-mat sheathing, cement board, OSB, plywood, CMU; PVC and galvanized flashing
Tensile Bond (after freeze-thaw)	ASTM C 297	Minimum 103 kPa (15 psi) avg; no failure after 10 cycles freeze-thaw	Pass

### 5. Air/Water-Resistance Barrier ICC-ES AC 148:

TEST	METHOD	CRITERIA	RESULTS
Sequential Testing: 1. UV Light Exposure 2. Accelerated Aging 3. Hydrostatic Pressure Test	1. ICC-ES AC 148 2. ICC-ES AC 148 3. AATCC 127-1985	No cracking or bond failure to substrate No water penetration after 21.7 in (550 mm) water for 5 hours	Pass
Peel Adhesion	ASTM D 3330 Method F	After UV Exposure After Accelerated Aging After Elevated Temperature Exposure After Water Immersion	Pass - tested over ASTM C1177 glass-mat sheathing, OSB, plywood, PVC and uncoated aluminum
Nail Sealability after Thermal Cycling	ASTM D 1970 (Modified), AAMA 711	No water penetration at galvanized roofing nail penetration under 31 mm (1.2") head of water after 24 hours at 4° C (40° F)	Pass
Tensile Strength after UV Exposure	ASTM D 5034, AAMA 711	Minimum 0.5 N/mm (2.9 lbs./in)	Pass
Cold Temperature Pliability	ASTM D 1970, AAMA 711	No cracking after bending around a 25 mm (1") mandrel after 2-hour exposure to -18° C (0° F)	Pass
Resistance to Peeling	AAMA 711	No signs of distress or failure after 24 hours of exposure at room temperature, 50° C (122° F), 65° C (149° F), 80° C (176° F)	Pass

### 1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle products under provisions of Section [01 65 00] [01 66 00] [ ].
- B. Deliver Sika materials in original unopened packages with manufacturer's labels intact.
- C. Protect Sika materials during transportation and installation to avoid physical damage.
- D. Store Sika materials in a cool, dry place protected from freezing. Store at no less than 40°F/4°C (50°F/10°C GRANITE & STONE finish).

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- E. Store MAXFLASH at a minimum of 40°F/4°C. In cold weather, keep containers at room temperature for at least 24 hours before using.
- F. Store reinforcing mesh, SHEATHING FABRIC and FLASH SEAL NP flexible flashing in a cool, dry place protected from exposure to moisture.

### 1.06 PROJECT/SITE CONDITIONS

- A. Do not apply Sika material in ambient temperatures below 40°F/4°C (50°F/10°C for GRANITE & STONE Finish). Provide properly vented, supplementary heat during installation and drying period when temperatures less than 40°F/4°C (50°F/10°C for GRANITE & STONE Finish) prevail. Do not apply in ambient temperature above 100°F (38°C) or surface temperature above 120°F (49°C).
- B. Do not apply materials to frozen surfaces.
- C. Maintain ambient temperature at or above 40°F/4°C (50°F/10°C for GRANITE & STONE Finish) during and at least 24 hours after material installation and until dry.
- D. Under average conditions [70 °F (21 °C), 50% Relative Humidity] finish will be dry within 24 hours. Drying time is dependent on humidity, air temperature, sun exposure, surface conditions and finish thickness. Lower temperature, higher humidity and application in shaded areas will extend drying time. Protect finish from rain or other precipitation and temperatures less than 40°F (4°C) for a minimum of 24 hours or until dry.

### 1.07 SEQUENCING AND SCHEDULING

- A. Coordinate and schedule installation of Direct Finishing System for Soffits and Ceilings with related work of other sections.
- B. Coordinate and schedule installation of trim, flashing, and joint sealers to prevent water infiltration behind the system.

### 1.08 WARRANTY

- A. Provide Sika standard warranty for Direct Finishing System for Soffits and Ceilings installations under provisions of Section [01 70 00].
- B. Comply with Sika Facades notification procedures to assure qualification for warranty.

