



ADDENDUM #2

MARCH 27, 2026

Board of Commissioners
Daniel C. Camp III, Chairman
Jack Manning
Tony Amadio

CENTRAL SERVICES
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Beaver, PA 15009

Wayne Souffrant, Director

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This addendum shall be considered part of the **Request for Bids for Roof Replacement at the Beaver County Magistrate and Community Development Buildings** and is issued to change or explain where provisions of this addendum differ from the original. This document shall have precedence over the original document where they differ and shall govern.

Question #1: This bid is asking for a Shingle Roof system. Will the County of Beaver entertain bids for a Standing Seam Metal Roof system?

Answer #1: **YES**. The County of Beaver is asking for bid prices for Shingle and Standing Seam Metal Roof systems. Therefore, a **2nd Revision** of the **Bid Proposal Form**, Section 3.1 (page 8) of this bid, is attached to this addendum. The 2nd Revision of the **Bid Proposal Form** must be filled out completely for both Shingle and Standing Seam Metal Roof systems.

Question #2: Are there any new **Detailed Specifications** (Section 4.6) that need to be added to this bid?

Answer #2: **YES**. There are new **Detailed Specifications** for this bid. The new **Detailed Specifications**, Section 4.6 (pages 18-37) are attached to this addendum.

Question #3: Is there a completion date that the County of Beaver is hoping to have this project completed by?

Answer #3: **YES**. The County of Beaver would like to have this project completed by November 30, 2026.

3.0 DOCUMENTS SUPPLIED BY BIDDER / VENDOR

3.1 BID PROPOSAL FORM (2ND revision)

BID LETTING OF APRIL 21, 2026

For: Roof Replacement at the Beaver County District Magistrate and Community Development Buildings

To: County of Beaver

Except as may be modified by the Exceptions Addendum attached hereto, the undersigned bidder proposes and agrees to furnish material and labor for execution of the following project. All equipment and materials necessary for completion of this project, but is not identified in the Detailed Specifications, are to be provided by the successful bidder.

BASE BID #1 – LUMP SUM BID

	<u>Shingle Roof</u>	<u>Standing Seam Metal Roof</u>
1. <u>All eight (8) buildings, combined</u>	\$ _____	\$ _____

BASE BID #2 – BID PER BUILDING

<u>Building</u>	<u>Shingle Roof</u>	<u>Standing Seam Metal Roof</u>
1. <u>District Magistrate – Ambridge</u>	\$ _____	\$ _____
2. <u>District Magistrate – Brighton Twp.</u>	\$ _____	\$ _____
3. <u>District Magistrate – Center</u>	\$ _____	\$ _____
4. <u>District Magistrate – Chippewa</u>	\$ _____	\$ _____
5. <u>District Magistrate – Freedom</u>	\$ _____	\$ _____
6. <u>District Magistrate – Hopewell</u>	\$ _____	\$ _____
7. <u>District Magistrate – New Brighton</u>	\$ _____	\$ _____
8. <u>Beaver County Community Development</u>	\$ _____	\$ _____

UNIT PRICING

Provide the unit cost for replacement of damaged or unsuitable roof decking for the Base Bid pricing:

1. Decking Replacement \$ _____ /sq. ft.

DATE: _____, 2026

Telephone Number

Email Address

Bidder

By _____
Authorized Representative

Address

() Bid Bond or () Certified Check or () Cashier's Check, in the amount of \$ _____ attached hereto.

4.6 DETAILED SPECIFICATIONS

The Board of Commissioners of the County of Beaver is requesting sealed bid proposals from qualified vendors, for Roof Replacement at the Beaver County District magistrate and Community Development Buildings. There are eight (8) building locations for this bid, as follows:

1. District Magistrate – Ambridge
650 11th Street, Ambridge, PA 15003
2. District Magistrate – Brighton Twp.
175 Friendship Drive, Beaver, PA 15009
3. District Magistrate – Center
226-F Center Grange Road, Aliquippa, PA 15001
4. District Magistrate – Chippewa
19 Cessna Drive, Beaver Falls, PA 15010
5. District Magistrate – Freedom
559 Third Street, Freedom, PA 15042
6. District Magistrate – Hopewell
1515 Gringo Road, Aliquippa, PA 15001
7. District Magistrate – New Brighton
513 11th Street, New Brighton, PA 15066
8. Beaver County Community Development Building
1013 8th Avenue, Beaver Falls, PA 15010

The Board of Commissioners of the County of Beaver is requesting bids for:

- a. All eight (8) building locations COMBINED (Base Bid #1), AND
- b. All eight (8) building locations INDIVIDUALLY (Base Bid #2).

