



STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242



ADDENDUM NO. 1 TO PROJECT NO. 43986

**CONSTRUCTION WORK
REPLACE ROOFING SYSTEMS & APPURTENANT WORK
MAINTENANCE SUBHEADQUARTERS
DOT REGION 10, SUFFOLK COUNTY
548 COMMACK ROAD
COMMACK, NY 11725**

November 9, 2012

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual.
Acknowledge receipt of this Addendum in the space provided on the Bid Form.

SPECIFICATIONS

1. DOCUMENT 072100 BUILDING INSULATION: Delete Part 2.01C in its entirety.
2. DOCUMENT 072114 SPRAYED FOAM INSULATION: Add the attached Section (pages 072114-1 thru 072114-5) to the Project Manual.
3. DOCUMENT 074113 PREFORMED METAL ROOFING SYSTEM: In Part 1.03A, change entire paragraph to: "Preformed Metal Roofing System: Structural standing seam roof panels with concealed clips and spreader plates installed over concealed flashing, slip sheet and existing wood deck. There is some minor variation (i.e. new wood decking & rigid tapered insulation) at the two dormer conditions only. See details on drawings for clarification."
4. DOCUMENT 074113 PREFORMED METAL ROOFING SYSTEM: Delete Part 2.01I in its entirety.

END OF ADDENDUM

James Dirolf, P.E.
Director of Design

SECTION 072114

SPRAYED FOAM INSULATION

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Restricted Work Period: Section 011000.

1.02 SYSTEM DESCRIPTION

- A. Description of System: Sprayed-in-place polyurethane foam wall and ceiling insulation with associated work.

1.03 DEFINITIONS

- A. Company Field Advisor; An individual meeting the requirements of either subparagraph below:
 - 1. An employee of the company producing or manufacturing the system (or the company which lists and markets the primary components of the system under their name) who is certified in writing by the company to be technically qualified in design, installation, and servicing of the required products, and has experience in the installation of the required products. Personnel involved solely in sales do not qualify.
 - 2. An individual employed by an organization (other than the company producing or manufacturing the system), certified in writing by the company producing or manufacturing the system, that the individual is technically qualified in design, installation and servicing of the required products and is capable to act as company field advisor in their behalf, and has experience in the installation of the required products. Personnel involved solely in sales do not qualify.

1.04 SUBMITTALS

- A. Waiver of Submittals: The "Waiver of Certain Submittal Requirements" in Section 013300 does not apply to this Section.
- B. Submittals Package: Submit the product data, samples, and quality control submittals specified below at the same time as a package.
- C. Product Data: Catalog sheets, specifications, and installation instructions for the following:
 - 1. Each material specified.
 - 2. Revise the product data as necessary, to suit the requirements of this project.
 - 3. The manufacturer's written specification and application instructions shall form an integral part of this Section except as specified otherwise.

4. Manufacturer's Warranty: Sample copy of the manufacturer's warranty covering workmanship and materials.
- D. Samples:
1. Granules: 1 lb.
- E. Quality Control Submittals:
1. Manufacturer's Certification:
 - a. Furnish a letter from the insulation manufacturer certifying that they are an active member of the Spray Polyurethane Foam Alliance.
 2. Applicator's Certification:
 - a. Furnish to the Director the names and address of five similar projects which the foregoing firm has installed during the past three years.
 - b. Furnish a letter from the insulation manufacturer certifying that the applicator is approved to apply the insulation system.
- F. Contract Closeout Submittals:
1. Warranty: Warranties as specified.

1.05 QUALITY CONTROL ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer must be an active member of the Spray Polyurethane Foam Alliance.
- B. Applicator's Qualifications: The application of this system shall be performed by a firm regularly engaged in the application of such systems for at least 3 years.
1. The applicator shall be approved by the insulation manufacturer.
- C. Fire Hazard Classification: The polyurethane foam system shall have a Class 1 rating when tested in accordance with ASTM E 84 and UL 723.
- D. Field Examples: Prepare an example at the site before the insulation work commences. The approved example will be used as quality standards for the Work.
1. Provide a 4' x 4' example of sprayed on polyurethane insulation on the wall to represent the specified insulation thickness, finish surface and quality required for the Work.
 2. Provide a 4' x 4' example of sprayed on polyurethane insulation on the ceiling to represent the insulation thickness and finish surface, adhesion and quality.
- E. Pre-Installation Conference: Prior to starting the insulation work and before any materials are ordered, a conference will be called by the Director's Representative at the site to discuss the specifications, details, application requirements and all other pertinent aspects of the work of this section. The meeting shall be attended by the Director's Representative, Contractor, Insulation Applicator and the Company Field Advisor.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver all materials to the site in manufacturer's labeled, unbroken containers.
- B. Storage and Handling: Store all materials in a dry, well ventilated place protected from the weather.

