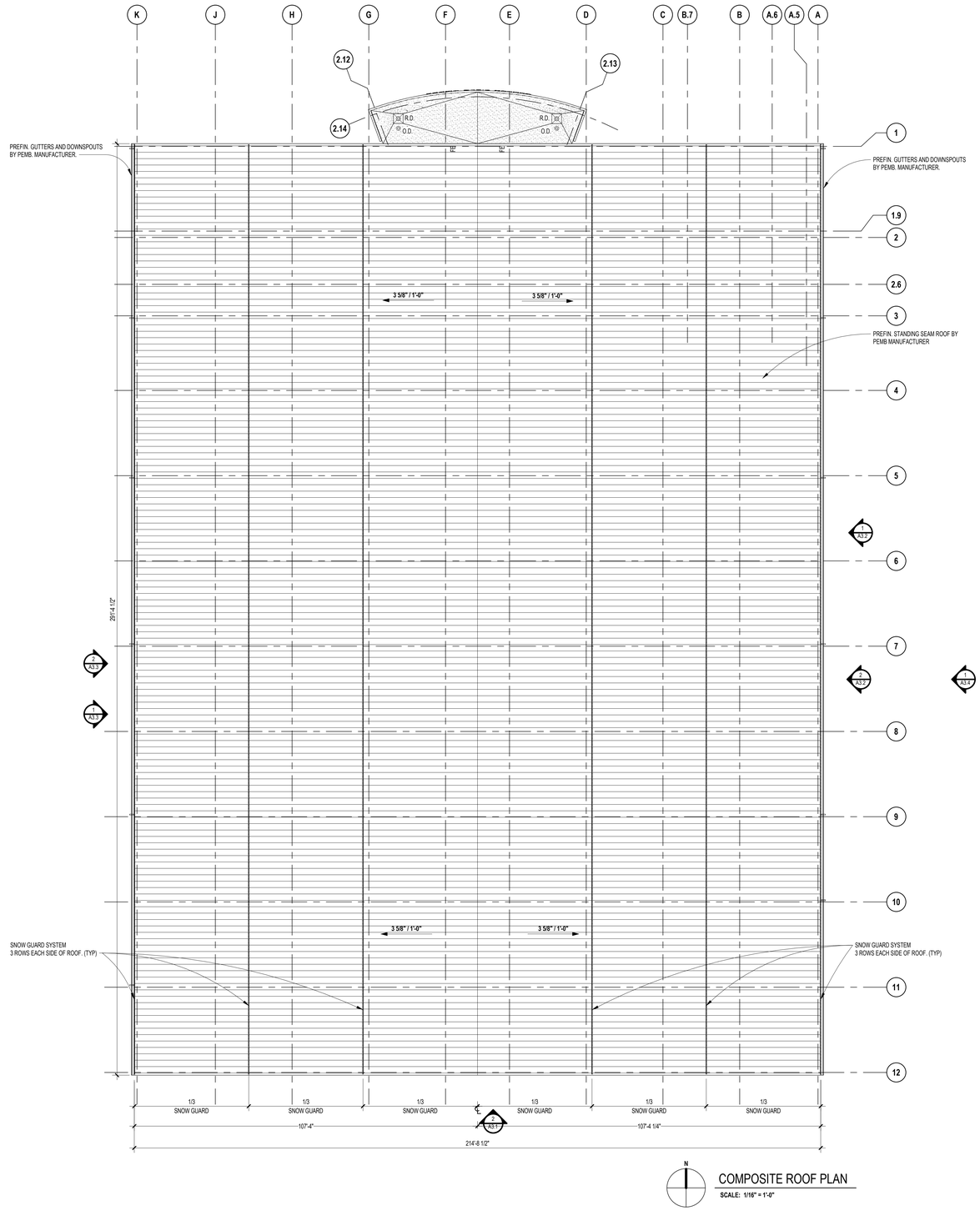



COMPOSITE ROOF PLAN

SCALE: 1/16" = 1'-0"


TMP ARCHITECTURE

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1191 WEST SQUARE LAKE ROAD
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REGISTRATION SEAL

CONSULTANT

PROJECT TITLE

# NEW FIELD HOUSE

DEXTER COMMUNITY SCHOOLS
DEXTER, MICHIGAN

DRAWING TITLE

## Composite Roof Plan

A
B

ISSUE DATES

| DATE: | ISSUED FOR: |
|---|---|
| 02-26-2026 | D.R. - 2 CONSTRUCTION DOCUMENTS |
| 02-12-2026 | OWNER REVIEW |
| 12-19-2025 | DESIGN DEVELOPEMENT |
| 12-16-2025 | BID PACKAGE NO. 1 - PEMB |
| 10-17-2025 | SCHEMATIC DESIGN |

| | |
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| APPROVED | DL |

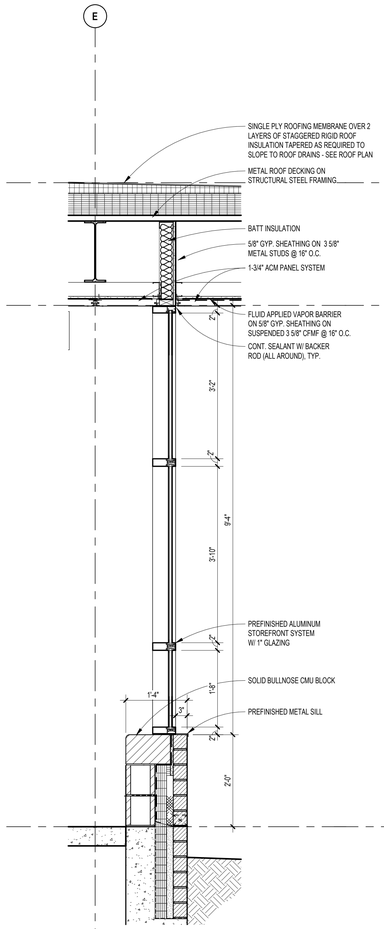
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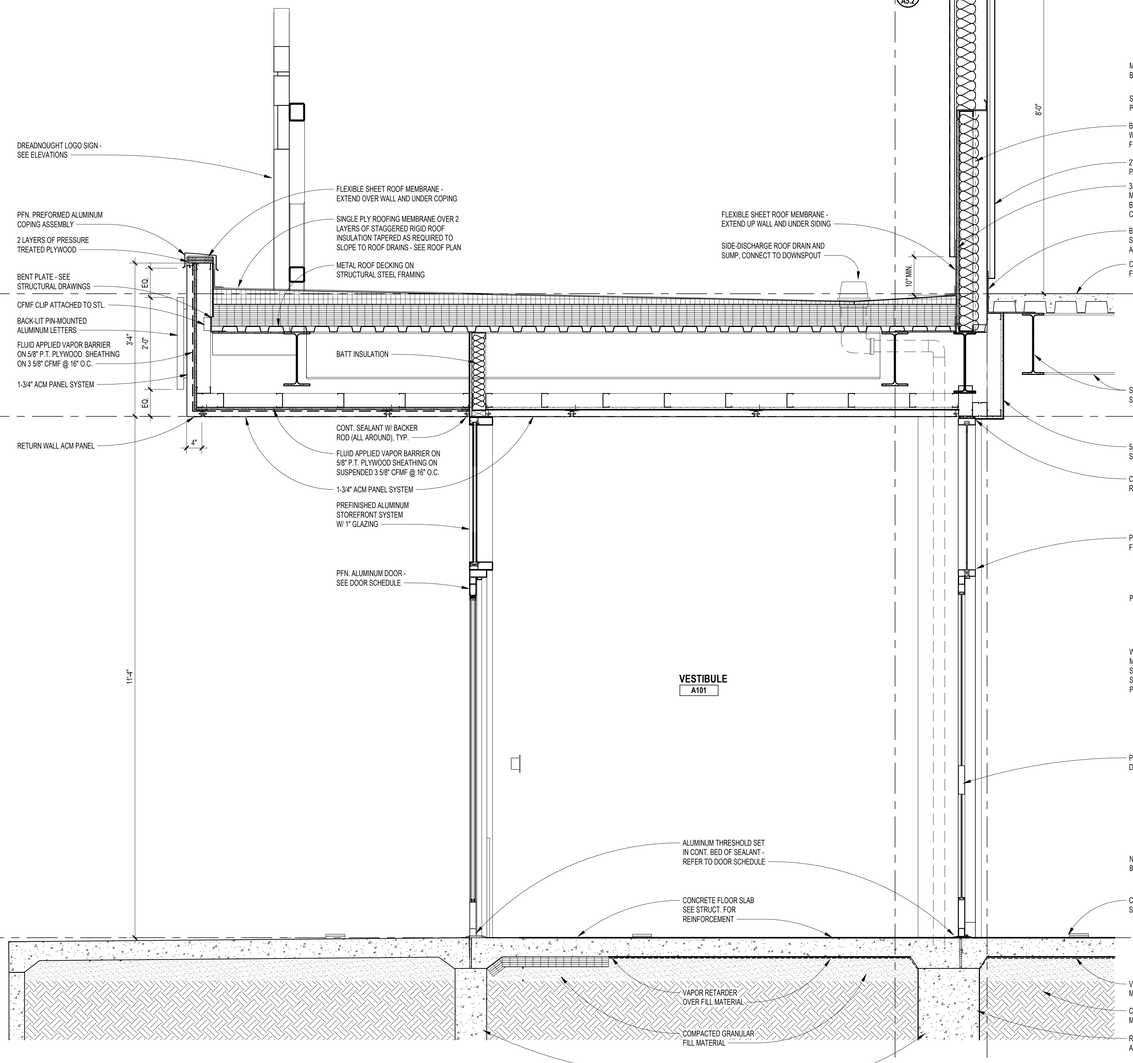
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AC.3

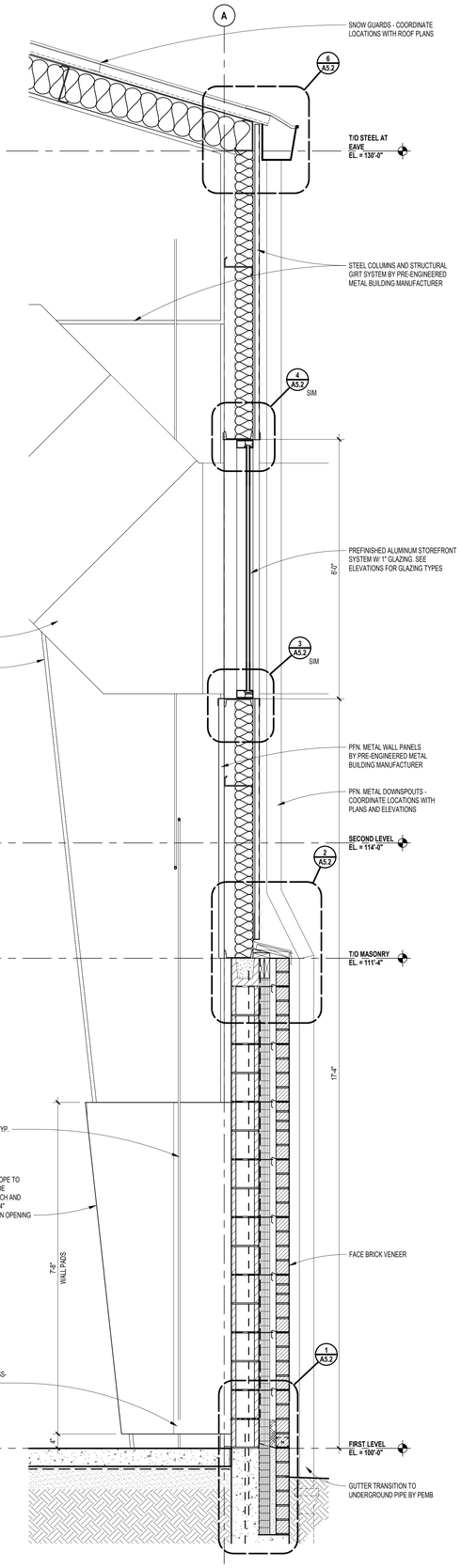

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3 A3.2 WALL SECTION
SCALE: 3/4" = 1'-0"

2 A3.6 SECTION THRU FRONT ENTRY
SCALE: 3/4" = 1'-0"

1 A3.5 WALL SECTION E/W HIGH BAY
SCALE: 3/4" = 1'-0"

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REGISTRATION SEAL

CONSULTANT

PROJECT TITLE

# NEW FIELD HOUSE

DEXTER COMMUNITY SCHOOLS
DEXTER, MICHIGAN

DRAWING TITLE

## Wall Sections

ISSUE DATES

| | |
|---|---|
| 02-26-2026 | D.R. - 2 CONSTRUCTION DOCUMENTS |
| 02-12-2026 | OWNER REVIEW |
| 12-19-2025 | DESIGN DEVELOPEMENT |
| 12-16-2025 | BID PACKAGE NO. 1 - PEMB |
| 10-17-2025 | SCHEMATIC DESIGN |
| DATE: | ISSUED FOR: |
| DRAWN | BP |
| CHECKED | MS |
| APPROVED | DL |

PROJECT NO.
25026E

DRAWING NO.
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# SECTION 07 5323 - EPDM MEMBRANE ROOFING

## PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Ethylene-propylene-diene-terpolymer (EPDM) roofing assembly; fully adhered. Including, but not limited to, the following:
   1. Cover board.
   2. Insulation, flat and tapered.
   3. Vapor barrier.
   4. Substrate board.
   5. Walkway pads.

### 1.02 ABBREVIATIONS

A. EPDM: Ethylene-propylene-diene-terpolymer.

### 1.03 REFERENCE STANDARDS

A. ASTM C1278/C1278M - Standard Specification for Fiber-Reinforced Gypsum Panel; 2017.
B. ASTM C1177/C1177M - Standard Specification for Glass Mat Gypsum Substrate for Use as Sheathing; 2017.
C. ASTM C1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board; 2023a.
D. ASTM D1876 - Standard Test Method for Peel Resistance of Adhesives (T-Peel Test); 2008 (Reapproved 2023).
E. ASTM D1970/D1970M - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection; 2021.
F. ASTM D5602/D5602M - Standard Test Method for Static Puncture Resistance of Roofing Membrane Specimens; 2018 (Reapproved 2022).
G. ASTM D4637/D4637M - Standard Specification for EPDM Sheet Used in Single-Ply Roof Membrane; 2015, with Editorial Revision (2022).
H. ASTM D903 - Standard Test Method for Peel or Stripping Strength of Adhesive Bonds; 1998 (Reapproved 2017).
I. ASTM E2178 - Standard Test Method for Determining Air Leakage Rate and Calculation of Air Permeance of Building Materials; 2021a.
J. ASTM E96/E96M - Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials; 2023.
K. FM (AG) - FM Approval Guide; Current Edition.
L. FM 4470 - Examination Standard for Single-Ply, Polymer-Modified Bitumen Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies for Use in Class 1 and Noncombustible Roof Deck Construction; 2022.
M. FM DS 1-28 - Wind Design; 2015, with Editorial Revision (2024).
N. FM DS 1-29 - Roof Deck Securement and Above-Deck Roof Components; 2016, with Editorial Revision (2022).
O. FM DS 1-49 - Perimeter Flashing; 2016.
P. NRCA (RM) - The NRCA Roofing Manual; 2023.
Q. NRCA (WM) - The NRCA Waterproofing Manual; 2021.

### 1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordinate with installation of associated counterflashings installed under other sections.
B. Preinstallation Meeting: Convene a preinstallation meeting one week before starting work of this section; require attendance by all affected installers; review preparation and installation procedures and coordination and scheduling necessary for related work.

### 1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data indicating membrane materials, flashing materials, cover boards, insulation, vapor barrier, substrate board, adhesives, and fasteners.
C. Shop Drawings: Indicate joint or termination detail conditions, conditions of interface with other materials, setting plan for tapered insulation, walkway pad locations, and sacrificial membrane locations.
D. Samples for Verification: Submit three samples 4 by 4 inches in size illustrating roofing membrane, cover board, insulation, vapor barrier, substrate board, and walkway pads.
E. Manufacturer's Field Reports: Indicate procedures followed, ambient temperatures, humidity, wind velocity during application, and supplementary instructions given.
F. Manufacturer's Qualification Statement.
G. Installer's Qualification Statement.
H. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.
I. Field Quality Control Reports.

**1.06 QUALITY ASSURANCE**

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum 5 years of documented experience.
B. Installer Qualifications: Company specializing in performing the work of this section with minimum 5 years documented experience, and approved by manufacturer.

**1.07 DELIVERY, STORAGE, AND HANDLING**

A. Deliver products in manufacturer's original containers, dry, undamaged, with seals and labels intact.
B. Store products in weather protected environment, clear of ground and moisture.
C. Ensure storage and staging of materials does not exceed static and dynamic load-bearing capacities of roof decking.
D. Protect foam insulation from direct exposure to sunlight.
E. Schedule applications so that no partially completed sections of roof are left exposed at end of workday.

**1.08 FIELD CONDITIONS**

A. Do not install roofing assembly during unsuitable weather and temperatures as defined by roofing membrane manufacturer.
B. Do not apply roofing membrane to damp or frozen deck surface or when precipitation is expected or occurring.
C. Do not expose materials vulnerable to water or sun damage in quantities greater than can be weatherproofed the same day.

**1.09 WARRANTY**

A. See Section 01 7800 - Closeout Submittals, for additional warranty requirements.
B. Manufacturer Warranty: Provide 20 year manufacturer's system warranty where manufacturer shall repair or replace roofing system components that fail in materials or workmanship; includes failure to prevent penetration of water to include rood edge metals.
C. Installer Warranty: Provide installation warranty where Installer agrees to correct defective Work within a 2 year period after Date of Substantial Completion; includes failure to prevent penetration of water.

## PART 2 PRODUCTS

**2.01 MANUFACTURERS**

A. Roof Assembly shall be provided by by one of the following:
1. Carlisle SynTec Systems; www.carlislesyntec.com.
2. Holcim Elevate (formerly Firestone Building Products); www.holcimelevate.com.

3. Johns Manville; www.jm.com.
4. Substitutions: Not permitted.

B. Source Limitations: Obtain roof membrane from one of the named Roof Assembly manufacturers and provide related roofing assembly components from either the roof membrane manufacturer or one of the listed product manufacturers; subject to approval of roof membrane manufacturer.

**2.02 ROOFING ASSEMBLY**

A. Single-ply membrane roofing assembly consisting of the following:
1. EPDM single-ply roof membrane; fully adhered.
2. Cover board; fully adhered.
3. Insulation, including tapered insulation; first layer mechanically fastened, all subsequent layers fully adhered.
4. Vapor barrier.
5. Substrate board; mechanically fastened.
6. Walkway pads.

B. Performance Requirements:
1. Comply with Factory Mutual (FM) Global and FM Approvals' RoofNav Listing requirements as follows:
a. Roof membrane, base flashings, and component materials shall comply with requirements in FM Approvals FM 4450 or FM Approvals FM 4470 as part of a roofing system, and shall be listed in FM Approvals' RoofNav for Class 1 or noncombustible construction, as applicable. Identify materials with FM Approvals Certification markings.
1) Fire/Windstorm Classification: Class 1A-90.
2) Hail-Resistance Rating: SH.
b. Comply with the following Property Loss Prevention Data Sheets:
1) Data Sheet FM DS 1-28: Wind Design.
2) Data Sheet FM DS 1-29: Roof Deck Securement and Above-Deck Roof Components.
3) Data Sheet FM DS 1-49: Perimeter Flashing.
2. Minimum Insulation Requirements: Excluding tapered insulation.
a. Minimum Layers of Insulation: Two.
b. Minimum R-value: 30.
3. Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials as demonstrated by roof membrane manufacturer based on testing and field experience.

**2.03 ROOF MEMBRANE**

A. Membrane: Ethylene-propylene-diene-terpolymer (EPDM); internally reinforced with fabric or scrim; complying with minimum properties of ASTM D4637/D4637M.
1. Thickness: 0.060 inch (60 mil), nominal.
2. Color: Black.

**2.04 COVER BOARD**

A. Faced Polyisocyanurate Cover Board: High compressive strength board, conforming to ASTM C1289, Type II, Class 4 - Faced with coated or uncoated polymer-bonded glass fiber mat facers on both major surfaces of the core foam.
1. Grade and Compressive Strength: Grade 1, 80 psi.
2. Board Size: 4 by 4, or 4 by 8 feet.
3. Board Thickness: 1/2 inch.
4. Insulation Thermal Resistance, R-value: 2.5, nominal.
5. Products:
a. Carlisle SynTec Systems; SecurShield HD Plus: www.carlislesyntec.com.
b. Holcim Elevate (formerly Firestone Building Products); ISOGARD HD Cover Board: www.holcimelevate.com.

c. Johns Manville; ProtectoR HD: www.jm.com.
d. Substitutions: See Section 01 6000 - Product Requirements.

**2.05 INSULATION**

A. Polyisocyanurate Board Insulation: Rigid cellular foam, conforming to ASTM C1289.
1. Classifications:
a. Type II:
1) Class 2 - Faced with coated polymer-bonded glass fiber mat facers on both major surfaces of core foam.
2) Compressive Strength: Grade 2 - 20 psi (138 kPa), minimum.
3) Long Term Thermal Resistance (LTTR) R-value: At 1 inch thick; 5.7 at 75 degrees F.
2. Board Size: 4 by 4, or 4 by 8 feet.
3. Board Thickness: 2.0 inch.
4. Tapered Board: Slope as indicated; minimum thickness 1/2 inch; fabricate of fewest layers possible.
5. Board Edges: Square.
6. Products:
a. Carlisle SynTec Systems; SecurShield: www.carlislesyntec.com.
b. Holcim Elevate (formerly Firestone Building Products); Resista: www.holcimelevate.com.
c. Johns Manville; Enrgy 3 CGF:www.jm.com.
d. Substitutions: See Section 01 6000 - Product Requirements.

**2.06 VAPOR BARRIER**

A. Self-Adhering-Sheet Vapor Barrier: Polyethylene film laminated to layer of butyl rubber adhesive; cold applied, with slip-resisting surface and release paper backing.
1. Properties:
a. Thickness: 30 mil total thickness, minimum; ASTM D1970/D1970M.
b. Tensile Strength: 50 lbf/in MD, 70 lbf/in XMD; ASTM D5147.
c. Elongation: 50 percent MD, 20 percent XMD; ASTM D5147; 73 degress F.
d. Low Temperature Flexibility: Minus 30 degress F; ASTM D5147.
e. Static Puncture: 90 lbf; ASTM D5602/D5602M.
f. Tear Strength: 80 lbf/in MD, 90 lbf/in XMD; ASTM D5601; at 73 degress F.
g. Lap Adhesion: 6 lbf/in; ASTM D1876; at 73 degress F
h. Peel Resistance: 5 lbf/in; ASTM D903.
i. Water Absorption: Less than 0.1 percent; ASTM D5147.
j. Water Vapor Permeability: Maximum permeance rating of 0.1 perm; ASTM E96/E96M, Procedure B.
k. Air Permeability: Maximum permeance of 0.0002 cu ft/min-sq ft; ASTM E2178.
2. Products:
a. Carlisle SynTec Systems; VapAir Seal 725TR: www.carlislesyntec.com.
b. Holcim Elevate (formerly Firestone Building Products); V-Force: www.holcimelevate.com.
c. Johns Manville; JM Vapor Barrier SA: www.jm.com.
d. Substitutions: See Section 01 6000 - Product Requirements.

**2.07 SUBSTRATE BOARD**

A. Substrate Board: ASTM C1177/C1177M, glass-mat, water-resistant gypsum board or ASTM C1278/C1278M, fiber-reinforced gypsum board.
1. Thickness: 1/2 inch.
2. Size: 4 by 4, or 4 by 8 feet.
3. Products:
a. Georgia-Pacific Gypsum: DensDeck Prime Roof Board: www.gp.com.
b. National Gypsum Company; DEXcell Brand FA Glass Mat Roof Board: www.nationalgypsum.com.

c. United States Gypsum Co.; USG Securock Brand Gypsum-Fiber Roof Board; www.usg.com.
d. Substitutions: See Section 01 6000 - Product Requirements.

**2.08 WALKWAYS**

A. Flexible Walkways: Factory-formed, nonporous, heavy-duty, slip-resisting, surface-textured walkway pads.
1. Size: 30 by 30 inches.
2. Thickness: 0.30 inch, minimum.
3. Color: Black.
4. Products:
a. Carlisle SynTec Systems; Sure-Seal EPDM Pressure-Sensitive Molded Walkway Pads: www.carlislesyntec.com.
b. Holcim Elevate (formerly Firestone Building Products); QuickSeam Walkway Pad: www.holcimelevate.com.
c. Johns Manville; JM EPDM Peel & Stick Walkpads: www.jm.com.
d. Substitutions: See Section 01 6000 - Product Requirements.

**2.09 ACCESSORIES**

A. Auxiliary Materials: Provide all materials recommended by roofing assembly manufacturer for a complete and weathertight assembly.
B. Flexible Flashing Material: Same material as roofing membrane.
1. Thickness: Same as roofing membrane unless otherwise recommended by roof membrane manufacturer.
2. Uncured, unless otherwise recommended by roof membrane manufacturer.
C. Factory Fabricated Flashings: Same material as roofing membrane
1. Provide manufacturer's standard preformed flashings including, but not limited to, cone and vent sheet flashings, molded pipe boot flashings, and pourable sealer penetration pockets.
D. Metal Termination Bars: Manufacturer's standard, predrilled stainless steel bars, approximately 1 by 1/8 inch thick; with anchors.
E. Membrane and Flashing Adhesive: As recommended by membrane manufacturer.
F. Seaming Materials: Manufacturer's standard splice tape with release film.
G. Insulation Adhesive: As recommended by insulation manufacturer and as follows:
1. Full-spread, spray-applied, low-rise, two-component urethane adhesive.
H. Fasteners: Factory-coated steel fasteners and metal or plastic plates complying with corrosion-resistance provisions in FM Approvals FM 4470, designed for fastening components to substrate, and acceptable to roofing system manufacturer
I. Sealants and Pourable Sealers: As recommended by membrane manufacturer.
J. Surface Conditioner for Adhesives: Compatible with membrane and adhesives.
K. Vapor Barrier Primer: As recommended by vapor barrier manufacturer.

**PART 3 EXECUTION**

**3.01 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 nailing strips are in place.

**3.02 INSTALLATION - GENERAL**

A. Perform work in accordance with manufacturer's instructions, NRCA (RM), and NRCA (WM) 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.

**3.03 SUBSTRATE BOARD INSTALLATION**

A. Install substrate boards with long joints in continuous straight lines and end joints staggered not less than 24 inches on center between board rows.
B. At metal deck, install substrate board at right angle to flutes of deck.
   1. Locate end joints over crests of metal deck.
C. Tightly butt substrate boards together.
D. Cut substrate board to fit tight around penetrations and projections.
E. Fasten substrate board to top flanges of metal deck according to roof assembly manufacturer's instructions and FM (AG) Factory Mutual requirements.

**3.04 VAPOR BARRIER INSTALLATION**

A. Self-Adhering-Sheet Vapor Barrier: Install according to vapor barrier manufacturer's instructions. Prime substrate if required by manufacturer. Lap self-adhering-sheet vapor barrier sides and ends a minimum of 3 and 6 inches, respectively.
B. Extend vertically up parapet walls and projections to a minimum height equal to height of insulation and cover board.
C. Completely seal vapor barrier at terminations, obstructions, and penetrations to prevent air movement into roofing system.

**3.05 INSULATION INSTALLATION**

A. Ensure vapor barrier is clean and dry, continuous, and ready for application of insulation.
B. Attachment of Insulation: Includes tappered insulation.
   1. Mechanically fasten first layer of insulation to deck in accordance with roof assembly manufacturer's instructions and FM (AG) Factory Mutual requirements.
   2. Embed each subsequent layer of insulation in adhesive in accordance with roof assembly manufacturers' instructions and FM (AG) Factory Mutual requirements.
   3. Lay subsequent layers of insulation with joints staggered minimum 6 inch from joints of preceding layer.
C. Cover Boards:
   1. Adhere cover board to insulation using adhesive according to roof assembly manufacturer's instructions and FM (AG) Factory Mutual requirements.
D. Place tapered insulation to the required slope pattern in accordance with manufacturer's instructions.
E. On metal deck, place boards perpendicular to flutes with insulation board ends bearing on deck flutes.
F. Lay boards with edges in tight contact without forcing. Cut insulation to fit neatly to perimeter blocking and around penetrations through roof.
   1. Gaps between boards and adjacent materials shall not exceed 1/4 inch.
G. At roof drains, use factory-tapered boards to slope down to roof drains over a distance of 24 inches.
H. Do not apply more insulation than can be covered with membrane in same day.

**3.06 MEMBRANE INSTALLATION**

A. Fully adhere membrane roofing system in accordance with manufacturer's recommendations and NRCA (RM) applicable requirements.

B. Roll out membrane, free from wrinkles or tears. Place sheet into place without stretching.
C. Shingle joints on sloped substrate in direction of drainage.
D. Accurately align roof membrane, and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.
   1. Overlap edges and ends and seal seams by splice tape. Seal permanently waterproof.
E. At intersections with vertical surfaces:
   1. Fully adhere flexible flashing over membrane and up to nailing strips.
   2. Secure flashing to nailing strips at 4 inches on center.
F. At gravel stops, extend membrane under gravel stop and down face of wall behind gravel stop fascia. Secure with fasteners to nailing strips.
G. At copings, unless otherwise indicated, extend membrane under coping and down face of wall behind front of coping. Secure with fasteners to nailing strips.
H. Around roof penetrations, seal flanges and flashings with flexible flashing.
I. Install roofing expansion joints where indicated. Make joints watertight.
   1. Install prefabricated joint components in accordance with manufacturer's instructions.
J. Coordinate installation of roof drains and sumps and related flashings.
K. Coordinate installation of associated counterflashings installed under other sections.

**3.07 SACRIFICIAL MEMBRANE INSTALLATION**

A. At roof exhausts which expel vegetable oils, animal fats, and other kitchen wastes, or expel other chemicals detrimental to the roof membrane, install a sacrificial membrane over the roof membrane in an 8 foot radius, minimum, around the roof exhaust.
   1. Sacrificial membrane shall be the same material and thickness as the roof membrane.

**3.08 WALKWAY PAD INSTALLATION**

A. Walkway Pads: Install walkway products according to manufacturer's instructions.
B. Install walkway pads at the following locations:
   1. Perimeter of each rooftop unit.
   2. Between each rooftop unit location, creating a continuous path connecting rooftop unit locations.
   3. Between each roof hatch and each rooftop unit location or path connecting rooftop unit locations.
   4. Top and bottom of each roof access ladder.
   5. Between each roof access ladder and each rooftop unit location or path connecting rooftop unit locations.
   6. At downspout discharges onto roof assembly.
   7. Other locations as indicated on Drawings.
   8. As required by roof membrane manufacturer's warranty requirements.
C. Provide 6 inch clearance between adjoining pads.
D. Adhere walkway products to substrate with compatible adhesive according to walkway pad manufacturer's instructions.

**3.09 FIELD QUALITY CONTROL**

A. See Section 01 4000 - Quality Requirements, for general requirements for field quality control and inspection.
B. Require site attendance of roof assembly manufacturer daily during installation of the Work.
C. Final Roof Inspection: Arrange for roof assembly manufacturer's technical personnel to inspect roofing installation on completion, in presence of Architect, and to prepare inspection report.
D. Repair or remove and replace components of roofing system where inspections indicate that they do not comply with specified requirements.
E. Additional testing and inspecting, at Contractor's expense, will be performed to determine if replaced or additional work complies with specified requirements

**3.10 CLEANING**

A. Clean all dirt, footprints, overspray, spillage, debris, and other construction waste materials from the roof assembly.

B. 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.

C. Repair or replace defaced or damaged finishes caused by work of this section.

**3.11 PROTECTION**

A. Protect installed roofing and flashings from construction operations.

**END OF SECTION 07 5323**

# SECTION 07 7100 - ROOF SPECIALTIES

## PART 1 GENERAL

### 1.01 SECTION INCLUDES

A. Manufactured roof specialties, including:
   1. Copings.
   2. Fascia/gravel stops.
   3. Roof expansion joint cover assemblies.
   4. Gutters and downspouts.

### 1.02 REFERENCE STANDARDS

A. AAMA 2605 - Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels (with Coil Coating Appendix); 2022.
B. ANSI/SPRI/FM 4435/ES-1 - Test Standard for Edge Systems Used with Low Slope Roofing Systems; 2022.
C. ASTM D4586/D4586M - Standard Specification for Asphalt Roof Cement; 2025.
D. NRCA (RM) - The NRCA Roofing Manual; 2023.
E. SMACNA (ASMM) - Architectural Sheet Metal Manual; 2012.

### 1.03 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.
B. Product Data: Provide data on shape of components, materials and finishes, anchor types and locations.
C. Shop Drawings: Indicate configuration and dimension of components, adjacent construction, required clearances and tolerances, and other affected work.
D. Samples:
   1. For each material and finish, submit three samples 4 by 4 inch inch in size illustrating metal finish color.
   2. Provide a full size sample, 12 inches long, for each of the following:
      a. Copings.
      b. Roof edges/gravel stops.
      c. Roof expansion joint cover assemblies.
      d. Gutters and downspouts.

### 1.04 DELIVERY, STORAGE, AND HANDLING

A. Store products in manufacturer's unopened packaging until ready for installation.
B. Store products under cover and elevated above grade.

## PART 2 PRODUCTS

### 2.01 COMPONENTS

A. Copings: Factory fabricated to sizes required; corners mitered; concealed fasteners.
   1. Configuration: Concealed continuous hold down cleat at both legs; internal splice piece at joints of same material, thickness, and finish as cap; concealed stainless steel fasteners.
   2. Pull-Off Resistance: Tested in accordance with ANSI/SPRI/FM 4435/ES-1 using test method RE-3 to positive and negative design wind pressure as defined by applicable local building code.
   3. Material: Formed aluminum sheet, 0.063 inch thick, minimum.
   4. Finish: PVDF coating; 70 percent polyvinylidene fluoride.
   5. Color: Two or three coat custom color to match Architect's sample.
   6. Products:
      a. Architectural Products Co.; AP Snap Tight Coping: www.archprod.com.
      b. ATAS International, Inc.; Rapid-Lok Coping: www.atas.com.
      c. Carlisle SynTec Systems; SecureEdge 200 Coping: www.carlislesyntec.com.
      d. Firestone Building Products; Firestone Gold Coping: www.firestonebpco.com.
      e. Johns Manville; Presto Lock Coping System: www.jm.com.

f. Metal-Era; Perma-Tite Coping: www.metalera.com.
g. OMG Roofing Products; PermaSnap: www.omgroofing.com.
h. Petersen Aluminum Corp.; PAC-TITE Coping: www.pac-clad.com.
i. Sika Sarnafil; Wall Grip Coping: usa.sarnafil.sika.com.
j. Substitutions: See Section 01 6000 - Product Requirements.

B. Fascia/Gravel Stop: Factory fabricated to sizes required; mitered, welded corners; concealed fasteners.
1. Configuration: Fascia, cant, and edge securement for roof membrane.
2. Accessories:
a. Fascia extenders with continuous hold-down cleats.
1) Depth: As indicated on Drawings.
3. Pull-Off Resistance: Tested in accordance with ANSI/SPRI/FM 4435/ES-1 using test methods RE-1 and RE-2 to positive and negative design wind pressure as defined by applicable local building code.
4. Material: Formed aluminum sheet, 0.050 inch thick, minimum.
5. Finish: PVDF coating; 70 percent polyvinylidene fluoride.
6. Color: Two or three coat custom color to match Architect's sample.
7. Products:
a. Architectural Products Co.; AP Snap-On Fascia: www.archprod.com.
b. ATAS International, Inc.; Edge-Lok 2: www.atas.com.
c. Carlisle SynTec Systems; SecureEdge 200 Fascia: www.carlislesyntec.com.
d. Firestone Building Products; Firestone EdgeGard - Snap-On: www.firestonebpco.com.
e. Johns Manville; Presto-Tite Edge One Fascia System: www.jm.com.
f. Metal-Era; Perma-Tite System 200 Fascia: www.metalera.com.
g. OMG Roofing Products; EconoSnap Fascia System: www.omgroofing.com.
h. Petersen Aluminum Corp.; PAC Snap Edge Fascia: www.pac-clad.com.
i. Sika Sarnafil; Edge Grip Fascia: usa.sarnafil.sika.com.
j. Substitutions: See Section 01 6000 - Product Requirements.

C. Expansion Joint Covers - Bellows: Composite construction of flexible EPDM or neoprene flashing of black color with closed cell urethane foam backing, each edge seamed to stainless steel sheet metal flanges, designed for nominal joint width of 2 inch. Include special formed corners, tees, intersections, and wall flashings, each sealed watertight.
1. Type: Roof-to-roof and roof-to-wall; cant based.
2. Accessories: Include the following:
a. Manufacturer's standard moisture barrier.
3. Products:
a. Balco, Inc.; BRB-WC Series: www.balcousa.com.
b. Construction Specialties, Inc.; BRJW-CF Series: www.c-sgroup.com.
c. Johns Manville; Expand-O-Flash CF/EJ Series: www.jm.com.
d. MM Systems Corp.; ERFL Series: www.mmsystemscorp.com.
e. Inpro Corporation; 674-G02 Series: www.inprocorp.com.
f. Nystrom; ECFw Series: www.nystrom.com.
g. Watson Bowman Acme Corp.; Wabo Flash EEJ/C Series: www.wbacorp.com.
h. Substitutions: See Section 01 6000 - Product Requirements.

D. Gutters and Downspouts: Factory fabricated gutters and downspouts.
1. Gutters: SMACNA rectangular style profile.
2. Downspouts: SMACNA Rectangular profile.
3. Material: Formed aluminum sheet, 0.063 inch thick, minimum.
4. Gutters and Downspouts: Size for rainfall intensity determined by a storm occurrence of 1 in 10 years in accordance with SMACNA (ASMM), unless otherwise indicated.
5. Anchors and Supports: Profiled to suit gutters and downspouts.
a. Anchoring Devices: Type recommended by fabricator, but not less than SMACNA requirements.

b. Gutter Supports: Brackets.
c. Downspout Supports: Brackets.

6. Downspout Boots: Plastic, unless otherwise indicated.
7. Finish: PVDF coating; 70 percent polyvinylidene fluoride.
8. Color: Two or three coat custom color to match Architect's sample.
9. Manufacturers:
   a. Architectural Products Co.; www.archprod.com.
   b. ATAS International, Inc.; www.atas.com.
   c. Metal-Era; www.metalera.com.
   d. OMG Roofing Products; www.omgroofing.com.
   e. Southern Aluminum Finishing Co, Inc.(SAF); www.saf.com <http://www.saf.com>.
   f. Substitutions: See Section 01 6000 - Product Requirements.

**2.02 FINISHES**

A. PVDF (Polyvinylidene Fluoride) Coating: Superior Performance Organic Finish, AAMA 2605; multiple coat, thermally cured fluoropolymer finish system. Two or three-coat system, unless otherwise indicated.

**2.03 ACCESSORIES**

A. Sealant for Joints in Linear Components: As recommended by component manufacturer.
B. Adhesive for Anchoring to Roof Membrane: Compatible with roof membrane and approved by roof membrane manufacturer.
C. Roof Cement: ASTM D4586/D4586M, Type I.
D. Protective Backing Paint: Zinc molybdate alkyd.

**PART 3 EXECUTION**

**3.01 EXAMINATION**

A. Verify that deck, curbs, roof membrane, base flashing, and other items affecting work of this Section are in place and positioned correctly.

**3.02 PREPARATION**

A. To prevent galvanic action or corrosion, back paint concealed metal surfaces with protective backing paint, minimum dry film thickness of 3 mil, or provide other permanent separation as recommended by unit manufacturer, where dissimilar metals contact each other, or where metal contacts pressure-treated wood or other corrosive substrates.

**3.03 INSTALLATION - GENERAL**

A. Install components in accordance with manufacturer's instructions and NRCA (RM) applicable requirements.
B. Seal joints within components when required by component manufacturer.
C. Anchor components securely.
D. Coordinate installation of components of this section with installation of roofing membrane and base flashings.

**3.04 GUTTERS AND DOWNSPOUTS**

A. Secure gutters and downspouts in place with concealed fasteners.
   1. Gutter Supports: Space 30 inches on center, maximum.
   2. Downspout Supports: Locate at top and bottom of downspout and 60 inches on center, maximum.
B. Seal metal joints.
C. Slope gutters 1/4 inch per 10 feet, minimum, unless otherwise indicated.
D. Where indicated, connect downspouts to downspout boots, and seal connection watertight.

**3.05 CLEANING**

A. On completion of manufactured roof specialties installations, remove unused materials and clean finished surfaces as recommended by roof specialties manufacturers. Maintain finishes in clean condition.

B. Replace manufactured roof specialties damaged or deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

**END OF SECTION 07 7100**