The Board of Commissioners of the County of Beaver reserves the right to choose either Base Bid #1 (all buildings to be completed) **OR** Base Bid #2 (pick which building(s) will be completed). Please make sure the Bid Proposal Form (Section 3.1, page 8) of this bid package is filled out completely for Base Bid #1 and Base Bid #2.

A. Shingle Roof

a. Scope of Work

Replace existing shingle roof system with a new shingle system, as specified.

1. Remove existing shingle roof system and underlayment down to the existing plywood deck. Contractor is to inspect the condition of the plywood deck and replace, if required, based on a cost per square foot. Allowance estimate not included in Contractor's Base Bid Price for replacement of decking.

4.6 DETAILED SPECIFICATIONS (cont.)

2. Existing gutter and downspouts will be removed and discarded.
3. New underlayment (R-Mer Seal) will be installed over existing plywood deck.
4. New shingle system, TruDefinition Duration (Algae Resistant) Shingles as manufactured by Owens Corning Roofing and Asphalt, LLC., to be installed as specified.
5. New downspouts and gutters (0.32 aluminum, standard color) will be continuous and manufactured by Contractor, on site.
6. Existing aluminum louvers and soffit will not be replaced. Contractor will be required to re-install/attach, if necessary.
7. Standard limited warranty will be provided at the end of the project.

b. Fiberglass-Based Asphalt Shingles

1. Fiberglass-based asphalt shingle.
2. Hip and ridge shingles.
3. Starter shingles.
4. Self-adhering ice and water barrier.
5. Attic Ventilation.
6. Fasteners.

c. Pre-Installation Meeting

A pre-installation meeting at the site(s) prior to commencing work is required of all entities directly concerned with roof installation. Topics to be discussed are:

1. Safety procedures.
2. Installment procedures/methods (including substrate preparation).
3. Roofing material availability, storage and handling.
4. Additional roof covering and roof accessory materials.
5. Through roof penetrations and accessory materials.
6. Schedule.
7. All other items related to the successful execution/completion of work.

4.6 **DETAILED SPECIFICATIONS (cont.)**

d. Installer Qualifications

Installer shall be licensed or otherwise authorized by Federal, State and Local authorities to install all products specified in this section. Installer shall follow manufacturer published installation instructions. Installer shall be a Preferred Contractor as defined and certified by manufacturer.

e. Delivery/Storage/Handling

1. Deliver materials to site in manufacturer's unopened bundles with labels intact and legible.
2. Store all products in manufacturer's unopened, labeled packaging until they are ready for installation.
3. Store all products in accordance with manufacturer's recommendation.
4. Do not install underlayment or shingles on wet surfaces.
5. Store and dispose of solvent-based materials in accordance with all Federal, State and Local regulations.
6. For rooftop loading, lay shingle bundles flat. Do not bend over the ridge.

f. Project Conditions

Do not install systems under environmental conditions outside manufacturer recommended limits. Proceed with work only when existing and forecasted weather conditions will permit work to be performed within manufacturer recommended limits.

g. Warranty

Standard Limited Warranty – Provide to the County of Beaver information required for standard warranty coverage for materials in the event of a material defect. Refer to the actual warranty for complete details, limitations and requirements.

h. Acceptable Manufacturers

1. Owens Corning Roofing and Asphalt, LLC
One Owens Corning Parkway, Toledo, OH 43659
1-800-ROOFING
Email: ocbuildingspec@owenscorning.com
Website: www.owenscorning.com
2. (The) Garland Company
3800 E. 91st Street, Cleveland, OH 44105
Territory Manager – Grant Kandabarow, (412-352-2912)
Website: www.garlandco.com

4.6 **DETAILED SPECIFICATIONS (cont.)**

i. Asphalt Shingles

TruDefinition Duration (Algae Resistant) Shingles, as manufactured by Owners Corning Roof and Asphalt, LLC.

1. Product attributes includes SureNail Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.
2. Normal size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
3. Exposure: 5-5/8 in (143 mm).
4. Shingles per square: 64.
5. Coverage per square: 3 bundles of 20 or 22 shingles.
6. Color: As selected from manufacturer's full range.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC 438, UL ER 2453-01, and UL ER2453-02, Florida Product Approval and Miami-Dade County Product Approval.

j. Hip and Ridge Shingles

DuraRidge Hip and Ridge (Algae Resistant) Shingles with Sealant, as manufactured by Owens Corning Roofing and Asphalt, LLC.

1. High profile design features patented SureNail Technology providing long-lasting durability and dimension.
2. Nominal size: 12 in (305 mm) by 10 5/8 in (270 mm) with 8 in (203 mm) exposure.
3. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, UL ER2453-02, Florida Product Approval, Miami-Dade County Product Approval and CSA A123.5.

k. Starter Shingles

Starter Strip Shingle, as manufactured by Owens Corning Roofing and Asphalt, LLC.

