SECTION 07 56 00

FLUID APPLIED ROOF COATINGS

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\*\* NOTE TO SPECIFIER \*\* Rust-Oleum; paints and coatings.
This section is based on the products of Rust-Oleum, which is located at:
11 Hawthorn Parkway
Vernon Hills, IL 60061
Toll Free Tel: (800) 323-3584
Tel: (847) 367-7700
Fax: (847) 816-2330
Email: technicalservice@rustoleum.com
Web: www.rustoleum.com
 [Click Here] for additional information
Rust-Oleum offers a full line of high-performance industrial coatings formulated to protect the roof, floor and everything in-between. Our selection of industrial coatings includes alkyds, epoxies, urethanes, acrylics as well as our Concrete Protection Systems heavy-duty floor toppings. Choose Rust-Oleum for all of your painting and flooring needs.

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Roof coatings including the following:
			1. Roof cleaners.
			2. Roof primers.
			3. Roof coatings.
			4. Patching and sealants.
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 07 41 13 - Metal Roof Panels.
		2. Section 07 51 13 - Built-Up Asphalt Roofing.
		3. Section 07 51 13.13 - Cold-Applied Built-Up Asphalt Roofing.
		4. Section 07 53 13 - Chlorinated-Polyethylene Roofing.
		5. Section 07 54 16 - Ketone Ethylene Ester Roofing.
		6. Section 07 55 56 - Fluid-Applied Protected Membrane Roofing.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ASTM International (ASTM):
			1. ASTM D 2824 - Standard Specification for Aluminum-Pigmented Asphalt Roof Coatings, Nonfibered, and Fibered without Asbestos.
			2. ASTM D 3805 - Standard Guide for Application of Aluminum-Pigmented Asphalt Roof Coatings.
			3. ASTM D 4586 - Standard Specification for Asphalt Roof Cement, Asbestos-Free.
			4. ASTM D 6083 - Standard Specification for Liquid Applied Acrylic Coating Used in Roofing.
			5. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
	1. SUBMITTALS
		1. Submit under provisions of Section 01 30 00 - Administrative Requirements.
		2. Product Data: Manufacturer's data sheets on each product to be used, including:
			1. Preparation instructions and recommendations.
			2. Storage and handling requirements and recommendations.
			3. Installation methods.
	2. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Minimum 5 years experience manufacturing similar products.
		2. Installer Qualifications: Minimum 2 years experience installing similar products.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
			1. Finish areas designated by Architect.
			2. Do not proceed with remaining work until workmanship is approved by Architect.
			3. Refinish mock-up area as required to produce acceptable work.
	1. PRE-INSTALLATION MEETINGS
		1. Convene minimum two weeks prior to starting work of this section.
	2. DELIVERY, STORAGE, AND HANDLING
		1. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
		2. Handle materials to avoid damage.
	3. PROJECT CONDITIONS
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.
	4. SEQUENCING
		1. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

\*\* NOTE TO SPECIFIER \*\* Delete warrantees not required.

* 1. WARRANTY
		1. Warranty: Provide manufacturer's standard limited warranty.
			1. The technical data and suggestions of use are correct to the best of our knowledge, and offered in good faith. The statements of this specification do not constitute a warranty, expressed, or implied, as to the performance of these products. As conditions and use of our materials are beyond our control, we can guarantee these products only to conform to our standards of quality, and our liability, if any, will be limited to replacement of defective materials. All technical information is subject to change without notice.
			2. Special written project warranties may be issued on a request basis at the discretion of the Rust-Oleum Corporation Technical and Legal Departments and would not be contained within this specification document.
			3. Please note that if Rust-Oleum has been requested to furnish a warranty, the Contractor/Owner must comply with the conditions for warranty issuance. A sample copy is available upon request. Contact Rust-Oleum for details regarding available warranties.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: Rust-Oleum®, which is located at: 11 Hawthorn Pkwy.; Vernon Hills, IL 60061; Toll Free Tel: 800-323-3584; Tel: 847-367-7700; Fax: 847-816-2330; Email: [request info (technicalservice@rustoleum.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=RustOleum26reg&coid=35301&rep=&fax=847-816-2330&message=RE:%20Spec%20Question%20(07560rus):%20%20&mf=); Web: <https://www.rustoleum.com>
		2. Specification and product questions shall be directed to David O'Bryan at  technicalservice@rustoleum.com . Product and distribution questions shall be directed to local Rust-Oleum Representatives.

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
	1. ROOF PRODUCTS - GENERAL

\*\* NOTE TO SPECIFIER \*\* Delete product types not required.

* + 1. Product Types:
			1. Material: Elastomeric.
			2. Material: Fibered Aluminum.
			3. Material: Silicone.
			4. Material: Primer.
			5. Material: Cleaners and Patching.
		2. Surfaces to be Protected:

\*\* NOTE TO SPECIFIER \*\* Delete surfaces to be coated.