## PART 2 PRODUCTS

### 2.01 MANUFACTURERS

- A. Direct Finishing System for Soffits and Ceilings manufactured by Sika Corporation US.

### 2.02 MATERIALS

**NOTE TO SPECIFIER: Items in blue/underlined indicate a system option or choice of options. Throughout the specification, delete those which are not required or utilized. Contact Sika Facades' Technical Service Department for further assistance.**

#### A. Air/Water-Resistive Barrier Components:

1. Air/Water-Resistive Barrier: **(Optional, used for air barrier continuity. Select a, b or c)**
  - a. SENERSHIELD-R: A one-component fluid-applied vapor permeable air/water-resistive barrier.
  - b. SENERSHIELD-RS: A one-component fluid-applied vapor permeable air/water-resistive barrier for use with airless spray equipment.
  - c. SENERSHIELD-VB: A one-component fluid-applied vapor impermeable air/water-resistive barrier.
2. Joint Treatment: **(Required if one of above materials is selected. Select a or b)**
  - a. SIKAWALL SHEATHING FABRIC: A spun-bonded non-woven reinforced polyester web for use with Senergy fluid applied air/weather-resistive barriers.
  - b. SIKAWALL MAXFLASH: A one-component elastomeric material for use as a flexible flashing membrane.
3. SIKAWALL FLASH SEAL NP Transitional Membrane / Expansion Joint Flashing: A 32-mil thick self-adhering and self-sealing composite membrane of polyester fabric and butyl adhesive. Compatible with Senergy liquid air/weather-resistive barriers.

#### B. Base Coats: **(Required, Select One or More)**

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1. ALPHA Base Coat: A 100% acrylic based adhesive and base coat, field-mixed with Portland cement. It has a creamy texture that is easily spread.
2. ALPHA DRY Base Coat: A dry-mix polymer adhesive and base coat containing Portland cement and requiring only water for mixing.
3. XTRA-STOP Base Coat: A 100% acrylic-based, water-resistant adhesive and base coat, field-mixed with Portland cement.
4. ALPHA GENIE Base Coat: A 100% acrylic, fiber-reinforced base coat, adhesive and leveler that is field-mixed with Portland cement.

### **NOTE TO SPECIFIER: Portland cement is not used with ALPHA DRY Base Coats.**

**C. Portland cement:** Conform to ASTM C150, Type I, IL (ASTM C595), II, or I/II, grey or white; fresh and free of lumps.

**D. Water:** Clean and potable without foreign matter.

**D. Senergy Reinforcing Mesh:** balanced, open-weave glass, fiber reinforcing mesh, twisted multi-end strands treated for compatibility with Senergy Base Coats. **(Required, Select One)**

1. FLEXGUARD 4: Standard weight, 4 oz.
2. SIKAWALL INTERMEDIATE 6: Standard/medium weight, 6 oz.
3. SIKAWALL INTERMEDIATE 12: Intermediate weight, 11 oz.
4. SIKAWALL STRONG 15: Heavy weight, 15 oz. used only in combination with FLEXGUARD 4 or INTERMEDIATE 6.
5. SIKAWALL ULTRA HI 20: Heavy weight, 20 oz. used only in combination with FLEXGUARD 4 or INTERMEDIATE 6.

**E. SIKWALL TINTED PRIMER (Optional):** A 100% acrylic-based primer that helps alleviate shadowing and enhances performance of the Senergy wall systems. Color to closely match the selected Senergy finish color.