1. Nail applied starter course. Individual starter shingle is 6-5/8 in (168 mm) by 39-3/8 in (1000mm).

4.6 DETAILED SPECIFICATIONS (cont.)

2. Standards/Qualifications: ASTM D3462, ASTM D3161 (Class F Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, UL ER2453-01.

i. Self-Adhering Underlayment's

Roof deck Protection & Leak Barrier

1. Self-adhering high temperatures underlayment with non-slip, cross-laminated polymer film laminated to a rubberized asphalt adhesive. Each roll contains approx. 200 sf, 36 inches by 67 feet, 45 mils (R-Mer Seal by the Garland Company).

m. Roof Ventilation

VentSure Rigid Roll Ridge Vent with Weather PROtector Moisture Barrier

1. Shingle-over, low profile ridge vents with Weather PROtector Moisture Barrier allows the passage of hot and/or moisture laden air from attics, while prohibiting snow infiltration.
2. Provides 12.5 sq. in (8200 sq. mm) NFVA per lineal foot.
3. Available in 20 ft (6.1 m) rolls in three (3) different widths (regional availability); 7 in (178 mm), 9 in (229 mm) and 11-1/4 in (286 mm).
4. Suitable on roofs with a pitch from 2:12 to 20:12.
5. Standards/Qualifications: ICC-ESR 2664, Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h) and Snow Infiltration at 35 mph (56 km/h) and 70 mph (112 km/h) Tests, UL ER21292-01, Florida Product Approval and Miami-Dade County Product Approval.

VentSure InFlow Vent

1. Shingle-over, polypropylene intake vent solution for soffit-less and open-rafter homes, and homes with inadequate intake. Designed to work with exhaust ventilation to help achieve a balanced air ventilation system.
2. Patent-pending bottom intake design helps protect against wind-driven rain.
3. 4 ft (2.4 m) strip provides 10 sq. in (6500 sq. mm) NFVA per lineal foot, or 40 sq. in (25800 sq. mm) NFVA per vent.
4. Weather PROtector Moisture Barrier provides added protection against wind-driven rain and snow infiltration.
5. Roof Mount Unit dimensions: 48 in (1219 mm) length, 15 in (381 mm) width and 1 in (25 mm) height.

4.6 DETAILED SPECIFICATIONS (cont.)

6. Suitable for roofs with a pitch from 4:12 to 16:12.
7. Standards/Qualifications: Passes Wind-Driven Rain with 8 in (224 mm) of rain/hr at 110 mph (177 km/h), ICC-ES AC 132; TDI listed for usage in Texas Coastal Regions (RV-82) and Florida Product Approval.

n. Fasteners

Galvanized steel, stainless steel or aluminum nail complying with ASTM F1667, minimum, 12-gauge, 0.0808 in (2.05 mm) shank with 3/8 in (9.5 mm) diameter head. Make sure to check local building code requirements.

o. Execution

Examination

1. Prior to starting work, examine all roof decks on which work will be applied for defects in materials and workmanship.
2. **DO NOT** begin installation until the roof deck has properly been prepared.
3. If another installer is responsible for roof deck preparation, notify the architect, designer-of-record on the project or the County of Beaver of unsatisfactory preparation prior to proceeding with installation. Commencement of installation constitutes acceptance of conditions.
4. Underlayment and shingles installed directly over roof installation or similar type decks is not approved.
 - a. Roof deck must be dry, minimum 3/4 in (19 mm) thick, minimum 6 in (152 mm) wide boards with maximum 1/4 in (6.4 mm) spaces, or APA rated sheathing (exposure 1); minimum 3/8 in (9.5 mm) plywood, minimum 7/16 in (11.1 mm) oriented strand board. Consult your manufacturer for other approved constructions.
 - b. Ventilation under the roof deck must meet local code requirements.

Preparation

1. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
2. Remove all existing roofing down to the deck.

