City of Bethlehem, Pennsylvania

APPLICATION FOR CERTIFICATE OF APPROPRIATENESS (COA)

Building address 400 Main Street Bethlehem, PA 18018

Owner of building Central Moravian Church Phone [redacted]

Owner's email & mailing address [redacted]

Applicant Spillman Farmer Architects Phone: [redacted]

Applicant's email & mailing address [redacted]

[redacted]

APPLICANT MUST ATTEND MEETING FOR CASE TO BE HEARD.
USE THE CHECKLIST ON THE BACK OF THIS APPLICATION TO ENSURE YOUR SUBMISSION IS COMPLETE.

Application form, photographs, and drawings must be submitted (see attached for deadline) prior to the regular scheduled meeting in order to be placed on the agenda for the next meeting.

1. **PHOTOGRAPHS** - Photographs of your building and neighboring buildings **must accompany** your application.

2. **TYPE OF WORK PROPOSED** – Check all that apply. Please bring any samples or manufactures specifications for products you will use in this project.

____ Trim and decorative woodwork	____ Skylights
____ Siding and Masonry	__X__ Metal work
__X__ Roofing, gutter and downspout	____ Light fixtures
____ Windows, doors, and associated hardware	____ Signs
____ Storm windows and storm doors	____ Demolition
____ Shutters and associated hardware	____ Other _____
____ Paint (Submit color chips – HARB only)	

3. **DRAWINGS OF PROPOSED WORK** – Required drawings **must accompany** your application. Please submit ***ONE ORIGINAL AND TEN (10) COPIES OF DRAWINGS, PHOTOGRAPHS, APPLICATION FORM, AND ANY SPECIFICATIONS***

__X__ Alteration, renovation, restoration (1/4 or 1/8"=1'0" scale drawings required IF walls or openings altered.)

____ New addition (1/4" or 1/8"=1'0" scale drawings: elevations, floor plans, site plan)

____ New building or structure (1/4" or 1/8"=1'0" scale drawings: elevations, floor plans, site plan)

____ Demolition, removal of building features or building (1/4" or 1/8"=1'0" scale drawings: elevation of remaining site and site plan)

____ A scale drawing, with an elevation view, is required for all sign submittals

4. **DESCRIBE PROJECT** – Describe any work checked in #2 and #3 above. Attach additional sheets as needed.

Reference Exhibit A

5. APPLICANT'S SIGNATURE [signature] DATE: 12.3.25

OWNER'S SIGNATURE [signature] DATE: 12.5.25

Spillman Farmer Architects

Principals:
Christian D. Didra, AIA, NCARB
Christa Duelberg-Kraftician, AIA LEED AP GGP
Russel P. Pacala, AIA LEED AP
Salvatore B. Verrastro, AIA CCS CCCA FCSI, NCARB

December 1, 2025

EXHIBIT "A"

CENTRAL MORAVIAN CHURCH - ROOF REPLACEMENT

Description of Work: The work consist of the following:

1. Replacement of the existing slate shingles with new slate shingles that match the color and size of the existing installation.