* + - 1. Surfaces: Modified Bitumen.
			2. Surfaces: Asphalt built-up.
			3. Surfaces: EPDM/Single Ply/TPO.
			4. Surfaces: Metal.
			5. Surfaces: Concrete.
			6. Surfaces: Foam.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* 1. ROOF PRIMERS

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum 115 Epoxy Roof Primer is a premium grade, water-based epoxy primer for use with Rust-Oleum silicone and elastomeric roof coatings. Rust-Oleum 115 Epoxy Roof Primer improves top-coat adhesion and blocks asphalt bleed-through on built-up (BUR), modified bitumen, and aluminum coated roofs. Rust-Oleum 115 Epoxy Roof Primer also increases long-term adhesion over single-ply roof systems including PVC, EPDM, Hypalon®, and aged TPO, especially in areas that retain water. The advanced two-component formula is VOC compliant and is easily applied by brush, roller, or spray equipment. 115 Epoxy Roof Primer may also be used as a vapor barrier coating on concrete roofs. Provides long-term adhesion on single-ply, metal and asphalt based roof systems
Blocks asphalt bleed-through Creates a smooth base for silicone and acrylic elastomeric coatings. Delete if not required.

* + 1. Product: Rust-Oleum 125 Acrylic Roof Primer.
			1. Resin Type: Polymer emulsion acrylic.
			2. Solvents: Water.
			3. Volatile Organic Compounds: Less than 0.42 lbs/gal (50 g/l).
			4. Recommended Dry Film Thickness (DFT) Per Coat: 7.5 to 8.0 mils (0.19 to 0.20 mm).
			5. Dry Times at 77 degrees F (25 degrees C) and 50 percent Relative Humidity to Touch: 1 hour. To recoat with itself: 6 hours. Return to service after 8 hours.
		2. Product: Rust-Oleum 120 Water Based Asphaltic Roof Primer.
			1. Resin Type: Polymer emulsion asphalt.
			2. Solvents: Water.
			3. Volatile Organic Compounds: Less than 0.02 lbs/gal (2 g/l).
			4. Recommended Dry Film Thickness (DFT) Per Coat: 1.7 to 3.3 mils (0.043 to 0.084 mm).
			5. Dry Times at 77 degrees F (25 degrees C) and 50 percent Relative Humidity to Touch: 30 minutes. To recoat with itself: after 24 hours. Return to service after 2-3 hours.
		3. Product: Rust-Oleum 115 Epoxy Roof Primer.
			1. Resin Type: Water-based epoxy.
			2. Solvents: Water.
			3. Volatile Organic Compounds: Less than 0.709 lbs/gal (85 g/l).
			4. Mix Ratio: 1:1 by volume.
			5. Pot Life at 70 to 80 degrees F (21 to 27 degrees C): 4 hours.
			6. Recommended Dry Film Thickness (DFT) Per Coat: 2 to 3 mils (0.051 to 0.076 mm).
			7. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity to Recoat: 2 hours with itself. After 8 hours and before 5 days with topcoat.
		4. Product: Rust-Oleum 110 Water-Based Rust Primer.
			1. Resin Type: Acrylic.
			2. Solvents: Water.
			3. Volatile Organic Compounds: Less than 0.025 lbs/gal (3 g/l).
			4. Recommended Dry Film Thickness (DFT) Per Coat: 3.5 to 7 mils (0.089 to 0.178 mm).
			5. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity is one hour. Topcoat after 4 hours and before 72 hours with a Rust-Oleum acrylic elastomeric roof coating.
		5. Product: Rust-Oleum 105 Multi-Surface Adhesion Primer.
			1. Resin Type: Acrylic.
			2. Solvents: Water.
			3. Volatile Organic Compounds: Less than 0.667 lbs/gal (80 g/l).
			4. Recommended Dry Film Thickness (DFT) Per Coat: 1.25 to 2 mils (0.032 to 0.051 mm).
			5. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity is one hour minimum. Topcoat same day after 1 hour once the primer is no longer tacky.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* 1. ROOF COATINGS

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum®780 Elastomeric Roof Coating provides a high initial reflectivity value of 85 percent, energy efficiency, long term durability and excellent resistance to weathering and dirt pick-up. This elastomeric roof coating is formulated to meet and/or exceed the standards established in ASTM D 6083. Rust-Oleum 780 Elastomeric Roof Coating waterproofs and weatherproofs metal, weathered single ply membranes as well as smooth surface asphalt built-up and modified bitumen roofing substrates.Delete if not required.

* + 1. Product: Rust-Oleum 780 Elastomeric Roof Coating.
			1. Performance:
				1. 85 percent energy efficient reflective coating.
				2. Rain resistant in 2 hours.
				3. Mildew resistant.
				4. Low temperature flexibility to minus 30 degree F (minus 1.1 degrees C).
			2. Physical Properties:
				1. Resin Type: Water-based Acrylic.
				2. Pigment Type: Titanium Dioxide, Zinc Oxide.
				3. Solvents: Water.
				4. Volatile Organic Compounds: Less than 0.083 lbs/gal (10 g/l).
				5. Recommended Dry Film Thickness (DFT) Per Coat: 12.0 mils (0.305 mm) per coat. (two coats required).
				6. Wet Film to Achieve DFT (Unthinned Material): 24.0 mils (0.610 mm) per coat. (two coats required).
				7. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Touch: 2 hours.

Recoat: 24 hours minimum.