4.6 DETAILED SPECIFICATIONS (cont.)

3. Verify that the deck is dry, structurally sound, clean and smooth. It shall be free of any depressions, waves and projections. Cover ALL holes 1 in (25 mm) or less in diameter, cracks over 1/2 in (13 mm) in width, loose knots and excessively resinous areas with minimum 28 gauge; 0.0187 in (0.475 mm) galvanized steel, 0.0156 in (0.396 mm) stainless steel or 0.0126 in (0.320 mm) aluminum sheet metal. Decking or deck boards with holes greater than 1 in (25 mm) in diameter shall be replaced.
4. Replace damaged deck with new materials.
5. Verify installed roof deck is acceptable to receive shingles.
6. Acceptable roof decks include the following:
 - a. Wood Boards: 6 in (152 mm) width, 3/4 in (19 mm) minimum thickness.
 - b. Plywood Sheathing: 3/8 in (9.5 mm) minimum thickness Exposure 1 grade plywood sheathing as recommended by APA and in compliance with local building codes requirements.
 - c. OSB panels: 7/16 in (11.1 mm) minimum thickness non-veneer structural panels as recommended by APA and in compliance with local building code requirements.
 - d. Spacing between boards or panels should not exceed 1/4 in (6.4 mm) between roof boards or 1/8 in (3.2 mm) between plywood or OSB sheathing panels.

Underlayment Installation

Installment underlayment's using manufacturer installation instruction and in accordance with local building code requirements. When local codes and installation instructions are in conflict, the local building code requirements shall take precedence.

- a. Drip Edge
 1. Drip edge shall be installed in all roof edges.
 2. Install drip edge on eaves first with underlayment installed over the drip edge, or install per local code requirements.
 3. Install the drip edge on rakes after underlayment is installed, with the drip edge fastened over the underlayment.
 4. Joints in drip edge shall be lapped a minimum 2 in (51 mm) with the upslope piece lapped over the down slope piece or per local building code requirements.

4.6 **DETAILED SPECIFICATIONS (cont.)**

5. Install fasteners 8 in to 10 in (203 mm to 254 mm) on center, approx. 1-3/4 in (44 mm) to 3 in (76 mm) from the outside edge of the drip edge, or per local building code requirements.

b. Valleys

Where valleys are indicated to be “open valleys”, install metal flashing over self-adhering ice and water barrier before roof deck underlayment is installed. **DO NOT** nail through the flashing. Secure the flashing by nailing at 18 in (457 mm) on center just beyond of flashing so that nail heads hold down the edge, or use valley metal with a formed edge and secure with clips.

Penetrations

a. Vent Pipes

1. Install a 24 in (610 mm) square piece of self-adhering ice and water barrier lapping over roof deck underlayment.
2. Seal tightly to pipe.

b. Vertical Walls

Install self-adhering ice and water barrier extending at least 3 in to 4 in (76 mm to 102 mm) up the wall and 12 in (305 mm) onto the roof surface. Lap the membrane over the roof deck underlayment.

c. Chimneys

Install self-adhering ice and water barrier around the entire chimney extending at least 6 in (152 mm) up the wall and 12 in (305 mm) on to the roof surface. Lap the membrane over the roof deck underlayment.

p. Shingle Installation

1. Install shingles (including starter shingles as well as hip and ridge shingles) in accordance with manufacturer installation instructions and in accordance with local building code requirements.
2. Install starter course at lowest roof edge and along rake with edge of shingles extending 1/4 in (6.4 mm) over roof edge. Sealant strip should be closest to roof edge.
3. Install first and successive courses of shingle stepping diagonally up and across roof deck with manufacturer recommended offset at each succeeding course. Maintain uniform exposure of shingles at each succeeding course. Use of a chalk line every other course is recommended.

4.6 DETAILED SPECIFICATIONS (cont.)

4. Fasten shingles to deck with number of roofing nails per shingle and type of nails specified, or in accordance specified by Local authority having jurisdiction.
5. All fasteners must be driven flush with the shingle surface and penetrate at least 3/4 in (19.1 mm) thick, the fastener should be long enough to penetrate fully and extend through the roof sheathing.

q. Vent Installation

1. Install vents in accordance with manufacturer installation instructions and local building code requirements.
2. ventilation at minimum must meet or exceed local building code requirements. Manufacturer recommends:
 - a. Net Free Ventilating Area (NFVA) of 1:150 as a minimum.
 - b. Balanced approach for most effective ventilation (balance between the lower and upper parts of the roof by providing 50% of the NFVA at the soffit and 50% at the ridge).
 - c. NFVA at the upper part of the roof ridge is sufficient, provide continuous ridge vents for most effective ventilation approach.
 - d. Where the length of the roof ridge is sufficient, provide continuous ridge vents for most effective ventilation approach.

r. Protection

1. Protect installed products until completion of project.
2. Touch-up, repair or replace damaged products before Substantial Completion.

B. Standing Seam Metal Roof

a. Scope of Work

1. Remove existing shingle roof system and underlayment down to the existing plywood deck. Contractor is to inspect the condition of the plywood deck and replace if required based on a cost per square foot. Allowance estimate not included in Contractor's Base Bid Price for replacement of decking.
2. Existing gutter and downspouts will be removed and discarded.
3. New underlayment (R-Mer Seal) will be installed over existing plywood deck.

