



February 26, 2026

Project Name: Flowood Fire Station - Re-Roof
Project Number: 25-030
Owner: City of Flowood, Mississippi
Project Location: 3480 Lakeland Dr Flowood, MS 39232



ADDENDUM NO. 1

NOTICE TO ALL DOCUMENT HOLDERS:

The following additions, deletions, changes and clarifications to the drawings and specifications are to be included as part of the Contract Documents.

Note! The Bid Date/Time is unchanged by this Addendum.

GENERAL

- ITEM NO. 1** **R304 SPECIFICATIONS**
Specification: Section 07.5423 - Thermoplastic Polyolefin (TPO) Membrane Roofing - Carlisle
Revise this section in its entirety with the **enclosed section.**

- ITEM NO. 2** **Clarification:**
Bidder Question: The drawings call for a prefabricated coping, is a shop fabricated coping acceptable.
Response: Yes, a shop fabricated coping is acceptable as long as it meets all other specified requirements.

- ITEM NO. 3** **Clarification:**
Bidder Question: Does the gravel need to stay on site or be hauled off by the contractor?
Response: The gravel shall be removed by the Contractor and stockpiled on-site for the Owner’s future use. See enclosed diagram.

- ITEM NO. 4** **Clarification:**
Bidder Question: clarify project access points.
Response: See enclosed diagram. The roof can be accessed at all points of the building **EXCEPT** for the areas of the bay doors. **NO OBSTRUCTING THE TRUCK BAY DOORS AT ANYTIME.**

- ITEM NO. 5** **Clarification:**
Question: Is there a designated area for a laydown yard?
Response: Yes. See enclosed diagram. The gravel lot, located behind the station can be used as a laydown yard.



NO MORE ITEMS

Encl: Revised Section 07.5423 (5 pages)
Site Diagram (1 page)

Cc: All document holders

Thermoplastic Polyolefin (TPO) Membrane Roofing - Carlisle

PART 1 GENERAL

1. SECTION INCLUDES
 - A. Adhered system with thermoplastic polyolefin (TPO) roofing membrane.
 - B. Insulation, flat and tapered.
 - C. Deck sheathing.
2. RELATED REQUIREMENTS
 - A. Section 07.6200 - Sheet Metal Flashing and Trim: Counterflashings, reglets.
3. REFERENCE STANDARDS
 - A. ASCE 7 - Minimum Design Loads for Buildings and Other Structures; 2010, with 2013 Supplements and Errata.
 - B. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2013.
 - C. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2014.
 - D. ASTM D638 - Standard Test Method for Tensile Properties of Plastics; 2014.
 - E. ASTM D6878/D6878M - Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing; 2013.
 - F. ASTM E96/E96M - Standard Test Methods for Water Vapor Transmission of Materials; 2014.
 - G. FM DS 1-28 - Wind Design; 2007.
 - H. FM DS 1-29 - Roof Deck Securement and Above-Deck Roof Components; Factory Mutual System; 2006.
 - I. NRCA (RM) - The NRCA Roofing Manual; 2017.
 - J. UL (FRD) - Fire Resistance Directory; current edition.
 - K. UL 790 - Standard for Standard Test Methods for Fire Tests of Roof Coverings; Current Edition, Including All Revisions.
4. ADMINISTRATIVE REQUIREMENTS
 - A. Preinstallation Meeting: Convene one week before starting work of this section.
 1. Review preparation and installation procedures and coordinating and scheduling required with related work.
5. SUBMITTALS
 - A. See Section 01.3000 - Administrative Requirements for submittal procedures.
 - B. Product Data: Provide manufacturer's written information listed below.
 1. Product data indicating membrane materials, flashing materials, insulation, vapor retarder, surfacing, and fasteners.
 2. Preparation instructions and recommendations.
 3. Storage and handling requirements.
 - C. Shop Drawings: Indicate joint or termination detail conditions, conditions of interface with other materials, and paver layout.
 - D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
 - E. Manufacturer's Installation Instructions: Indicate membrane seaming precautions and perimeter conditions requiring special attention.
 - F. Specimen Warranty: For approval.
 - G. Warranty:
 1. Submit manufacturer warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.
 2. Submit installer's certification that installation complies with all warranty conditions for the waterproof membrane.

Thermoplastic Polyolefin (TPO) Membrane Roofing - Carlisle

- H. Manufacturer's Qualification Statement.
- I. Installer's Qualification Statement.
- 6. QUALITY ASSURANCE
 - A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum twenty (20) years of documented experience.
 - B. Installer Qualifications: Company specializing in performing the work of this section:
 - 1. With minimum five (5) years documented experience.
 - 2. Approved by membrane manufacturer.
- 7. DELIVERY, STORAGE, AND HANDLING
 - A. Deliver products in manufacturer's original containers, dry, undamaged, with seals and labels intact.
 - B. Protect products in weather protected environment, clear of ground and moisture.
 - C. Protect foam insulation from direct exposure to sunlight.
 - D. Provide Safety Data Sheets (SDS) at the project site at all times during transportation, storage, and installation of materials.
 - E. Comply with requirements from Owner to prevent overloading or disturbance of the structure when loading materials onto the roof.
- 8. FIELD CONDITIONS
 - A. Do not apply roofing membrane during unsuitable weather. Refer to manufacturer's written instructions.
 - B. Do not apply roofing membrane when ambient temperature is below 40 degrees F (5 degrees C) or above ____ degrees F (____ degrees C).
 - C. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.
 - D. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.
 - E. Proceed with work so new roofing materials are not subject to construction traffic as work progresses.
 - F. Do not allow grease, oil, fats, or other contaminants to come into direct contact with membrane.
- 9. WARRANTY
 - A. See Section 01.7800 - Closeout Submittals for additional warranty requirements.
 - B. System Warranty: Provide manufacturer's system warranty agreeing to repair or replace roofing that leaks or is damaged due to wind or other natural causes.
 - 1. Warranty Term: 20 years.
 - 2. For repair and replacement include costs of both material and labor in warranty.
 - 3. Include accidental punctures according to the manufacturer's standard warranty terms.
 - 4. Include hail damage according to the manufacturer's standard warranty terms.

PART 2 PRODUCTS

- 1. MANUFACTURER
 - A. Carlisle SynTec Systems: www.carlisle-syntec.com/#sle.
- 2. ROOFING APPLICATIONS
 - A. TPO Membrane Roofing: One ply membrane, fully adhered, over insulation.
 - B. Roofing Assembly Performance Requirements and Design Criteria:
 - 1. Wind Uplift:
 - a. Designed to withstand wind uplift forces calculated with ASCE 7.
 - b. Design Wind Speed: In accordance with local building code and authorities having jurisdiction (AHJ).

Thermoplastic Polyolefin (TPO) Membrane Roofing - Carlisle

3. ROOFING MEMBRANE AND ASSOCIATED MATERIALS
 - A. Single Source Responsibility: Provide and install products from single source.
 - B. Membrane:
 1. Material: Thermoplastic Polyolefin (TPO) complying with ASTM D6878/D6878M.
 2. Reinforcing: Internal fabric.
 3. Thickness: 60 mil (0.060 inch) (1.5 mm), minimum.
 4. Sheet Width: Factory fabricated into largest sheets possible.
 5. Color: White.
 6. Products:
 - a. Carlisle SynTec Systems; Sure-Weld.
 - C. Seaming Materials: As recommended by membrane manufacturer.
 - D. Membrane Fasteners: As recommended and approved by membrane manufacturer.
 - E. Flexible Flashing Material: Same material as membrane.
 - F. Base Flashing: Provide waterproof, fully adhered base flashing system at all penetrations, plane transitions, and terminations.
4. DECK SHEATHING AND COVER BOARDS
 - A. Cover Board: Polyisocyanurate (ISO) thermal board, complying with ASTM C1289; Type II - Faced with dark coated-glass facer on one side and light coated-glass facer on other surface of core foam, Class 4 with thickness of 1/2 inch (12.7 mm), and Grade 1 with 109 psi (751 kPa), maximum, compressive strength.
5. INSULATION
 - A. Polyisocyanurate (ISO) Board Insulation: Complies with ASTM C1289, Type II, Class 1 - Faced with glass-reinforced felt on both surfaces of core foam.
 1. Tapered Board: Slope as indicated; minimum thickness 1/2 inch (13 mm); fabricate of fewest layers possible.
 2. Grade and Compressive Strength: Grade 2, 20 psi (Grade 2, 138 kPa), minimum.
 3. Board Thickness: 4 inches (102 mm).
 4. Product: Carlisle InsulBase.
6. ACCESSORIES
 - A. Prefabricated Flashing Accessories:
 1. Corners and Seams: Same material as membrane, in manufacturer's standard thicknesses.
 2. Penetrations: Same material as membrane, with manufacturer's standard cut-outs, rigid inserts, clamping rings, and flanges.
 3. Sealant Pockets: Same material as membrane, with manufacturer's standard accessories, in manufacturer's standard configuration.
 4. Pressure Sensitive Cover Strips: 6 inches (152 mm) wide, 45 mil, 0.045 inch (1.1 mm) thick, non-reinforced TPO membrane laminated to 35 mil, 0.035 inch (0.9 mm) thick cured synthetic rubber with pressure sensitive adhesive.
 5. Miscellaneous Flashing: Non-reinforced TPO membrane; 80 mil, 0.080 inch (2.0 mm) thick, in manufacturer's standard lengths and widths.
 - B. Insulation Fasteners: Appropriate for purpose intended and approved by roofing manufacturer.
 - C. Membrane Adhesive: As recommended by membrane manufacturer.
 - D. Surface Conditioner for Adhesives: Compatible with membrane and adhesives.
 - E. Sealants: As recommended by membrane manufacturer.
 - F. Cleaner: Manufacturer's standard, clear, solvent-based cleaner.
 1. Product: Carlisle Weathered Membrane Cleaner.

