

IMPORTANT NOTICE

The following document is NOT comprehensive for design, bidding, or installation when used in isolation. Please refer to all related documents in their entirety for complete information regarding this ACM panel system. Such documents include, but may not be limited to, Technical Guides, Architectural Color Chart, Approved Materials List, Systems Guides, Technical Bulletins, Technical Data Sheets, CAD Drawings, Specifications, and Submittals. Visit <u>LaminatorsInc.com</u> for information on the latest documents regarding this panel system.

INSTALLATION GUIDE ERRATA - ROUT & RETURN

- 1. [Effective 2/7/2020] Modify Page 6, Step 7 as follows:
 - This step is to be omitted. No fasteners are to be installed in reinforcing angles (Part No. 44DS-ANGLE)

CONTACT US

To consult directly with one of our Professional Engineers regarding our ACM panel systems, contact Laminators Technical Support between the hours of 8:00am – 5:00pm EST:

800.523.2347
<u>LaminatorsInc.com</u>
<u>engineering@laminatorsinc.com</u>



INSTRUCTIONS FOR NFPA 285 COMPLIANCE

With respect to fire performance, the Rout & Return Installation System must be installed over fire-retardant-treated wood (FRTW) structural sheathing (panels) in order to achieve NFPA 285 compliance (in Type III construction only). Note the following when detailing the Rout & Return Installation System:

- The following document represents the referenced system as it has been designed, detailed, and tested and its relationship with a typical exterior wall assembly. As such, the document may be considered a baseline for the system and appropriately applied to project-specific conditions.
 - a. Laminators defines the NFPA 285 Zone as the area contained within a 10'-0" height above any window by the width of the window opening. The following document does not include a partial elevation that outlines the NFPA 285 Zone and related dimensions, notes, and sections. However, in order to maintain NFPA 285 compliance, specialized detailing is still required in the NFPA 285 Zone and at window heads as follows:
 - i. All horizontal panel joints within the NFPA 285 Zone require additional fasteners per detail RR-PLY-01A or must have rivets installed per detail RR-PLY-01B.
 - ii. Additional layers of steel flashing are required at window heads per detail RR-PLY-02A.
 - iii. Vertical panel joints are not permitted above window openings within the NFPA 285 Zone. All vertical joints must align with vertical window jambs or mullions.
- 2. Through the use of a specific Engineering Evaluation (EEV) available from Laminators, engineering extensions may be made (in lieu of what has been tested) with respect to base wall framing, fire-stopping at floor lines, cavity insulation, and water-resistive barrier (WRB) components while maintaining NFPA 285 compliance. The EEV may be required for submission to the Authority Having Jurisdiction (AHJ) to support the extensions.
- 3. If one or more engineering extensions are required beyond what is provided in the EEV available from Laminators, it is the responsibility of a third-party to pursue obtaining a separate EEV that adequately addresses each intended substitution. Note that Laminators <u>cannot</u> serve as the third-party in efforts to obtain such an EEV.

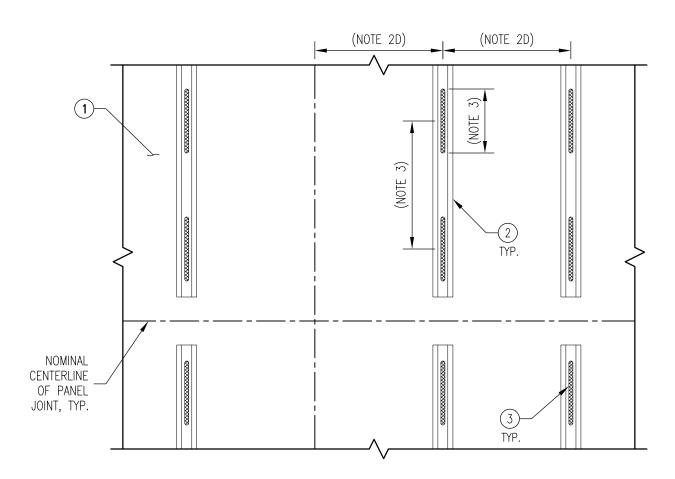
Note that the application of any engineering extension for NFPA 285 compliance will need to be evaluated by the Design Professional of Record (DPR) with respect to potential impact on any air, structural, and water performance of the project-specific exterior wall assembly. It is possible that components substituted to achieve fire testing compliance will affect the assembly differently with respect to air, structural, and water performance and need to be coordinated.