Foot Traffic: 24 hours.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum®750 Elastomeric Roof Coating provides a high initial reflectivity value of 75 percent, energy efficiency, long term durability and excellent resistance to weathering and dirt pick-up. This elastomeric roof coating is formulated to meet and/or exceed the standards established in ASTM D 6083. Rust-Oleum 750 Elastomeric Roof Coating waterproofs and weatherproofs metal, weathered single ply membranes as well as smooth surface asphalt built-up and modified bitumen roofing substrates.Delete if not required.

* + 1. Product: Rust-Oleum 750 Elastomeric Roof Coating.
			1. Performance:
				1. Reflective Coating: 75 percent energy efficient.
				2. Rain resistant in 4 hours.
				3. Mildew resistant.
			2. Physical Properties:
				1. Resin Type: Water-based acrylic.
				2. Pigment Type: Titanium dioxide, zinc oxide.
				3. Solvents: Water.
				4. Volatile Organic Compounds: Less than 0.083 lbs/gal (10 g/l).
				5. Recommended Dry Film Thickness (DFT) Per Coat: 12.0 mils (0.305 mm) per coat. (two coats required).
				6. Wet Film to Achieve DFT (Unthinned Material): 24.0 mils (0.610 mm) per coat. (two coats required).
				7. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Touch: 2 hours.

Recoat: 24 hours minimum.

Foot Traffic: 24 hours.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum®710 Elastomeric Roof Coating provides a high initial reflectivity value of 67 percent, energy efficiency, long term durability and excellent resistance to weathering and dirt pick-up. This elastomeric roof coating is formulated to meet and/or exceed the standards established in ASTM D 6083. Rust-Oleum 710 Elastomeric Roof Coating waterproofs and weatherproofs metal, weathered single ply membranes as well as smooth surface asphalt built-up and modified bitumen roofing substrates.Delete if not required.

* + 1. Product: Rust-Oleum 710 Elastomeric Roof Coating.
			1. Performance:
				1. Reflective Coating: 67 percent energy efficient.
				2. Rain resistant in 4 hours.
				3. Mildew resistant.
			2. Physical Properties:
				1. Resin Type: Water-based acrylic.
				2. Pigment Type: Titanium dioxide, zinc oxide.
				3. Solvents: Water.
				4. Volatile Organic Compounds: Less than 0.083 lbs/gal (10 g/l).
				5. Recommended Dry Film Thickness (DFT) Per Coat: 12.0 mils (0.305 mm) per coat. (two coats required).
				6. Wet Film to Achieve DFT (Unthinned Material): 24.0 mils (0.610 mm) per coat. (two coats required).
				7. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Touch: 2 hours.

Recoat: 24 hours minimum.

Foot Traffic: 24 hours.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum®580 Fibered Aluminum Roof Coating is a metallic pigmented coating used for rust-proofing and weatherproofing metal roofs and sidewalls, and as a reflective coating for built-up roofing (BUR) and modified bitumen roof systems. Rust-Oleum 580 Fibered Aluminum Roof Coating reflects heat, prevents corrosion and protects against mild acid and alkali fumes on a variety of substrates, including metal, transite, built-up roofing and modified bitumen. This reflective coating protects low and steep slope roofs from harmful UV damage while supporting overall energy efficiency.Delete if not required.

* + 1. Product: Rust-Oleum 580 Fibered Aluminum Roof Coating.
			1. Performance:
				1. Reflective Coating: 66 percent reflectivity energy efficient.
				2. Metal Flake Content: 15.9 percent.
				3. No primer needed. 1 coat direct to tightly adhered rust.
				4. Waterproofs and rust proofs metal roofs.
			2. Physical Properties:
				1. Resin Type: Asphaltic fibered aluminum.
				2. Pigment Type: Aluminum flake.
				3. Solvents: Mineral Spirits.
				4. Volatile Organic Compounds: Less than 3.313 lbs/gal (397 g/l).
				5. Recommended Dry Film Thickness (DFT) Per Coat: 12.0 mils (0.305 mm) per coat.
				6. Wet Film to Achieve DFT (Unthinned Material): 24.0 mils (0.610 mm) per coat.
				7. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Touch: 4 hours.

Full Cure: 24 hours minimum.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum®550 Fibered Aluminum Roof Coating is a metallic pigmented coating used for rust-proofing and weatherproofing metal roofs and sidewalls, and as a reflective coating for built-up roofing (BUR) and modified bitumen roof systems. Rust-Oleum 550 Fibered Aluminum Roof Coating reflects heat, prevents corrosion and protects against mild acid and alkali fumes on a variety of substrates, including metal, transite, built-up roofing and modified bitumen. This reflective coating protects low and steep slope roofs from harmful UV damage while supporting overall energy efficiency.Delete if not required.

* + 1. Product: Rust-Oleum 550 Fibered Aluminum Roof Coating.
			1. Performance:
				1. Reflective Coating: 60 percent reflectivity energy efficient.
				2. Metal Flake Content: 11.4 percent.
				3. No primer needed. 1 coat direct to tightly adhered rust.
				4. Waterproofs and rust proofs metal roofs.
			2. Physical Properties:
				1. Resin Type: Asphaltic fibered aluminum.
				2. Pigment Type: Aluminum flake.
				3. Solvents: Mineral spirits.
				4. Volatile Organic Compounds: Less than 3.897 lbs/gal (467 g/l).
				5. Recommended Dry Film Thickness (DFT) Per Coat: 12.0 mils (0.305 mm) per coat.
				6. Wet Film to Achieve DFT (Unthinned Material): 24.0 mils (0.610 mm) per coat.
				7. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Touch: 4 hours.