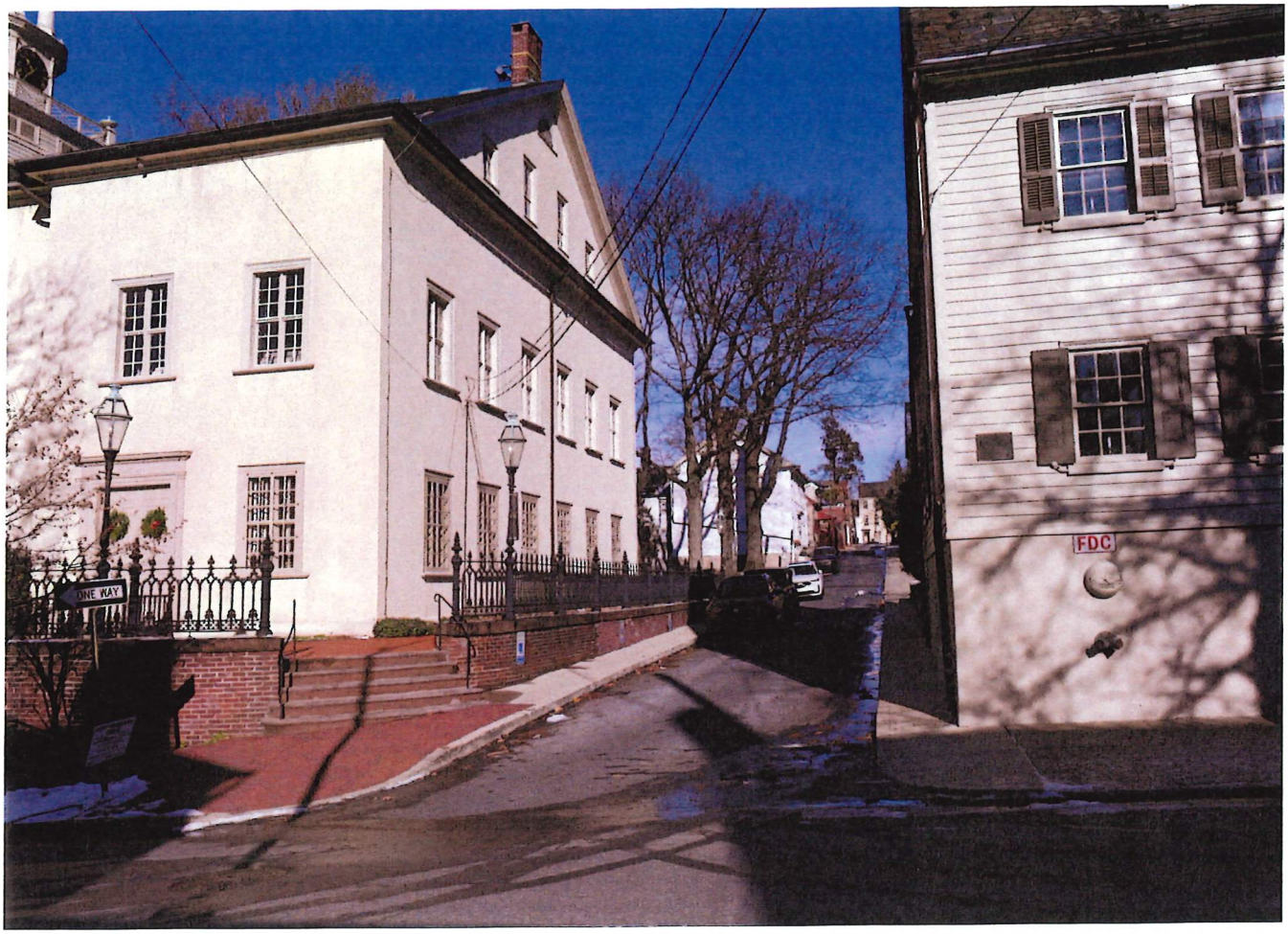
2. Replacement of the existing copper gutters and downspouts in-kind with the exception of increasing the size of the gutters slightly to match the current industry standards for gutter sizes. The existing snow guards will be replaced with snow guards to match as well.