**F. Finish Coat (Required, Select One or More Textures):**

1. SENERFLEX Finish: 100% acrylic polymer finishes with advanced technology to improve long-term performance and dirt pick-up resistance; air cured, compatible with base coat; Senergy finish color [ ] as selected; finish texture:
  - a. CLASSIC: A medium worm-holed" appearance which is achieved by the random aggregate sizes in the Finish. The "worm-holed" look can be circular, random, vertical or horizontal.
  - b. FINE: Utilizes uniformly sized aggregates for a uniform, fine texture.
  - c. TEXTURE: Can achieve a wide variety of free-formed, textured appearances, including stipple and skip-trowel
  - d. SAHARA: Provides a uniform, "pebble" appearance.
2. Specialty Finishes: 100% acrylic polymer finishes that can be hand-troweled to simulate stone or create a time-honored, mottled tone-on-tone look that achieves a soft and weathered patina over time.
  - a. SIKAWALL ENCAUSTO VERONA: Utilizes uniformly sized aggregate to achieve a free-formed, flat texture. It can be used to achieve a mottled look and unlimited tone on tone designs by combining multiple colors.
  - b. SIKAWALL METALLIC: A pearlescent appearance. It utilizes uniformly sized aggregates for a uniform fine texture.
  - c. SIKAWALL GRANITE & STONE: A factory-mixed, reflective stone finish consisting of colored aggregate and large black mica flakes in a 100% acrylic transparent binder that provides a classic granite or marble-like textured finished appearance.

## **PART 3 - EXECUTION**

### **3.01 EXAMINATION**

- A.** Examine surfaces to receive Direct Finishing System for Soffits and Ceilings and verify that substrate and adjacent materials are dry, clean, cured, sound and free of releasing agents, paint, or other residue or coatings. Verify substrate surface is flat, free of fins.
- B.** Ensure adhesion tests meet the requirements listed in the Basics of Conducting Adhesion Testing Senergy technical bulletin.
- C.** Control/Expansion joint type and placement shall be the responsibility of the architect/engineer and substrate manufacturer. Existing expansion joints shall be honored.

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- D. Acceptable substrates are: PermaBase® brand cement board (or other ASTM C1325 Type A Exterior approved cement boards); ASTM C1177 type sheathings including DensGlass™ exterior sheathing, eXP™ sheathing, GlasRoc® sheathing, Securock™ glass-mat sheathing, Weather Defense™ Platinum sheathing and GreenGlass® sheathing; poured concrete/unit masonry; stucco or exterior gypsum soffits board (ASTM C931 or ASTM C1396).
- E. Unsatisfactory conditions shall be reported to the general contractor and corrected before application of the Direct Finishing System for Soffits and Ceilings.

### 3.02 PREPARATION

- A. All surfaces to receive Direct Finishing System for Soffits and Ceilings components must be clean, dry and free of airborne contaminants.
- B. Protect all surrounding areas and surfaces from damage and staining during application of Direct Finishing System for Soffits and Ceilings.
- C. Protect finished work at end of each day to prevent water penetration.

### 3.03 MIXING

General: No additives are permitted unless specified in product mixing instructions. Close containers when not in use. Prepare in a container that is clean and free of foreign substances. Do not use a container which has contained or been cleaned with a petroleum-based product. Clean tools with soap and water immediately after use.

**NOTE TO SPECIFIER: Keep only the products in this section which were selected in Section 2.02. Delete those not to be utilized.**

#### A. Air/Water-Resistive Barriers:

1. SENERSHIELD-R/RS/VB: Mix with a clean, rust-free paddle and drill until thoroughly blended. Do not add water.

#### B. Base Coat:

1. ALPHA Base Coat: Mix base coat with a clean, rust-free paddle and drill until thoroughly blended, before adding Portland cement. Mix one part (by weight) Portland cement with one part base coat. Add Portland cement in small increments, mixing until thoroughly blended after each additional increment. Clean, potable water may be added to adjust workability.
2. XTRA-STOP Base Coat: Mix base coat with a clean, rust-free paddle and drill until thoroughly blended, before adding Portland cement. Mix one part (by weight) Portland cement with one part base coat. Add Portland cement in small increments, mixing until thoroughly blended after each additional increment. Clean, potable water may be added to adjust workability.
3. ALPHA GENIE Base Coat: Mix base coat with a clean, rust-free paddle and drill until thoroughly blended, before adding Portland cement. Mix one part (by weight) Portland cement with one part base coat. Add Portland cement in small increments, mixing until thoroughly blended after each additional increment. Clean, potable water may be added to adjust workability.
4. ALPHA DRY Base Coat: Mix and prepare each bag in a 5-gallon (19-liter) pail. Fill the container with approximately 1.5-gallons (5.6-liters) of clean, potable water. Add Base Coat in small increments, mixing after each additional increment. Mix Base Coat and water with a clean, rust-free paddle and drill until thoroughly blended. Additional ALPHA DRY Base Coat or water may be added to adjust workability.