Full Cure: 24 hours minimum.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum®510 Fibered Aluminum Roof Coating is a metallic pigmented coating used for rust-proofing and weatherproofing metal roofs and sidewalls, and as a reflective coating for built-up roofing (BUR) and modified bitumen roof systems. Rust-Oleum 510 Fibered Aluminum Roof Coating reflects heat, prevents corrosion and protects against mild acid and alkali fumes on a variety of substrates, including metal, transite, built-up roofing and modified bitumen. This reflective coating protects low and steep slope roofs from harmful UV damage while supporting overall energy efficiency.Delete if not required.

* + 1. Product: Rust-Oleum 510 Fibered Aluminum Roof Coating.
			1. Performance:
				1. Reflective Coating: 50 percent reflectivity energy efficient.
				2. Metal Flake Content: 9.7 percent.
				3. No primer needed. 1 coat direct to tightly adhered rust.
				4. Waterproofs and rust proofs metal roofs.
			2. Physical Properties:
				1. Resin Type: Asphaltic fibered aluminum.
				2. Pigment Type: Aluminum flake.
				3. Solvents: Mineral spirits.
				4. Volatile Organic Compounds: Less than 3.246 lbs/gal (389 g/l).
				5. Recommended Dry Film Thickness (DFT) Per Coat: 12.0 mils (0.305 mm) per coat.
				6. Wet Film to Achieve DFT (Unthinned Material): 24.0 mils (0.610 mm) per coat.
				7. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Touch: 4 hours.

Full Cure: 24 hours minimum.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum 980 Silicone Roof Coating is a high solids, 100 percent silicone based roof coating that creates a durable, breathable, watertight and weatherproof barrier that resists natural weathering and reflects heat from the sun. 980 Silicone Roof Coating resists ultraviolet radiation and adapts to temperature extremes to provide long-term weathering protection and energy savings. The premium high solids formula allows for one coat application without the use of a primer. 980 Silicone Roof Coating can be applied over spray applied polyurethane foam; aged single-ply roofs including PVC, EPDM, TPO, Hypalon®; aged acrylic coatings; concrete; asphalt built-up roofs; granulated modified bitumen; metal; RV and trailers roofs; and over existing silicone roof coatings. 980 Silicone Roof Coating contains no solvents.Delete if not required.

* + 1. Product: Rust-Oleum 980 Silicone Roof Coating.
			1. Performance:
				1. One Coat Application: Due to 100 percent silicone, and 98 percent solids.
				2. Reflectivity: 84 percent.
				3. Resists ponding water.
				4. Resists rain after 2 hours.
			2. Physical Properties:
				1. Resin Type: 100 percent silicone.
				2. Pigment Type: Titanium dioxide.
				3. Solvents: None.
				4. Volatile Organic Compounds: Less than 0.209 lbs/gal (25 g/l).
				5. Recommended Dry Film Thickness (DFT) Per Coat: 24.0 mils (0.610 mm) for single coat application. 15 mils (0.381 mm) for multi-coat application.
				6. Wet Film to Achieve DFT (Unthinned Material): 25.0 mils (0.635 mm) for single coat application. 16.0 mils (0.406 mm) for multi-coat application.
				7. Dry Times at 70 to 80 degrees F (21-27 degrees C) and 50 percent Relative Humidity:

Touch: 2 hours.

Recoat: 2 to 4 hours.

Return to Service: 24 hours.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum® 350 Fibered Black Roof Coating is a high quality, cold process, asphalt-based roof coating formulated to protect against the detrimental effects of the environment. It is designed for the waterproofing, weather proofing and maintenance of smooth asphalt built-up and modified bitumen roofing membranes.Delete if not required.

* + 1. Product: Rust-Oleum 350 Fibered Black Roof Coating.
			1. Performance:
				1. Premium water proofer and weather proofer for smooth asphalt built-up and modified bitumen roofing.
				2. Revitalizes older roofs.
				3. Low temperature application.
				4. Spray or brush grade.
			2. Physical Properties:
				1. Resin Type: Asphalt.
				2. Pigment Type: Asphalt.
				3. Solvents: Mineral spirits.
				4. Volatile Organic Compounds: Less than 2.086 lbs/gal (250 g/l).
				5. Recommended Dry Film Thickness (DFT) Per Coat: 30.0 mils (0.762 mm).
				6. Wet Film to Achieve DFT (Unthinned Material): 56.0 mils (1,422 mm).
				7. Dry Times at 70 to 80 degrees F (21-27 degrees C) and 50 percent Relative Humidity:

Touch: 1 hour.

Topcoat: 4 to 6 hours.

Fully Cured: 24 hours.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum® 380 Non-Fibered Asphalt Emulsion Coating is a premium, water-based protective coating for built-up asphalt roofing and concrete foundations. Asphalt emulsions are faster drying, low odor alternatives to solvent-based asphalt roof coatings. 380 Non-Fibered Asphalt Emulsion can be used as a base coat for reflective coatings or as a protective coating for new or existing composition roofs with smooth (not graveled) surfaces. 380 Non-Fibered Asphalt Emulsion can also be used for damp-proofing exterior below-grade foundations and walls.Delete if not required.