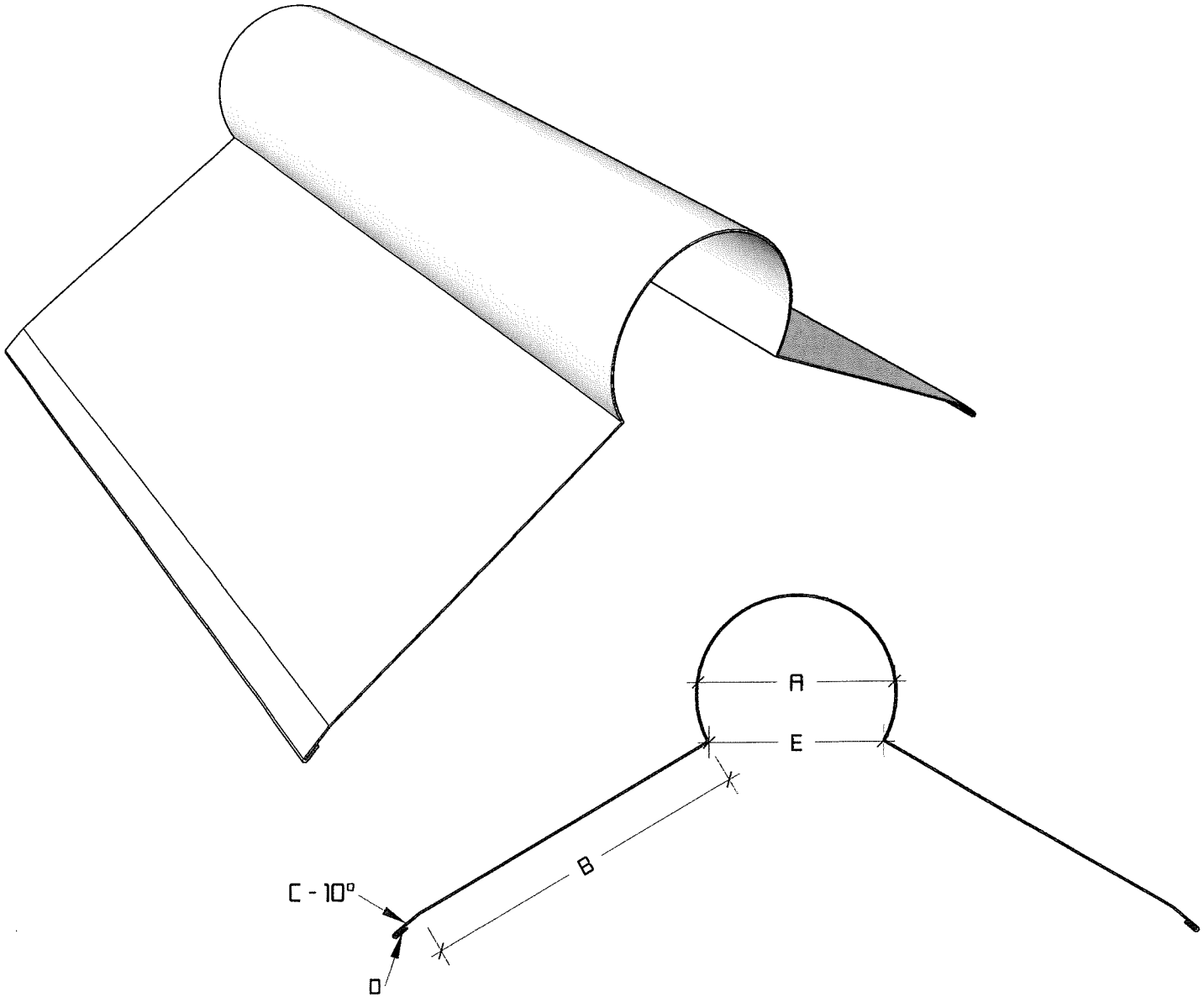
3. There are four "eyebrow" flat roof sections which were all originally "metal", with one section that was reroofed years ago with EPDM. All four sections will be replaced with new metal roofing to match the style and composition of the original roofs.

4. The in-kind replacement of the horizontal wood siding at the base of the Belfry's from the clock level down to the roof line.


MORAVIAN UNIVERSITY


MORAVIAN UNIVERSITY


ONE WAY
FDC



Copper, Freedom Gray and Lead Coated Copper					
A / Nominal size	B	C	D (Closed Hem)	E	Stock
3"	5.125"	0.5"	0.25"	2.625"	18"

Aluminum, Steel, Galvalume and Stainless Steel					
A / Nominal size	B	C	D (Closed Hem)	E	Stock
3"	4.125	0.5"	0.25"	2.625"	16"

Available in Kynar 0.032" aluminum and 24 gauge steel, 24 gauge galvalume, copper, freedom gray, lead coated copper and 24 gauge stainless steel.

