

This Manu-Spec® utilizes the Construction Specifications Institute (CSI) Project Resource Manual (PRM), including MasterFormat™, SectionFormat™ and PageFormat™. A Manu-Spec is a manufacturer-specific proprietary product specification using the proprietary method of specifying applicable to project specifications and master guide specifications. Optional text is indicated by brackets []; delete optional text in final copy of specification. Specifier Notes precede specification text; delete notes in final copy of specification. Trade/brand names with appropriate product model numbers, styles and types are used in Specifier Notes and in the specification text Article titled "Acceptable Material." Metric conversion, where used, is soft metric conversion.

This Manu-Spec specifies coated foamed roofing manufactured by SWD Urethane. Revise Manu-Spec section number and title below to suit project requirements, specification practices and section content. Refer to CSI MasterFormat for other section numbers and titles.

07 5700
COATED FOAMED ROOFING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
1. Coated Foamed Roofing System.
 2. [].

Specifier Note: Revise Paragraph below to suit project requirements. Add section numbers and titles per CSI MasterFormat and specifiers practice.

- B. Related Sections:

Specifier Note: Include in this Paragraph only those sections and documents that directly affect the work of this section. If a reader of this section could reasonably expect to find a product or component specified in this section, but it is actually specified elsewhere, then the related section number(s) should be listed in the Subparagraph below. Do not include Division 00 documents or Division 01 sections since it is assumed that all technical sections are related to all project Division 00 documents and Division 01 sections to some degree. Refer to other documents with caution since referencing them may cause them to be considered part of the Contract.

1. Section [03 3000 – Cast-In-Place Concrete] for concrete roof deck material.
2. Section [05 300 – Metal Decking] for metal roof deck material.
3. Section [06 1516 – Wood Roof Decking] for wood roof deck material.
4. [].

Specifier Note: Define terms that are unique to this Section and are not provided elsewhere in the contract documents. Include in the Article terms that are unique to the work result specified that may not be commonly known in the construction industry.

1.2 REFERENCE STANDARDS:

Specifier Note: Paragraph below may be omitted when specifying manufacturer's proprietary products and recommended installation. Retain References Paragraph when specifying products and installation by an industry reference standard. List retained standard(s) referenced in this section alphabetically. Indicate issuing authority name, acronym, standard designation and title. Establish policy for indicating edition date of standard referenced. Contract Conditions Section 01 42 00 - References may establish the edition date of standards. This Paragraph does not require compliance with standard(s). It is a listing of all references used in this section. Only include here standards that are referenced in the body of the specification in PARTS 1, 2

and/or 3. Do not include references to building codes at any level.

- A. ASTM International (ASTM):
 - 1. ASTM D-6083 - Standard Specification for Liquid Applied Acrylic Coating Used In Roofing.
 - 2. ASTM E84 – Standard Test Method for Surface Burning Characteristics of Building Materials.
- B. International Code Council (ICC)
 - 1. ICC-ES AC 377 - Acceptance Criteria For Spray-Applied Foam Plastic Insulation
- C. Miami-Dade Notice of Acceptance.
 - 1. 14-1124.02.
 - 2. 14-1124.03.
 - 3. 14-1124.04.
 - 4. 14-1124.05.
- D. Underwriters Laboratories (UL):
 - 1. UL 790 (ASTM E108) – Standard Test Methods for Fire Tests of Roof Coverings.

Specifier Note: Article below includes submittal of relevant data to be furnished by Contractor before, during or after construction. Coordinate this article with Architect's and Contractor's duties and responsibilities in Contract Conditions and Section 01 33 00 - Submittal Procedures.

1.3 SUBMITTALS

- A. Product Data: Manufacturer's standard specifications, and descriptive literature, including:
 - 1. Spec-Data product information sheets.
 - 2. Safety Data Sheets (SDS).
 - 3. Building code evaluation reports.
 - 4. Sample warranty forms.
 - 5. Warranty process requirements for pre-project submittal, field inspection, final project approval, and warranty extensions.
 - 6. [].
- B. Shop Drawings: Graphic information specifically prepared for this Project, including:
 - 1. Dimensioned roof plans, and construction details indicating full extent of coated foamed roofing work, including: substrate joints and cracks, inside and outside corners, flashings, perimeters, penetrations, and other termination conditions.
 - 2. Verified field dimensions.
- C. Certification letter prepared by manufacturer documenting experience, training, and acceptance of authorized installer.

Specifier Note: Specify submittals intended to document manufacturer storage, installation and other instructions.

- D. Manufacturer's Instructions, including:
 - 1. Delivery, storage and handling.
 - 2. Environmental conditions.
 - 3. Preparation and installation.
 - 4. Maintenance information.
- E. Manufacturer's field reports.