**C. SIKAWALL TINTED PRIMER:** Mix the factory-prepared material with a clean, rust-free paddle and drill until thoroughly blended. A small amount of clean, potable water may be added to adjust workability. Do not overwater.

#### D. Finishes:

1. SENERFLEX and ENCAUSTO VERONA Finish: Mix the factory-prepared material with a clean, rust-free paddle and drill until thoroughly blended. A small amount of clean, potable water may be added to adjust workability. Do not overwater.
2. SIKAWALL GRANITE & STONE Finish: Gently mix the contents of the pail for 1 minute using a low RPM ½" drill equipped with a mixing paddle such as a Demand Twister or a Wind-Lock B-MEW, B-M1 or B-M9.



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## 3.04 APPLICATION

### A. Air/Water-Resistive Barrier:

1. All sheathing joints must be protected, and the air/water-resistive barrier applied in accordance with the published Senershield product bulletin and details.
2. Substrate shall be dry, clean, sound, and free of releasing agents, paint, or other residue or coatings. Verify substrate is flat, free of fins or planar irregularities greater than 6.4 mm in 3 m (¼" in 10').
3. Unsatisfactory conditions shall be corrected before application of the Senergy air/water-resistive barriers.
4. Apply SIKAWALL SHEATHING FABRIC and Senergy air/water-resistive barrier in accordance with the Senergy air/water-resistive barrier product bulletin.
5. Apply SIKAWALL MAXFLASH in accordance with the SIKAWALL MAXFLASH product bulletin.
6. Installed materials shall be checked before continuing system application.
7. Installed materials shall be checked before continuing system application.

### B. Base Coat/Reinforcing Mesh:

**NOTE TO SPECIFIER: Indicate on drawings the required locations of standard, medium and high or ultra-high impact reinforcing mesh.**

1. Board Joints
  - a. Apply mixed Senergy base coat to sheathing joint with a stainless-steel trowel to embed the reinforcing mesh.
  - b. Immediately place FLEXGUARD 4 reinforcing mesh over the center of the joint and against wet base coat and embed the reinforcing mesh into the base coat by troweling from the center to the edges.
  - c. Ensure the reinforcing mesh is continuous, void of wrinkles. Overlap FLEXGUARD 4 a minimum 2 1/2" (65 mm).
  - d. Allow base coat and FLEXGUARD 4 to dry prior to application of Senergy reinforcing mesh and base coat to the entire surface.
2. Standard Impact or Medium Impact Resistance Reinforcing Mesh: FLEXGUARD 4 INTERMEDIATE 6 and INTERMEDIATE 12
  - a. Apply mixed Senergy base coat to entire surface of sheathing with a stainless steel trowel to embed the reinforcing mesh.
  - b. Immediately place reinforcing mesh against wet base coat and embed the reinforcing mesh into the base coat by troweling from the center to the edges. Lap reinforcing mesh 2 ½" (64 mm) minimum at edges.
  - c. Ensure reinforcing mesh is continuous at corners, void of wrinkles and embedded in base coat so that no reinforcing mesh color is visible.
  - d. If required, apply a second layer of base coat to achieve total nominal base coat/reinforcing mesh thickness of 1/16" (1.6 mm).
  - e. Allow base coat with embedded reinforcing mesh to dry hard (normally 8 to 10 hours).
3. High Impact or Ultra High Impact Resistance Reinforcing Mesh: INTERMEDIATE 12, STRONG 15 and ULTRA HI 20