4.6 DETAILED SPECIFICATIONS (cont.)

4. New standing seam metal roof system (IMETCO's PermLok 1.5) will be installed.
5. New downspouts and gutters (.032 aluminum, standard color) will be continuous and manufactured by Contractor, on site.
6. Existing aluminum louvers and soffit will not be replaced. Contractor will be required to re-install/attach, if necessary.
7. Standard 20-year watertight limited warranty will be provided at the end of the project.

b. Standing-Seam Metal Roof Assembly

1. Vertical-Rib, Snap-Joint, Standing Seam Metal Roof Panels: Formed with vertical ribs at panel edges and intermediate striations between ribs; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panels and engaging opposite edge of adjacent panels and snapping panels together.
2. Basis-of-Design System: panel shall be IMETCO PermLok 1.5 roof panel system, as manufactured by Innovative Metals Company (IMETCO), Norcross, Georgia, 30071, telephone (440) 477-3162.
3. Self-adhering ice and water barrier.
4. Attic ventilation
5. Fasteners

c. Pre-Installation Meeting

A pre-installation meeting at the site(s) prior to commencing work is required of all entities directly concerned with roof installation. Topics to be discussed:

1. Safety procedures
2. Installment procedures/method (including substrate preparation).
3. Roofing material availability, storage and handling.
4. Additional roof covering and roof accessory materials.
5. Through roof penetrations and accessory materials.
6. Schedule.
7. All other items related to the successful execution/completion of work.

4.6 DETAILED SPECIFICATIONS (cont.)

d. Installer Qualifications

Installer shall be licensed or otherwise authorized by Federal, State and Local authorities to install all products specified in this section. Installer shall follow manufacturer published installation instructions. Installer shall be a Preferred Contractor, as defined and certified by manufacturer.

e. Delivery/Storage/Handling

1. Inspect materials upon delivery.
2. Handle materials to prevent damage.
3. Store materials off ground providing for drainage, under cover providing for air circulation and protected from any debris.

f. Project Conditions

1. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit metal roof panel work to be performed according to manufacturer's written instructions and warranty requirements.
2. Field Measurements: Verify actual dimensions of construction contiguous with metal roof panels by field measurements before fabrication.

g. Warranty

1. Endorse and forward to the County of Beaver the following warranties:
 - a. 20-year watertight warranty, jointly signed by the installer and the manufacturer.
 - b. Manufacturer's standard 20-year finish warranty covering checking, crazing, peeling, chalking, fading and adhesion.
 - c. Installer's 3-year warranty covering roof panel system installation and watertightness.
2. Warranties shall commence on date of substantial completion.

h. Acceptable Manufacturer's

1. Innovative Metals Company, Inc. (IMETCO)
Norcross, Georgia 30071
Territory Manager – Jacob Suran
Telephone: (440) 477-3162
Website: www.imetco.com

4.6 DETAILED SPECIFICATIONS (cont.)

i. **Metal Roof Panels**

Basis-of-Design-System: Panel shall be IMETCO PermLok 1.5 roof panel system.

j. **Material**

Zinc-coated (galvanized) sheet steel, 24ga nominal thickness.

k. **Finish**

To be selected from IMETCO's standard colors.

l. **Characteristics**

1. The same panel profile from a single manufacturer shall be used for ALL standing seam roof areas.
2. Configuration: Interlocking standing seams incorporating concealed anchor clips allowing thermal movement. Snap-on separate seam caps are not acceptable.
 - a. Profile of panel shall be striated throughout the flat portion on the panel.
 - b. Exposed fasteners, screws and/or roof mastic are unacceptable and will be rejected. System configuration only allows for exposed fasteners at panel overlap (if required and approved) and trim details (as per manufacturer's guidelines).
 - c. Panels must be furnished in continuous lengths from ridge to eave with no overlaps, unless shown on contract documents.
3. Seam: 1-1/2 in minimum height with male leg 1-3/8 in high. Seam shall allow for expansion and contraction of panels due to thermal changes.
4. Sealant: Female seam shall have a factory applied hot melt sealant bead. Panel and clip shall be designed to prevent clip contact with the sealant bead, to ensure that normal expansion and contraction of panel will not cause damage to the integrity of the seal.
5. A clearance of 3/16 in high between the panel and the roof substrate is required to conceal telegraphing of the supporting structure and to aid in venting the roof system.
6. Site Formed Panels: Bidder will not be allowed to supply panels formed at the jobsite on portable roll formers; metal panels must be factory pre-manufactured and engineered for this project.