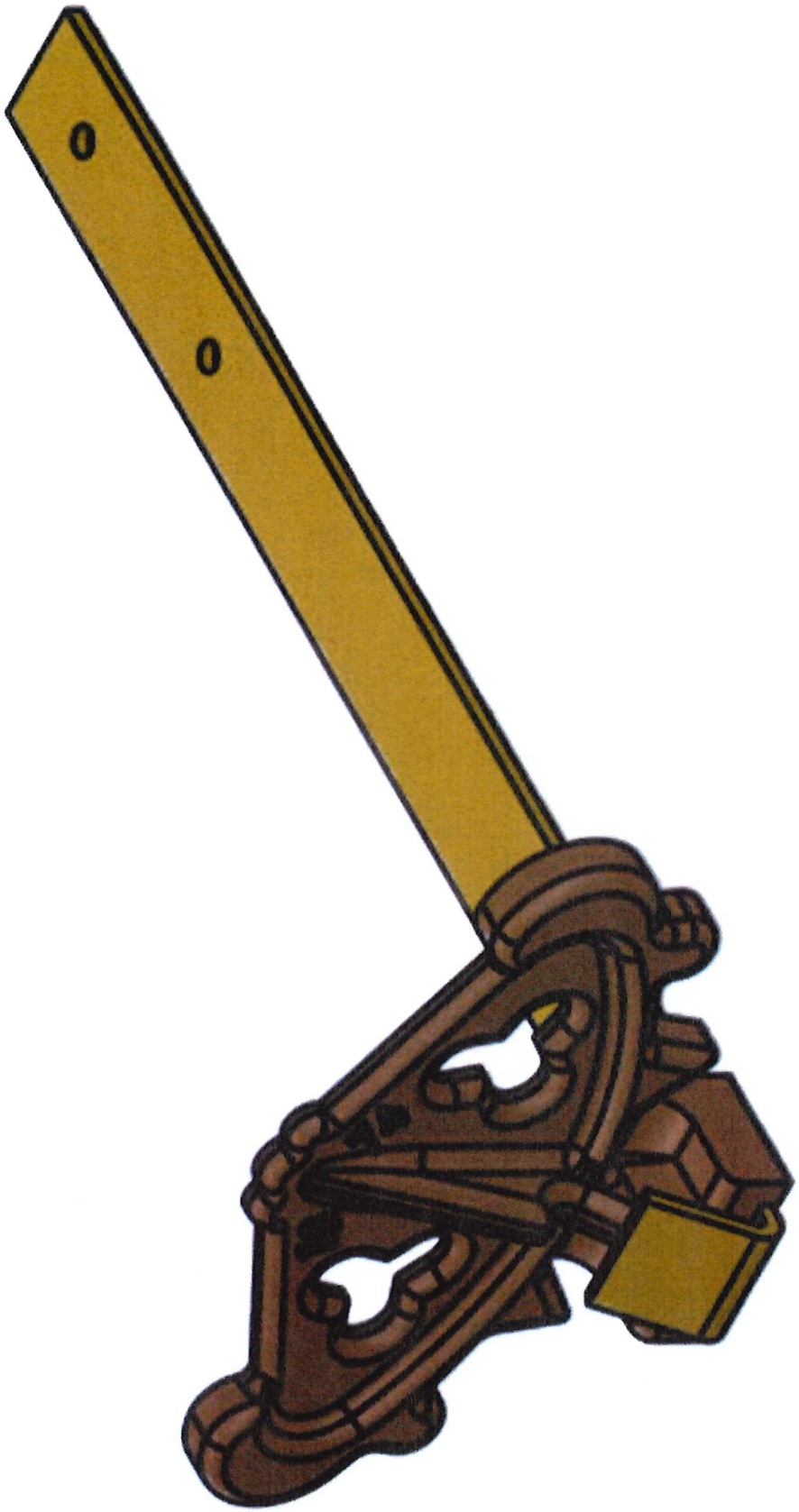
KM SHEET METAL
1310 E. Cornwallis Rd.
Durham, NC - 27713
(919) 544-8887 - Fax: 544-8898
info@kmsheetmetal.com - www.kmsheetmetal.com

Ridge Roll Flashing

Available in 10' lenghts

REVISIONS		
	MM/DD/YY	REMARKS
1	__/__/__	...ORIGINAL DRAFT OF DRAWING
2	__/__/__	...
3	__/__/__	...
4	__/__/__	...
5	__/__/__	...

D 001



SECTION 07.3126 - SLATE SHINGLES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Slate shingles (Replacement)
2. Self-adhering sheet underlayment.
3. Snow guards.
4. Ridge Cap.

B. Related Sections include the following:

1. Division 02 Section Demolition" for the removal of the existing slate.
2. Division 06 Section "Rough Carpentry" for roof sheathing.
3. Division 07 Section "Sheet Metal Flashing and Trim" for metal roof-penetration flashings, counterflashings and flashings not part of this Section.

1.2 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" for definitions of terms related to roofing work in this Section.

1.3 SUBMITTALS

A. Product Data: For each of the following:

1. Slate Shingles
2. Underlayment materials
3. Ridge accessories
4. Asphalt roof cement
5. Sealants
6. Snow Guards.

B. Qualification Data: For Installer.

C. Shop Drawings: For metal flashing; Include similar Samples of trim and accessories involving color selection.

D. Samples for Verification: For the following products, of sizes indicated, to verify color selected.

1. Slate Shingle: Full size, of each color, size, texture, and shape.
2. Ridge Cap: 12 inches (300 mm) long.
3. Fasteners: Three fasteners of each type, length, and finish.
4. Self-Adhering Underlayment: 12 inches (300 mm) square.
5. Snow Guard: Full-size unit.

E. Material Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for each slate variety.

F. Warranty: Special warranty specified in this Section.

1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain each color of slate from a single quarry capable of producing slate of consistent quality in appearance and physical properties.

B. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 1 Section "Project Management and Coordination."

C. Installer Qualifications: Engage an experienced Installer (Roofer) who has a minimum of fifteen (15) years of experience installing systems similar to the types specified herein. Submit written proof of experience with references and contact information.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store underlayment rolls on end on pallets or other raised surfaces. Do not double-stack rolls.

1. Handle, store, and place roofing materials in a manner to avoid significant or permanent damage to roof deck or structural supporting members. Do not overload roof deck.

B. Protect unused underlayment from weather, sunlight, and moisture when left overnight or when roofing work is not in progress.

1.6 PROJECT CONDITIONS

A. Environmental Limitations: Proceed with installation of self-adhering sheet underlayment only within the range of ambient and substrate temperatures recommended by manufacturer.

1.7 WARRANTY

A. Special Roofing Installer's Warranty: Provide Warranty signed by roofing Installer and covering Work of this Section, in which roofing Installer agrees to repair or replace slate roofing that fails in materials or workmanship within the following warranty period:

1. Warranty Period: Fifteen (15) years from date of Substantial Completion.

B. Material Warranty Period: Provide the Manufacturer's standard warranty form in which manufacturer agrees to repair or replace slate shingles that fail in materials within specified warranty period of fifty (50) years from date of Substantial Completion, non-prorated. Materials failures include manufacturing defects and failure of slate shingles to remain intact.

1.8 MAINTENANCE

A. Extra Materials: Provide 2 percent of overall quantity of each type, color and texture of slate shingles used in the work. Provide in strong, secure, and clearly labeled containers. Turn over to Owner's

representative at the job site and deliver to the Owner storage facility.

PART 2 - PRODUCTS

2.1 SLATE

A. Basis of Design Manufacturer: Subject to the requirements in the Contract Documents, provide slate shingles as manufactured by the Virginia Slate Company or an approved equal

B. Slate Shingles: **ASTM C 406, Grade S1**; hard, dense, and sound; chamfered edges, with nail holes machine punched or drilled and countersunk. No broken or cracked slates, no broken exposed corners, and no broken corners on covered ends that could sacrifice nailing strength or laying of a watertight roof.

1. Thickness: Nominal 1/4 to 3/8 inch. (Match existing)
2. Surface Texture: Smooth to match existing.
3. Size: Match existing.
4. Nail Holes: Two per shingle.
5. Shape: Match existing.
6. Color: "*Unfading Black*".
7. Weather-Exposure Color Change: Unfading.

C. Starter Slate: Slate shingles, with chamfered nail holes front-side punched.

1. Length: Exposure of slate shingle plus headlap.

2.2 UNDERLAYMENT MATERIALS

A. Self-Adhering Sheet Underlayment, Polyethylene Faced: ASTM D 1970, minimum of 40 mils (1.0 mm) thick; slip-resisting, polyethylene-film-reinforced top surface laminated to SBS-modified asphalt adhesive, with release-paper backing; cold applied. Provide primer for adjoining concrete or masonry surfaces to receive underlayment.

1. Products:

a. Carlisle Coatings & Waterproofing, Div. of Carlisle Companies Inc.; CCW WIP 200."
b. Grace, W. R. & Co.; Grace Ice and Water Shield.

2.3 SNOW GUARDS

A. Snow Guards:: Provide "Model #95" Pad Type copper snow guards as manufactured by Berger Brothers (800-523-8852) fabricated from 20 oz. Copper.

2.4 ACCESSORIES

A. Asphalt Roofing Cement: ASTM D 4586, Type II, asbestos free.

B. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied.

C. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane polymer sealant; of type, grade, class, and use classifications required to seal joints in slate-shingle roofing and remain watertight.

D. Slating Nails: ASTM F 1667; copper or stainless-steel, **ring shanked** wire nails, 0.135-inch (3.4-mm) minimum thick, sharp pointed, with 3/8-inch- (10-mm-) minimum diameter flat head, and of sufficient length to penetrate a minimum of 3/4 inch (19 mm) into sheathing.

1. Where nails are in contact with metal flashing, use nails made from same metal as flashing.
2. Basis of Design: Provide "Stormguard" nails as manufactured by Maze (800-435-5949).

E. Ridge Accessories: Custom-fabricated metal ridge roll / rolled ridge section with noncorrosive components , and snap-on caps and slate retention channels.

1. Products:

   a. Berger Brothers:
   b. Slate International, Inc.
   c. Castle Metal Products.

2. Type: solid, continuous, non-venting type, Minimum 12 foot lengths.
3. Provide splice plates between sections
4. Metal Components: Copper, 20-oz./sq. ft.- (0.7-mm-) thick sheet.
5. Accessories: Provide splices plates at seams, cleats, end caps, and other accessories of matching metal and finish.
6. No EXPOSED fasteners. The concealed fasteners must be stainless steel screws to anchor the copper cleats.

2.5 METAL FLASHING AND TRIM

A. Sheet Metal Flashing and Trim: Comply with requirements in Division 07 Section "Sheet Metal Flashing and Trim."

1. Sheet Metal: Copper.

B. Fabricate sheet metal flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to design, dimensions, metal, and other characteristics of item.

1. Apron Flashings: Fabricate with lower flange extending a minimum of 6 inches (150 mm) over and 4 inches (100 mm) beyond each side of downslope slate shingles and 6 inches (150 mm) up the vertical surface.
2. Step Flashings: Fabricate with a 3-inch (75-mm) headlap extending a minimum of 5 inches (125 mm) over the underlying slate shingles and up the vertical surface.
3. Cricket Flashings: Fabricate with concealed flange extending a minimum of 24 inches (600 mm) beneath upslope slate shingles and 6 inches (150 mm) beyond each side of chimney and 6 inches (150 mm) above the roof plane.
4. Drip Edges: Fabricate in lengths not exceeding 10 feet (3 m) with 2-inch (50-mm) roof-deck flange and 1-1/2-inch (38-mm) fascia flange with 3/8-inch (10-mm) drip at lower edge.

C. Vent-Pipe Flashings: ASTM B 749, Type L51121, at least 1/16 inch (1.6 mm) thick. Provide lead sleeve sized to slip over and turn down into pipe, soldered to skirt at slope of roof and extending at least 4 inches (100 mm) from pipe onto roof.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.

1. Examine roof sheathing to verify that sheathing joints are supported by framing and blocking or metal clips and that installation is within flatness tolerances.
2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and completely anchored; and that provision has been made for flashings and penetrations through roofing.
3. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 ROOF UNDERLAYMENT INSTALLATION

A. Self-Adhering Sheet Underlayment: Install wrinkle free, complying with low-temperature installation restrictions of underlayment manufacturer if applicable. Install on entire sloped roofing areas (under slate) and at locations indicated on Drawings, lapped in direction to shed water. Lap sides not less than 3-1/2 inches (89 mm). Lap ends not less than 6 inches (150 mm), staggered 24 inches (600 mm) between courses. Roll laps with roller. Cover underlayment within seven days.

1. Prime concrete and masonry surfaces to receive self-adhering sheet underlayment.
2. Ridges: Extend membrane over ridge without obstructing continuous ridge vent slot.
3. Sidewalls: Extend 18 inches (450 mm) beyond sidewalls and return vertically against sidewalls not less than 12 inches (300 mm).
4. Ridge Caps: Provide self-adhering underlayment over the ridge below the copper ridge cap, spanning cleat to cleat as indicated.

3.3 METAL FLASHING INSTALLATION

A. General: Install metal flashings and other sheet metal to comply with requirements in Division 7 Section "Sheet Metal Flashing and Trim."

1. Install metal flashings according to recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."

B. Apron Flashings: Extend lower flange over and beyond each side of downslope slate shingles and up the vertical surface.

C. Step Flashings: Install with a 3-inch (75-mm) headlap extending over the underlying slate shingles and up the vertical surface. Install with lower edge of flashing just upslope of, and concealed by, butt of overlying slate shingle. Fasten to roof deck only.

D. Rake Drip Edges: Install over underlayment and fasten to roof deck.

E. Eave Drip Edges: Install beneath underlayment and fasten to roof deck.

F. Pipe Flashings: Form flashing around pipe penetrations and slate shingles. Fasten and seal to slate

shingles.

G. Ridge Cap: Install copper ridge cap using copper cleats, which are screwed in the roof structure. The ridge cap shall be installed without the use of exposed fasteners. Provide manufacture splice plates at all seams.

3.4 SLATE-SHINGLE INSTALLATION

A. Installation, General: Beginning at eaves, install slate shingles according to written recommendations of manufacturer and details and recommendations in NRCA's "The NRCA Roofing and Waterproofing Manual."

1. Install wood nailer strip cant at eave edges.
2. Install shingle starter course chamfered face down.

B. Install first and remaining shingle courses with chamfered face up. Install full-width first course at rake edge.

1. Offset joints of uniform width slate shingles by half the shingle width in succeeding courses.
2. Offset joints of random width slate shingles a minimum of 3 inches (75 mm) in succeeding courses.

C. Maintain a 4-inch (100-mm) minimum head lap between succeeding shingle courses.

D. Maintain uniform exposure of shingle courses between eaves and ridge.

E. Extend shingle starter course and first course 1 inch (25 mm) over fasciae at eaves.

F. Extend shingle starter course and succeeding courses 1 inch (25 mm) over fasciae at rakes.

G. Cut and fit slate neatly around roof vents, pipes, ventilators, and other projections through roof.

H. Hang slate with two slating nails for each shingle with nail heads lightly touching slate. Do not drive nails home drawing slates downward or leave nail head protruding enough to interfere with overlapping shingle above.

3.5 SNOW-GUARD INSTALLATION

A. Snow-Guards: Space individual pad snow guards in two rows which are 24 inches on center. Stagger each row of snow guards spaced at 16 inches on center.

3.6 ADJUSTING AND CLEANING

A. Remove and replace damaged or broken slates.

B. Remove excess slate and debris from Project site.

END OF SECTION 07.3126