* + 1. Product: Rust-Oleum 380 Non-Fibered Asphalt Emulsion Coating.
			1. Performance:
				1. Ideal as a base coat under reflective coatings.
				2. Waterproof when dry; corrosion resistant.
				3. Will not run, crack or sag in extreme weather.
			2. Physical Properties:
				1. Resin Type: Asphalt emulsion.
				2. Pigment Type: Asphalt clay emulsion.
				3. Solvents: Water.
				4. Volatile Organic Compounds: Less than 0.417 lbs/gal (50 g/l).
				5. Recommended Dry Film Thickness (DFT) Per Coat: 20 to 24 mils (0.508 to 0.610 mm).
				6. Wet Film to Achieve DFT (Unthinned Material): 48.0 mils (1.219 mm).
				7. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Foot Traffic: 6 to 8 hours.

Below Grade 24 to 48 hours.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum 310 Roof and Foundation Coating is a non-fibered asphalt emulsion coating that can be applied as a high quality primer and thin base coat for use with Rust-Oleum 350 Fibered Black Roof Coating and other black roof coatings, or as a dampproofer on vertical construction surfaces to protect against moisture penetration. 310 Roof and Foundation Coating fills surface pores and protects against moisture penetration.Delete if not required.

* + 1. Product: Rust-Oleum 310 Roof and Foundation Coating.
			1. Performance:
				1. Protects and seals roofs and foundation walls.
				2. Spray grade; non-fibered.
				3. Rain resistant in 2 hours.
				4. Use on built-up and modified bitumen roofing and damp or green concrete.
			2. Physical Properties:
				1. Resin Type: Asphalt emulsion.
				2. Pigment Type: Asphalt.
				3. Solvents: Water.
				4. Volatile Organic Compounds: Less than 0.083 lbs/gal (10 g/l).
				5. Recommended Dry Film Thickness (DFT) Per Coat: 15.0 mils (0.381 mm).
				6. Wet Film to Achieve DFT (Unthinned Material): 30.0 mils (0.762 mm).
				7. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Touch: 1 hour.

Back Filled: 2 hours.

Fully Cured: 24 hours.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* 1. PATCHING AND SEALANTS

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum® Clear Acrylic Roof Sealant is a multi-purpose acrylic sealant designed for sealing roofs, walls, trim, doors and windows. It is ideal for residential and commercial sealant applications. The water-based, environmentally friendly formula has little odor and is easy to tool. It is non-yellowing and creates a clear seal that remains flexible and can be painted.
Flexible for long lasting protection. Great for Roofs, Doors, Windows. Adheres to metal, vinyl, wood, tile, masonry, glass, and most roofing surfaces. Ideal for sealing metal roofs and for application under elastomeric roof coatings.Delete if not required.

* + 1. Product: Rust-Oleum Clear Acrylic Roof Sealant.
			1. Performance:
				1. Seals seams and flashings.
				2. Suitable for use on vinyl, wood, concrete, tile, masonry and glass.
				3. Remains flexible.
			2. Color: Clear.
			3. Physical Properties:
				1. Resin Type: Elastomeric acrylic.
				2. Pigment Type: None.
				3. Solvents: Water.
				4. VOC: Less than 0.209 lbs/gal (25 g/l).
				5. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Through Dry: 4 to 8 hours.

Full Cure: 24 hours.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum® Roof and Construction Sealant is a high performance elastomeric sealant for sealing roofs, walls, trim, doors and windows. The water-based sealant remains highly flexible to accommodate thermal stress movement without cracking. It is ideal for both residential and commercial applications. Roof and construction sealant dries white and can be painted.
Highly flexible for long lasting protection. Great for Roofs, Doors, Windows. Excellent adhesion to metal, vinyl, wood, tile, masonry, glass, and most roofing surfaces. Ideal for sealing metal roofs and for application under elastomeric roof coatings.Delete if not required.

* + 1. Product: Rust-Oleum Roof and Construction Sealant.
			1. Performance:
				1. Remains highly flexible.
				2. Ideal for roofs, doors and windows.
				3. Suitable for use on vinyl, wood, masonry and most roofing surfaces.
			2. Color: Paintable.
			3. Physical Properties:
				1. Resin Type: Elastomeric acrylic.
				2. Pigment Type: Titanium dioxide, mineral.
				3. Solvents: Water.
				4. VOC: Less than 0.209 lbs/gal (25 g/l).
				5. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Through Dry: 4 to 8 hours.

Full Cure: 24 hours.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum® Neoprene Rubber Flashing Cement is a 100 percent synthetic rubber based sealant for sealing and repairing all types of flashing, metal roofs and trailers, built-up roofing, modified bitumen, asphalt, Kynar, EPDM and TPO surfaces. It is ideal for caulking termination bars, metal flashing and fasteners. The premium grade formula has excellent adhesion on wet or dry surfaces and outstanding flexibility. Rust-Oleum Neoprene Rubber Flashing Cement contains no asphalt and dries to a black, paintable finish. Excellent adhesion on wet or dry surfaces. Outstanding flexibility and tensile strength. Resists cracking for long lasting protection. Sag resistant, suitable for vertical repairs. Applies smooth, can be painted when dry.Delete if not required.