If the Rout & Return Installation System is intended to be installed over a different substrate (e.g. gypsum (non-structural) sheathing, CMU, concrete, or Omega CI rigid insulation panels), please defer to the appropriate detail set.



DRAWING INDEX - RR-PLY DETAIL SET (Rev 01, 12/03/2020)

DWG NO.	TITLE	REV DATE	REV	CHANGE FROM PREVIOUS REV
				Stiffener to joint spacing clarified;
RR-PLY-EL	Partial System Elevation	12/3/2020	01	Min screw length specified
RR-PLY-ST	Panel Stiffener Detail	8/4/2020	00	
				System depth added;
RR-PLY-01	Joint Detail	12/3/2020	01	Min screw length specified
RR-PLY-01A	Horizontal Joint Detail (NFPA 285 Zone)	12/3/2020	01	Min screw length specified
RR-PLY-01B	Joint Detail (Rivet Option)	8/4/2020	00	
RR-PLY-02	Window Head Detail	8/4/2020	00	
RR-PLY-02A	Window Head Detail (NFPA 285 Zone)	12/3/2020	01	Min screw length specified
RR-PLY-03	Window Sill Detail	8/4/2020	00	
RR-PLY-04	Window Jamb / Vertical Edge Detail	8/4/2020	00	
RR-PLY-05	Top of Wall Detail	8/4/2020	00	
RR-PLY-06	Base of Wall (Grade) Detail	8/4/2020	00	
RR-PLY-07	Inside Corner Detail	8/4/2020	00	
RR-PLY-08	Outside Corner Detail	8/4/2020	00	
RR-PLY-09	Fascia-to-Soffit Transition Detail	8/4/2020	00	
RR-PLY-10	Soffit Vent Requirements	8/4/2020	00	



PARTIAL SYSTEM ELEVATION (PANELS NOT SHOWN)

- (1) 5/8" (MIN) STRUCTURAL SHEATHING (PLYWOOD OR OSB) W/ AIR AND WATER BARRIER (AWB); TYPE OF AWB TO BE SELECTED BY DESIGN PROFESSIONAL OF RECORD
 - FIRE-RETARDANT-TREATED WOOD (FRTW) STRUCTURAL SHEATHING REQUIRED FOR NFPA 285 COMPLIANCE (TYPE III CONSTRUCTION ONLY)
- (2) PANEL STIFFENERS (7/8" HAT CHANNELS, 18 GA. MIN)
 - A. MAINTAIN 3" GAP'S BETWEEN ENDS OF PANEL STIFFENERS AND PANEL EDGES FOR DRAINAGE
 - B. PANEL STIFFENERS MAY BE ORIENTED HORIZONTALLY OR VERTICALLY
 - C. ATTACH STIFFENERS USING (2) #8 X 1" (MIN) SELF-DRILLING SCREWS AT 16" O.C. ALONG HAT CHANNEL FLANGES (REFER TO DETAIL RR-PLY-ST)
 - D. REQUIRED PANEL STIFFENER SPACING TO BE BASED ON PROJECT SPECIFIC WIND LOADS:
 - UP TO 40 PSF (ASD): STIFFENERS REQUIRED AT 24" O.C.
 - GREATER THAN 40 PSF (ASD), UP TO 60 PSF (ASD): STIFFENERS REQUIRED AT 16" O.C.

- 3 1/4" (MIN) TO 3/8" (MAX) BEAD OF LAMINATORS APPROVED PANEL ADHESIVE APPLIED TO PANEL STIFFENERS (REFER TO DETAIL RR-PLY-ST); LENGTH AND SPACING OF ADHESIVE BEADS TO BE BASED ON PROJECT SPECIFIC WIND LOADS:
 - UP TO 60 PSF (ASD): 8" ADHESIVE LENGTHS AT 16" O.C.

IMPORTANT NOTICE

PROJECT-SPECIFIC COMPONENTS AND CLADDING WIND LOADS (REQUIRED STRENGTH, Ra) SHALL NOT EXCEED AVAILABLE LOAD-CARRYING CAPACITY OF SYSTEM (ALLOWABLE STRENGTH, ${\rm Rn}/\Omega$)

- A. PROJECT-SPECIFIC COMPONENTS AND CLADDING WIND LOADS ARE TO BE DETERMINED BY THE DESIGN PROFESSIONAL OF RECORD
- B. AVAILABLE LOAD-CARRYING CAPACITY OF SYSTEM (UP TO 60 PSF) IS BASED ON ALLOWABLE STRENGTH DESIGN (ASD) METHOD
- C. FOR PROJECT—SPECIFIC COMPONENTS AND CLADDING WIND LOADS GREATER THAN 60 PSF, CONTACT LAMINATORS TECHNICAL SUPPORT FOR PROJECT—SPECIFIC DETAILING REQUIREMENTS

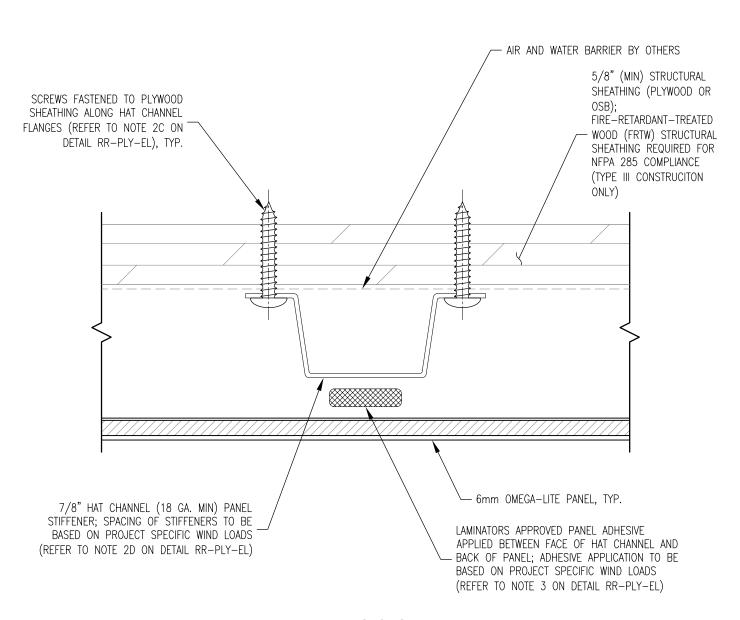


PARTIAL SYSTEM ELEVATION

ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 12/3/2020 JJM

Dwg. No.: Rev: RR-PLY-EL 01



PLAN SECTION

DETAIL NOTES:

- SPACING SHOWN BETWEEN SOME INSTALLATION SYSTEM COMPONENTS EXAGGERATED FOR CLARITY
- PANEL STIFFENERS TO BE FASTENED TO SUBSTRATE PRIOR TO PANEL INSTALLATION; REFER TO DETAIL RR-PLY-EL FOR ADDITIONAL INFORMATION
- 3. FULL CONTACT OF PANEL ADHESIVE WITH BACK OF PANEL REQUIRED AT ALL APPLICATION LOCATIONS