4.6 **DETAILED SPECIFICATIONS (cont.)**

7. Concealed Standard Anchor Clips: Clips must be 18-gauge galvanized steel ONE (1) piece clip with provision for unlimited thermal movement in each direction along the longitudinal dimension.
 - a. Two-piece clips are NOT acceptable.
 - b. Clip design must isolate sealant in panel from clip to ensure that no sealant damage occurs from the clip during expansion and contraction.
 - c. Clip must maintain a clearance of a minimum of 3/16 in (4.5 mm) between panel and substrate for proper ventilation to help prevent condensation on underside of panel and eliminate the contact of panel fastener head to panel.
8. Standing Seam Panel Width: 18" (nominal).
9. Mechanical Finish: Light striations shall be formed in flat of panel to minimize oil canning and telegraphing of structural members.

m. Flashing and Trim

Formed from the same material and gauge as roof panels, pre-painted with coil coating. Provide flashing and trim as required to seal against weather and to provide finished appearance. Locations include, but are not limited to eaves, rakes, corners, bases, framed openings, ridges, fasciae and fillers. Finish flashing and trim with the same finish system as adjacent metal roof panels.

n. Self-Adhering Underlayment's Roof Deck Protection & Leak Barrier

Self-adhering high temperatures underlayment with non-slip, cross-laminated polymer film, laminated to a rubberized asphalt adhesive. Each roll contains approx. 200 sf, 36 inches by 67 feet, 45 mils (R-Mer Seal, by the Garland Company).

o. Preparation

1. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
2. Remove all existing roofing down to the deck.
3. Verify that the deck is dry, structurally sound, clean and smooth. It shall be free of any depressions, waves and projections. Cover ALL holes 1 in (25 mm) or less in diameter, cracks over 1/2 in (13 mm) in width, loose knots and excessively resinous areas with minimum 28 gauge, 0.0187 in (0.475 mm) galvanized steel, 0.0156 in (0.396 mm) stainless steel or 0.0126 in (0.320 mm) aluminum sheet metal. Decking or deck boards with holes greater than 1 in (25 mm) in diameter shall be replaced.

4.6 **DETAILED SPECIFICATIONS (cont.)**

4. Replace damaged deck with new materials.
5. Verify installed roof deck is acceptable to receive roof deck.
6. Acceptable roof decks include the following:
 - a. Wood Boards: 6 in (152 mm) width, 3/4 in (19 mm) minimum thickness.
 - b. Plywood Sheathing: 3/8 in (9.5 mm) thickness, Exposure 1 grade plywood sheathing as recommended by APA and in compliance with local building code.
 - c. OSB panels: 7/16 in (11 mm) thickness, non-veneer structural panels as recommended by APA and in compliance with local building code requirements.
 - d. Spacing between boards or panels should not exceed 1/4 in (6.4 mm) between roof boards or 1/8 in (3.2 mm) between plywood or OSB sheathing panels.

p. **Underlayment Installation**

Installment underlayment's using manufacturer installation instruction and in accordance with local building code requirements. When local codes and installation instructions are in conflict, the local building code requirements shall take precedence.

Drip edge

1. Drip edge shall be installed in all roof edges.
2. Install drip edge on eaves first with underlayment installed over the drip edge or per local code requirements.
3. Install drip edge on rakes after underlayment is installed, with the drip edge fastened over the underlayment.
4. Joints in drip edge shall be lapped a minimum 2 in (51 mm) with the upslope piece lapped over the down slope piece, or per local building code requirements.
5. Install fasteners 8 in to 10 in (203 mm to 254 mm) on center, approx. 1-3/4 in (44 mm) to 3 in (76 mm) from the outside edge of the drip edge, or per local building code requirements.

4.6 DETAILED SPECIFICATIONS (cont.)

q. Penetrations

Vent Pipes

1. Install a 24 in (610 mm) square piece of self-adhering ice and water barrier lapping over roof deck underlayment.
2. Seal tightly to pipe.

Vertical Walls

Install self-adhering ice and water barrier extending at least 3 in to 4 in (76 mm to 102 mm) up the wall and 12 in (305 mm) onto the roof surface. Lap the membrane over the roof deck underlayment.

Chimneys

Install self-adhering ice and water barrier around entire chimney extending at least 6 in (152 mm) up the wall and 12 in (305 mm) on to the roof surface. Lap the membrane over the roof deck underlayment.

r. Protection

1. Protect installed products until completion of project.
2. Touch-up, repair or replace damaged products before Substantial Completion.