* + 1. Product: Rust-Oleum Neoprene Rubber Flashing Cement.
			1. Performance:
				1. Excellent adhesion to wet or dry surfaces.
				2. Outstanding flexibility and tensile strength.
				3. Resists cracking for long lasting protection.
				4. Sag resistant, suitable for vertical repairs.
				5. Applies smooth, can be painted when dry.
			2. Physical Properties:
				1. Resin Type: Asphalt.
				2. Pigment Type: Mineral.
				3. Solvents: Mineral spirits.
				4. VOC: 3.338 lbs/gal (400 g/l) maximum.
				5. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Through Dry: 2 hours.

Full Cure: 24 hours.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum® Plastic Roof Cement is a fibered, asphalt based cement that provides a strong and flexible seal and resists cracking. Ideal for installing or repairing roof flashings at valleys, parapet walls, gravel stops, stacks, vents, monitors and similar applications. Also suitable for sealing cracks in exterior foundation and chimney walls. It is perfect for use with fiberglass or polyester fabric or roll roofing for permanent repairs. Rust-Oleum Plastic Roof Cement applies fast and smooth without stringing. Use on roofs, chimneys, skylights, flashing. Applies smooth without stringing. Fiber reinforced for long term durability.Delete if not required.

* + 1. Product: Rust-Oleum Plastic Roof Cement.
			1. Performance:
				1. For use on roofs, skylights, flashings and chimneys.
				2. Applies smooth without stringing.
				3. Fibered, asphalt based.
			2. Physical Properties:
				1. Resin Type: Asphalt.
				2. Pigment Type: Mineral.
				3. Solvents: Mineral spirits.
				4. VOC: Less than 2.086 lbs/gal (250 g/l).
				5. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Through Dry: 2 hours.

Full Cure: 24 hours.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum® Rubberized Wet Patch is a premium quality, heavily fibered, asphalt-based roof cement blended with penetrating oils and plasticizing agents that can be applied directly to cold, hot, wet, dry or underwater surfaces. Rubberized Wet Patch can be used to repair and restore flashings and roofing defects such as blisters, cracks, and punctures. It can also be used to adhere new asphalt ply and modified bitumen membrane flashings or seal vents, shingles, skylights, and chimneys. Rubberized Wet Patch resists sags and spreads easily in cold conditions. Excellent adhesion to cold, hot, wet, dry or underwater surfaces. Permits immediate all-weather repairs. Heavily fibered for increased durability and longevity. Highly flexible to prevent cracking. Sag resistant; ideal for vertical repairs.Delete if not required.

* + 1. Product: Rust-Oleum Rubberized Wet Patch.
			1. Performance:
				1. Excellent adhesion for immediate all-weather repairs.
				2. Heavily fibered for increased durability and longevity.
				3. Highly flexible to prevent cracking.
				4. Sag resistant, suitable for vertical repairs.
				5. Available in container and cartridge.
			2. Physical Properties:
				1. Resin Type: Asphalt.
				2. Pigment Type: Mineral.
				3. Solvents: Mineral spirits.
				4. VOC: Maximum 2.086 lbs/gal (250 g/l).
				5. Recommended Dry Film Thickness (DFT) Per Coat: 90 mils (2.286 mm).
				6. Wet Film Thickness to Achieve DFT (unthinned material): 125 mils (3.175 mm).
				7. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Through Dry: 2 to 4 hours.

Full Cure: 24 hours.

\*\* NOTE TO SPECIFIER \*\* Rust-Oleum® Elastomeric Roof Patch is a high performance acrylic elastomeric roof sealant intended for application to metal, asphalt, modified bitumen and most single-ply roofs. The highly flexible, rubber-like elasticity accommodates wide swings in temperature and significant building movement. Rust-Oleum Elastomeric Roof Patch is UV Stable and may be used to repair roofs and seal metal roof fasteners. Elastomeric Roof Patch dries white and can be painted or coated with elastomeric roof coatings. Excellent adhesion and flexibility for long lasting protection. Patches seams and splits and seals roof fasteners. Use on metal, asphalt, MB, and most single-ply roofs. Ideal for sealing metal roofs and for application under elastomeric roof coatings.Delete if not required.

* + 1. Product: Rust-Oleum Elastomeric Roof Patch.
			1. Performance:
				1. Patches seams and splits and seals roof fasteners.
				2. Excellent adhesion and flexibility.
				3. Use on metal, asphalt, modified bitumen and most single-ply roofs.
			2. Physical Properties:
				1. Resin Type: Elastomeric acrylic.
				2. Pigment Type: Titanium dioxide.
				3. Solvents: Water.
				4. VOC: Less than 0.209 lbs/gal (25 g/l).
				5. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Recoat: 4 to 8 hours.

Full Cure: 24 hours depending on temperature.

* + 1. Product: Rust-Oleum Silicone Roof Sealant.
			1. Performance:
				1. Use to seal and repair roofs, masonry, architectural metal and metal roof seams and fasteners.
				2. Use to seal penetrations and terminations.
				3. Solvent free and minimal odor.
				4. Excellent adhesion to concrete, masonry, polyurethane foam, EPDM, aged PVC, aged acrylic coatings, granular cap sheet, wood, metals, Kynar and most other common building materials.
				5. May be applied to wet and underwater surfaces.
			2. Physical Properties:
				1. Resin Type: Silicone.
				2. Pigment Type: Mineral.
				3. Solvents: Not applicable.
				4. VOC: Less than 50 g/l.
				5. Dry Times at 70 to 80 degrees F (21 to 27 degrees C) and 50 percent Relative Humidity:

Touch: 1 to 2 hours.