Specifier Note: Coordinate Article below with Contract Conditions and with Section 01 78 36 - Warranties.

Specifier Note: SWD Urethane provides numerous warranties. Select warranty to meet project requirements.

- F. [Roof Warranty: Manufacturer's [5-year] [10-year] [15-year] Material Limited Warranty against leaks caused by defects in materials, including cost of material only].
- G. [Roof Warranty: Manufacturer's [5-year] [10-year] [15-year] [20-year] System Limited Warranty against leaks caused by defects in materials, including cost of labor and material].
- H. [Roof Warranty: Manufacturer's [5-year] [10-year] [15-year] [20-year] No-Dollar-Limit (NDL) Warranty against leaks caused by defects in materials, including cost of labor and material].
- I. [Roof Warranty: Manufacturer's [5-year] [10-year] [15-year] Restoration Coating Limited Warranty against leaks caused by defects in materials, including cost of material only].
- J. [].

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized installer.
- B. Installation Documents On-Site: Maintain copies of manufacturer's installation instructions, approved submittals, and related documents on-site; make available as needed to confirm proper installation.
- C. [].

1.5 DELIVERY, STORAGE AND HANDLING

- A. A. Deliver, store, and handle coated foamed roofing products in accordance with manufacturer's instructions.
- B. Deliver materials in manufacturer's original packaging with identification labels intact.
- C. Store materials protected from exposure to harmful weather conditions and at temperature conditions in accordance with manufacturer's instructions.
- D. Handle materials with care to avoid damage. Do not install damaged products.

PART 2 PRODUCTS

Specifier Note: Retain Article below for proprietary method specification. Add product attributes, performance characteristics, material standards and descriptions as applicable. Use of such phrases as or equal, approved equal or similar phrases may cause ambiguity in specifications. Such phrases require verification (procedural, legal and regulatory) and assignment of responsibility for determining or equal products.

2.1 COATED FOAMED ROOFING SYSTEM

Specifier Note: Include in the following Paragraph; manufacturer's name, address, phone number, fax number, e-mail address and website URL.

- A. Manufacturer: SWD Urethane; 540 South Drew Street; Mesa, AZ 85210; Phone: 800-828-1394; Fax: 480-461-6926; Email: sales@swdurethane.com; Website: www.swdurethane.com .

Specifier Note: Substitution procedures must either be in the Contract Conditions or in Section 01 25 00 - Substitution Procedures. Do not include substitution procedures here.

- 1. Single Source Responsibility: Provide components and materials specified in this section from same manufacturer.
- 2. Substitutions: No substitutions permitted.

Specifier Note: Include an overall description of the system, assembly, product or material. Include required properties or characteristics that do not obviously belong under other titles. Examples: Configuration, size and color.

Specifier Note: Coordinate reference standard acronyms used in PART 2 with PART 1, Reference Standards.

- B. Description: Quik-Shield 125 Coated Foamed Roofing System; monolithic, insulating roof assembly consisting of primer, polyurethane insulation, and coating materials; used for construction of Class A and Class B roof systems; meeting UL 790 (ASTM E108) Class A and B, R9303, #35, #136, #181, and #206; UL P904; UL P733; and UL P826; tested for building code compliance, and material properties with results documented in building code evaluation report.
 - 1. System Design: Recommended by manufacturer, building code evaluation report, and approved by authorities having jurisdiction.
 - 2. Fire rating: Pass fire tests meeting ASTM E84, ASTM E108, UL 263 and L790.

2.2 MATERIALS

Specifier Note: SWD Urethane provides two primers. Select primer to meet project requirements.

- A. Primer: [Quik-Shield 1000 Primer] [Quik-Shield 2000 Low VOC Primer] for proper adhesion to roof substrate.
 - 1. Type: Neoprene-based.
 - 2. Installation method: Brushed, rolled, or spray-applied.
- B. Polyurethane Insulation: Quik-Shield 125; two-component, closed-cell, polyurethane foam plastic insulation; meeting ICC-ES AC 377.
 - 1. Components:
 - a. Part A: Polymeric isocyanate.
 - b. Part B: Proprietary resin.

Specifier Note: Quik-Shield 125 is available in three temperature related grades. Select grade to meet project requirements.

- 2. Grades:

- a. Seasonal grades available to enhance reactivity. Consult with manufacturer for recommendation and application instructions.
3. Installation method: Spray-applied in one or more 1/2 inch to 2 inch thick (12.7 mm to 51 mm) coats.

Specifier Note: Quik-Shield 125 is suitable for installation on wood, metal, and concrete substrates. Select one or more substrates to meet project requirements. Note substrates and thicknesses on drawings, or schedule in PART 3, Attachments.