1.07 PROJECT CONDITIONS

- A. Do not execute the Work of this Section under conditions that are contrary to the approved specifications and recommendations of the manufacturer.
- B. Do not execute the Work of this Section unless the substrate is dry and acceptable for application in compliance with the specifications and the manufacturer.
- C. Moisture Protection: Keep the substrate watertight at all times.
- D. Do not execute the Work of this section unless the Director's Representative is present unless he directs that the Work be performed during his absence.
- E. Environmental Conditions:
 - 1. Do not apply the polyurethane foam when the substrate surface temperature is below the manufacturer recommend application temperature or moisture is present.
- F. Protection of Adjacent Surfaces:
 - 1. Protect adjacent surfaces with tarps, plastic sheets, masking tape etc. as required to prevent damage and soilage.

1.08 WARRANTY

- A. In addition to the one year warranty specified in the General Conditions, furnish the insulation manufacturer's 5 year warranty.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Closed-Cell Polyurethane Foam Insulation: HeatLok Soy 200, For use in Attics and Crawlspace passing AC 377 Appendix X compliant to NFPA 286.

Acceptable Manufacturer:

- a. Demilec (USA) LLC.

2925 Galleria Drive
Arlington, Texas, 76011
Phone: (817) 640-4900

- B. Two component non ozone depleting system, spray applied, semi-rigid polyurethane foam. Specific formulation as recommended by the manufacturer for the type of application, air temperature and all other application conditions.

PHYSICAL PROPERTIES		
ASTM	Description	Minimum Values
D 1622	Density	2.1 – 2.3 lb/ft³
C 518	Aged Thermal Resistance per inch	6.6 ft².h°F/BTU
E 283-04	Air Leakage	
	1" @ 75Pa (25 mph wind)	0.00004 L/sm
D 1621	Compressive Strength	28.3 psi
D 1623	Tensile Strength	51.5 psi
D 2856	Closed Cell Content	92 %
E 96	Water Vapor Transmission	
	1"	1.2 Perms
E 84	Surface Burning Characteristics (3")	Class I
	• Flame Spread Index	20
	• Smoke Development	450

2.02 EQUIPMENT:

- A. Equipment used to apply the foam insulation shall have fixed ratio 1:1, positive displacement pumps and approved by foam manufacturer.

PART 3 EXECUTION

3.01 APPLICATION

- A. The equipment used to process and apply the polyurethane foam shall be that specifically recommended or approved by the manufacturer of the polyurethane foam insulation.
- B. Installing Foamed-In-Place Polyurethane:
 - 1. All surfaces to be foamed shall be absolutely dry and free of dirt, oil and any other material which will impair the bonding of the polyurethane.
 - 2. Install polyurethane foam in strict accordance with the foam manufacturer's recommendations for equipment and application procedures.
 - 3. Thickness Tolerance: + 10 percent of total thickness.
 - 4. Foam Surface: Finished foam surface shall be smooth and free of voids, crevices or pinholes.
 - 5. Apply the foam in a cross hatch pattern in the maximum lifts possible to produce a smooth uniform surface. In no case shall the minimum or maximum lift thickness exceed the foam manufacturer's recommendations.
 - 6. Unless shown otherwise terminate the foam at all wall openings and ceiling openings.

3.02 REPAIR OF POLYURETHANE FOAM

- . Remove all wet foam insulation down to the substrate and fill voids with sprayed polyurethane foam.

3.03 CLEANING

- A. Remove all temporary coverings.
- B. Remove all soiling or staining that has resulted from overspray, droppings or spillage. Use methods and cleaning agents recommended by the manufacturer's of the materials.

END OF SECTION