Recoat: 4 to 8 hours.

Full Cure: 2-4 hours depending on temperature.

* + 1. Product: Universal Patching Fabric.
	1. ROOF CLEANERS
		1. Product: Rust-Oleum Krud Kutter Original Cleaner.
		2. Product: Rust-Oleum Krud Kutter Concrete & Driveway Cleaner Concentrate.
		3. Product: Rust-Oleum Krud Kutter Mold & Mildew Stain Remover Concentrate.
		4. Product: Rust-Oleum Krud Kutter Multi-Purpose Cleaner Concentrate.
		5. Product: Krud Kutter Gutter Wash.
1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until substrates have been properly prepared.
		2. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
	2. PREPARATION
		1. General: Surfaces shall be dry and in sound condition. Remove oil, dust, dirt, loose rust, peeling paint or other contamination to ensure good adhesion.
			1. Remove mildew before painting by washing with a solution of 1 part liquid household bleach and 3 parts of warm water or appropriate Rust-Oleum roof cleaning product. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with clean water and allow the surface to dry a minimum of 48 hours before painting. Wear protective glasses or goggles, waterproof gloves, and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. Do not add detergents or ammonia to the bleach/water solution.
			2. No exterior painting should be done immediately after a rain, during foggy weather, when rain is predicted, or when the temperature is below 50 degrees F (10 degrees C), unless products are designed specifically for these conditions. The air, surface and material temperatures must be 50 degrees F (10 degrees C) and less than 120 degrees F (49 degrees C). For optimum results, the protective coating must be applied after the morning dew has dried on a sunny day and postponed if rain is imminent.
			3. Atmospheric conditions such as humidity, cooler temperatures, surface temperatures above 120 degrees F (49 degrees C), and field conditions are all factors in a coating's ability to cure. Air temperature must be 50 degrees F (10 degrees C) dry and rising and must be a minimum of 5 degrees F (2.78 degrees C) above the dew point.
		2. Verify the existence of lead based paints on the project. Buildings constructed after 1978 are less likely to contain lead based paints. If lead based paints are suspected on the project, all removal must be done in accordance with the EPA Renovation, Repair and Painting rule and all applicable state and local regulations. State and local regulations may be more strict than those set under the federal regulations. Verify that Owner has completed a Hazardous Material Assessment Report for the project prior to issuing of Drawings.
		3. Metal Roof Systems:
			1. Loose rust, mill scale, and paint must be removed by any of the following: SSPC-SP2 Hand Tool Cleaning to include scraping, sanding, and wire brushing; SSPC-SP3 Power Tool Cleaning to include power sanding, power wire brushing, or power grinding; WJ-4 High Pressure Water Cleaning to include high pressure water blast at not less than 2,000 psi (13789 kPa) using Rust-Oleum Krud Kutter Multi-Purpose Cleaner.
			2. Roof surfaces containing heavy soot, dirt, chemical contaminants, oil, grease, or wax deposits must be cleaned with a surface cleaner and rinsed thoroughly with high pressure water blast. Note: New galvanized panels must be weathered a minimum of six months or treated with a phosphoric acid wash to remove factory oil film.
			3. Severe chalking, if evident, must be removed to ensure adhesion, as must all debris, dust and dirt by using high pressure water wash.
			4. Remove all existing acrylic and asphalt coatings and all existing sealants and mastics prior to installing Rust-Oleum Roof Patches. All rusted areas must be primed prior to the application of the patch.
			5. If previously coated, check for adhesion and compatibility of any remaining, tightly adhered, existing coating with Rust-Oleum Roof Coatings. A test application is the best method of determining compatibility with and adhesion to a previously coated surface. After application and curing of the test area, an X-Cut Tape Test per ASTM D 3359 is used to determine adhesion of the existing coating to the substrate. Contact Rust-Oleum's Technical Department for further information.
			6. Roof panels exhibiting holes and/or posing safety concerns should be replaced with new metal panels with a similar panel design.
			7. Closely inspect underside of all metal panels for corrosion at endlaps, curbs and penetrations. Replace as required.
			8. If metal panel finish is Kynar 500 or similar, please contact the Rust-Oleum Technical Department for alternative recommendations.
			9. All end-lap (horizontal) and faulty side-lap (vertical) seams must be treated with the proper Rust-Oleum patching product and back-brushed into any open seam areas. Seams with openings between 1/8 and 1/4 inch (3 and 6 mm), reinforce Rust-Oleum patching product with Universal Patching Fabric in a three-course combination. Seams with greater than 1/4 inch (6 mm) openings must be drawn together with a self-tapping sheet metal screw and neoprene washer.
			10. Check and tighten all fasteners. Replace stripped or missing fasteners using an oversize "repair type" fastener; BUILDEX TRAXX or TEKS, FABCO, FAB-LOK, or equivalent. Add additional fasteners, where necessary, to draw uplifted sheets together. Encapsulate all fasteners with Rust-Oleum patching product.
		4. Modified Bitumen and Built Up Roof Systems
			1. Remove all loose granules, paint, dirt, dust, debris, and similar items, by mechanical brush, stiff broom, vacuum, power washing, as suitable. All surfaces must be clean and dry. Surfaces exhibiting algae growth must be cleaned with a bleach/water solution or Rust-Oleum Krud Kutter Mold & Mildew Stain Remover Concentrate and rinsed thoroughly.