**NOTE TO SPECIFIER: Where STRONG 15 or ULTRA HI 20 is specified, FLEXGUARD 4 or INTERMEDIATE 6 must be specified also.**

  - a. Apply mixed Senergy base coat to entire surface of sheathing with a stainless steel trowel to embed the reinforcing mesh.
  - b. Immediately place INTERMEDIATE 12, STRONG 15 or ULTRA HI 20 against wet base coat and embed the reinforcing mesh into the base coat by troweling from the center to the edges.
  - c. Butt STRONG 15 or ULTRA HI 20 at all adjoining edges; do not use to bend around corners.
  - d. Ensure reinforcing mesh is free of wrinkles and embedded in base coat so that no reinforcing mesh color is visible.
  - e. After base coat with embedded reinforcing mesh is dry and hard (normally 8 to 10 hours), apply a layer of FLEXGUARD 4 or INTERMEDIATE 6 reinforcing mesh over the entire surface in accordance with 3.04B (2) to achieve total nominal base coat/ reinforcing mesh thickness of 3/32" (2.4 mm).



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### **C. SIKWALL TINTED PRIMER:**

1. Apply primer to the base coat/reinforcing mesh with a sprayer, 3/8" (10 mm) nap roller, or good quality latex paint brush at a rate of approximately 150-250 ft<sup>2</sup> per gallon (3.6-6.1m<sup>2</sup> per liter). Primer shall be dry to the touch before proceeding to the Senergy Finish coat application.

### **D. SENERFLEX, ENCAUSTO VERONA and METALLIC Finish Coat:**

1. Apply finish directly to the base coat with a clean, stainless steel trowel.
2. Apply and level finish during the same operation to a minimum obtainable thickness consistent with uniform coverage. Maintain a wet edge on finish by applying and texturing continually over the wall surface.
3. Work finish to corners, joints or other natural breaks and do not allow material to set up within an uninterrupted wall area. Float finish to achieve final texture.

### **E. SIKAWALL GRANITE & STONE Finish:**

1. Apply SIKAWALL TINTED PRIMER to the substrate in accordance with the current product bulletin. Primer shall be of the corresponding color for the selected finish color. Allow the primer to dry to the touch before proceeding with finish application.
2. Apply a tight coat of finish with a clean, stainless steel trowel. Maintain a wet edge on finish by applying and leveling continually over the wall surface.
3. Work finish to corners, joints or other natural breaks and do not allow material to set up within an uninterrupted wall area. Allow first coat to set until surface is completely dry prior to applying a second coat of finish.
4. Use a stainless-steel trowel and apply the second coat of finish. Achieve final texture using circular motions. Total thickness of finish may be between 1/16" (1.6 mm) and 1/8" (3.2 mm).

### **3.05 CLEANING**

- A. Clean work under provisions of Section [\[01 74 00\] \[x\]](#).
- B. Clean adjacent surfaces and remove excess material, droppings, and debris.

### **3.06 PROTECTION**

- A. Protect materials from rain, snow and frost for 48-72 hours following application.
- B. Under average conditions [70 °F (21 °C), 50% Relative Humidity] finish will be dry within 24 hours. Drying time is dependent on humidity, air temperature, sun exposure, surface conditions and finish thickness. Lower temperature, higher humidity and application in shaded areas will extend drying time. Protect finish from rain or other precipitation and temperatures less than 40°F (4°C) for a minimum of 24 hours or until dry.
- C. Protect installed construction under provisions of Section [\[01 76 00\] \[ \]](#).

### **END OF SECTION**

## Senergy Direct Finishing System for Soffits and Ceilings

### WARRANTY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at [usa.sika.com/senergy](https://usa.sika.com/senergy) or by calling SIKAFACADES' Technical Service Department at 1-800-589-1336. Nothing contained in any SIKAFACADES literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKAFACADES product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKAFACADES product.

SIKAFACADES warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKAFACADES SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKAFACADES SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. Sale of SIKAFACADES products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/>.

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