4. [Thickness on wood substrates: 1 inch (25.4 mm) minimum; maximum thickness unlimited].
5. [Thickness on metal substrates: 1 1/2 inch (38 mm) minimum; maximum thickness unlimited].
6. [Thickness on concrete substrates: 1 inch (25.4 mm) minimum; maximum thickness unlimited].
7. [Thickness over existing roof systems: Recommended by manufacturer, and approved by authorities having jurisdiction].
8. [].

Specifier Note: Quik-Shield 125 is available in three densities. Select density to meet project requirements.

9. Density: [2.5 lb/ft³ (12.2 kg/m²)] [2.8 lb/ft³ (13.7 kg/m²)] [3.0 lb/ft³ (14.7 kg/m²)].
10. Thermal resistance: R-6.3 for 1 inch (25.4 mm) thickness at 75 degrees F (24 degrees C).
11. Water vapor permeance: 1.4 perms for 1 inch (25.4 mm) thickness.

Specifier Note: Match compressive strength to density selected.

12. Compressive strength: [40-45 lb/in² (276-311 kPa) for 2.5 lb/ft³ (12.2 kg/m²) density] [50-55 lb/in² (345-380 kPa) for 2.5 lb/ft³ (13.7 kg/m²) density] [60-65 lb/in² (414-449 kPa) for 2.5 lb/ft³ (14.7 kg/m²) density].
13. [].

C. Coatings:

1. Base coat: Quik-Shield 1929 F Flame Retardant Acrylic Coating; for protection of polyurethane foam against normal weathering, aging, and ultraviolet radiation.
 - a. Type: Elastomeric, water-based acrylic coating.
 - b. Installation method: Brushed, rolled, or spray-applied.
2. Top coat: Same as base coat.
3. Surface coat; granules:
 - a. Type: No. 9 or No. 11 limestone or coated granules.
 - b. Installation method: Broadcast into wet top coat.
4. Surface coat; cementitious: Quik-Shield 2020 Cementitious Roof Coating; for increased fire protection of combustible roof substrate.
 - a. Type: Cement-based acrylic coating.
 - b. Installation method: Troweled or spray-applied.

Specifier Note: Select accessories to meet project requirements. Note accessories on drawings, or schedule in PART 3, Attachments.

2.3 ACCESSORIES

- A. Patching Compound: Quik-Shield 1881 Acrylic Patching Compound; for filling and sealing gaps, cracks, and irregularities in substrates, perimeters, and penetrations.
 1. Type: Water-based acrylic compound.
 2. Installation method: Brushed or trowel-applied.
- B. [].

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that conditions of work previously installed under other sections or contracts are acceptable for installation of coated foamed roofing in accordance with manufacturer's instructions, and approved submittals.
 1. Notify [Architect] of unacceptable conditions upon discovery.
 2. Proceed with installation only after unacceptable conditions have been corrected.
- B. [].

Specifier Note: Specify actions required to prepare the surface, area or site for incorporation of the section's primary products. Describe requirements for exposure or removal of existing assemblies, components, products or materials.

3.2 PREPARATION

Specifier Note: Specify preparatory work required prior to installation/application/erection of primary products.

- A. A. Prepare substrates to receive coated foamed roofing in accordance with manufacturer's instructions, and approved submittals.
- B. Protect adjacent work from damage by installation of coated foamed roofing.
- C. [].

3.3 INSTALLATION

- A. Install coated foamed roofing in accordance with manufacturer's instructions, and approved submittals.
- B. [].

3.4 FIELD QUALITY CONTROL

Specifier Note: Specify requirements for quality control and related quality assurance for onsite activities and installed materials, manufactured units, equipment, components and accessories.

- 1. Manufacturer's field inspection.
- 2. [].

3.5 CLEANING

- A. Clean-up packaging, waste material, and construction debris daily during installation; legally dispose of as directed by Contractor.
- B. Upon completion, remove surplus material, remaining debris, tools, and equipment.
- C. Clean spills and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.
- D. [].

Specifier Note: Specify protection methods completed after installation, but prior to acceptance by the owner. Protection of surrounding areas and surfaces during application or installation is included under PART 3, Preparation. Include only statements unique to this Section.

Specifier Note: Coordinate the following Article with Section 01 76 00 - Protecting Installed Construction.

3.6 PROTECTION

- A. Protect installed products from damage during subsequent construction work until Final Inspection, and acceptance by Owner.
- B. [].

Specifier Note: Schedules are sometimes placed in the specifications rather than on drawings. Include schedules that indicate item/element/product/equipment, location and other coordinating data.

3.7 ATTACHMENTS

- A. A. Coated Foamed Roofing Schedule:
- B. [].

END OF SECTION