

ACF Direct Finish System for Soffits and Ceilings Only Section - 09 25 13.13

Parex 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 Parex® 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 Parex® 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 Parex 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 Parex website, usa.sika.com/parex, for additional information about products, systems and for updated literature.

Parex ACF 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. Parex 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:
 - 1. Parex DPR Finish

TEST	METHOD	CRITERIA	RESULTS
------	--------	----------	---------

Parex ACF Direct Finishing System for Soffits and Ceilings

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

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 SikaWall Granite & Stone finish).
- E. Store reinforcing mesh, SikaWall Sheathing Fabric and Sikawall 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 Sikawall 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 Sikawall 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.

Parex ACF Direct Finishing System for Soffits and Ceilings

Throughout the specification, delete those which are not required or utilized. Contact Sika Facades' Technical Service Department for further assistance.

A. Base Coats: (Required, Select One or More)

1. Parex 121 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. Parex 121 Dry Base Coat: A dry-mix polymer adhesive and base coat containing Portland cement and requiring only water for mixing.
3. Parex Weatherdry Base Coat: A 100% acrylic-based, water-resistant adhesive and base coat, field-mixed with Portland cement.

NOTE TO SPECIFIER: Portland cement is not used with Parex 121 dry base coats.

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

C. Water: Clean and potable without foreign matter.

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

1. Parex 355: 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 Parex 355 Standard or Intermediate 6.
5. Sikawall Ultra HI 20: Heavy weight, 20 oz. used only in combination with Parex 355 Standard or Intermediate 6.

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

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

1. Parex DPR Finish: 100% acrylic polymer finishes with advanced technology to improve long-term performance and dirt pick-up resistance; air cured, compatible with base coat; Parex finish color [] as selected; finish texture:
 - a. Swirl Fine : 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. Sand Fine : Utilizes uniformly sized aggregates for a uniform, fine texture.
 - c. Sand Smooth: Can achieve a wide variety of free-formed, textured appearances, including stipple and skip-trowel
 - d. Sand Coarse: 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 Metallic: A pearlescent appearance. It utilizes uniformly sized aggregates for a uniform fine texture.
 - b. 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 Sika Facades 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.
- D. Acceptable substrates are: PermaBase® brand cement board (or other ASTM C1325 Type A Exterior

Parex ACF Direct Finishing System for Soffits and Ceilings

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. Base Coat:

1. Parex 121 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. Parex Weatherdry 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. Parex 121 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 Parex 121 Dry Base Coat or water may be added to adjust workability.

- B. **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.

C. Finishes:

1. Parex DPR 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.

A. 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 Parex base coat to sheathing joint with a stainless-steel trowel to embed the reinforcing mesh.
 - b. Immediately place Parex 355 Standard 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.

Parex ACF Direct Finishing System for Soffits and Ceilings

- c. Ensure the reinforcing mesh is continuous, void of wrinkles. Overlap Parex 355 Standard Mesh a minimum 2 1/2" (65 mm).
- d. Allow base coat to dry prior to application of Parex 355 reinforcing mesh and apply Parex base coat to the entire surface.

B. Sikawall 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 ft² per gallon (3.6-6.1m² per liter). Primer shall be dry to the touch before proceeding to the Parex Finish coat application.

C. Parex DPR, 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.

D. 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

Parex ACF 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/parex or by calling SIKA Facades' Technical Service Department at 1-800-226-2424. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA 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. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA 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 SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/>.