C. Protection of Work and Property

1. The Contractor shall maintain adequate protection of all in progress or completed Work from damage and shall protect the County of Beaver's and adjacent property from injury or loss arising from this contract. Contractor shall provide and maintain at all times any danger signs, guards and/or obstructions necessary to protect the public and workmen from any dangers inherent with or created by the work in progress. Contractor shall hold the County of Beaver harmless from any loss arising due to injury or accident to the public or workmen, or from theft of materials stored at the job site.
2. Should the Contractor suffer injury or damage to person or property because of an act or omission of the County of Beaver or of any of the County of Beaver's employees or agents for whose act the County of Beaver is legally liable, the claim shall be made in writing to the County of Beaver within thirty (30) days after the first observance of such injury or damage, otherwise such claim shall be waived. This clause shall not allow claims for injury or damages, which are otherwise precluded by these Contract Documents. The County of Beaver shall not be responsible for actions or inactions of other Contractors.

4.6 **DETAILED SPECIFICATIONS (cont.)**

3. Any areas of the building or grounds which have become strained or damaged in any way shall be repaired or replaced by the Contractor prior to the final inspections. The method of repair used must be acceptable to both the County of Beaver and their representative.
4. In those areas where materials and/or hot asphalt will be raised to the roof area, a protective covering shall be placed from the base of the wall extending up and over the top edge of the roof. This coverage shall be wide enough to assure that the exterior walls do not become stained or soiled during roofing operations.
5. Any areas of the building or grounds which have become stained or damaged in any way shall be repaired or replaced by the Contractor prior to final inspection. The method of repair used must be acceptable to both the County of Beaver and their representative.

D. **Material Storage and Clean-up**

1. The Contractor shall keep the premises free from rubbish at all times and shall arrange material storage so as not to interfere with the County of Beaver's operations. At the completion of the job, all the unused material and rubbish shall be removed from the site. The ground shall be raked clean and the building shall be broom clean.
2. If the Contractor refuses at any time to remove Work debris from the premises or to keep the working area clean, such cleaning will be completed by the County of Beaver and deducted from the balance due the Contractor provided twenty-four (24) hours written notice by the County of Beaver.
3. The Contractor shall also remove drippage of bitumen or adhesive from all walls, windows, floors, ladders and finished surfaces. Failure to do so will result in the work being done by others and the cost shall be deducted from the balance due the Contractor.
4. Materials must be delivered with the manufacturer's label intact and legible. Labels must be affixed to the outside of the package stating the type of product, name and address of the manufacturer. All materials shall be stored and protected against weather, vandalism and theft. Any materials found to be damaged or missing shall be replaced by the Contractor at no cost to the County of Beaver.

E. **Miscellaneous Utilities**

1. Electrical power will be furnished by the County of Beaver for small tools only. All connections to the electrical system will be furnished by the Contractor.

4.6 **DETAILED SPECIFICATIONS (cont.)**

2. Water for concrete, mortar, washing and drinking purposes will be furnished by the County of Beaver. Any connections to the water system shall be completed by the Contractor.
3. At the completion of the work or when the above connections are no longer required, the Contractor shall remove all connections and leave the facilities in a condition at least as satisfactory as prior to the commencement of Work.
4. Toilet facilities will be provided by the Contractor. The Contractor will be responsible for supplying a portable toilet on the job-site. The Contractor's personnel are not permitted to enter the building without proper authorization from the County of Beaver or their representative.

F. **Changes or Extra Work**

1. The County of Beaver may, without invalidating the original contract, order such changes or additions as may from time to time be deemed desirable. In doing so, the contract price shall be adjusted, as stated below, with all work being done under the conditions of the original contract except for such adjustments in extension of time as may be acceptable to the County of Beaver. The value of such extra work shall be determined in one of the following ways:
 - a. By firm adjustment.
 - b. By cost plus with a guaranteed maximum.
 - c. By cost with a fixed fee, or
 - d. By unit cost.
2. If agreement is reached that the extra cost shall be handled as per methods 2, 3 or 4, the Contractor shall keep and compile a correct amount of the cost together with such vouchers, etc., as may be necessary to substantiate same for presentation to the County of Beaver. The County of Beaver's representative shall have authority to make minor job changes or additions as may be necessary to expedite the job providing such changes do not involve additional material cost. No major change or addition shall be made except upon receipt by the Contractor of a signed order from the County of Beaver authorizing such a change. No claims for an extra to the contract price shall be valid unless so authorized.

4.6 **DETAILED SPECIFICATIONS (cont.)**

3. All work covered by unit prices submitted to the Contractor in the bid must be covered by a written work order. The County of Beaver's representative will prepare the work order in triplicate covering the quantity of work and the total cost of the work. The work order which will be written at the end of each day, will be signed by the County of Beaver's representative and the Contractor's foreman and/or superintendent.