			2. Flashings, blisters, and other damaged areas must be repaired and allowed to cure for 48 to 72 hours prior to applying the Rust-Oleum Roof Coating to the entire roof.
			3. Blisters need to be removed and replaced with granular modified bitumen cap sheet. The membrane should be installed per the manufacturer's written specifications, to bring the roof membrane back to level with the existing membrane. Once repair is fully cured, 3-course the perimeter of the repair.
			4. If previously coated, check for adhesion and compatibility of any remaining, tightly adhered, existing coating with Rust-Oleum Roof Coatings. A test application is the best method of determining compatibility with and adhesion to a previously coated surface. After application and curing of the test area, an X-Cut Tape Test per ASTM D3359-09 is used to determine adhesion of the existing coating to the substrate. Contact Rust-Oleum's Technical Department for further information.
			5. Permanent or continuous ponded areas must be eliminated, 1/4 inch per foot (21 mm per m) slope minimum. These areas must be corrected via the addition of tapered insulation, additional roof and/or through wall drains or the relocation of existing scuppers.
		5. Single Ply/EPDM/TPO Roof Systems
			1. Remove all loose paint, dirt, dust, debris, and similar items, by mechanical brush, stiff broom, vacuum, power washing, as suitable. All surfaces must be clean and dry. Surfaces exhibiting algae growth must be cleaned with a bleach/water solution or Rust-Oleum Krud Kutter Mold & Mildew Stain Remover Concentrate and rinsed thoroughly.
			2. Flashings, blisters, and other damaged areas must be repaired and allowed to cure for 48 to 72 hours prior to applying the Rust-Oleum Roof Coating to the entire roof.
			3. Blisters need to be removed and replaced with single ply cap sheet. The membrane should be installed per the manufacturer's written specifications, to bring the roof membrane back to level with the existing membrane. Once repair is fully cured, 3-course the perimeter of the repair.
			4. If previously coated, check for adhesion and compatibility of any remaining, tightly adhered, existing coating with Rust-Oleum Roof Coatings. A test application is the best method of determining compatibility with and adhesion to a previously coated surface. After application and curing of the test area, an X-Cut Tape Test per ASTM D3359-09 is used to determine adhesion of the existing coating to the substrate. Contact Rust-Oleum's Technical Department for further information.
			5. Permanent or continuous ponded areas must be eliminated, 1/4 inch per foot (21 mm per m) slope minimum. These areas must be corrected via the addition of tapered insulation, additional roof and/or through wall drains or the relocation of existing scuppers.
		6. Concrete and Foam Roof Systems:
			1. Remove all loose paint, dirt, dust, debris, and similar items, by mechanical brush, stiff broom, vacuum, power washing, as suitable. All surfaces must be clean and dry. Surfaces exhibiting algae growth must be cleaned with a bleach/water solution or Rust-Oleum Krud Kutter Mold & Mildew Stain Remover Concentrate or appropriate Krud Kutter Cleaner and rinsed thoroughly.
			2. Flashings, blisters, and other damaged areas must be repaired and allowed to cure for 48 to 72 hours prior to applying the Rust-Oleum Roof Coating to the entire roof.
			3. Blisters need to be removed and replaced with the appropriate patching procedure for the substrate. The patching material should be installed per the manufacturer's written specifications, to bring the roof membrane back to level with the existing membrane. Once repair is fully cured, 3-course the perimeter of the repair.
			4. If previously coated, check for adhesion and compatibility of any remaining, tightly adhered, existing coating with Rust-Oleum Roof Coatings. A test application is the best method of determining compatibility with and adhesion to a previously coated surface. After application and curing of the test area, an X-Cut Tape Test per ASTM D3359-09 is used to determine adhesion of the existing coating to the substrate. Contact Rust-Oleum's Technical Department for further information.
			5. Permanent or continuous ponded areas must be eliminated, 1/4 inch per foot (21 mm per m) slope minimum. These areas must be corrected via the addition of tapered insulation, additional roof and/or through wall drains or the relocation of existing scuppers.
	3. INSTALLATION
		1. Install in accordance with manufacturer's instructions, approved submittals and in accordance with manufacturer's recommendations and recommended surface preparation.
			1. Rust-Oleum Roof Coatings may be applied by roller, brush, or heavy duty airless spray. Consult manufacturer's TDS for specific information. Coating must be applied to the proper film build required for each system uniformly and without pinholes.
			2. Skill and experience of the spray applicator is important to the success of the coating application. Periodic checking of the film build is necessary to ensure best results.
			3. Do not permit traffic on completed roof surfaces unless absolutely necessary, and only after complete cure.
			4. For optimum results, the protective coating must not be applied to wet or damp surfaces, and postponed if rain is imminent. Failure to comply can result in blistering.
	4. PROTECTION
		1. Protect installed products until completion of project.
		2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION