

Request for Proposal

Graphic Standardization and Drafting of Branded Details

Issued: March 27, 2024

The Terminations, Transitions and Flashing Task Group (part of Technical Committee) of the Air Barrier Association of America (ABAA) is seeking the services of an independent consultant or consulting firm for drafting and graphic design of both 2D and 3D building enclosure details.

An individual or firm that has experience in updating and developing 2D and 3D building enclosure details would be considered a qualified firm for the purpose of this project. Proposals shall be received by **April 24th, 2024 at 5:00 pm (EDT)**.

If you are considering bidding, please notify ABAA of your intention by emailing Ryan Dalglish at rdalglish@airbarrier.org by April 10th, 2024, at 5:00 pm (EDT). Failure to register will not disqualify your proposal but will possibly prevent you from receiving updated information in a timely manner.

All Request for Information (RFI's) will need to be submitted by April 10th, 2024, **at 5:00 pm (EDT)**.

Responses to RFI's will be completed by **April 17th, 2024, at 5:00 pm (EDT)**.

All RFI's and project understanding clarifications will be provided to all firms and contractors that have confirmed they will be submitting a proposal.

All questions regarding the proposal should be directed to Ryan Dalglish at (866) 956-5888 or via email at rdalglish@airbarrier.org.

About ABAA

ABAA is a nonprofit association representing the air and water resistive barrier industry. ABAA's general membership consists of manufacturers of air barrier materials and products, contractors who install air barrier materials and accessories, and individuals with a general, academic, or business interest. This project will be overseen by the TFC Task Group of the Air Barrier Association of America (ABAA), with a technical review from ABAA's Technical Committee. ABAA's committees include persons from manufacturers, architects, consultants, specifiers, testing agencies and laboratories.

Summary of Project

Deliverables

- Provide up to 3 mock-ups (proof or drafts) or samples of a full design (3D Model, 2D design and rendered 11x17 print) prior to execution of all design work.
 - Preliminary review by client and make modifications based on feedback.
 - Submission of revised mock-up for review and address any final comments.
 - Submit final design for sign off by client.
- Thirty (30) 3D files
- Thirty (30) 2D files
- Thirty (30) rendered design prints, combining corresponding 2D and 3D details on one (1) 11 x 17 page.

GENERAL NOTES:

- Native files must be provided by consultant to client, along with PDF.
- Contractors must have capability to do 2D and 3D models in house.
- There will be at least 12 virtual meetings to review draft details and have client approval and sign off.
- Existing files are attached to this RFP that shows 21 details and work completed to date. This is included in Appendix A. An additional 9 details will be provided to the organization/consultant.
- Example details from other organizations that convey intent for the look and feel of the details. This is included in Appendix B.
- Improve callouts and include on the actual details versus table at beginning of document.
- Contractor to identify single point of contact for duration of the work and have decision making authority.
- The services requested do not include engineering or development of new details. The technical work will be completed by ABAA's committee's and experts.
- The objective of the details is to upload to the ABAA website for use for the greater construction industry.

Requirements for Proposal

The following information is to be included in the consultant's proposal:

firm overview

provide a brief narrative on the history of the firm. Include a list of current/past construction-related and trade association clients, with a focus on experience in developing construction details.

project understanding

a statement that clearly and concisely states the firm's understanding of the project and describes its capability to perform the work.

resumes

provide CVs of the firm's personnel who will be assigned to the project.

similar projects

include a summary of specific projects the individual or firm has conducted that are similar in nature to the proposed project. Include samples of past work in creating 2D and 3D details.

project management

include a summary of how the firm intends to address comments from a technical review committee and how technology will be used to communicate changes and make comments.

Identify software that will be used for the details and how it will be delivered to ABAA.

Identify the anticipated timeline to complete the project, allowing sufficient time for review and comment by ABAA.

References

Provide three references from past clients: those related to the construction industry are preferable. Reference information should include name, address, phone number and website address.

Fee Proposal

Provide a detailed estimate of the costs for each task associated with completion of this project, including labor hours. Include a copy of billable rates for items outside of the scope of this presentation.

Add Alternate

Include recommendations for additional services and scope of work.

Project Timelines

The key timelines are:

Bids Submittal:	April 24 th , 2024
Award of Contract:	May 10 th , 2024
Kick-off Meeting:	May 17 th , 2024
2 – 3 mock-ups completed by contractor	May 31 st , 2024
Initial comments on mock-ups provided by ABAA.	June 7 th , 2024
Contractor to provide final sample detail:	June 14 th , 2024
Final comments provided by ABAA	June 21 st , 2024
ABAA signs off on sample detail design:	June 28 th , 2024
Standing Coordination Meeting with ABAA	Every 2-3 weeks depending on timeline.
Target completion date: October 1 st , 2024	

**Interim completion to be set for 3 partial sets of 10 details, periodically throughout the duration of work*

Basis for Selecting Organization

The selection of the organization will be based on the personnel identified in the proposal and the organization experience in developing 2D and 3D construction details. Criteria and a weighting factor for selecting the organization will include:

SELECTION CRITERIA	Total % Value
1. Consultants understanding of Work Statements as demonstrated in the proposal including but not limited to: a. Proposed timeline that includes all reviews and deliverables. b. Identify project team and if any sub-contractors would be used to complete the project. c. Completeness of proposal in addressing each of the identified deliverables.	30%
2. Expertise in creating building enclosure technical details in 2D and 3D	50%
3. Ability to meet project schedule milestones and final product delivery.	20 %

APPENDIX A – Existing ABAA 2D and 3D details

APPENDIX B – Sample details from other organizations

APPENDIX A – Existing ABAA 2D and 3D details

air barrier

abaa

association of
america

2023 GUIDE DETAILS:
ROOF-TO-WALL TIE-IN

May 1, 2023

MW1A	Mass Wall without Roof Air/Vapor Retarder - Option A
MW1B	Mass Wall without Roof Air/Vapor Retarder - Option B
MW1C	Mass Wall without Roof Air/Vapor Retarder - Option C
MW2A	Mass Wall with Roof Air/Vapor Retarder - Option A
MW2B	Mass Wall with Roof Air/Vapor Retarder - Option B
MW3	Gutter Edge at Mass Wall
MW4	Mass Parapet Wall
RS0	Rainscreen Wall - Incompatible Membrane Solutions
RS1	Rainscreen Wall - Roof without Roof Air/Vapor Retarder
RS2	Rainscreen Wall - Roof with Roof Air/Vapor Retarder
RS3	Rainscreen Stud Parapet Wall with Foam Insulation in Stud Cavity
RS4A	Rainscreen Stud Parapet Wall with Continuous Rigid Board Exterior Insulation
RS4B	Rainscreen Stud Parapet Wall with Foam Insulation
RS4C	Rainscreen Stud Parapet Wall with Insulation within Coping Blocking Assembly
RS5	AVR Installation Prior to Parapet Extension- without Thermal Break
RS6	AVR Installation Prior to Parapet Extension- with Thermal Break
RW1	Rising Wall Transition Brick Shelf with Stand off Clips
RW2	Rising Wall Transition with Structural Thermal Break
CL1A	Cantilever (Included) Option A with Roof Air/Vapor Retarder
CL1B	Cantilever (Included) Option B with Roof Air/Vapor Retarder
CL2	Cantilever (Excluded) with Roof Air/Vapor Retarder

GENERAL NOTES:

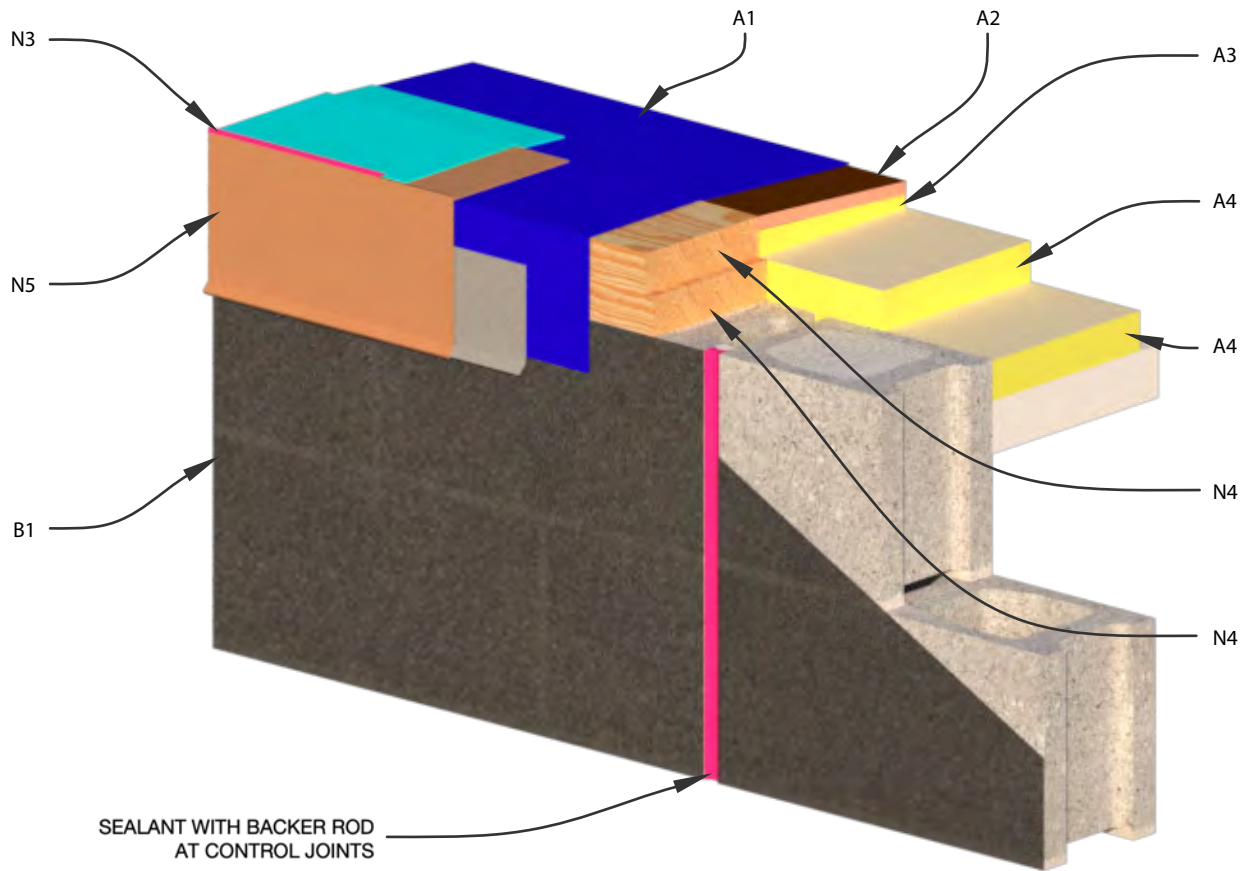
1. THIS GUIDELINE WILL FOCUS PRIMARILY ON THE AIR BARRIER CONCEPTUAL DETAILS AT THE ROOF-TO-WALL TRANSITION. THE INTENT IS THAT THE GUIDELINE REMAINS AS A LIVING DOCUMENT THAT IS CONTINUALLY UPDATED WITH ADDITIONAL DETAILS AND/OR WITH NEW DEVELOPMENTS IN MATERIAL AND PRODUCT TECHNOLOGIES.
2. THESE CONCEPTUAL DETAILS ARE PREPARED BY THE JOINT EFFORT OF ABAA'S TECHNICAL COMMITTEE ON "TRANSITIONS, TERMINATIONS AND FLASHINGS TASK GROUP" AND SPRI (SINGLE PLY ROOFING INDUSTRY). THE OBJECTIVE IS TO GUIDE DESIGNERS IN THE DEVELOPMENT OF CONSTRUCTION DETAILS FOR WALL TO ROOF TRANSITIONS. CONCEPTUAL DETAILS INCLUDE EXAMPLE DETAILING FOR AIR, MOISTURE AND THERMAL CONTROL LAYERS. IT IS IMPORTANT THAT THE DESIGNER REVIEW THERMAL PERFORMANCE AND CONDENSATION RISK SPECIFIC TO THE PROJECT, AS CONTROL LAYER REQUIREMENTS WILL VARY BASED ON BUILDING TYPE, ITS USE, AND CLIMATE ZONE.
3. REQUIREMENTS FOR A CONTINUOUS AIR BARRIER PER ASHRAE 90.1-2019 OR THE LATEST EDITION:
 - 3.1. THE CONTINUOUS AIR BARRIER SHALL BE DESIGNED AND INSTALLED IN THE FOLLOWING MANNER:
 - 3.1.1. COMPONENTS DESIGNED TO PROVIDE THE CONTINUOUS AIR BARRIER AND THE COMPONENT'S POSITION WITHIN EACH OF THE BUILDING ENVELOPE ASSEMBLIES SHALL BE CLEARLY IDENTIFIED ON THE CONSTRUCTION DOCUMENTS.
 - 3.1.2. THE JOINTS, INTERCONNECTIONS, AND PENETRATIONS OF THE CONTINUOUS AIR BARRIER COMPONENT SHALL BE DETAILED IN THE CONSTRUCTION DOCUMENTS.
 - 3.1.3. THE CONTINUOUS AIR BARRIER SHALL BE DESIGNED TO RESIST POSITIVE AND NEGATIVE PRESSURES FROM WIND, STACK EFFECT AND MECHANICAL VENTILATION AND ALLOW FOR ANTICIPATED MOVEMENTS.
 - 3.2. THE FOLLOWING AREAS OF THE CONTINUOUS AIR BARRIER IN THE BUILDING ENCLOSURE SHALL BE WRAPPED, SEALED, CAULKED, GASKETED, OR TAPED IN AN APPROVED MANNER TO MINIMIZE THE AIR LEAKAGE.
 - 3.2.1. JOINTS AROUND FENESTRATION AND DOOR/WINDOW FRAMES.
 - 3.2.2. JUNCTIONS BETWEEN WALLS AND FLOORS; BETWEEN WALLS AND BUILDING CORNERS AND BETWEEN WALLS AND ROOFS INCLUDING CEILINGS, PARAPETS, COPINGS AND WALLS AT FOUNDATIONS.

- 3.2.3. PENETRATIONS THROUGH THE CONTINUOUS AIR BARRIER IN BUILDING ENVELOPE ROOFS, WALLS AND FLOORS.
- 3.2.4. BUILDING ASSEMBLIES USED AS DUCTS AND PLENUMS.
- 3.2.5. JOINTS, SEAMS, CONNECTIONS BETWEEN PLANES, AND OTHER CHANGES IN CONTINUOUS AIR BARRIER MATERIALS.
- 3.2.6. ASSEMBLIES OR COMPONENTS PROJECTING THROUGH OR ATTACHED THROUGH THE CONTINUOUS AIR BARRIER.
- 3.2.7. CONTINUOUS AIR BARRIER OF CONDITIONED SPACES SEPARATING CONDITIONED SPACES FROM UNCONDITIONED SPACES, SEMI-HEATED SPACES, AND AREAS THAT ARE NOT ENCLOSED SPACES.
4. THE DESIGNER SHALL UNDERSTAND THE BUILDING PHYSICS OF EACH PROJECT IN ORDER TO SELECT THE APPROPRIATE MATERIALS AND LOCATION FOR AIR, WATER, VAPOR & THERMAL CONTROL LAYERS. THE SELECTION OF THE AIR AND/OR VAPOR RETARDER AND ITS LOCATION WITH RESPECT TO THE THERMAL CONTROL LAYER (INSULATION) IS CRITICAL TO MITIGATING CONDENSATION RISK.
5. REFER TO IBC 2021, SECTION 1404, "INSTALLATION OF WALL COVERINGS" FOR PROVISION OF VAPOR RETARDERS OR AN APPROVED DESIGN USING ACCEPTED ENGINEERING PRACTICE FOR HYGROTHERMAL ANALYSIS.
6. CONSULT MANUFACTURER(S) PROVIDING AIR & VAPOR RETARDER MATERIALS ON BUILDINGS WITH HIGHER MOISTURE GENERATIONS INCLUDING BUT NOT LIMITED TO POOLS, INDOOR WATER PARKS, ICE SKATING RINKS, LABORATORIES AND AGRICULTURAL FACILITIES, ETC.
7. WHEN DIFFERENT MATERIALS ARE PHYSICALLY TOUCHING, ENSURE THAT CHEMICAL AND ADHESION COMPATIBILITY IS VERIFIED WITH EACH MANUFACTURER.
8. WIND UPLIFT, ANCHORAGE AND OTHER ROOF ASSEMBLY REQUIREMENTS ARE NOT ADDRESSED IN THIS DOCUMENT, BUT IT IS THE RESPONSIBILITY OF THE DESIGNER.
9. THE TIE-IN DETAILS SHOULD ACCOMMODATE FOR THE POSSIBILITY OF FUTURE ROOF REPLACEMENT WITHOUT DISTURBING THE PERMANENT SEAL BETWEEN ROOF AIR/VAPOR BARRIER VERSUS WALL AIR/VAPOR BARRIER. REMOVAL OF WALL CLADDING, OR ROOF OVERBURDEN SHOULD BE CONSIDERED.
10. A PRE-CONSTRUCTION MEETING SHOULD BE REQUIRED TO DISCUSS THE SEQUENCING OF CONSTRUCTION RELATED TO TIE-IN DETAILS.
 - 10.1 REQUIRED ATTENDEES: A/E, GC/CONSTRUCTION MANAGER, ROOF & WALL MANUFACTURERS' REPRESENTATIVES, FIELD TECHNICAL STAFF, THIRD-PARTY CONSTRUCTION OBSERVERS, TESTING AGENCY, ROOFING, WALLS AND OTHER RELATED SUBCONTRACTORS INVOLVED IN EXECUTION OF DETAILS.
 - 10.2 ENSURE SEQUENCE OF CONSTRUCTION, ANY PHASING, CONSTRUCTABILITY OF DETAILS WITH MATERIALS COMPATIBILITY & FIELD QUALITY CONTROL IS ADDRESSED.

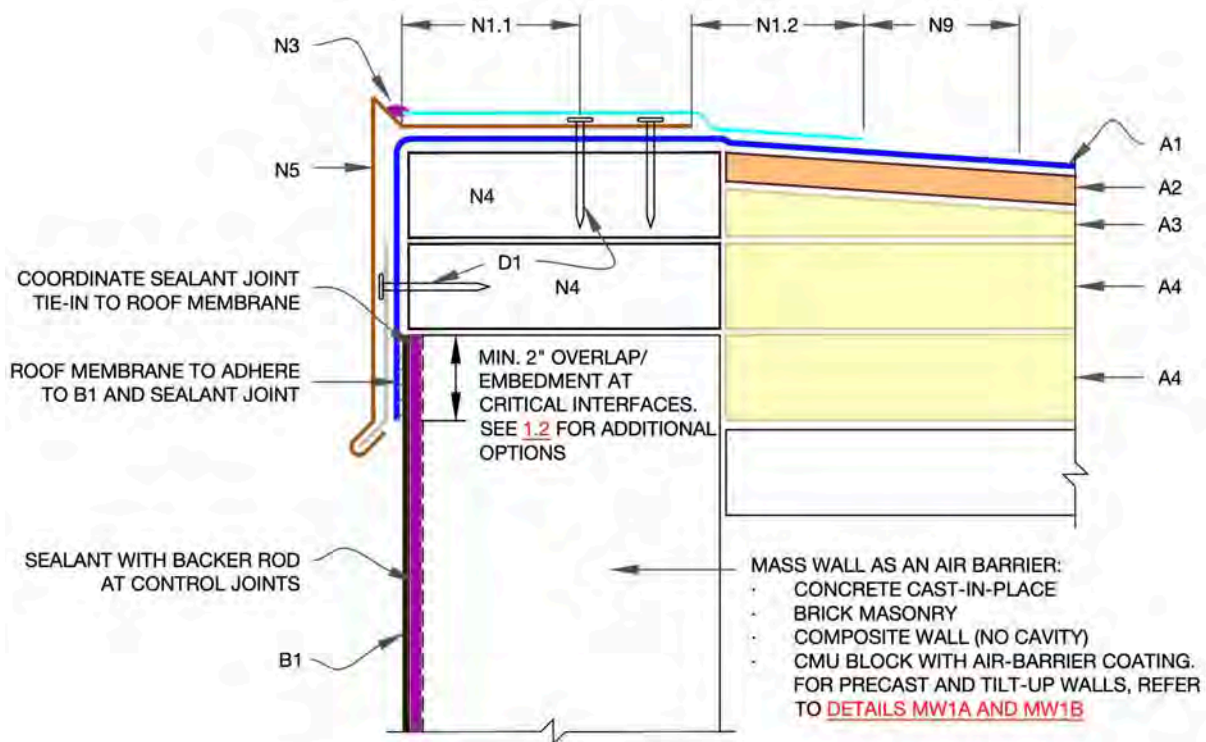
A1	ROOF AIR BARRIER: (ROOF MEMBRANES OR ROOF COATINGS).
A2	COVER BOARD (OPTIONAL)
A3	TAPERED INSULATION BOARDS, WHERE ROOF DECK IS FLAT. IBC REQUIRES POSITIVE DRAINAGE. GOOD ROOFING PRACTICE REQUIRES MIN. 1/4" PER FOOT [(2%) (1.2°)] SLOPE. ON STRUCTURALLY SLOPED DECKS, TAPERED INSULATION MAY BE REQUIRED NEAR ROOF EDGES TO DIVERT WATER, SUBJECT TO DRAINS' LOCATIONS.
A4	ROOF RIGID BOARD INSULATION LAYERS WITH STAGGERED JOINTS (JOINTS NOT SHOWN)
A5	ROOF VAPOR RETARDER & OR AIR BARRIER (MEMBRANE DIRECTLY APPLIED TO METAL DECK OR ADHERED TO SOLID SUBSTRATE). ALL PENETRATIONS THROUGH THIS LAYER WILL REQUIRE PROPER AIR SEALING IN ADDITION TO ROOF MEMBRANE FLASHING.
B1	WALL AIR/WATER BARRIER (MEMBRANE OR FLUID-APPLIED WITH SPRAY OR ROLLER). MASONRY UNITS ARE GENERICALLY DEPICTED. ARCHITECT & ENGINEER SHOULD DESIGN MASONRY WALL AS REQUIRED. MASONRY CONTRACTOR TO PROVIDE SMOOTH, SOUND, CONTINUOUS SUBSTRATE WITH FLUSH STRUCK MORTAR JOINTS FOR AIR/WATER BARRIER INSTALLATION.
B2	WALL VAPOR RETARDER (MEMBRANE OR FLUID-APPLIED WITH SPRAY OR ROLLER)
B3	WALL MOISTURE BARRIERS OR MOISTURE SHEDDING LAYER
B4	SINGLE WYTHE CMU WALL WITH AIR BARRIER. MASONRY UNITS ARE GENERICALLY DEPICTED. ARCHITECT & ENGINEER SHOULD DESIGN MASONRY WALL AS REQUIRED. MASONRY CONTRACTOR TO PROVIDE SMOOTH, SOUND, CONTINUOUS SUBSTRATE WITH FLUSH STRUCK MORTAR JOINTS FOR AIR/WATER BARRIER INSTALLATION.
B5	WATER-RESISTIVE BARRIER
B6	WALL CAVITY VENT
C1	WALL INSULATION, "SEAL ALL JOINTS".
D1	1-1/4" S.S. RING SHANK NAILS THROUGH PRE-PUNCHED HOLES. SPACING AS REQ'D BY DESIGNER. ON VERTICAL FACE OF WIND CLEAT, ENSURE NAILS ARE CLOSE TO DRIP EDGE FOR BETTER WIND RESISTANT. ENSURE, NAILS ARE SECURED AT MID POINT OF STRUCTURAL MEMBERS (WOOD BLOCKING SHOWN HERE).
N1.1	ROOF MEMBRANE FLASHING OVERLAP BEYOND FASCIA FASTENER PER MANUFACTURER.
N1.2	ROOF MEMBRANE FLASHING OVERLAP BEYOND EDGE METAL PER MANUFACTURER.

N2	TO CREATE AIR BARRIER, SEAL BETWEEN TWO MEMBRANES. USE APPLICABLE ADHESIVE, SEALANT OR DOUBLE SIDED TAPE, AS APPROVED BY ROOFING MANUFACTURER.
N3	SEALANT AS REQUIRED BY ROOF MEMBRANE MANUFACTURER OR AS NEEDED FOR EXTENDED WARRANTY
N4	<p>WOOD NAILER, PREFERABLY 2X6 DOUGLAS FIR OR SOUTHERN YELLOW PINE OR SIMILAR WITH DECAY-RESISTANT PROPERTIES, TREATED WITH SALT PRESERVATIVES & MIN. 0.50 SPECIFIC GRAVITY. 1/2" (13mm) WIDER THAN METAL HORIZONTAL FLANGE. REFER TO FACTORY MUTUAL PROPERTY LOSS PREVENTION DATA SHEETS 1-49 (PERIMETER FLASHING, LATEST EDITION) WHICH CONTAINS OPTIONS FOR THE SPACING AND SIZING OF FASTENERS BASED ON THE PROJECT WIND ZONE. ANSI/SPRI ES-1 STANDARD CAN ALSO BE REFERENCED FOR PERIMETER FLASHING ATTACHMENT.</p> <p>WHEN FASTENING WIND CLEATS OR SHEET METAL COPING, ENSURE NAILS/FASTENERS PENETRATE AT THE CENTER OF MIN. 1-1/2" (39mm) THICK WOOD BLOCKING. ENSURE, NAILS/FASTENERS DO NOT PENETRATE INTO LAMINATED ENDS OF PLYWOOD, DUE TO POOR GRIP.</p> <p>LUMBER TREATED WITH CREOSOTE, PENTACHLOROPHENOL, COPPER NAPHTHENATE AND COPPER 8-QUINOLINOLATE MAY ADVERSELY AFFECT THE MEMBRANES WHEN IN DIRECT CONTACT AND NOT RECOMMENDED.</p>
N5	SHEET METAL FASCIA OR DRIP EDGE AS REQUIRED ON EACH PROJECT. REFER TO ANSI/SPRI/FM 4435/ES-1 2017 (TEST STANDARD FOR EDGE SYSTEMS USED WITH LOW SLOPE ROOFING SYSTEMS). ON FM (FACTORY MUTUAL) INSURED PROJECTS, REFER TO FM 1-49 (PERIMETER FLASHING) AS NOTED ABOVE.
N6	GUTTERS TO MEET ANSI/SPRI GT-1 STANDARD AS REQUIRED IN IBC 2021 CODE.
N7	22 GAUGE OR THICKER, GALVANIZED SHEET METAL CLIPS MAY BE REQUIRED TO REINFORCE THE ATTACHMENT OF WOOD BLOCKING, WHERE WOOD CANTILEVERS 2" (51mm) OR GREATER IN HIGH WIND AREAS OR ON PROJECTS INSURED BY FM (FACTORY MUTUAL). THE FREQUENCY OF CLIPS IS SUBJECT TO WIND PRESSURE AND HEIGHT OF BUILDING. COORDINATE WITH STRUCTURAL ENGINEER.
N8	INSTALL COMPATIBLE MEMBRANE FLASHING. USE HIGH TEMPERATURE MEMBRANE, WHERE REQUIRED. MIN. OVERLAPS AS REQUIRED BY EACH MANUFACTURER.
N9	FUTURE REROOFING: ABAA SUGGESTS TO PRESERVE THE EXISTING ROOF-TO-WALL TIE IN DETAILS DURING FUTURE REROOFING PROJECTS AS PRACTICALLY POSSIBLE. DUE TO COMPLEXITY, COST AND DISRUPTION, IT IS PREFERRED THAT FUTURE DESIGNERS SHOULD CONSIDER CUTTING & REMOVING EXISTING ROOF WITHIN APPROXIMATELY 12" (305mm) FROM THE NEAREST END OF FLASHING.

Mass Wall without Roof Air/Vapor Retarder - Option A



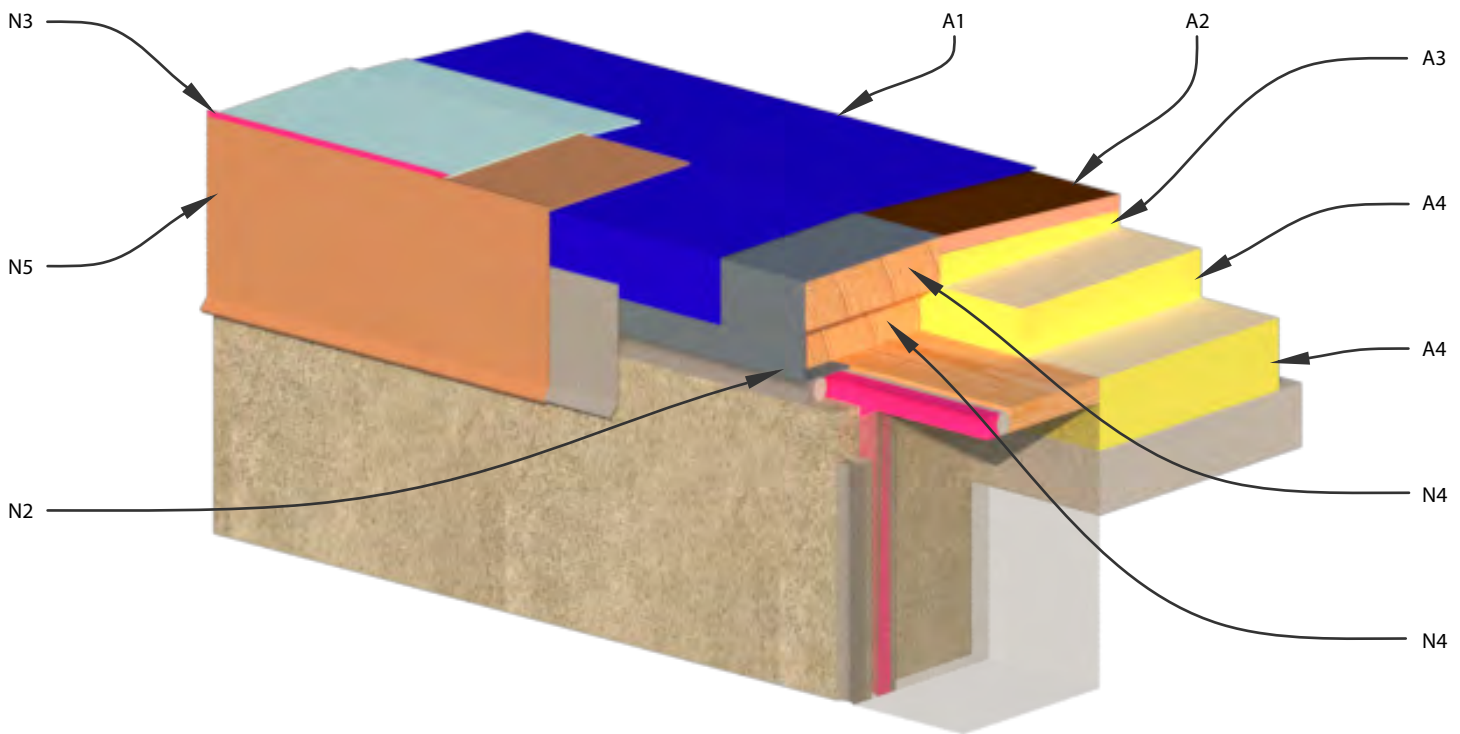
SEALANT WITH BACKER ROD
AT CONTROL JOINTS



NOTE:

1. WHEN ADHERING ROOF MEMBRANE TO COATING ON WALLS AND SEALANT JOINTS, ENSURE THE COMPATIBILITY BETWEEN BOTH MATERIALS AND CONDUCT TESTING FOR QUALITY OF LONG-TERM ADHESION DURING MOCKUP STAGE.
2. WALL INSULATION NOT SHOWN.

Mass Wall without Roof Air/Vapor Retarder - Option B



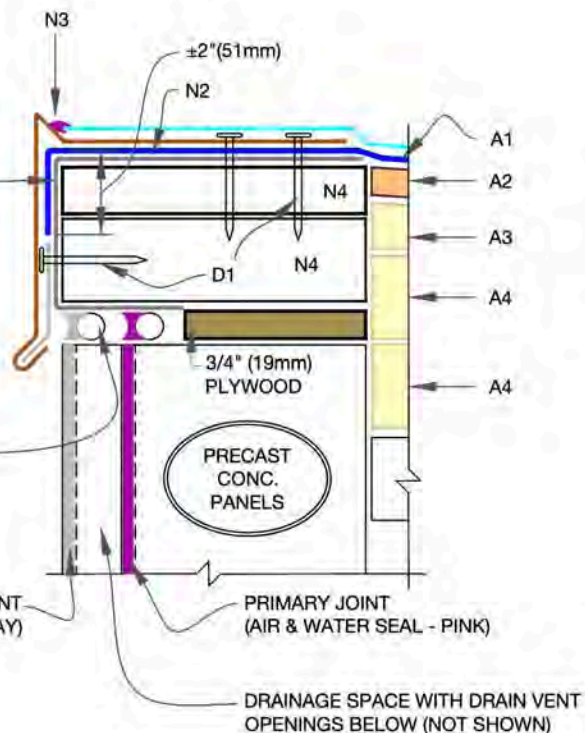
OPTION A:
USE SECTION OF HIGH TEMPERATURE SELF-ADHERING FLASHING MEMBRANE FLASHING TO CONFORM TO THE EDGE CONDITIONS AND SEAL ROOF MEMBRANE TO FLASHING AS SHOWN.

OPTION B:
TO ADDRESS COMPATIBILITY, USE 304 SELF-ADHERING STAINLESS STEEL MEMBRANE IN SEALANT CAVITY AND EXTEND UP TO TIE-IN WITH ROOF MEMBRANE

OPTION C:
WHERE ROOF MEMBRANE CAN CONFORM THE EDGE CONDITIONS, USE ROOF MEMBRANE ONLY & FULLY ADHERE TO SUBSTRATE

CONT. BACKER ROD AND SEALANT. SEAL AT VERTICAL AND HORIZONTAL JUNCTIONS OF SEALANT WITH PROPER DEPTH AND THICKNESS OF SEALANT

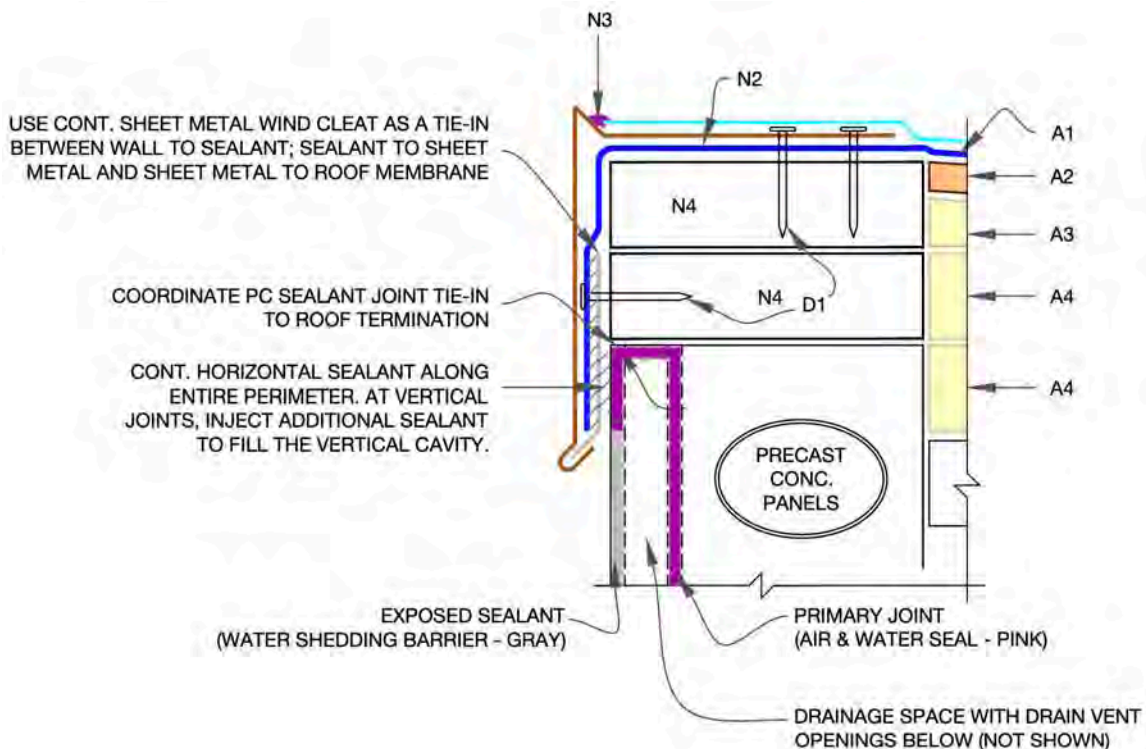
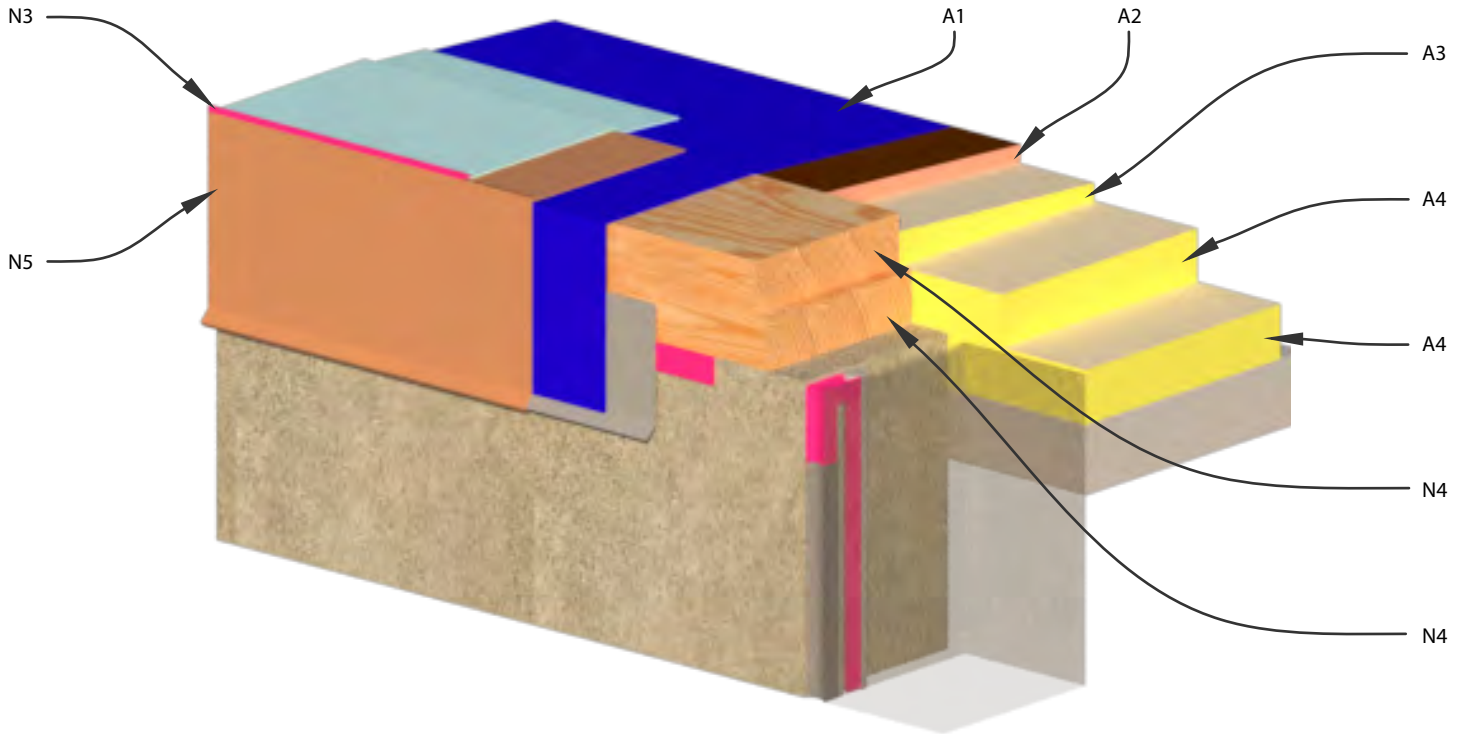
EXPOSED SEALANT (WATER SHEDDING BARRIER - GRAY)



NOTE:

1. WHEN ADHERING ROOF MEMBRANE TO COATING ON WALLS AND SEALANT JOINTS, ENSURE THE COMPATIBILITY BETWEEN BOTH MATERIALS AND CONDUCT TESTING FOR QUALITY OF LONG-TERM ADHESION DURING MOCKUP STAGE.
2. BARE PRECAST CONCRETE ACTS AS AN AIR BARRIER, NOT THE PAINTS/COATINGS.
3. WALL INSULATION NOT SHOWN.

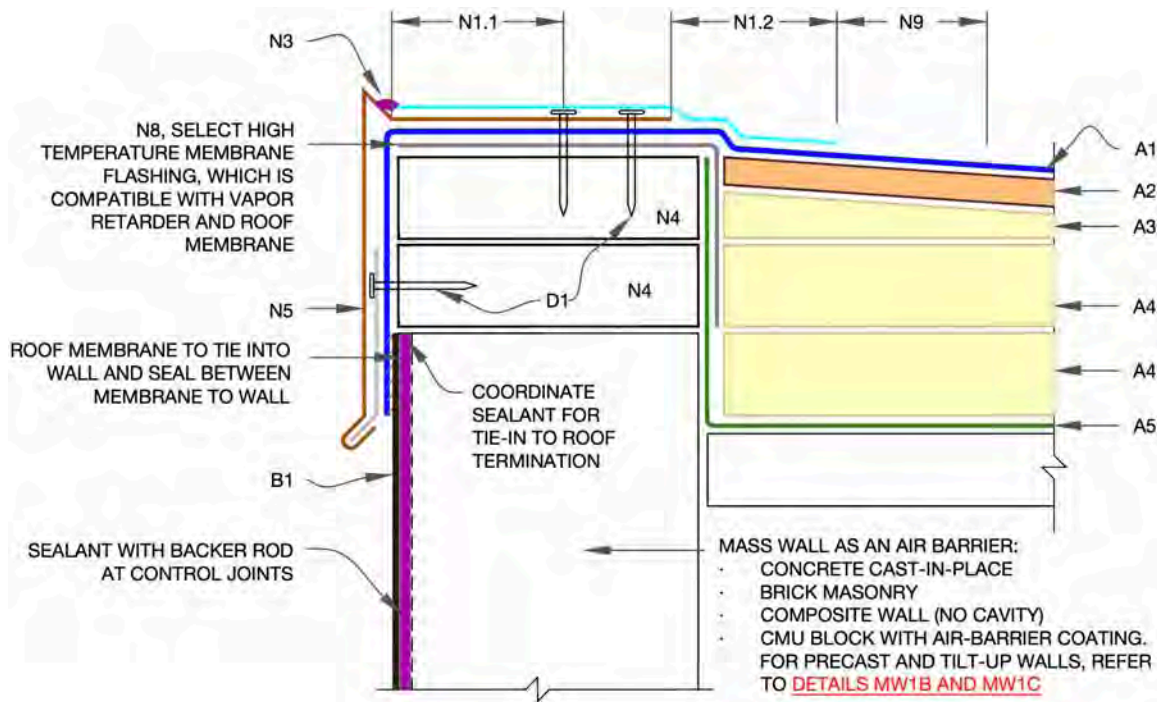
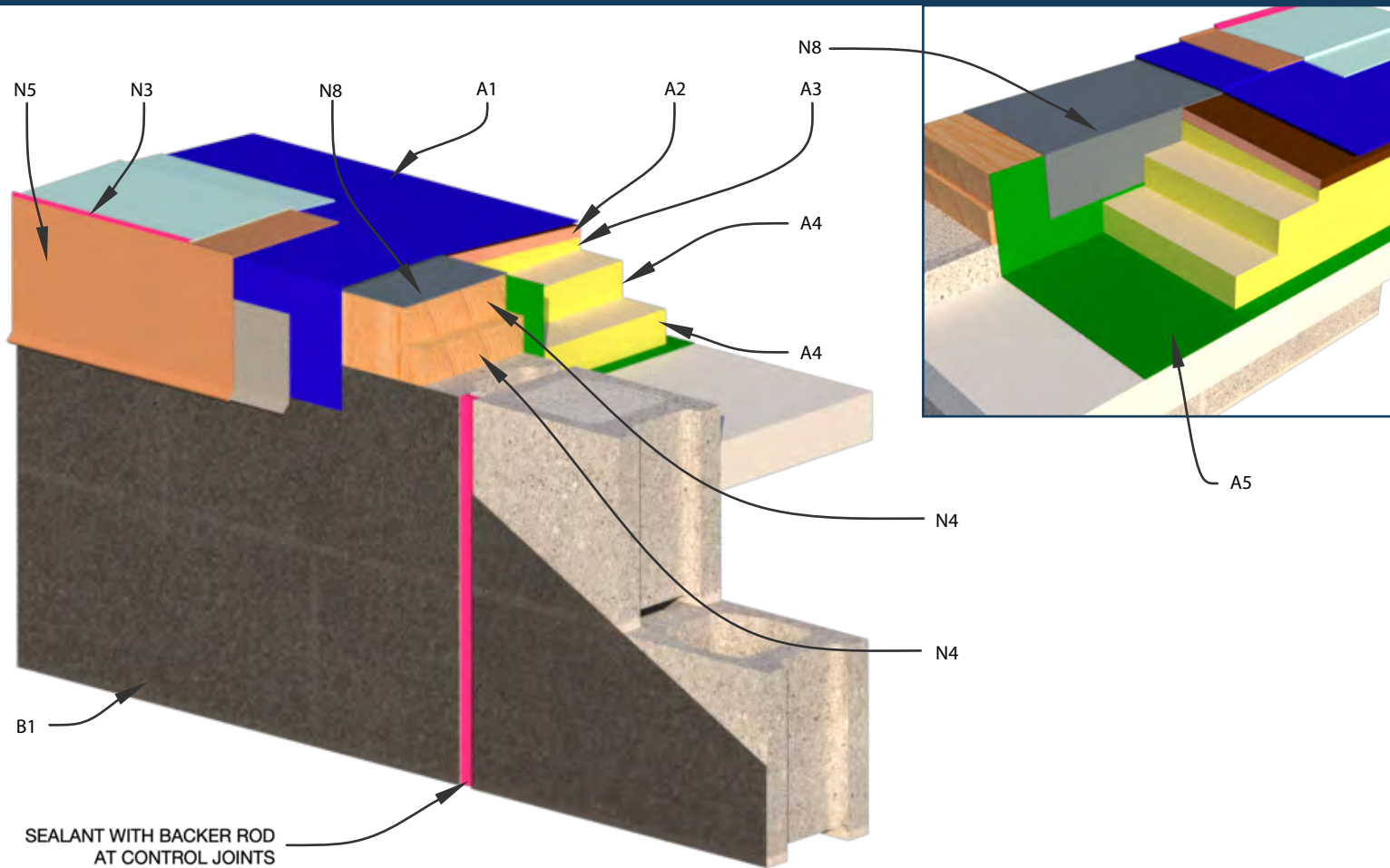
Mass Wall without Roof Air/Vapor Retarder - Option C



NOTE:

1. WHEN ADHERING ROOF MEMBRANE TO COATING ON WALLS AND SEALANT JOINTS, ENSURE THE COMPATIBILITY BETWEEN BOTH MATERIALS AND CONDUCT TESTING FOR QUALITY OF LONG-TERM ADHESION DURING MOCKUP STAGE.
2. BARE PRECAST CONCRETE ACTS AS AN AIR BARRIER, NOT THE PAINTS/COATINGS.
3. WALL INSULATION NOT SHOWN.

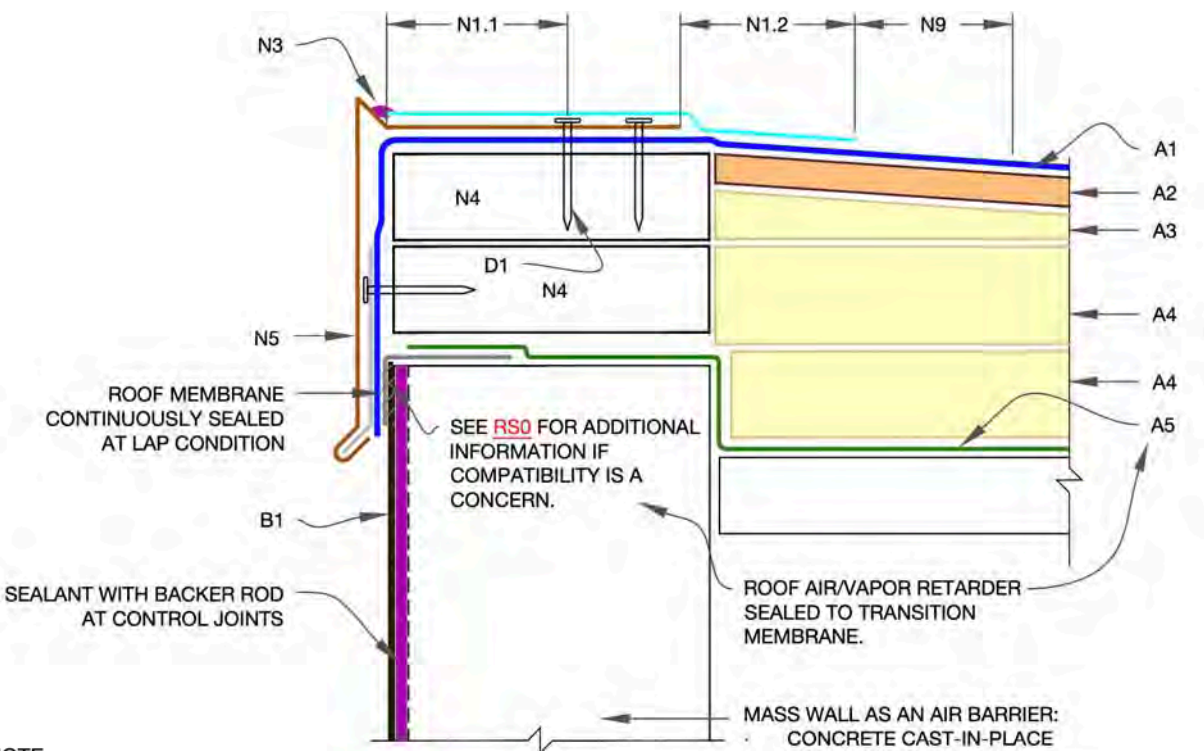
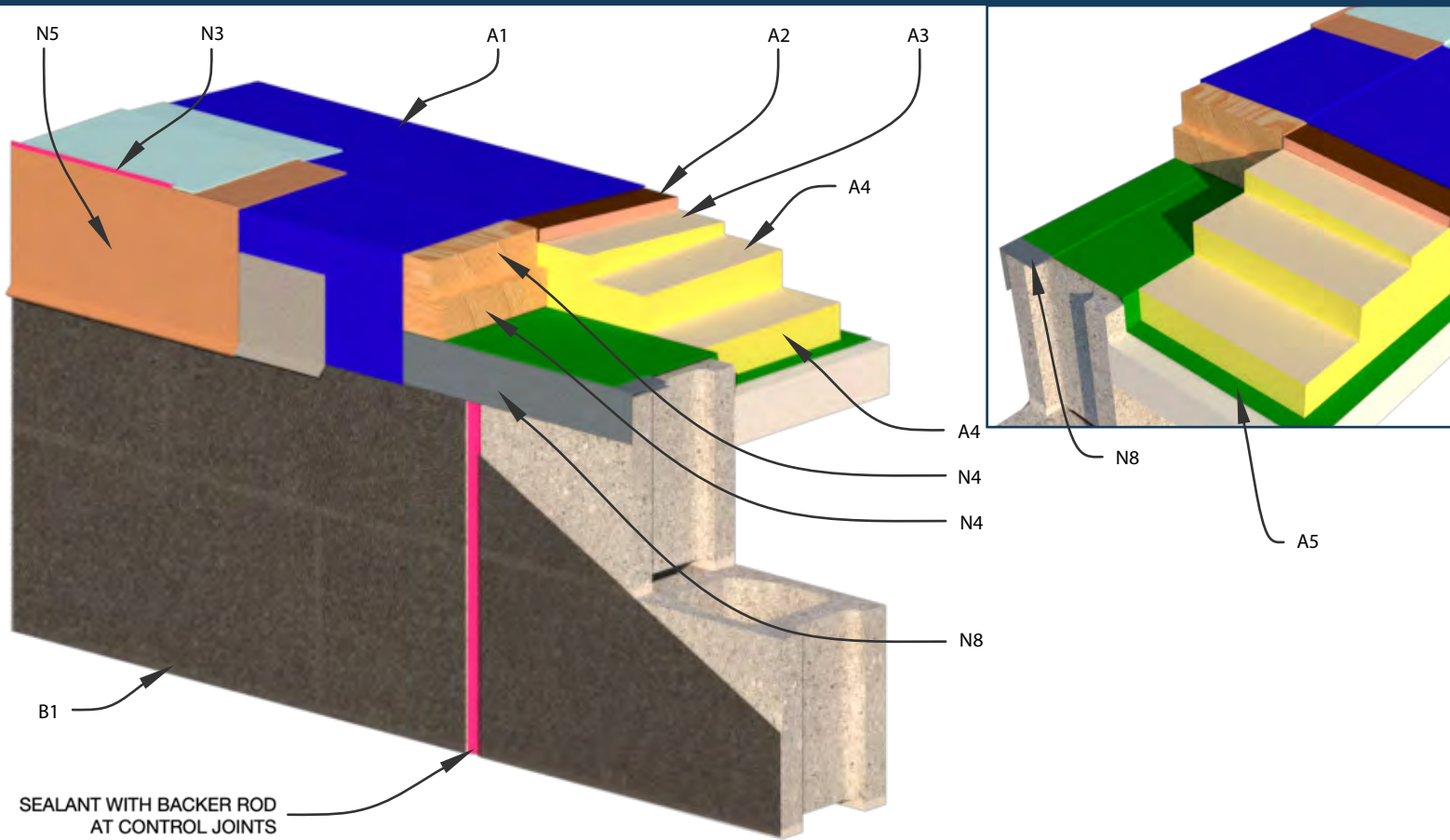
Mass Wall with Roof Air/Vapor Retarder - Option A



NOTE:

1. WHEN ADHERING ROOF MEMBRANE TO COATING ON WALLS AND SEALANT JOINTS, ENSURE THE COMPATIBILITY BETWEEN BOTH MATERIALS AND CONDUCT TESTING FOR QUALITY OF LONG-TERM ADHESION DURING MOCKUP STAGE.
2. WALL INSULATION NOT SHOWN.

Mass Wall with Roof Air/Vapor Retarder - Option B



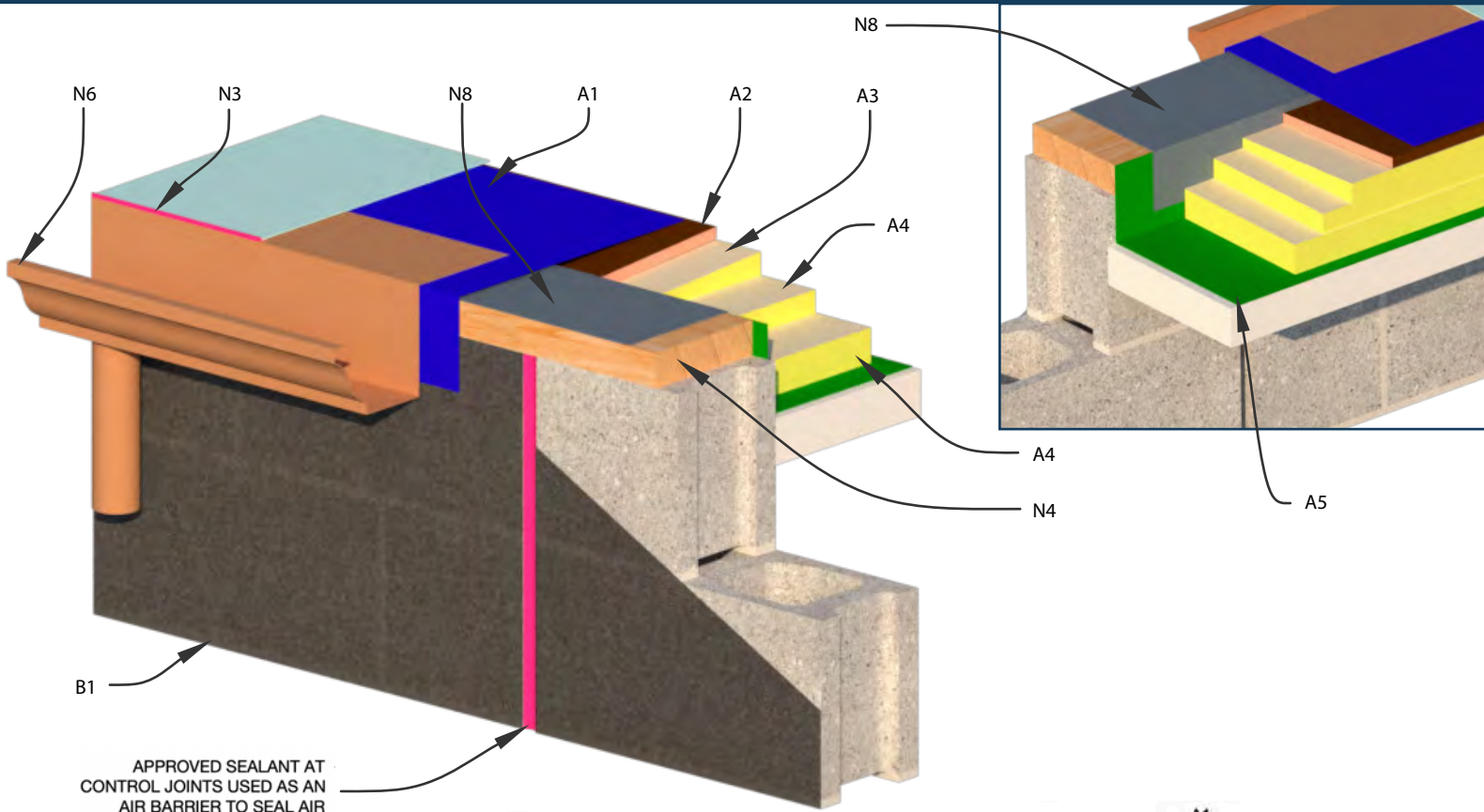
NOTE:

1. WHEN ADHERING ROOF MEMBRANE TO COATING ON WALLS AND SEALANT JOINTS, ENSURE THE COMPATIBILITY BETWEEN BOTH MATERIALS AND CONDUCT TESTING FOR QUALITY OF LONG-TERM ADHESION DURING MOCKUP STAGE.
2. WALL INSULATION NOT SHOWN.

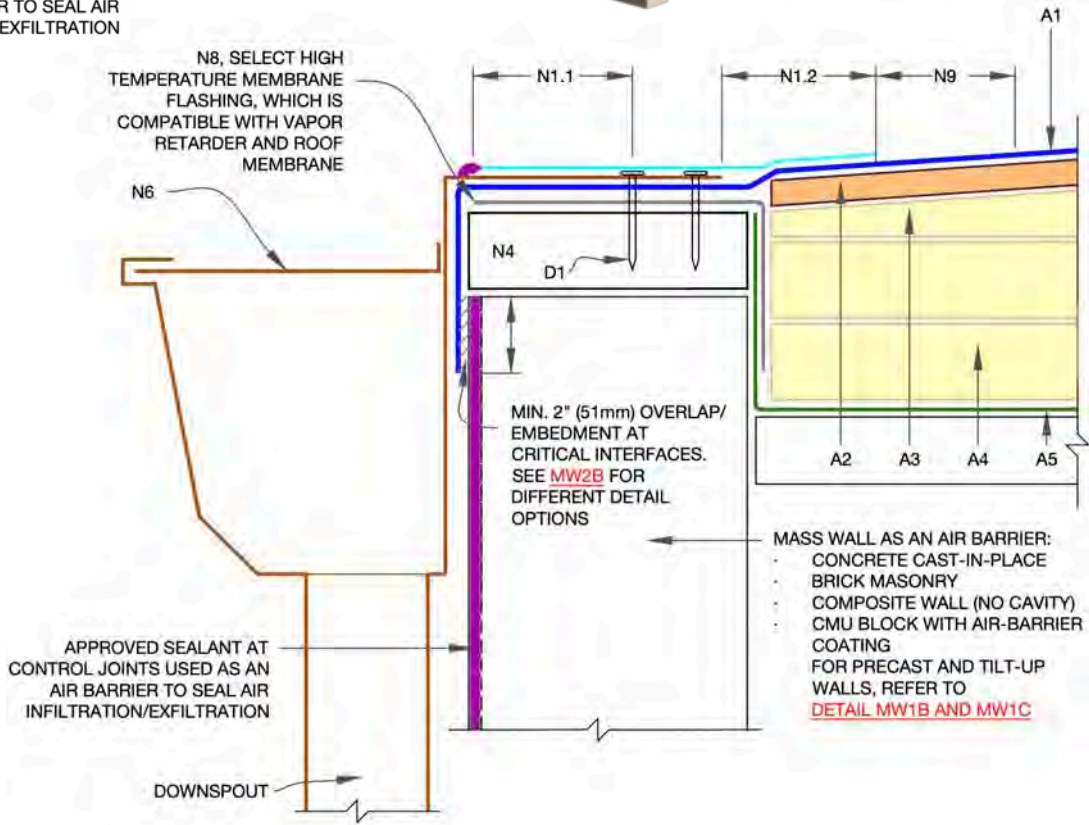
- MASS WALL AS AN AIR BARRIER:**
- CONCRETE CAST-IN-PLACE
 - BRICK MASONRY
 - COMPOSITE WALL (NO CAVITY)
 - CMU BLOCK WITH AIR-BARRIER COATING. FOR PRECAST AND TILT-UP WALLS, REFER TO [DETAILS MW1B AND MW1C](#)



Gutter Edge at Mass Wall



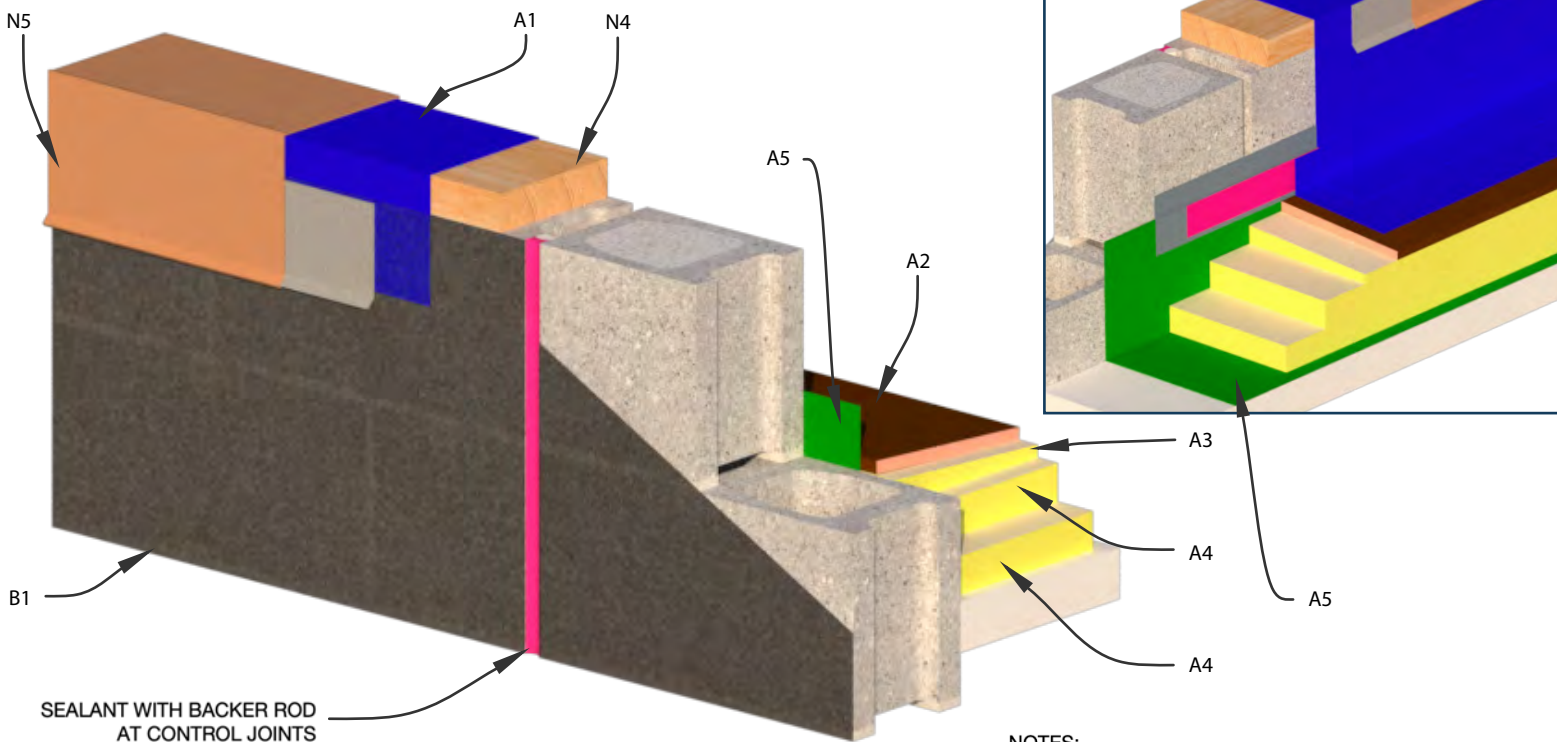
APPROVED SEALANT AT CONTROL JOINTS USED AS AN AIR BARRIER TO SEAL AIR INFILTRATION/EXFILTRATION



NOTE:

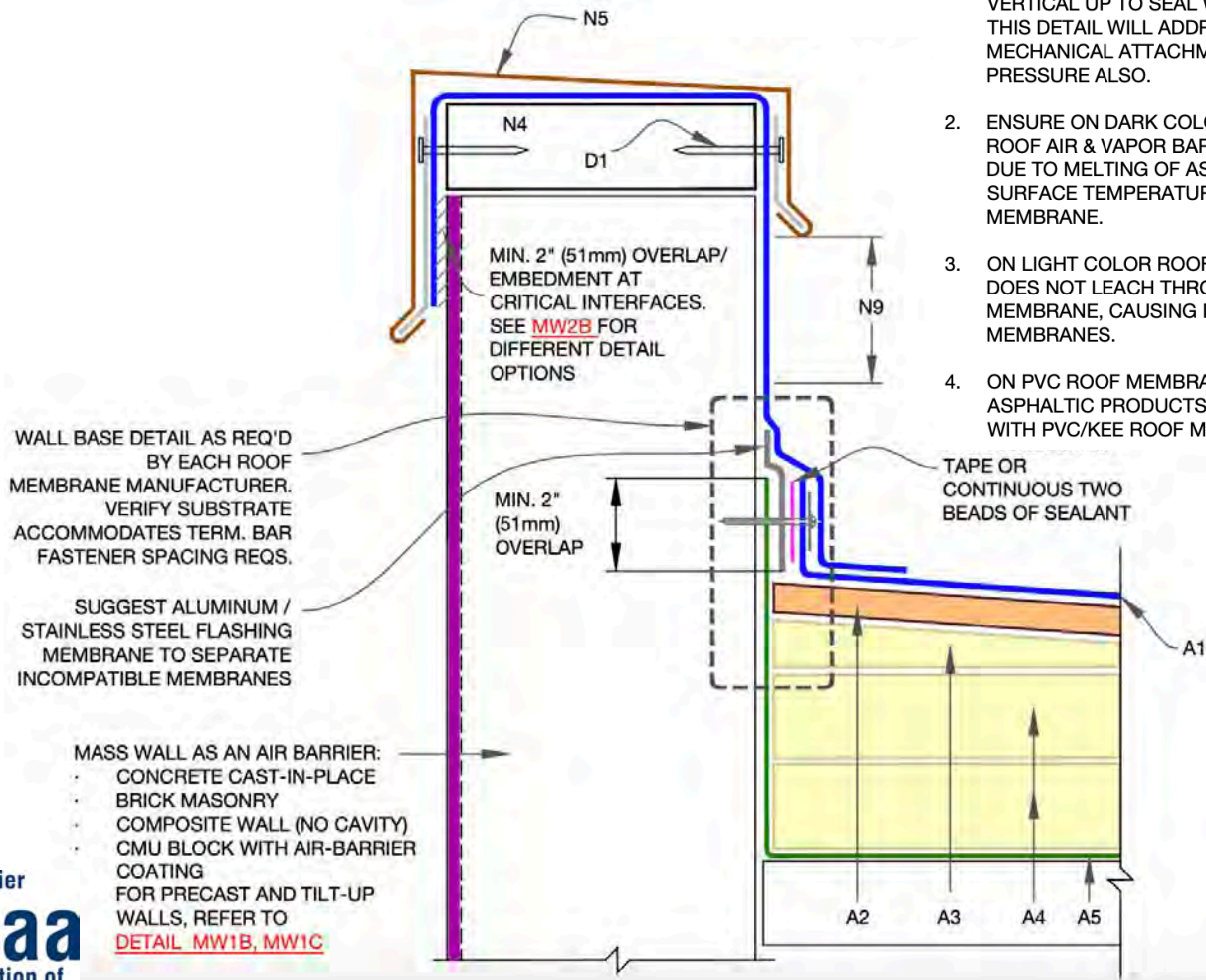
1. WHEN ADHERING ROOF MEMBRANE TO COATING ON WALLS AND SEALANT JOINTS, ENSURE THE COMPATIBILITY BETWEEN BOTH MATERIALS AND CONDUCT TESTING FOR QUALITY OF LONG-TERM ADHESION DURING MOCKUP STAGE.
2. WALL INSULATION NOT SHOWN.

Mass Parapet Wall



NOTES:

1. ROOF MEMBRANE MANUFACTURER SHALL PROVIDE A BASE FLASHING DETAIL, WHERE ROOF AIR & VAPOR BARRIER SHOULD BE EXTENDED VERTICAL UP TO SEAL WITH ROOF MEMBRANE. THIS DETAIL WILL ADDRESS THE MEMBRANE'S MECHANICAL ATTACHMENT AGAINST WIND UPLIFT PRESSURE ALSO.
2. ENSURE ON DARK COLOR ROOFS, THE ASPHALTIC ROOF AIR & VAPOR BARRIER DOES NOT DEGRADE DUE TO MELTING OF ASPHALT UNDER VERY HIGH SURFACE TEMPERATURE OF DARK COLOR ROOF MEMBRANE.
3. ON LIGHT COLOR ROOFS, ENSURE THAT ASPHALT DOES NOT LEACH THROUGH THE ROOF MEMBRANE, CAUSING DISCOLORATION OF ROOF MEMBRANES.
4. ON PVC ROOF MEMBRANES, ENSURE THE ASPHALTIC PRODUCTS DO NOT COME IN CONTACT WITH PVC/KEE ROOF MEMBRANE.

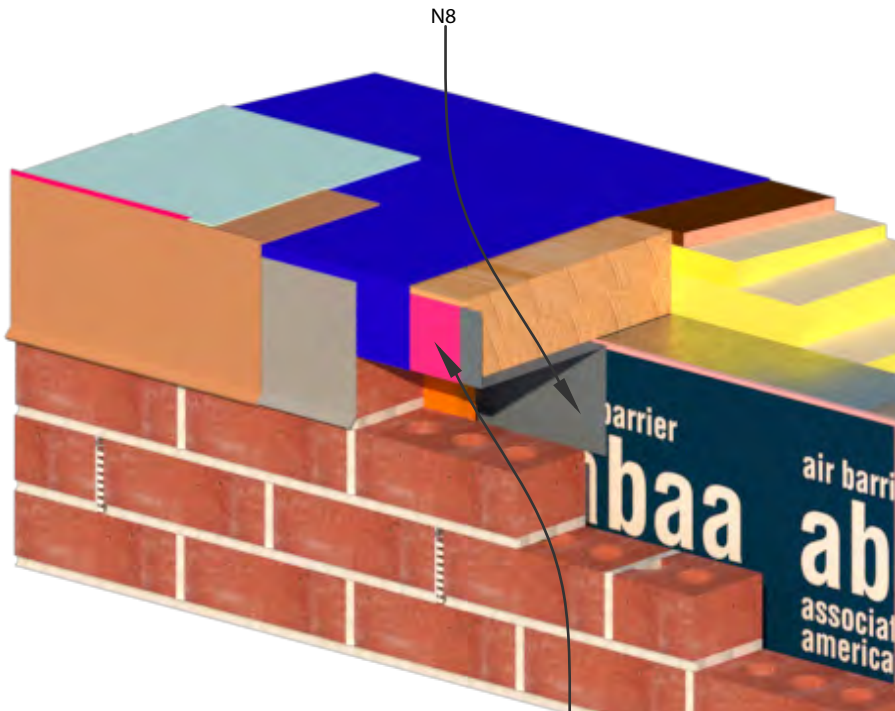


MASS WALL AS AN AIR BARRIER:

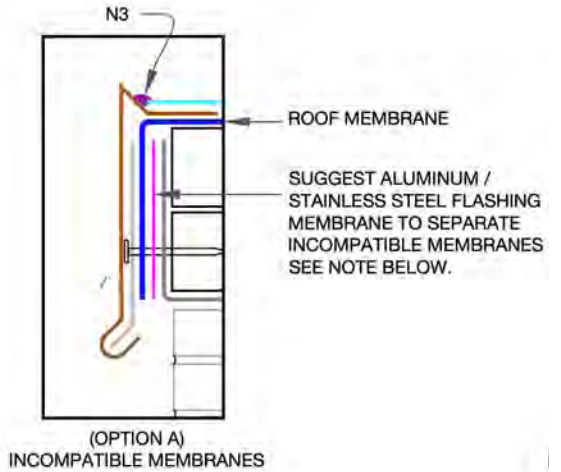
- CONCRETE CAST-IN-PLACE
- BRICK MASONRY
- COMPOSITE WALL (NO CAVITY)
- CMU BLOCK WITH AIR-BARRIER COATING

FOR PRECAST AND TILT-UP WALLS, REFER TO [DETAIL MW1B, MW1C](#)

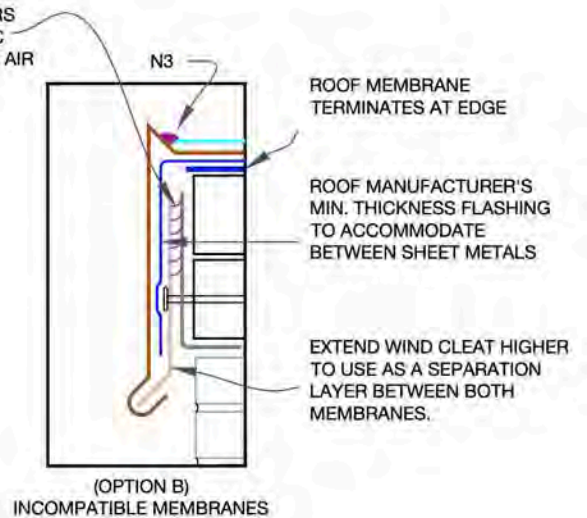
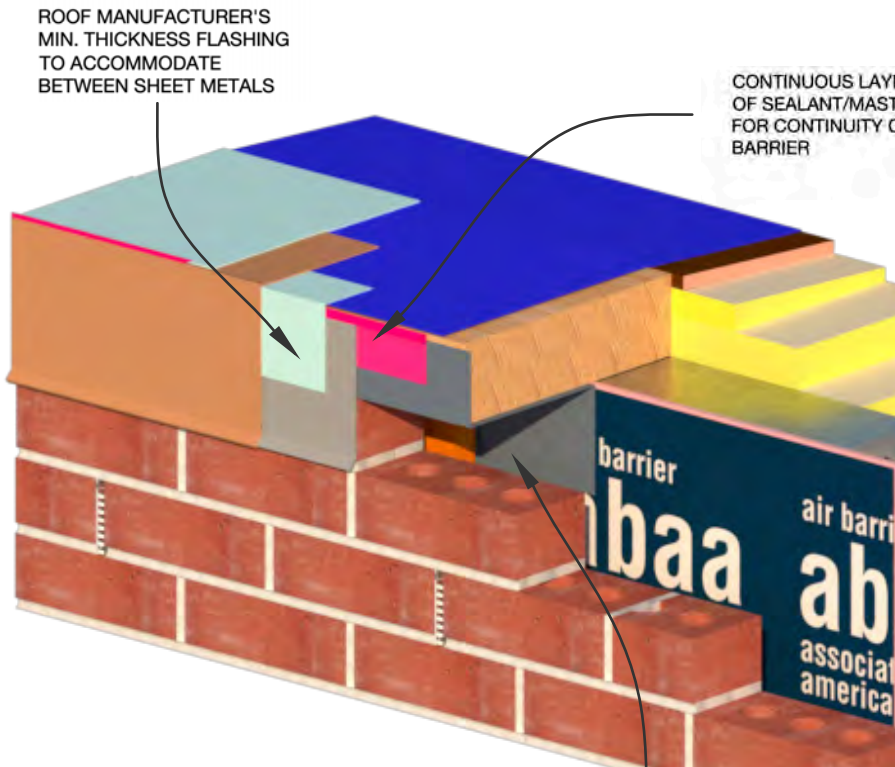
Rainscreen Wall - Incompatible Membrane Solutions



SUGGEST ALUMINUM / STAINLESS STEEL FLASHING MEMBRANE TO SEPARATE INCOMPATIBLE MEMBRANES SEE NOTE BELOW.

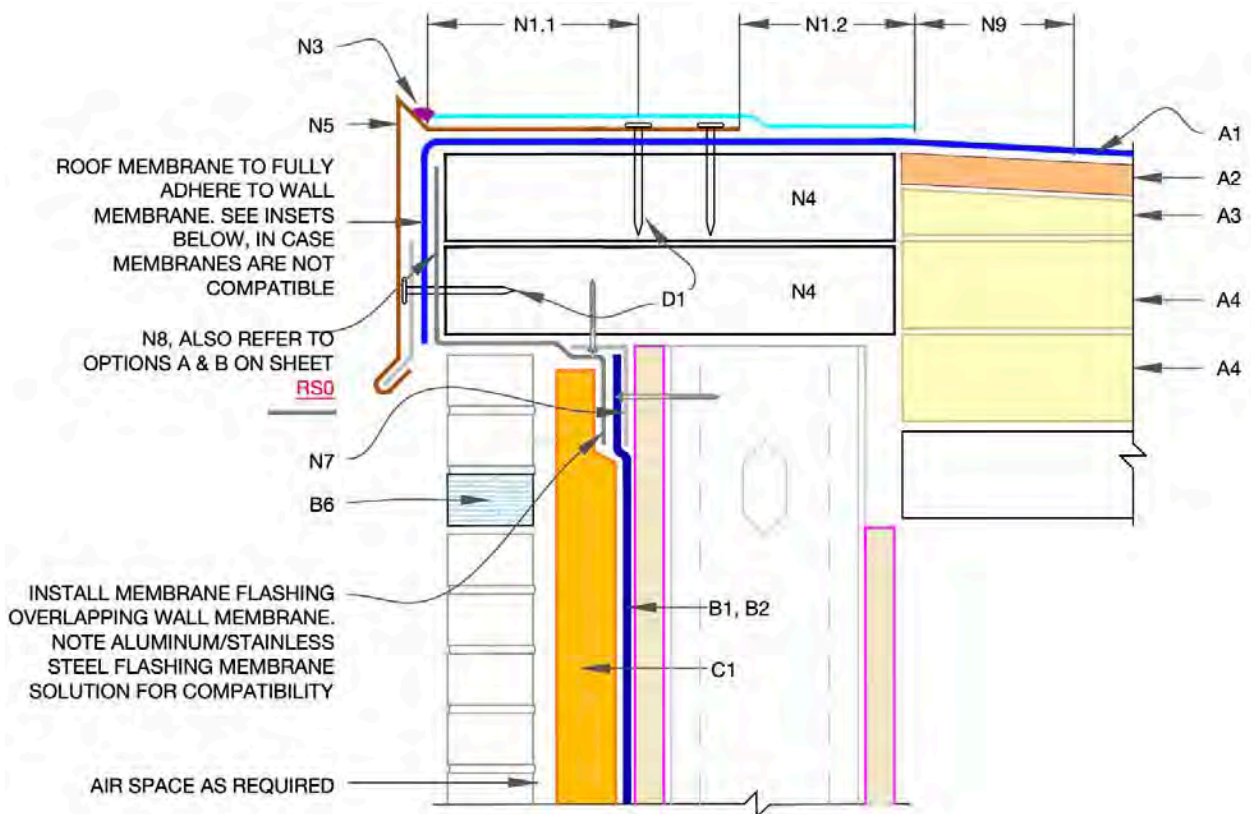
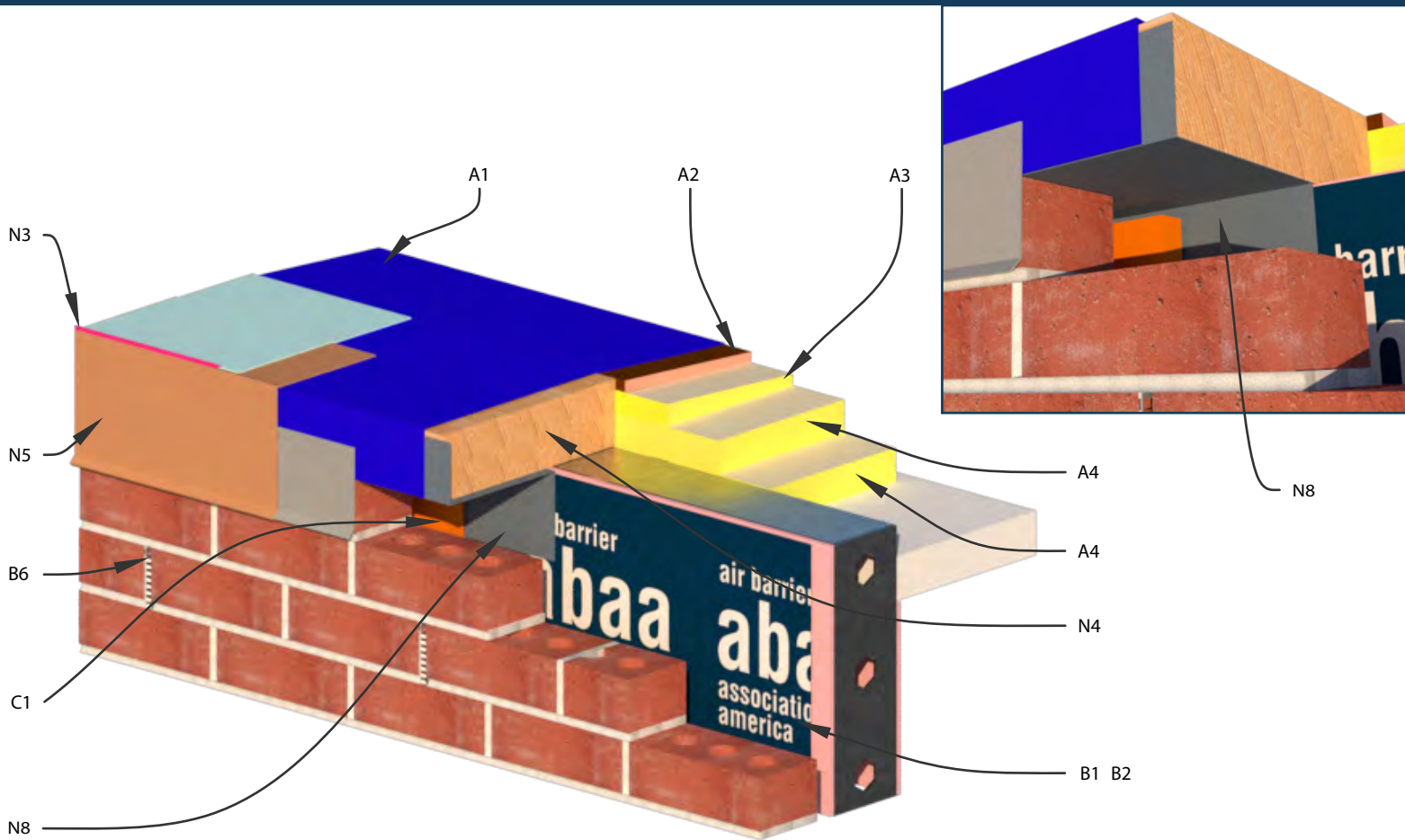


NOTE: MIN. OVERLAPS 2" (51mm) OR REQUIRED BY MANUFACTURER **Option A**

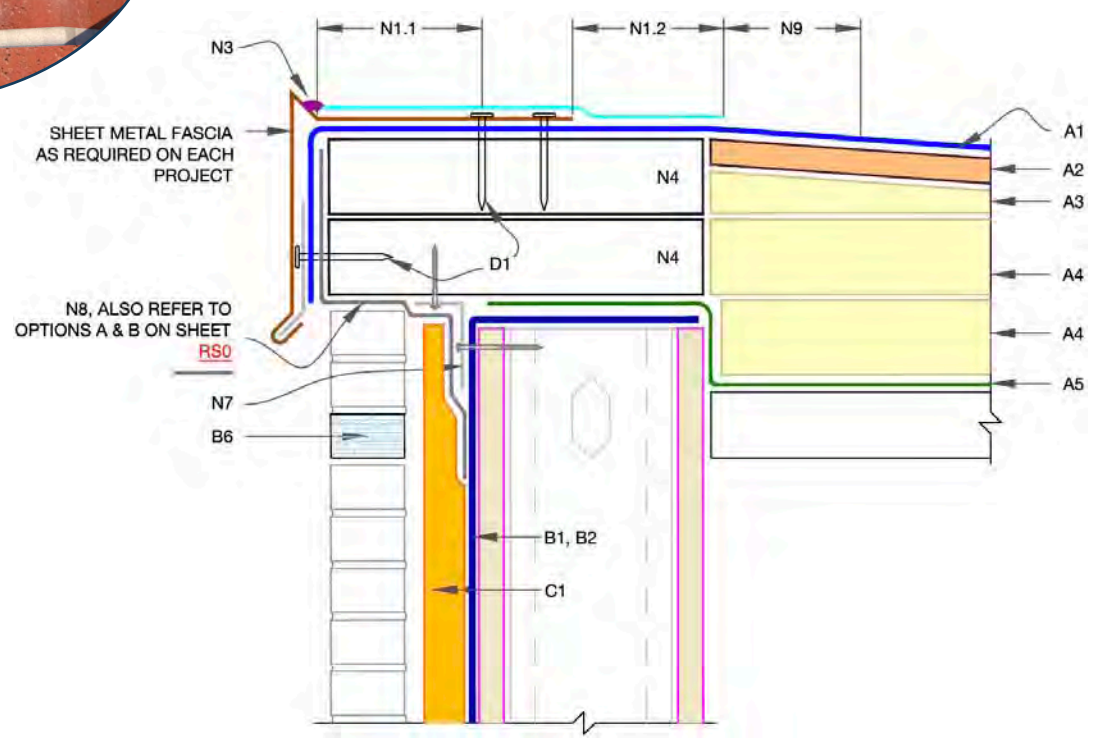
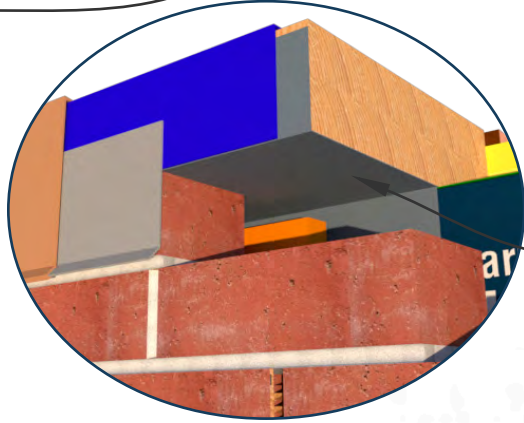
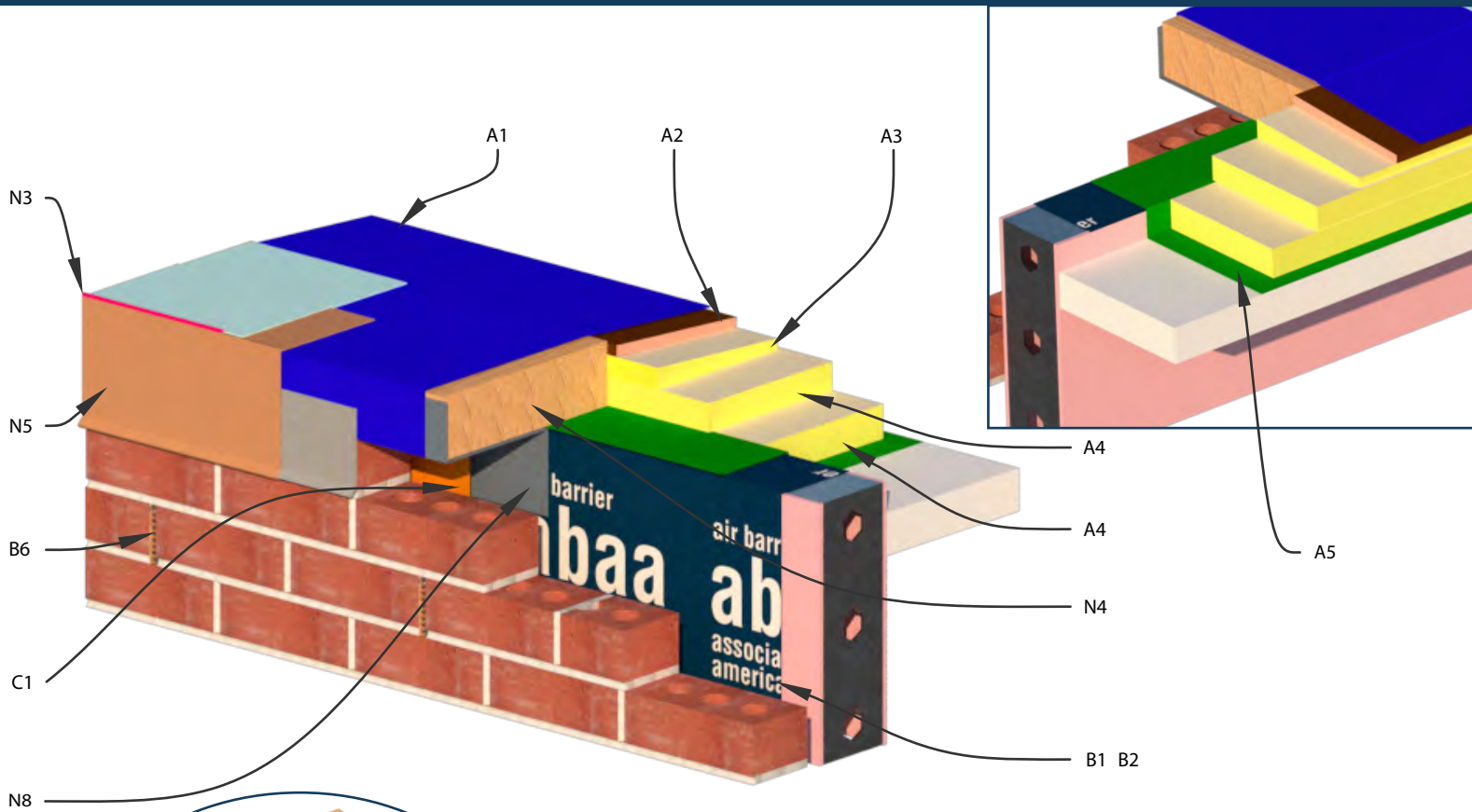


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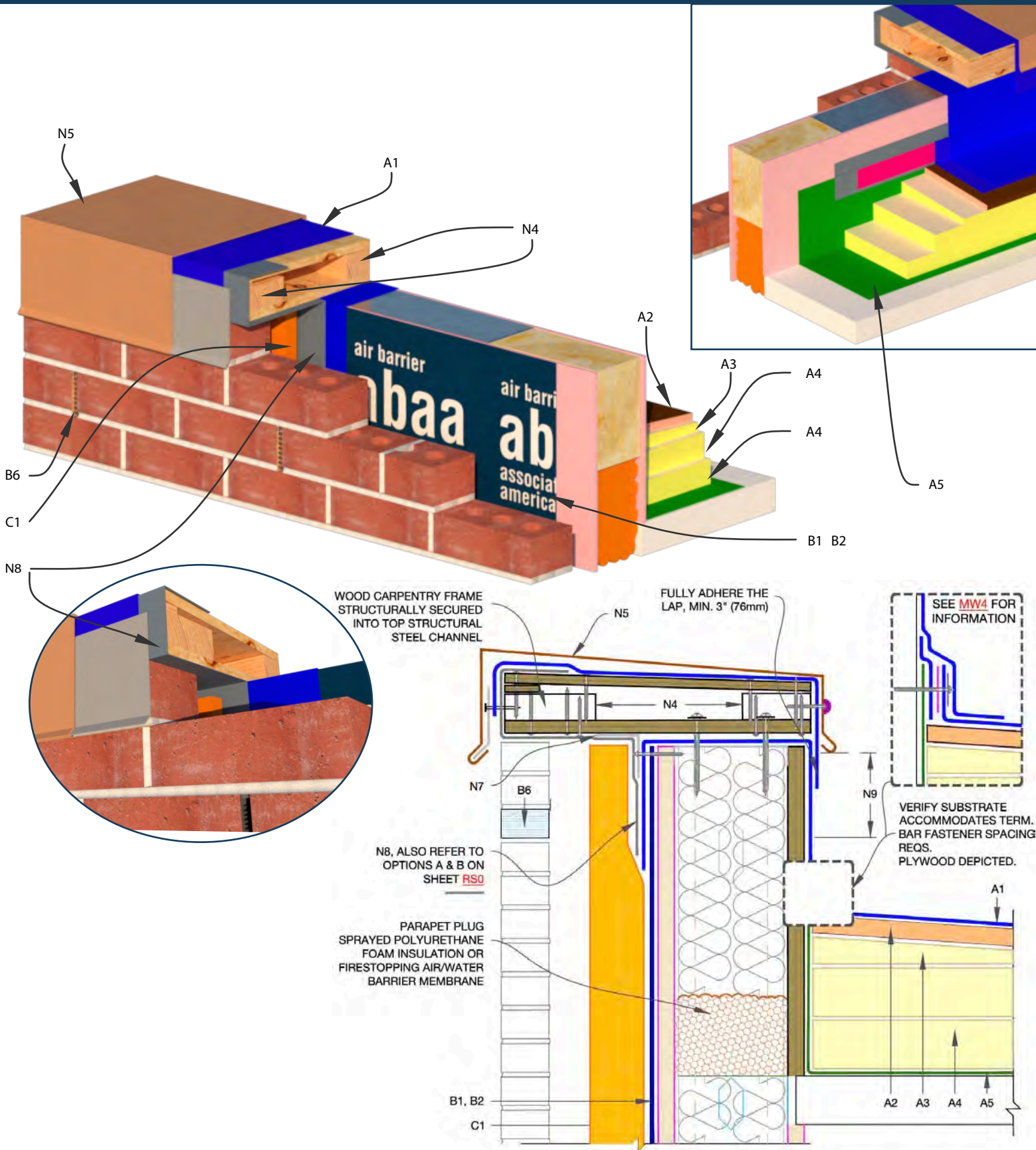
Rainscreen Wall - Roof without Roof Air/Vapor Retarder



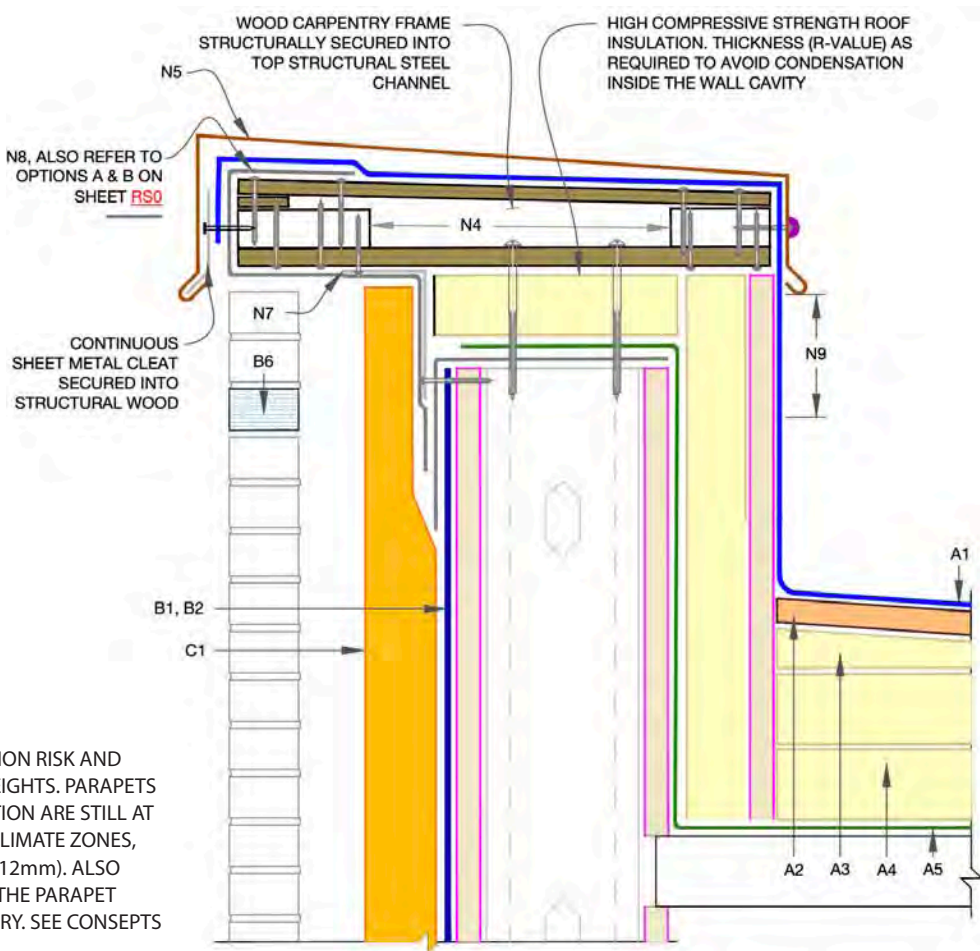
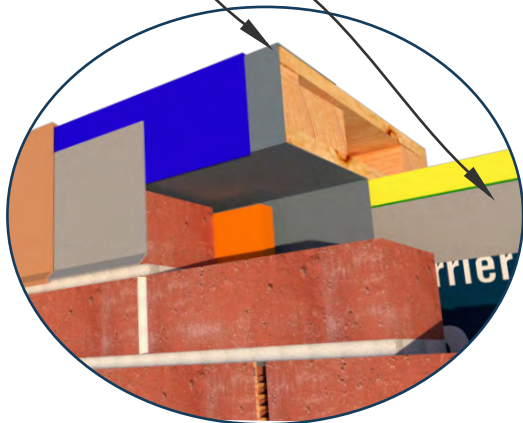
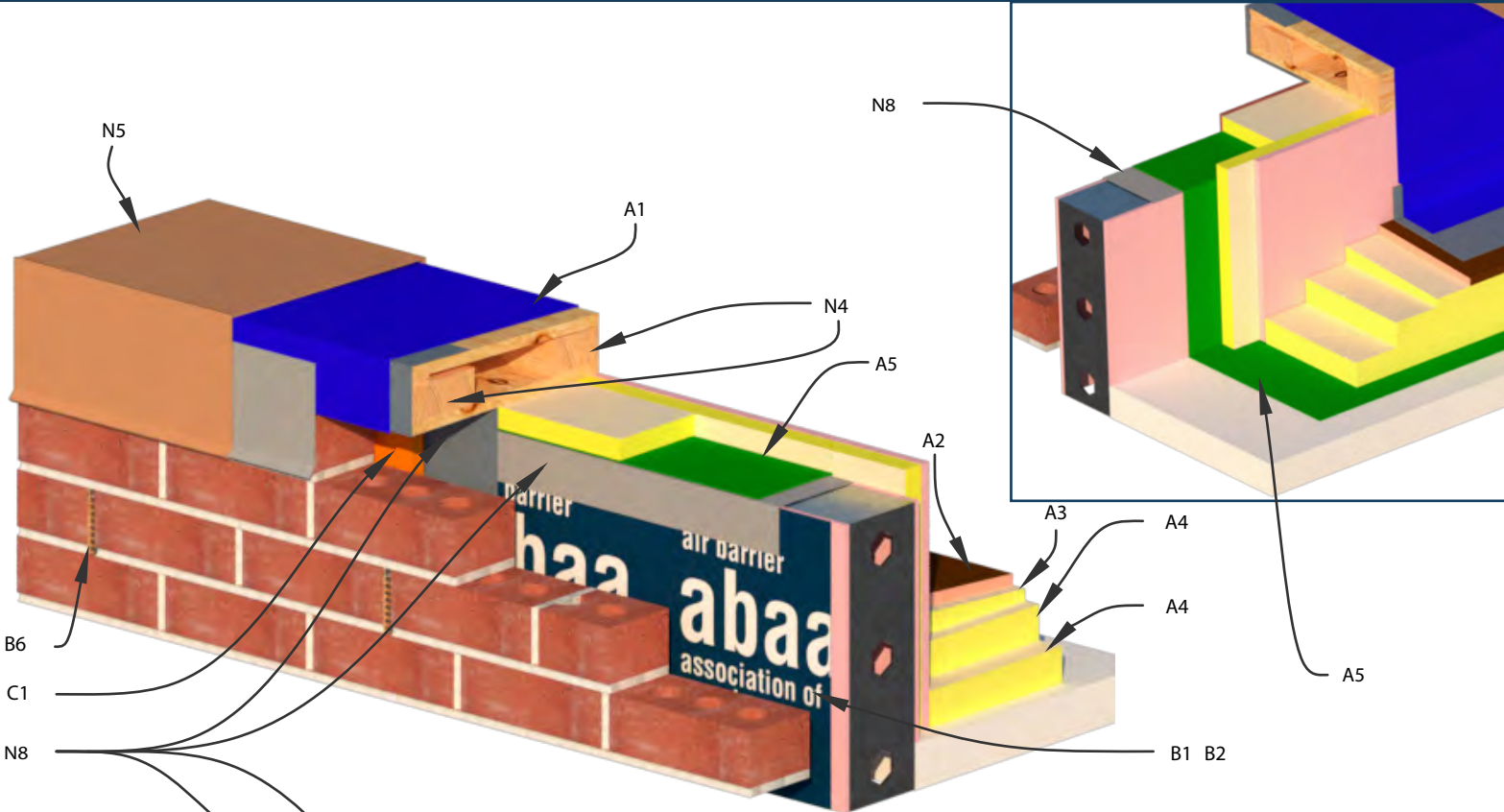
Rainscreen Wall - Roof with Roof Air/Vapor Retarder



Rainscreen Stud Parapet Wall with Foam Insulation in Stud Cavity



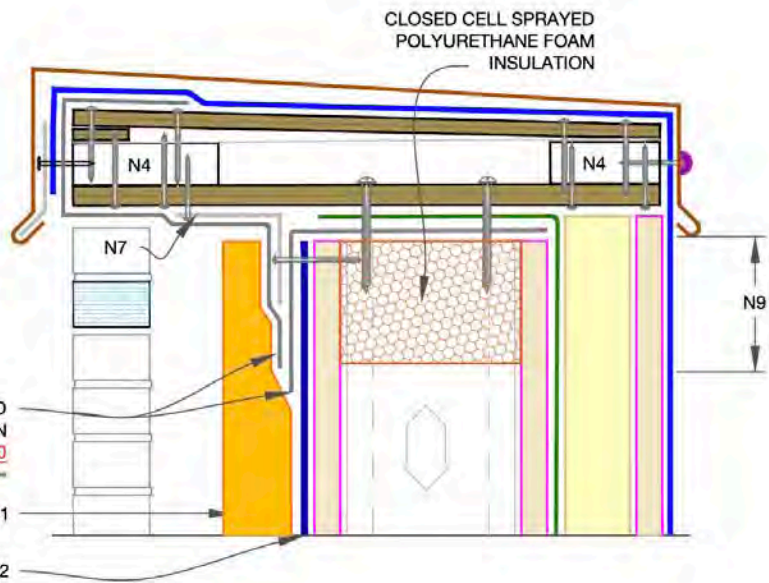
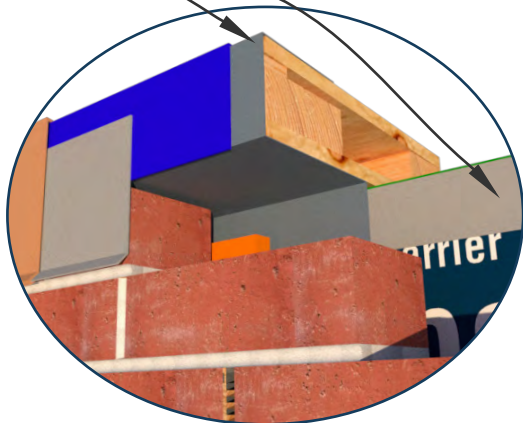
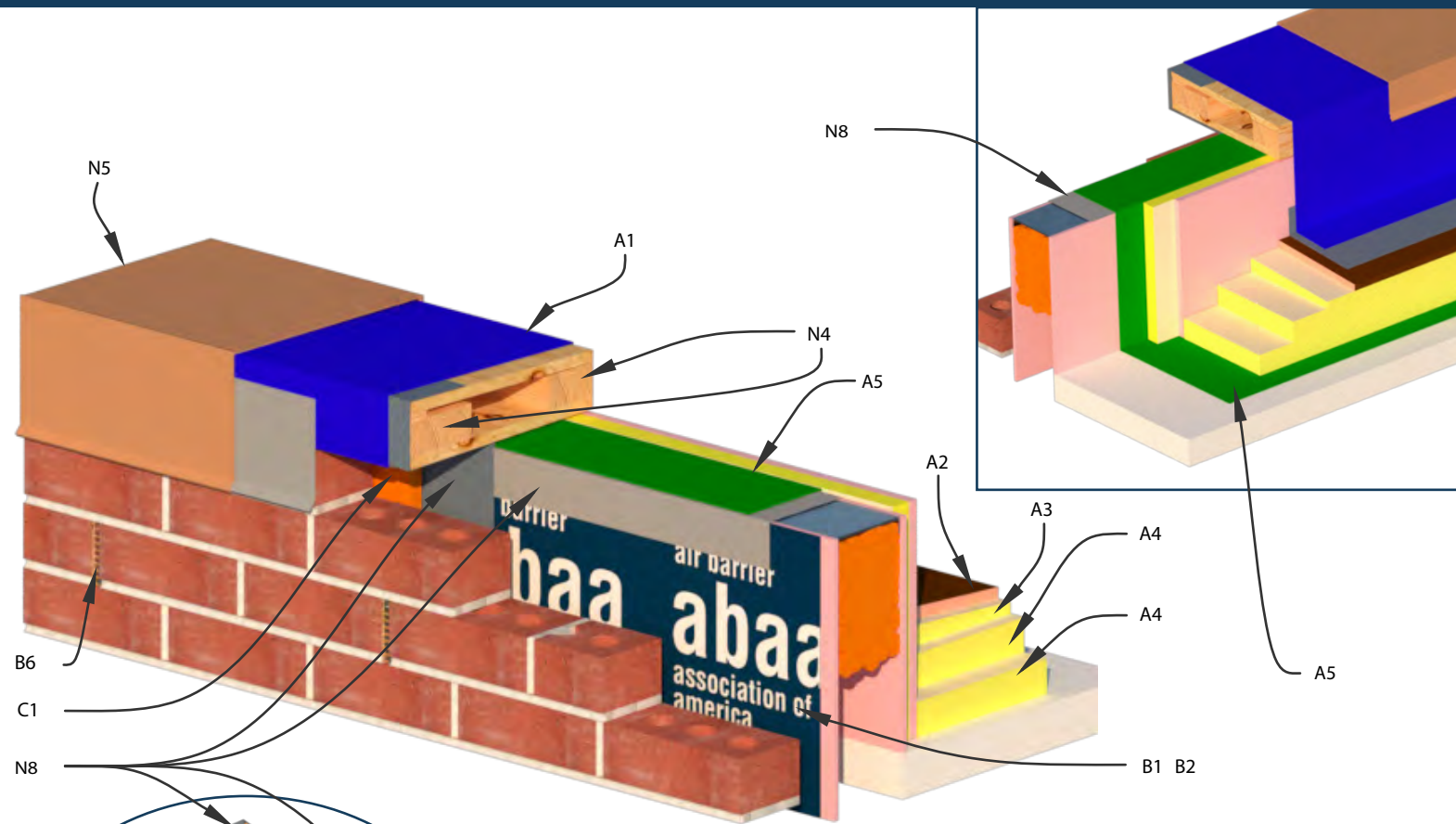
Rainscreen Stud Parapet Wall with Continuous Rigid Board Exterior Insulation



NOTES:
PARAPET HEIGHT: REVIEW CONDENSATION RISK AND THERMAL LOSSES FOR ALL PARAPET HEIGHTS. PARAPETS WRAPPED WITH CONTINUOUS INSULATION ARE STILL AT RISK FOR CONDENSATION IN COLDER CLIMATE ZONES, ESPECIALLY THOSE GREATER THAN 2' (612mm). ALSO CONSIDER DETAILING THAT EXCLUDES THE PARAPET FROM THE AIR AND THERMAL BOUNDARY. SEE CONCEPTS SHOWN IN [DETAILS RS5 AND RS6](#).



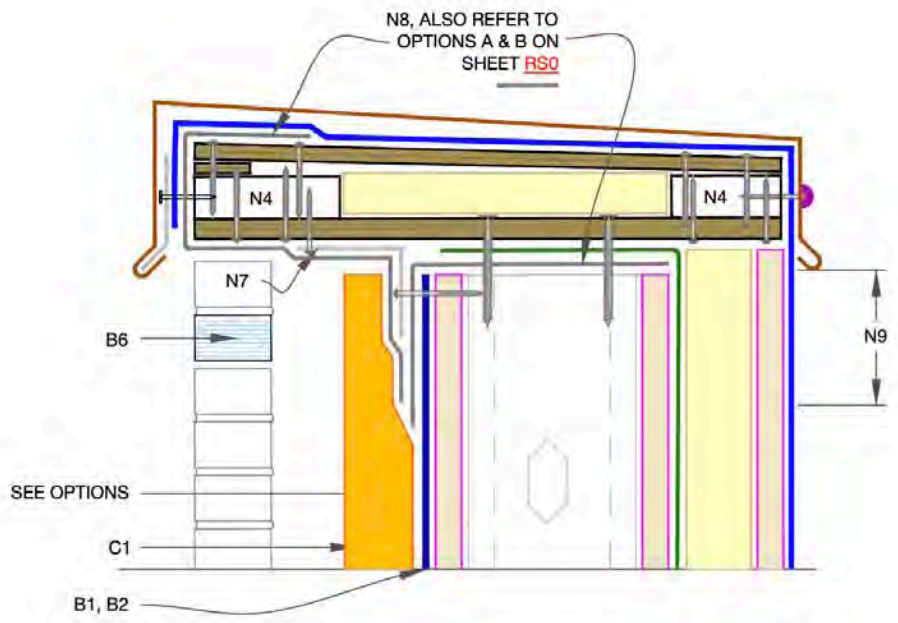
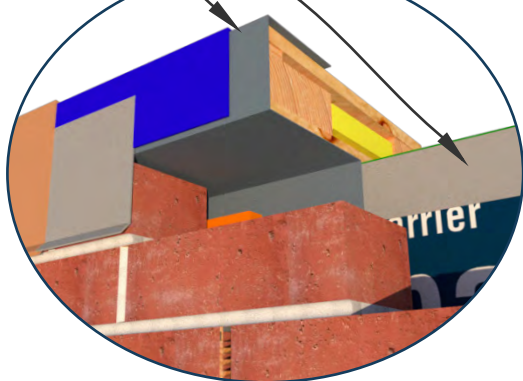
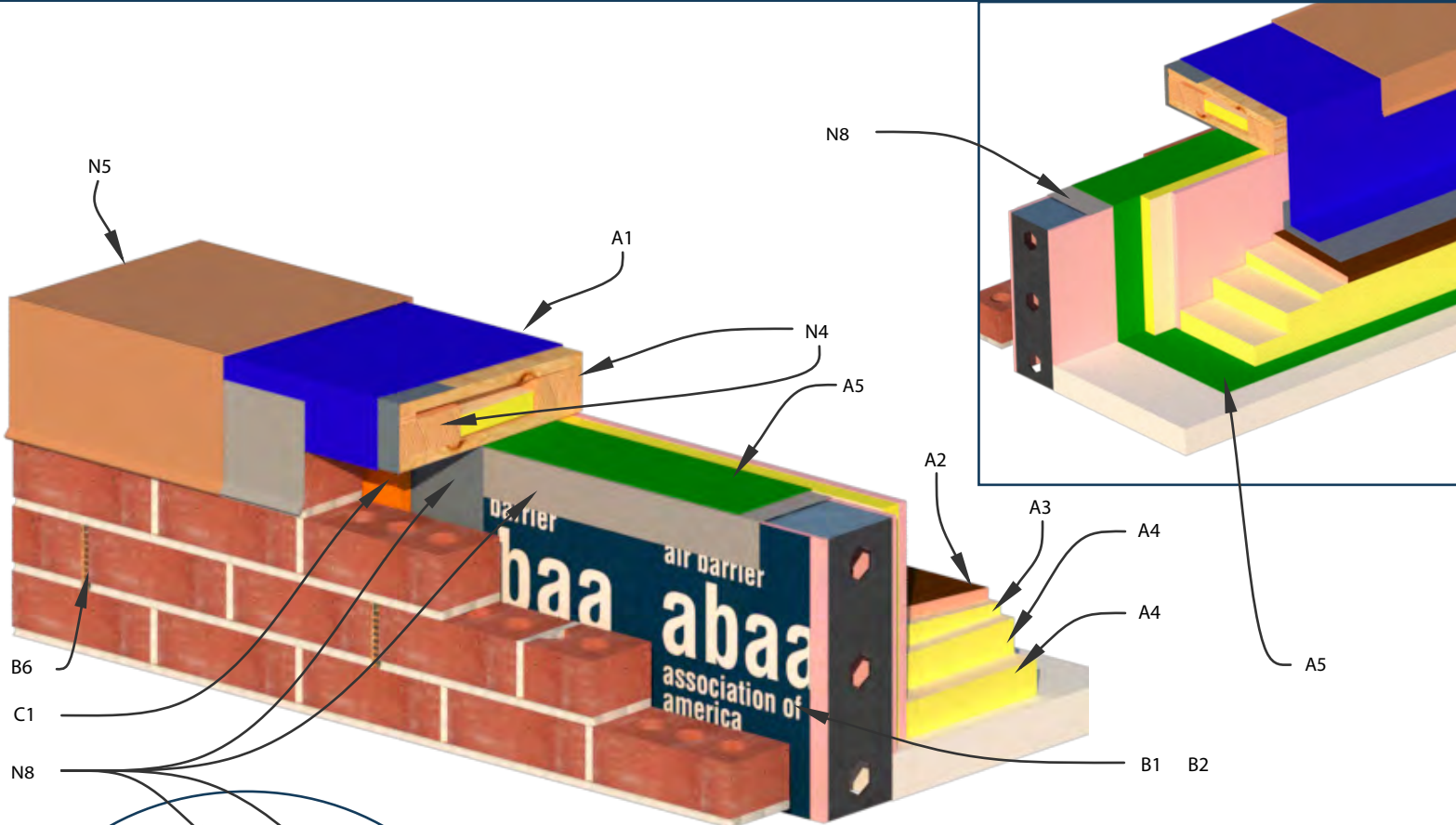
Rainscreen Stud Parapet Wall with Foam Insulation



N8, ALSO REFER TO
OPTIONS A & B ON
SHEET [RS0](#)

NOTE:
PARAPET HEIGHT: REVIEW CONDENSATION RISK AND THERMAL LOSSES FOR ALL PARAPET HEIGHTS. PARAPETS WRAPPED WITH CONTINUOUS INSULATION ARE STILL AT RISK FOR CONDENSATION IN COLDER CLIMATE ZONES, ESPECIALLY THOSE GREATER THAN 2' (612mm). ALSO CONSIDER DETAILING THAT EXCLUDES THE PARAPET FROM THE AIR AND THERMAL BOUNDARY. SEE CONCEPTS SHOWN IN [DETAILS RS5 AND RS6](#).

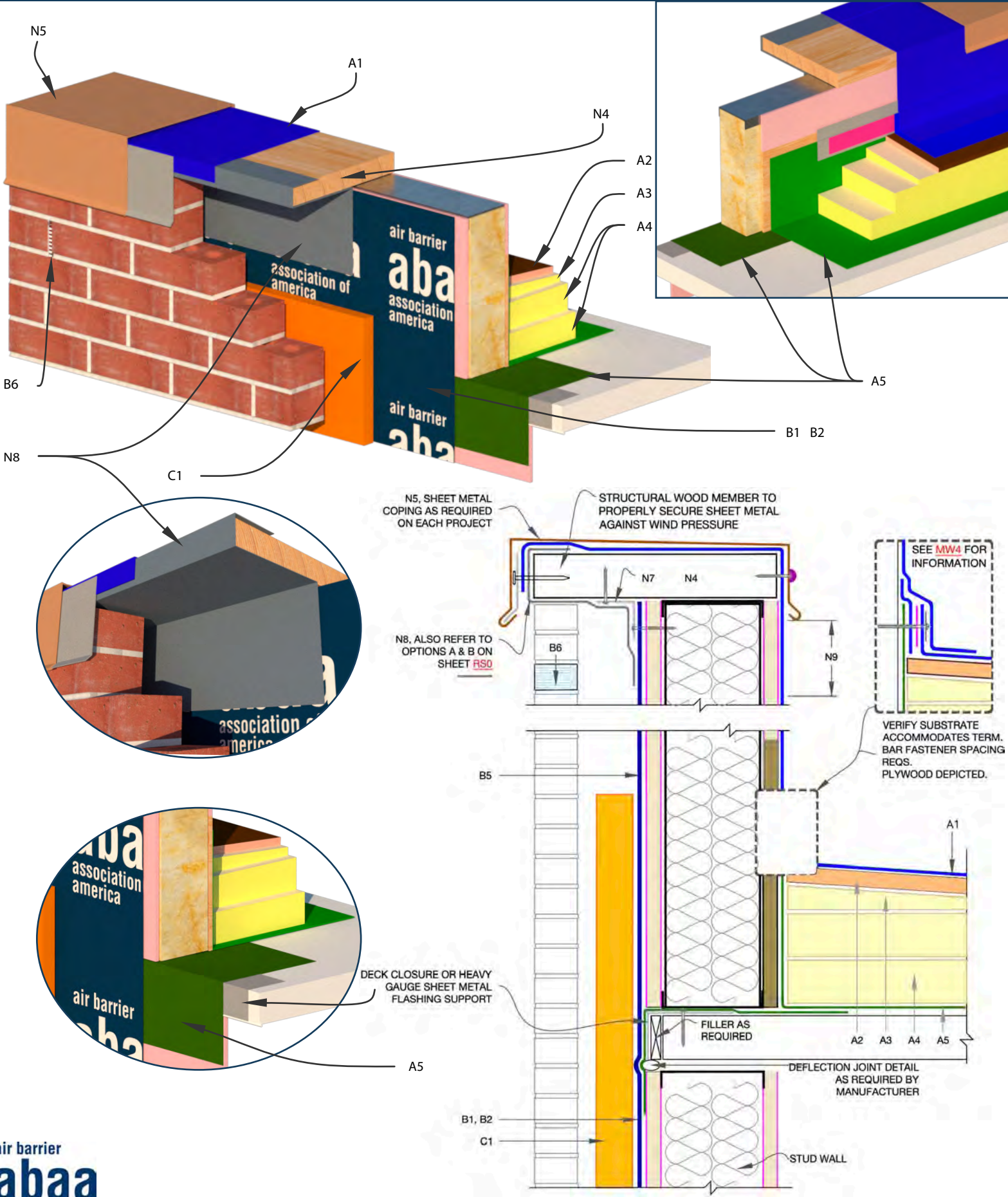
Rainscreen Stud Parapet Wall with Insulation within Coping Blocking Assembly



NOTE:
 PARAPET HEIGHT: REVIEW CONDENSATION RISK AND THERMAL LOSSES FOR ALL PARAPET HEIGHTS. PARAPETS WRAPPED WITH CONTINUOUS INSULATION ARE STILL AT RISK FOR CONDENSATION IN COLDER CLIMATE ZONES, ESPECIALLY THOSE GREATER THAN 2' (612mm). ALSO CONSIDER DETAILING THAT EXCLUDES THE PARAPET FROM THE AIR AND THERMAL BOUNDARY. SEE CONCEPTS SHOWN IN [DETAILS RS5 AND RS6](#).

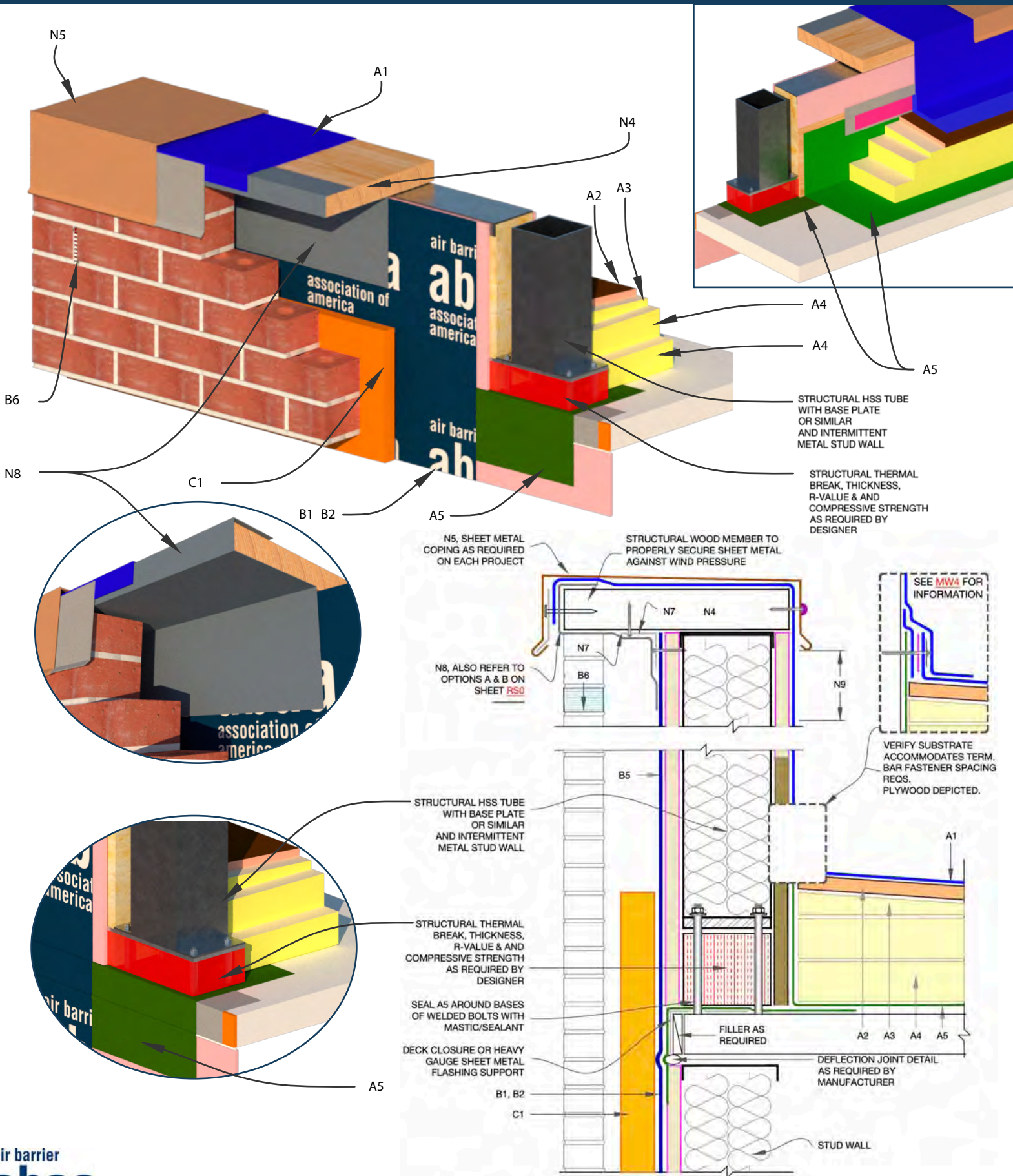


AVR Installation Prior to Parapet Extension - without Thermal Break

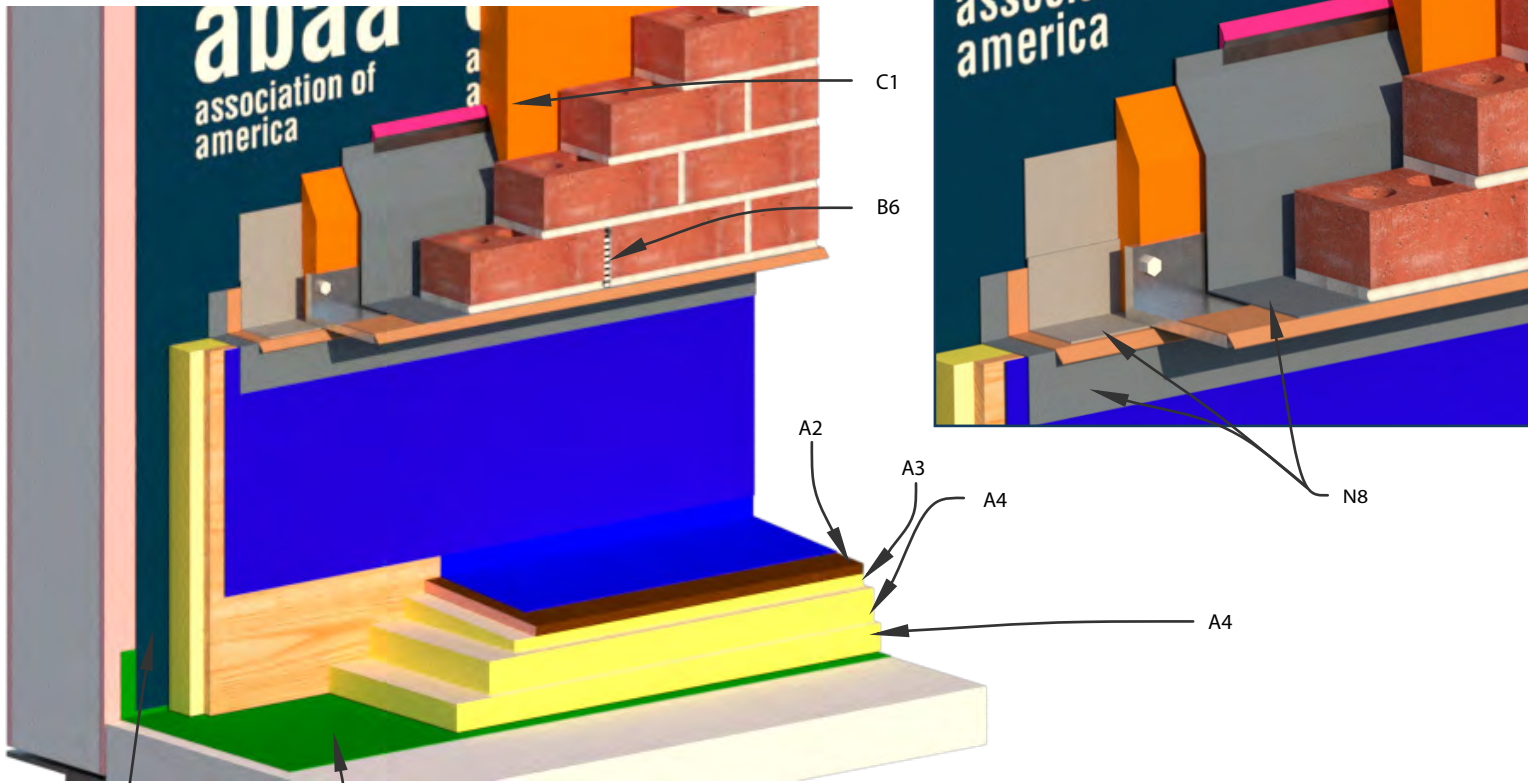


air barrier
abaa
 association of
 america

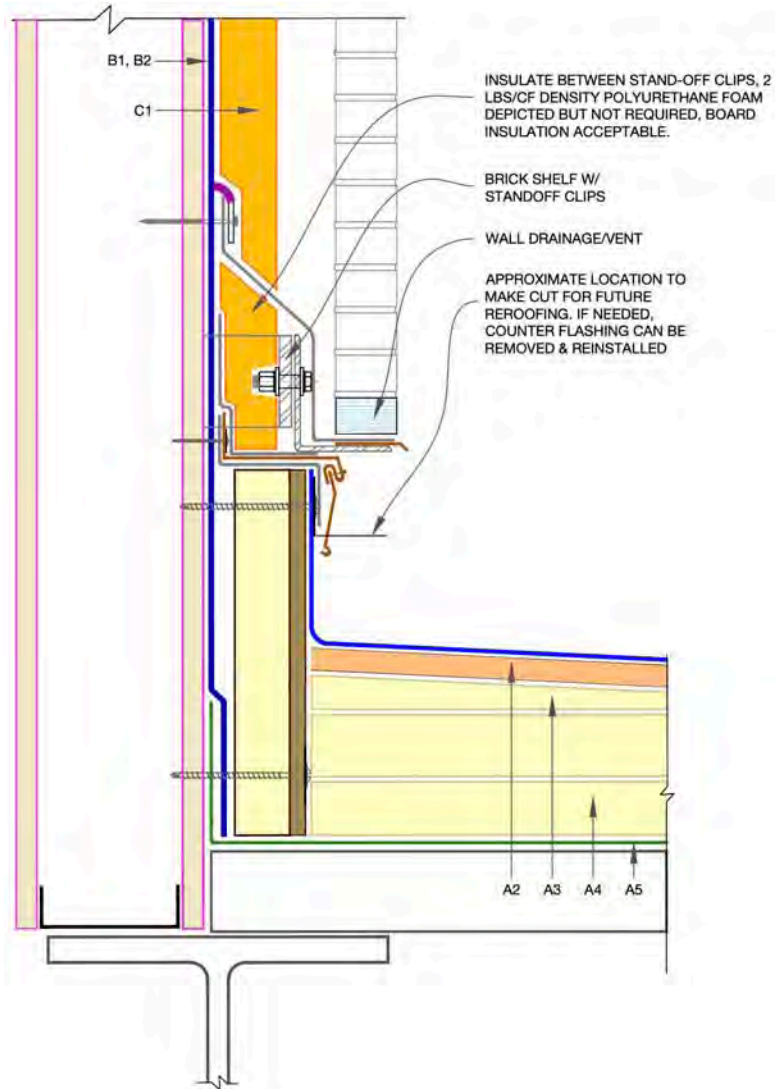
AVR Installation Prior to Parapet Extension- with Thermal Break



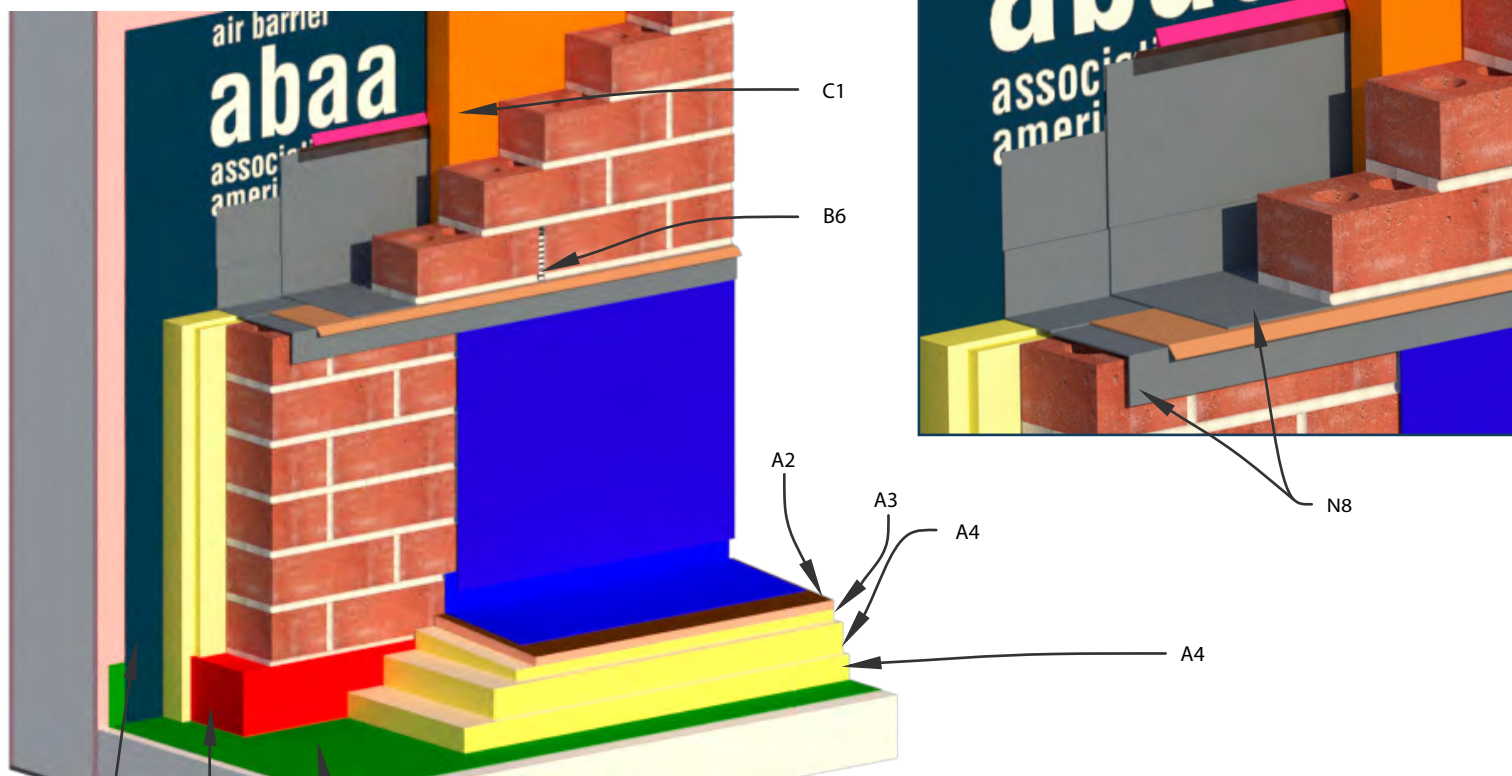
Rising Wall Transition Brick Shelf with Stand off Clips



B1 B2 A5

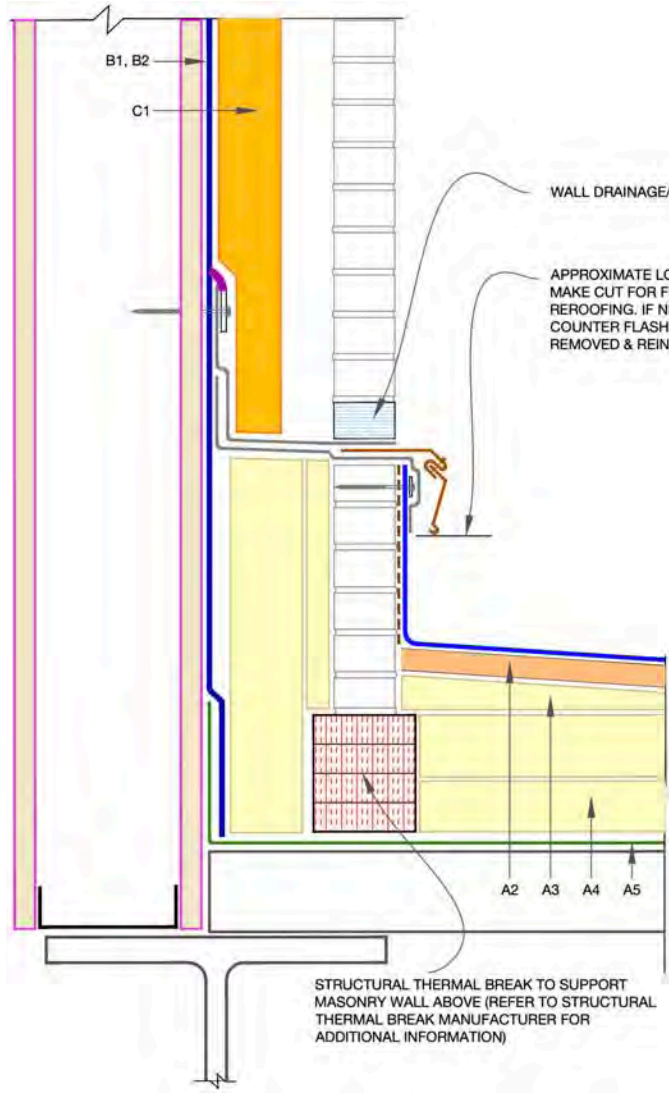


Rising Wall Transition with Structural Thermal Break



B1 B2 A5

STRUCTURAL THERMAL BREAK TO SUPPORT MASONRY WALL ABOVE (REFER TO STRUCTURAL THERMAL BREAK MANUFACTURER FOR ADDITIONAL INFORMATION)



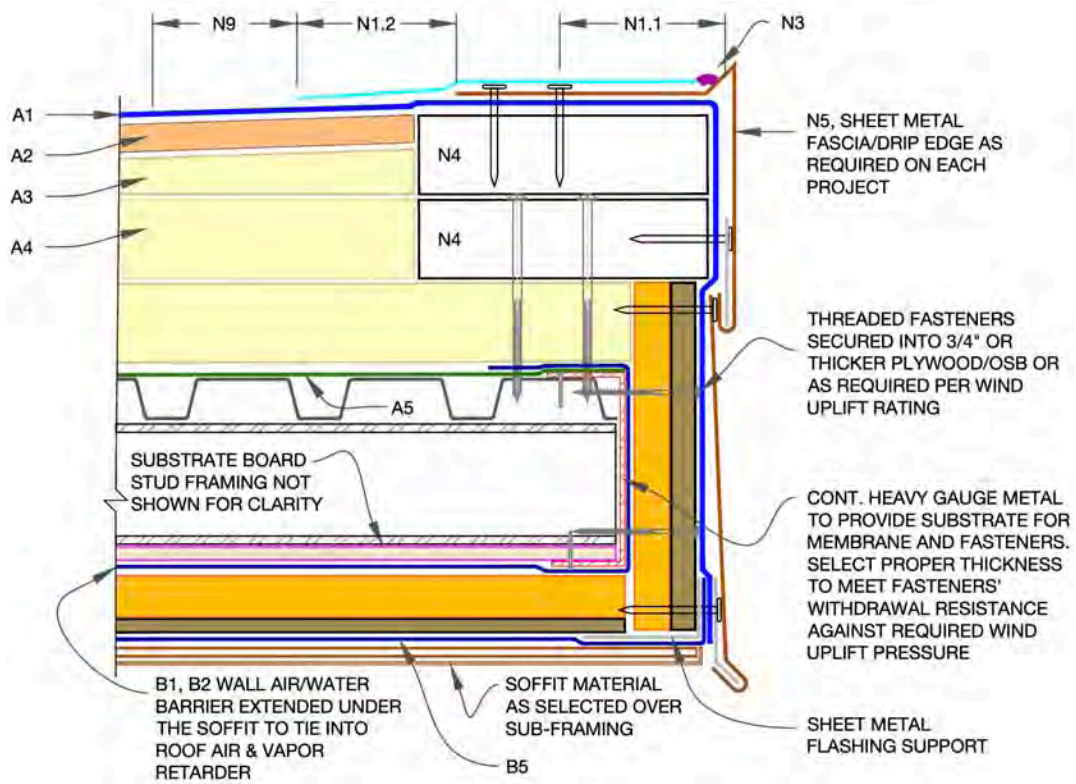
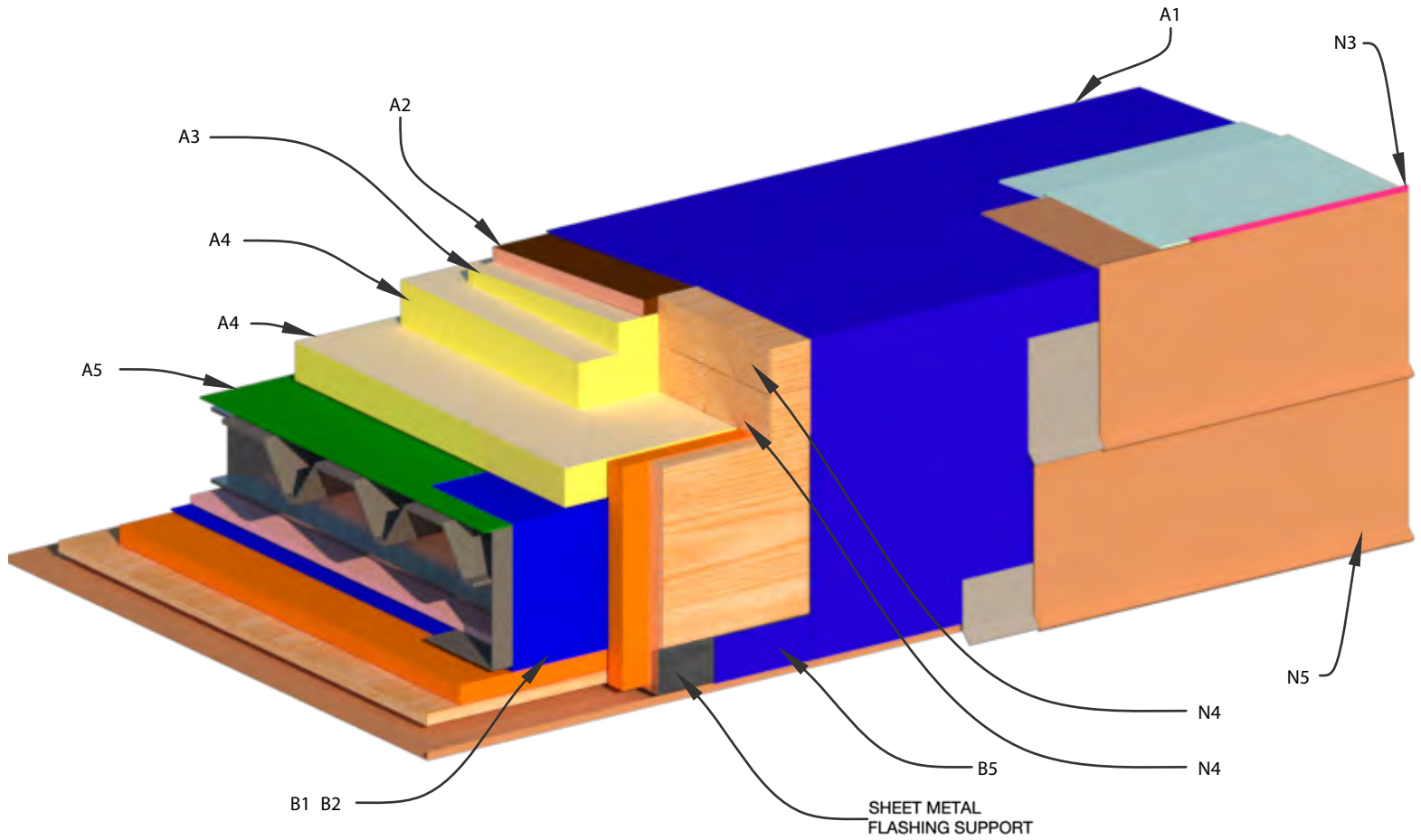
WALL DRAINAGE/VENT

APPROXIMATE LOCATION TO MAKE CUT FOR FUTURE REROOFING. IF NEEDED, COUNTER FLASHING CAN BE REMOVED & REINSTALLED

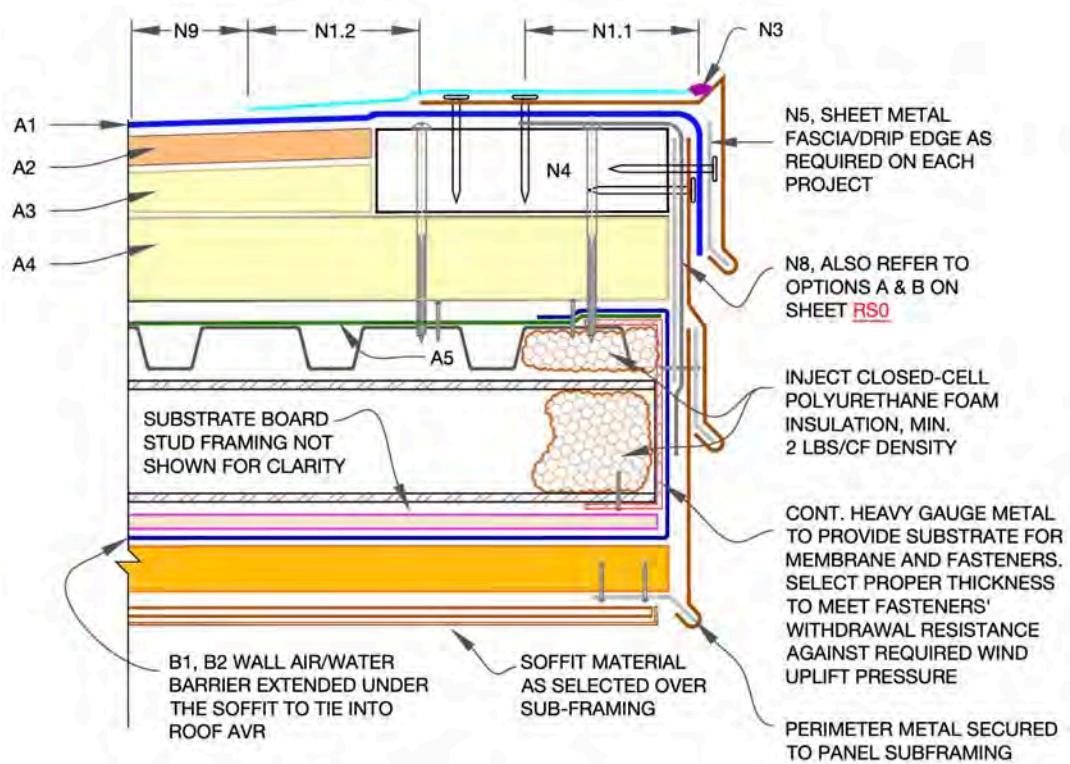
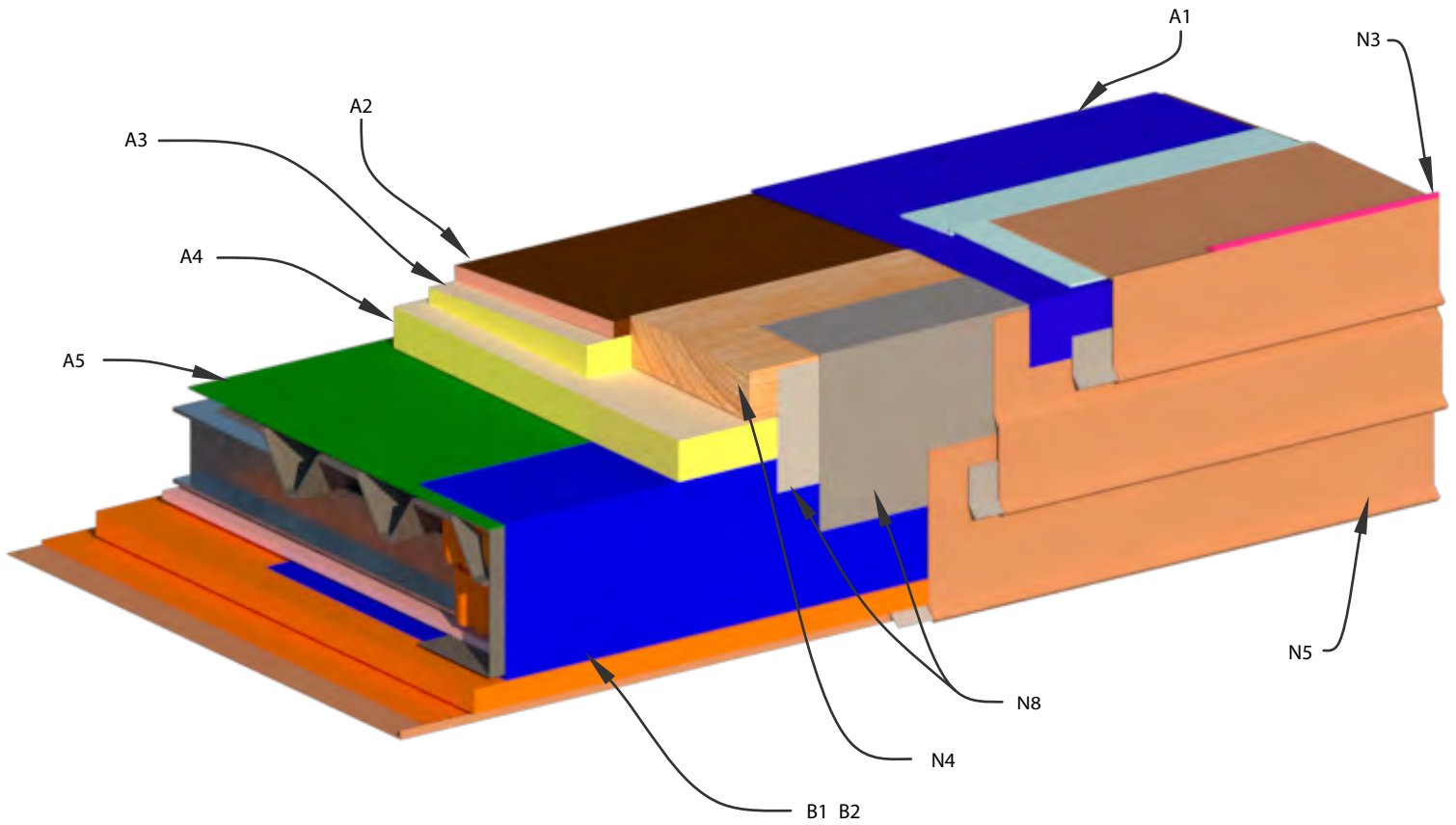
A2 A3 A4 A5

STRUCTURAL THERMAL BREAK TO SUPPORT MASONRY WALL ABOVE (REFER TO STRUCTURAL THERMAL BREAK MANUFACTURER FOR ADDITIONAL INFORMATION)

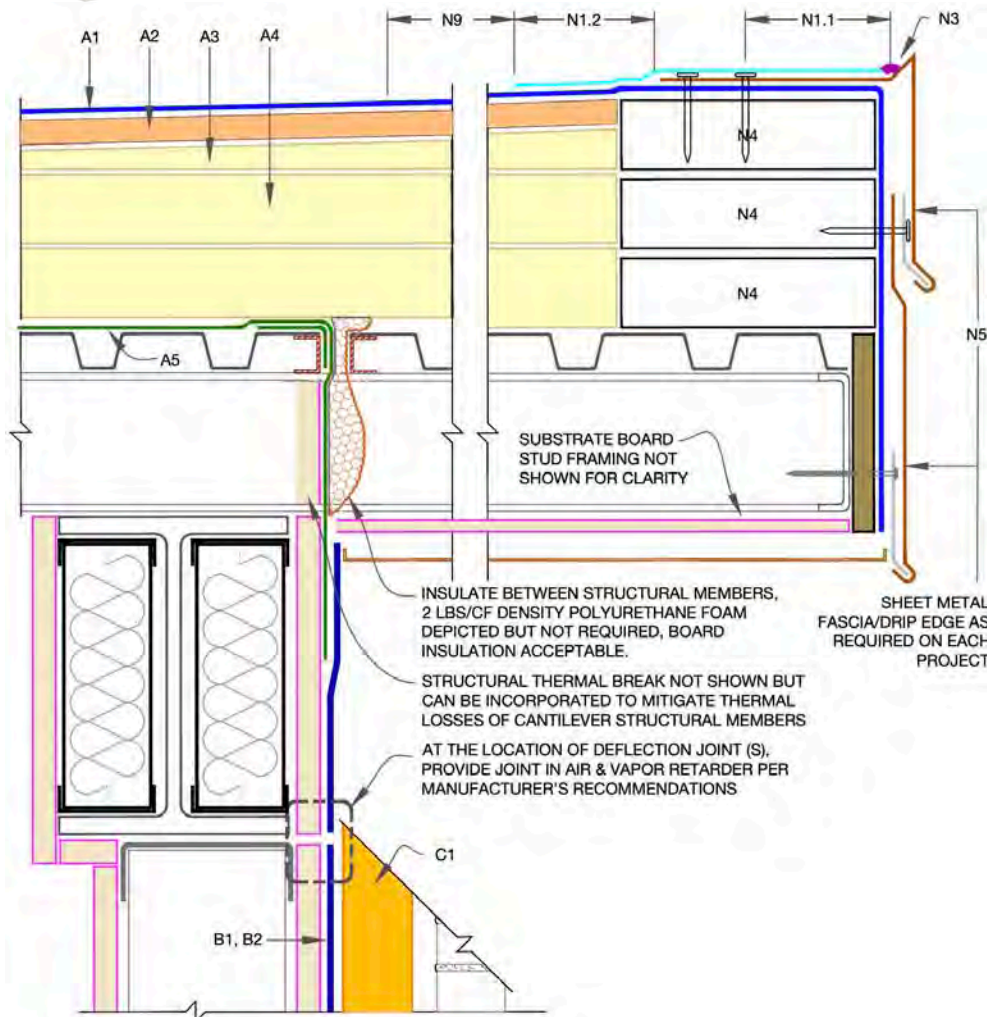
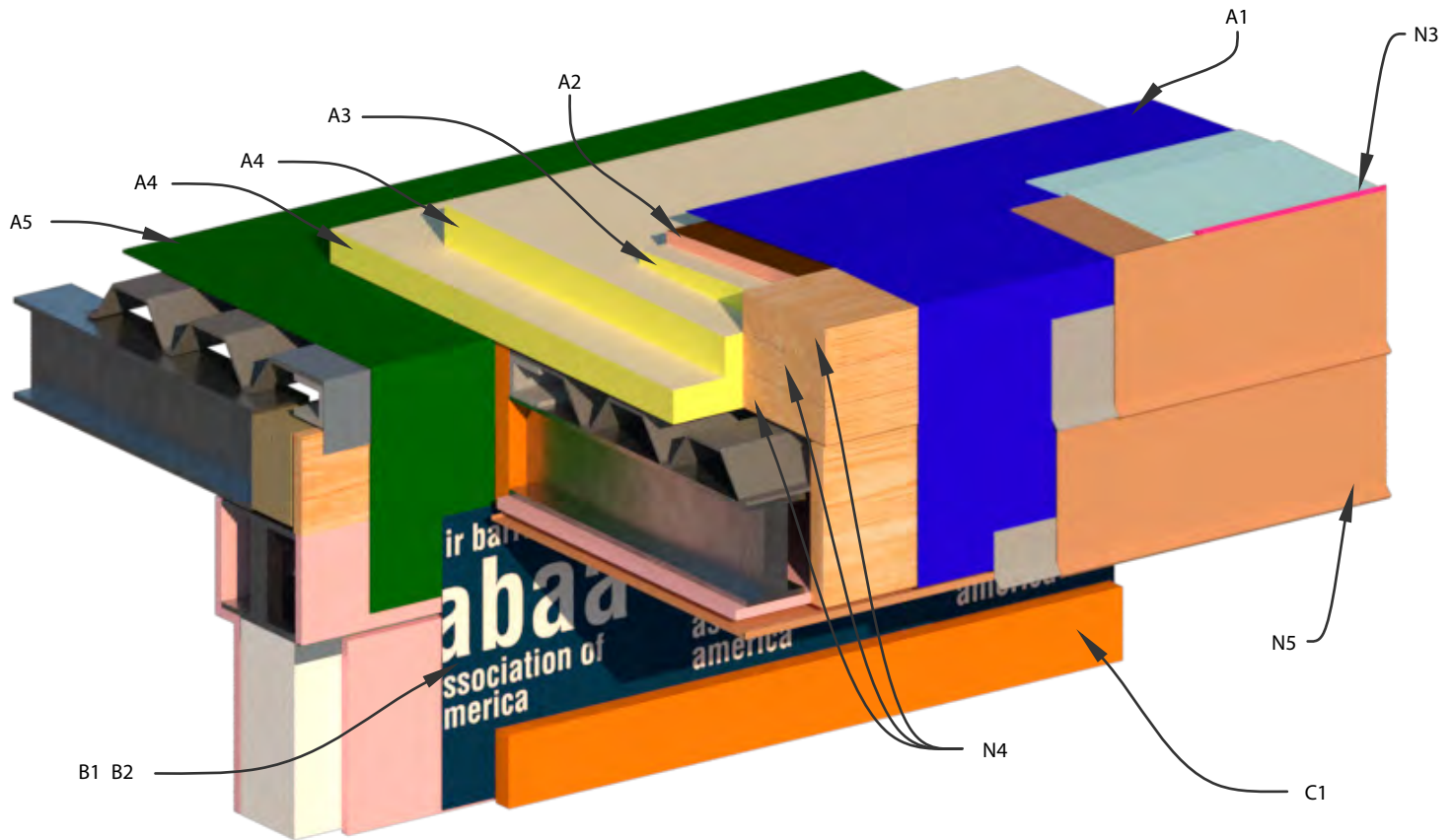
Cantilever (Included) Option A with Roof Air/Vapor Retarder



Cantilever (Included) Option B with Roof Air/Vapor Retarder

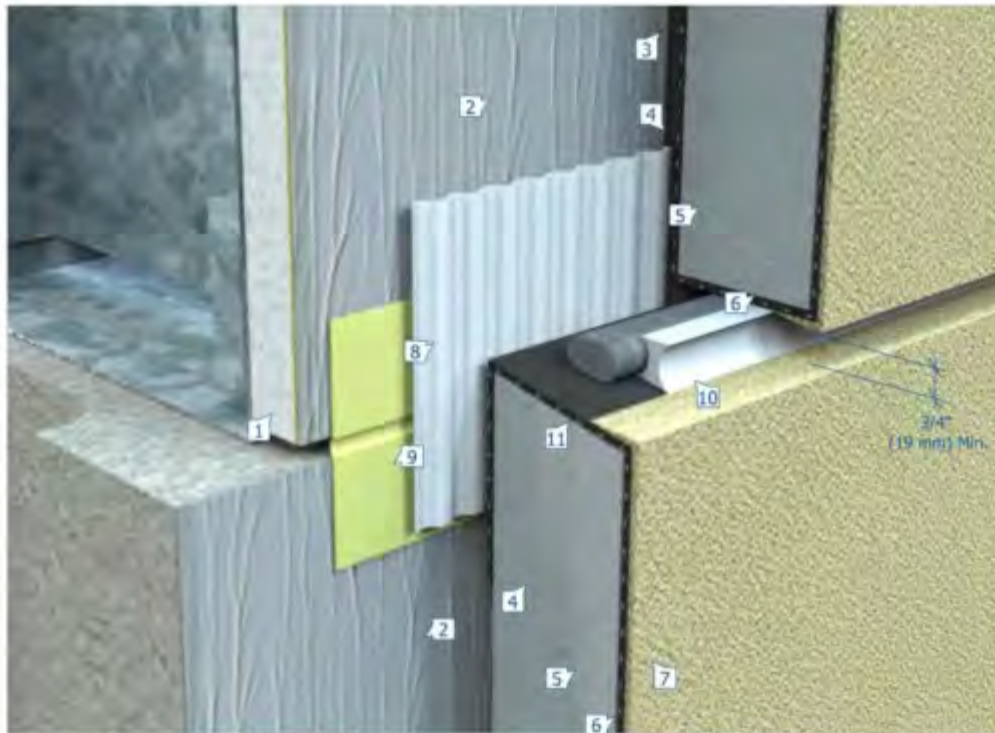


Cantilever (Excluded) with Roof Air/Vapor Retarder



APPENDIX B – Sample details from other organizations

HORIZONTAL JOINT-SUBSTRATE CHANGE



- | | |
|---|---|
| 1 Approved Substrate | 7 Finish Coat |
| 2 Air/Water Resistive Barrier Coatings | 8 Drainage Strip per Manufacturer if Applicable |
| 3 Adhesive in Vertical Notched Trowel Configuration | 9 EIFS Manufacturer Recommended Transition |
| 4 Reinforcing Mesh Pre-Wrapped to Back Side of Insulation Board 2" (51 mm) Min. | 10 Sealant with Closed Cell Backer Rod |
| 5 Insulation Board | 11 Slope Exposed Bottom Surface 1:5 Min. Outward to Drain |
| 6 Reinforcing Mesh Embedded in Base Coat | |



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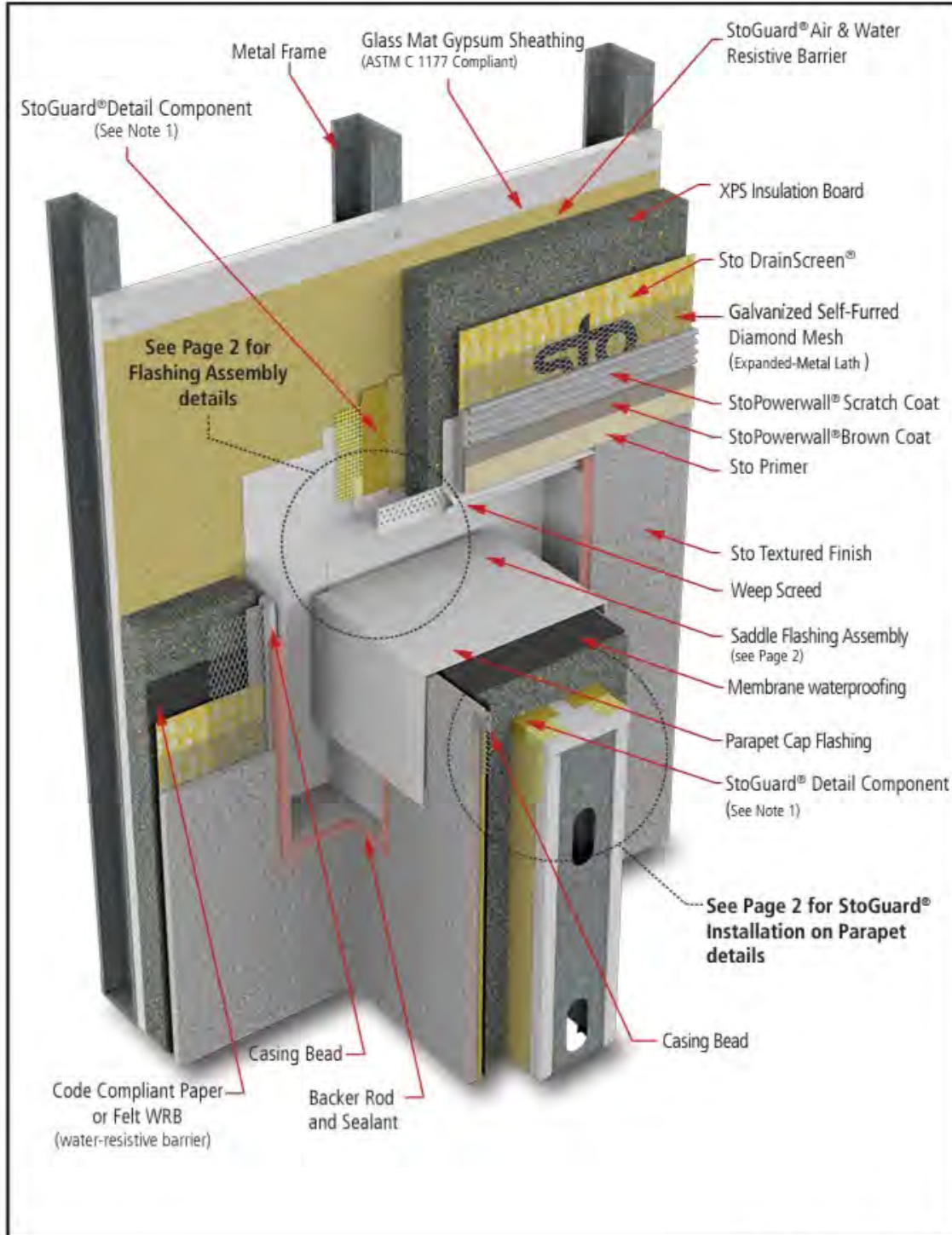
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These drawings and comments apply only to complete EIFS products as specifically defined in the current edition of EIMA Classification Paper.

StoPowerwall®ci Saddle Flashing

Detail No.: 63s.17
Date: August 2023
Page 1 of 2



- Notes:**
1. Refer to StoGuard Product Use Chart (Table 1.1) for StoGuard detail components; joint treatment, rough opening protection, backing for masonry anchors, or transitions to dissimilar materials, joints and seams in construction.
 2. Refer to General Notes for specific information and design guidance on wall assembly components.
 3. Sto GPS Insulation in compliance with ASTM C 578.
 4. Glass mat gypsum sheathing in compliance with ASTM C1177, exterior grade and Exposure 1 wood based sheathing, or cementitious sheathing in compliance with ASTM C1325.
 5. Minimum 2.5 lb/yd² (1.4 kg/m²) self-furred galvanized diamond mesh metal lath.
 6. Stucco scratch and brown coat material in compliance with ASTM C926 and manufactured or listed by Sto Corp.
 7. Components not identified as Sto are furnished by other manufacturers and are not necessarily installed by trades who install the Sto products. Refer to project specific contract documents.

ATTENTION

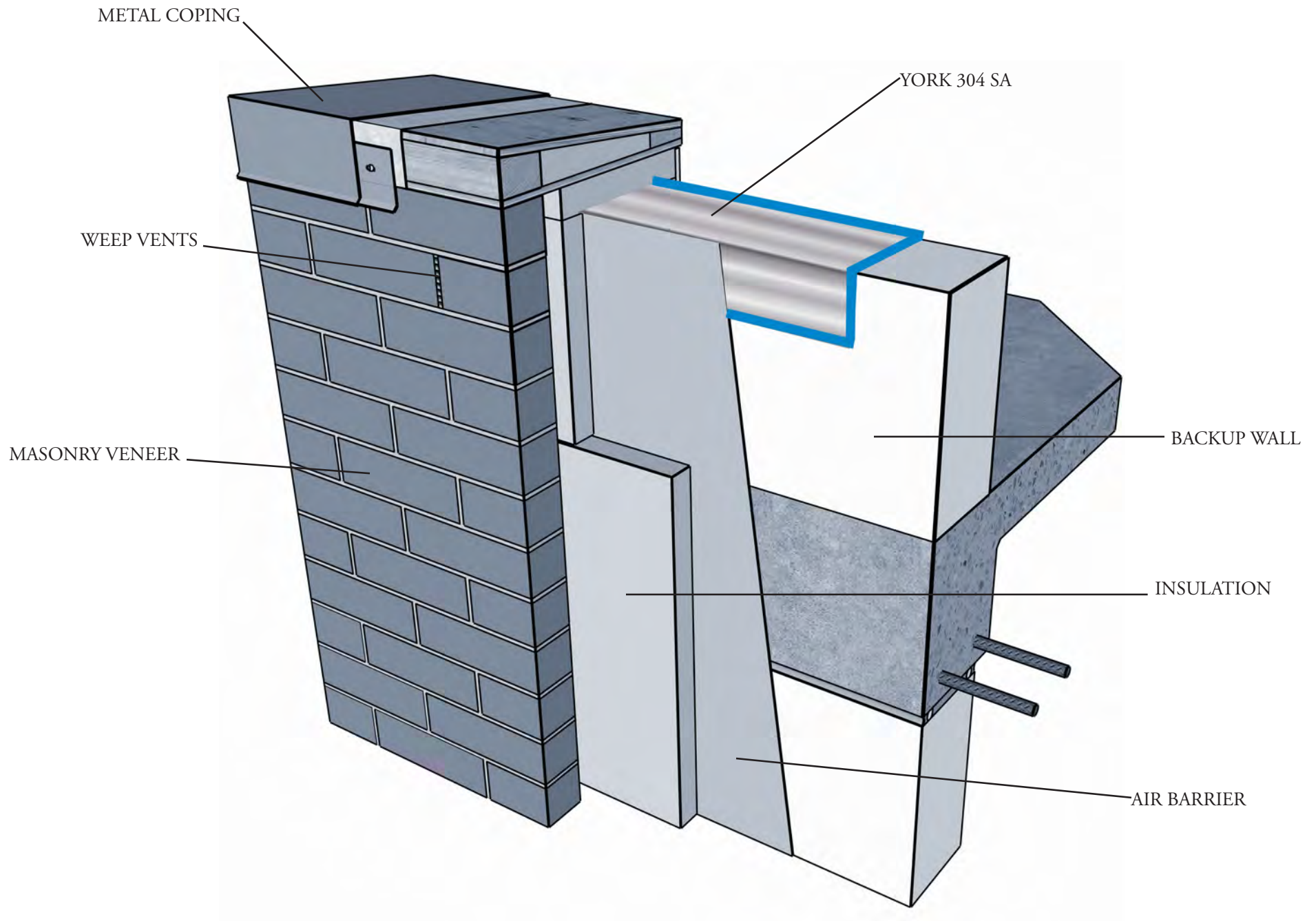
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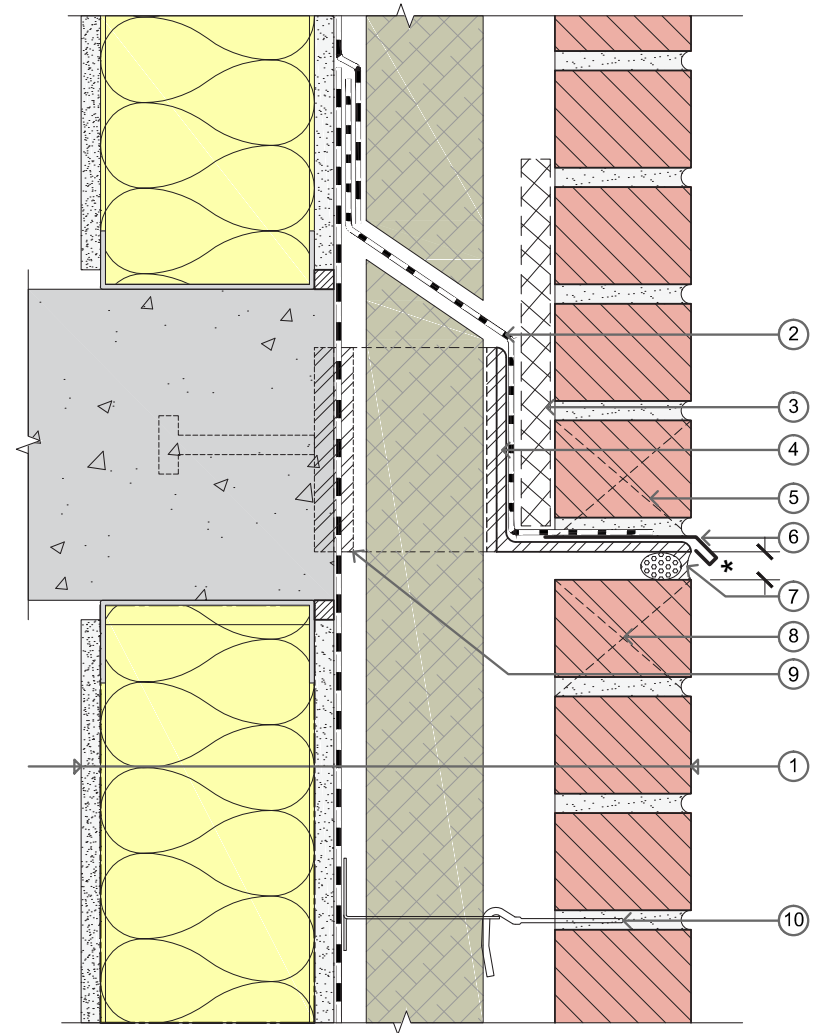
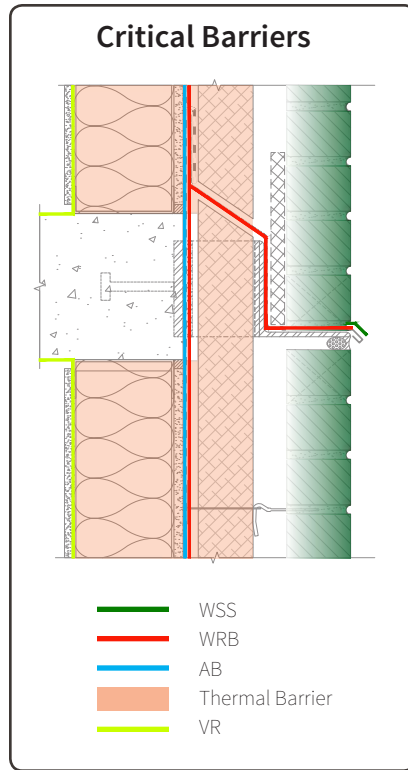


ROOF TO WALL PARAPET DETAIL YORK 304 SA SELF-ADHERING STAINLESS STEEL



LEGEND

1. Typical Assembly:
 - Interior gypsum board
 - Vapor retarder
 - Steel-framed wall with batt insulation
 - Exterior sheathing
 - Vapor permeable self-adhered sheet or fluid-applied AB/WRB field membrane
 - Semi-rigid exterior insulation
 - Air cavity
 - Anchored masonry veneer
 - Clear water repellent
 2. Flexible self-adhered flashing membrane over semi-rigid insulation and shelf angle
 3. Continuous mortar collection net
 4. Hot-dipped galvanized steel standoff shelf angle anchored on intermittent knife plates or HSS
 5. Vents/weepers at maximum 24 inches on-center
 6. Sheet-metal flashing with 1/2-inch hemmed drip edge
 7. Backer rod and sealant
 8. Vents at maximum 24 inches on-center
 9. Fluid-applied flashing membrane, extended onto intermittent knife plate or HSS connection
 10. Masonry veneer anchor, fasteners bed in sealant or fluid-applied flashing membrane per manufacturer recommendations
- * Size joint for project specific building movement, minimum 3/8-inch.



Detail Discussion

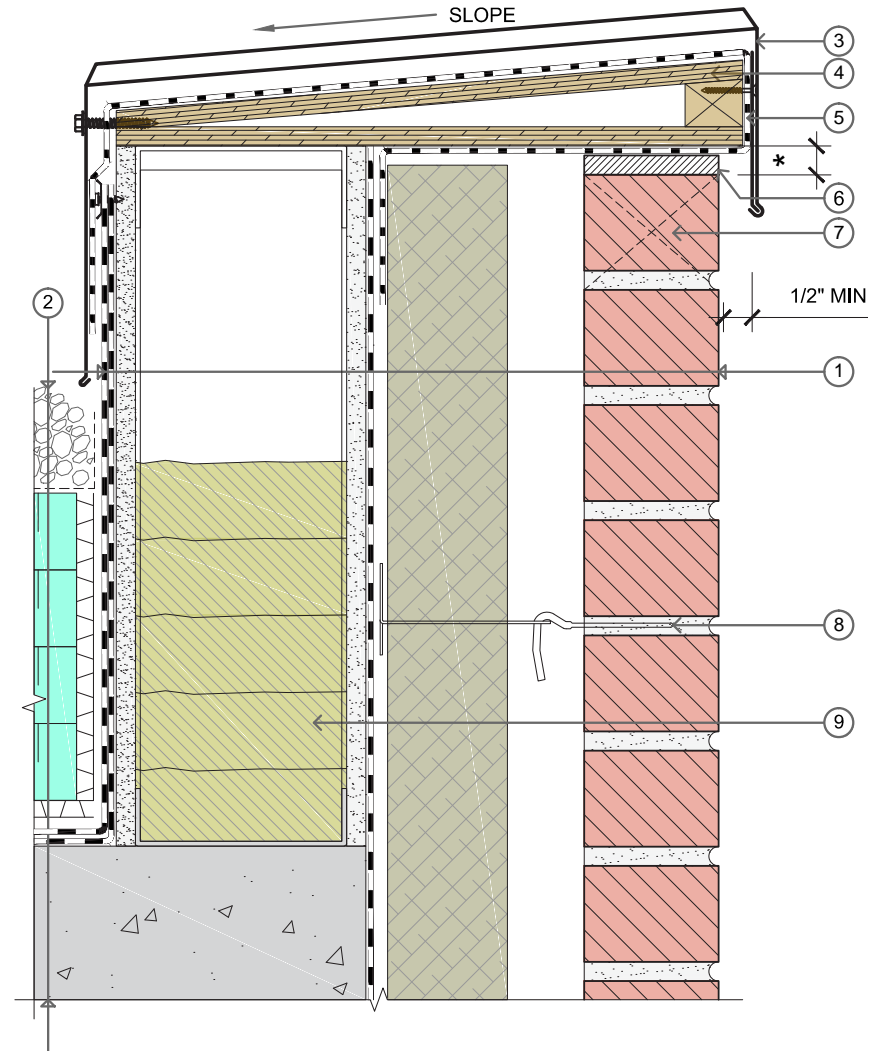
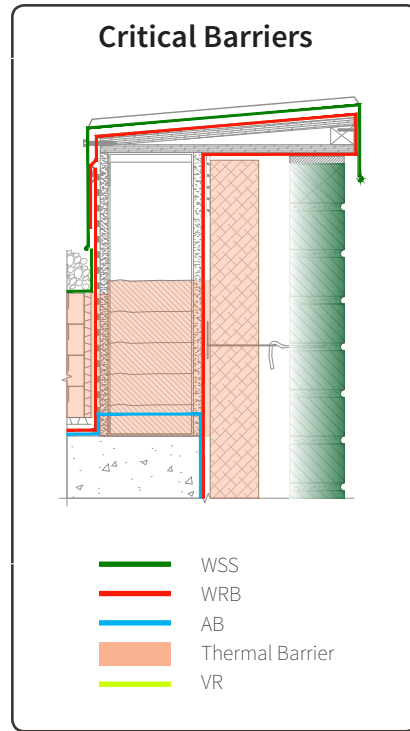
- A flexible self-adhered flashing membrane over the semi-rigid insulation promotes drainage of the rainscreen cavity at the floor line. It is a thermally improved alternative detail to a two-piece sheet-metal flashing as shown in Detail 2-A. When installing the self-adhered membrane ensure it is fit tightly to the substrate and sloped to drain.
- The hot-dipped galvanized steel loose lintel reduces the amount of thermal bridging at the floor line shelf-angle when compared to a continuous shelf angle mounted tight to the concrete slab face.
- Refer to the introductory chapter for alternative lip brick details that reduce the visibility of the backer rod and sealant movement joint. Note this joint is necessary for differential movement that will occur between the structure and anchored masonry veneer.

Typical Standoff Shelf Angle at Floor Line

Detail 2-D

LEGEND

1. Parapet Assembly
 - Interior gypsum board
 - Vapor retarder
 - Steel-framed wall with batt insulation
 - Exterior sheathing
 - Vapor permeable self-adhered sheet or fluid-applied AB/WRB field membrane
 - Semi-rigid exterior insulation
 - Air cavity
 - Anchored masonry veneer
 - Clear water repellent
 2. Inverted roof membrane assembly
 3. Standing-seam sheet-metal coping with gasketed washer fasteners
 4. Preservative-treated blocking
 5. High-temperature self-adhered membrane
 6. Compressible filler
 7. Vent at maximum 24 inches on-center
 9. Masonry veneer anchor, fasteners bed in sealant or fluid-applied flashing membrane per manufacturer recommendations
 9. Closed-cell spray foam insulation plug (AB)
- * Size joint for project specific building movement, minimum 3/8-inch wide.



Detail Discussion

- The concrete roof structure provides the VR layer at this detail.
- Vents are located at the top masonry course to encourage ventilation of the rainscreen cavity. The sheet-metal parapet cap is offset from the face of the anchored masonry veneer so as not to block the ventilation path. The sheet-metal coping and drip edge overhangs the vents to protect the masonry veneer opening from wind-driven rain.
- A compressible filler is used between the anchored masonry veneer and parapet blocking to allow building movement while preventing insects and debris from entering the rainscreen cavity.
- Parapet cavity insulation is provided to create a continuous thermal envelope at the roof-to-wall transition.

Typical Parapet at Inverted Roof System

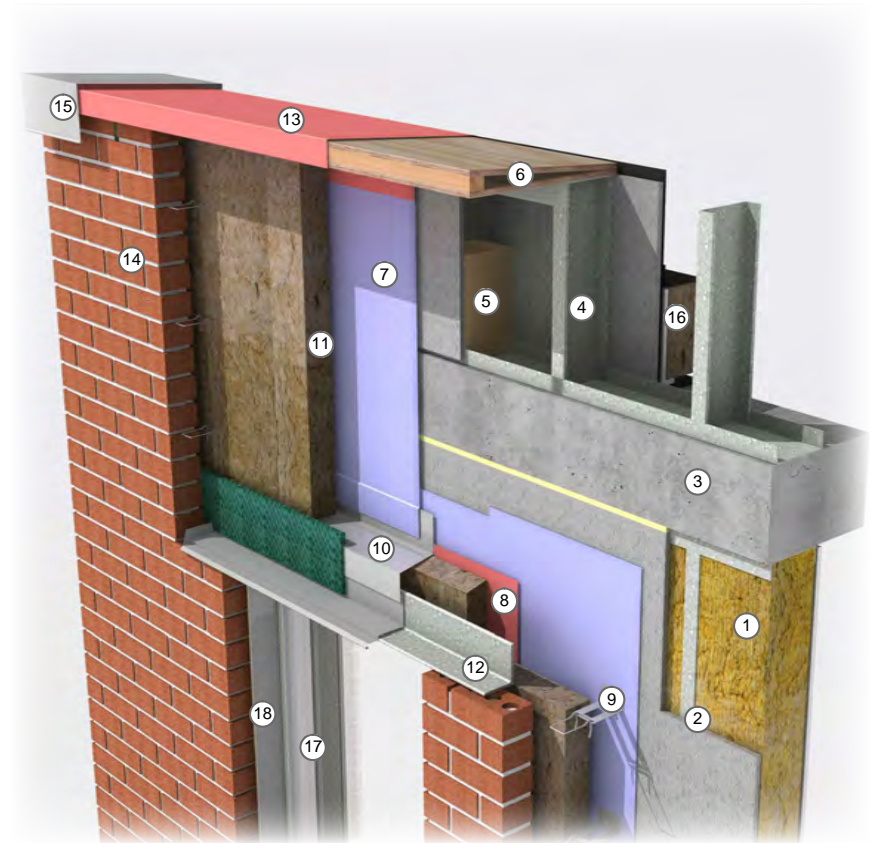
Detail 2-E

LEGEND

1. Steel-framed wall with batt insulation
2. Exterior sheathing
3. Concrete roof structure
4. Steel stud parapet framing
5. Closed-cell spray foam insulation plug (AB)
6. Preservative-treated blocking
7. Vapor-permeable self-adhered sheet or fluid-applied AB/WRB field membrane
8. Fluid-applied AB/WRB head and jamb prestrip membrane
9. Masonry veneer anchor, fasteners bed in sealant or fluid-applied flashing membrane per manufacturer recommendations
10. Two-piece sheet-metal head flashing with 1/2-inch hemmed drip edge and end dams beyond
11. Semi-rigid exterior insulation
12. Hot-dipped galvanized steel loose lintel
13. High-temperature self-adhered membrane
14. Anchored masonry veneer
15. Standing-seam sheet-metal coping with gasketed washer fasteners
16. Inverted roof membrane assembly
17. Non-flanged window
18. Sheet-metal jamb trim

3-D Detail Discussion

- Three-dimensional cutaway sections on the remaining pages of this Chapter represent the two-dimensional details provided for this assembly.
- In all details, WRB and WSS elements are shingle-lapped to encourage water shed in both the rainscreen cavity and at the anchored masonry veneer face.
- As shown in Detail 2-F, horizontally oriented ties such as a double eye and pintle plate ties allow exterior insulation to be installed in horizontal strips between ties. This orientation can improve the efficiency of the anchored masonry veneer installation.
- The two-piece sheet-metal flashing at the window head as shown in Detail 2-F allows the upper flashing to be installed and integrated into the AB/WRB field membrane prior to installation of the lower sheet-metal flashing and hot-dipped galvanized steel loose lintel. As shown, the sheet-metal flashing above the lintel ends at a head joint. This location allows the sheet-metal head flashing to terminate with an end dam.
- Vents/weeps at the floor line above the lintel, as shown in Detail 2-G, provide both drainage and ventilation of the rainscreen cavity above. Mortar collection mesh helps keep the weeps and the base of the rainscreen cavity free of mortar droppings. Vents below the floor line lintel provide ventilation of the rainscreen cavity.
- Detail 2-H describes a typical rough opening with continuous back dam angle. The back dam angle creates a sill pan below the window; intermittent shims below the window promote drainage at the sill and into the rainscreen cavity.
- The sheet-metal jamb trim shown in all details conceals the rainscreen cavity from water exposure and protects the insulation from UV exposure.



Parapet Assembly Cutaway Section

Detail 2-F