G. Correction of Work prior to Final Payment

1. The Contractor shall promptly remove any work that does not meet the requirements of the plans and specifications, or is incorrectly installed or otherwise disapproved by the County of Beaver or their representative as failing to meet the intent of the plans and specifications. The Contractor shall promptly replace any such work without expense to the County of Beaver and shall the cost of making good all work of other contractors, or the County of Beaver, destroyed or damaged by such removal or replacement.

H. Correction of Work after Final Payment

1. The Contractor shall guarantee all materials and workmanship for two (2) years from date of final payment of the contract by the County of Beaver. Any defects which may arise during this period shall be promptly repaired by the Contractor including any damage done to the County of Beaver's property due to such defects.

I. Deduction for Uncorrected Work

1. If the County of Beaver deems it unacceptable to have the Contractor correct work which has been incorrectly done, a deduction from the contract price shall be agreed upon, therefore. Such a deduction from the contract price shall in no way affect the Contractor's responsibility for defects that may occur nor its ability for correcting them and damage caused by them.

J. Job Conditions

1. There is **NO SMOKING** allowed on County of Beaver property and the Contractor shall be responsible for enforcement of this job rule at all times with its personnel.
2. The Contractor should be aware of County of Beaver's property when tearing off the existing roof. This is required for removal of dirt, silt, debris, roof membrane and insulation from the roof surface in order to preserve the ecology, eliminate unsightly conditions and protect building faces. Specific locations to be discussed at the pre-bid conference.

4.6 DETAILED SPECIFICATIONS (cont.)

3. All surfaces to be covered shall be smooth, dry and free from dirt, debris and foreign material before any of the Work is installed. Heavy equipment shall be located on the ground at a safe distance from the building; the location being subject to the approval of the County of Beaver. The Contractor shall be responsible for guarding against fires and shall provide suitable fire extinguishers conveniently located at the site. Competent operators shall be in attendance at all times equipment is in use. Materials shall be stored neatly in areas designated by the County of Beaver and dispersed so as to present a minimum fire hazard. Loads placed on roof surfaces at any point shall not exceed the safe load for which the roof is designed.
4. Rolled Roofing Materials: All rolled roofing materials must be stored standing on end on a pallet or otherwise raised off of the roof. The materials are to be covered in a proper manner to assure that they will not become wet prior to application. Any materials that become wet or damaged must be removed from the job-site and replaced at the Contractor's expense.
5. Ladders: Any ladders used on this project must be in good condition. The ladder must also be secured at all times while in use. Ladders must be O.S.H.A. approved.
6. No drugs, alcoholic beverages or weapons are permitted on County of Beaver property.
7. The Contractor shall provide and maintain all necessary fences, barricades and other protective structures for the safety of the public, workers, existing property and equipment as required by the Provincial or Municipal laws and regulations, local ordinances, laws and other requirements of the Region, County, Province or any other authorities having jurisdiction with regard to safety precautions, operations and fire hazards.
8. The Contractor will also protect the building structure from damage in the process of the job. In the event that the damage does occur to any property or equipment, or the County of Beaver's work in progress, notification must be made within two (2) working days of the incidents to the County of Beaver and their representative.
9. During the progress of the job, if waste material and rubbish are found or damage resulting from the Contractor's operations is found, or the Contractor does not comply with the requirement by keeping the premises free of accumulations and correct the damage, it shall be the County of Beaver's prerogative to hire qualified personnel to do so; and the cost of this work will be deducted from the balance due the Contractor.

4.6 DETAILED SPECIFICATIONS (cont.)

10. Existing roof top equipment, walls, windows, etc., shall be completely protected by masking or other effective methods. Any mastics, asphalt, sealants, thick dust and debris must be cleaned off metal surfaces.
11. The Contractor is responsible for protecting all materials from the elements. If any material, such as insulation, becomes wet, it cannot be installed and must be replaced at the Contractor's expense.
NOTE: Insulation and rolled roofing materials must be covered with waterproof tarps at the end of each work days. Plastic wrappers supplied by the insulation manufacturer are not acceptable substitutes for tarps. The County of Beaver's representative will reject any covering method material which does not adequately protect roofing materials.
12. Anyone guilty of willful destruction or unlawful removal of company property will be dismissed from the job and is subject to prosecution by law.
13. Any laws damaged by Contractor vehicles will be restored with a strand of grass at the Contractor's expense. Any damaged pavements will likewise be restored at the Contractor's expense.
14. The Contractor must verify that all materials can be installed to accommodate the building design, pertinent codes and regulations and the manufacturer's current recommendations.
15. The Contractor will ensure that all substances are clean, dry, sound, smooth and free of dirt, debris and other contamination before any materials are supplied.
16. Any isolated areas that must be torn off and replaced will be built-up to the height of the existing roof prior to the installation of the new roofing membrane system.