Thermoplastic Polyolefin (TPO) Membrane Roofing - Carlisle

- G. Edgings and Terminations: Manufacturer's standard edge and termination accessories.

PART 3 EXECUTION

1. EXAMINATION

- A. Verify that surfaces and site conditions are ready to receive work.
- B. Verify deck is supported and secure.
- C. Verify deck is clean and smooth, flat, free of depressions, waves, or projections, properly sloped and suitable for installation of roof system.
- D. Verify deck surfaces are dry and free of snow or ice.
- E. Verify that roof openings, curbs, and penetrations through roof are solidly set, and cant strips are in place.

2. PREPARATION, GENERAL

- A. Clean substrate thoroughly prior to roof application.
- B. Do not begin work until other work that requires foot or equipment traffic on roof is complete.

3. INSTALLATION - GENERAL

- A. Perform work in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.
- B. Do not apply roofing membrane during unsuitable weather.
- C. Do not apply roofing membrane when ambient temperature is outside the temperature range recommended by manufacturer.
- D. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.
- E. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

4. INSULATION APPLICATION

- A. Attachment of Insulation:
 - 1. Mechanically fasten first layer of insulation to deck in accordance with roofing manufacturer's instructions and Factory Mutual requirements.
 - 2. Embed second layer of insulation into full bed of adhesive in accordance with roofing and insulation manufacturers' instructions.
- B. Lay subsequent layers of insulation with joints staggered minimum 6 inch (152 mm) from joints of preceding layer.
- C. Lay boards with edges in moderate contact without forcing, and gap between boards no greater than 1/4 inch (6.3 mm). Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.
- D. Do not apply more insulation than can be completely waterproofed in the same day.
- E. minimum insulation installation shall achieve a minimum of R25.

5. MEMBRANE APPLICATION

- A. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.
- B. Shingle joints on sloped substrate in direction of drainage.
- C. Fully Adhered Application: Apply adhesive at manufacturer's recommended rate. Fully embed membrane in adhesive except in areas directly over or within 3 inches (75 mm) of expansion joints. Fully adhere one roll before proceeding to adjacent rolls.
- D. Seam Welding:
 - 1. Seam Welding: Overlap edges and ends and seal seams by heat welding, minimum 2 inches (51 mm).
 - 2. Cover seams with manufacturer's recommended joint covers.

Thermoplastic Polyolefin (TPO) Membrane Roofing - Carlisle

3. Probe seams once welds have thoroughly cooled, in approximately 30 minutes.
4. Repair deficient seams within the same day.
5. Seal cut edges of reinforced membrane after seam probe is complete.
- E. At intersections with vertical surfaces:
 1. Extend membrane over cant strips and up a minimum of 4 inches (100 mm) onto vertical surfaces.
 2. Fully adhere flexible flashing over membrane and up to nailing strips.
- F. Coordinate installation of roof drains and sumps and related flashings. Locate all field splices away from low areas and roof drains. Lap upslope sheet over downslope sheet.
- G. Daily Seal: Install daily seal per manufacturers instructions at the end of each work day. Prevent infiltration of water at incomplete flashings, terminations, and at unfinished membrane edges.
6. FIELD QUALITY CONTROL
 - A. See Section 01.4000 - Quality Requirements for general requirements for field quality control and inspection.
7. CLEANING
 - A. See Section 01.7000 - Execution and Closeout Requirements for additional requirements.
 - B. Remove wrappings, empty containers, paper, and other debris from the roof daily. Dispose of debris in compliance with local, State, and Federal regulations.
 - C. In areas where finished surfaces are soiled by work of this section, consult manufacturer of surfaces for cleaning advice and conform to their documented instructions.
 - D. Repair or replace defaced or damaged finishes caused by work of this section.
8. PROTECTION
 - A. Protect installed roofing and flashings from construction operations.
 - B. Where traffic must continue over finished roof membrane, protect surfaces using durable materials.

END OF SECTION 07.5423

SITE DIAGRAM

issued via Addendum No. 01