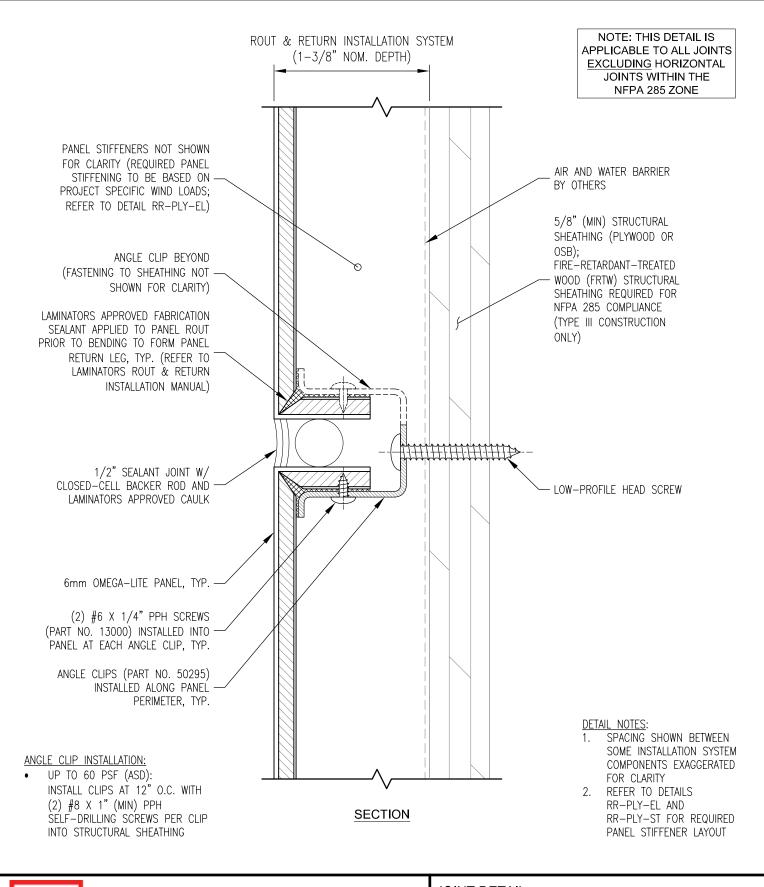


TYPICAL PANEL STIFFENER DETAIL

ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 8/4/2020 JJM

Dwg. No.: Rev: RR-PLY-ST 00





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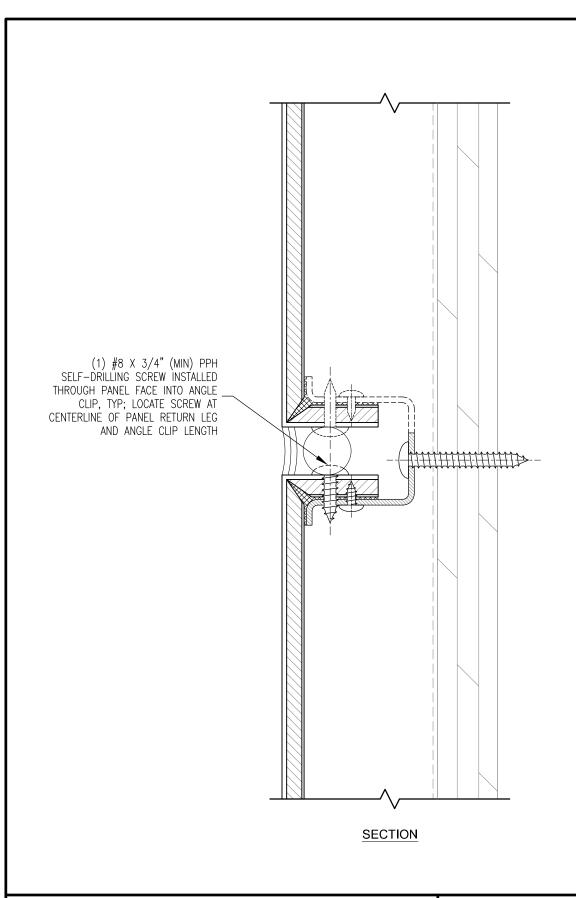
JOINT DETAIL

ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 12/3/2020 JJM

Dwg. No.: Rev: RR-PLY-01

01



DETAIL NOTES:

- . SPACING SHOWN BETWEEN SOME INSTALLATION SYSTEM COMPONENTS EXAGGERATED FOR CLARITY
- 2. REFER TO DETAILS
 RR-PLY-EL AND
 RR-PLY-ST FOR REQUIRED
 PANEL STIFFENER LAYOUT
- 3. REFER TO JOINT DETAIL RR-PLY-01 FOR CLIP SPACING AND TYPICAL COMPONENTS NOT ANNOTATED



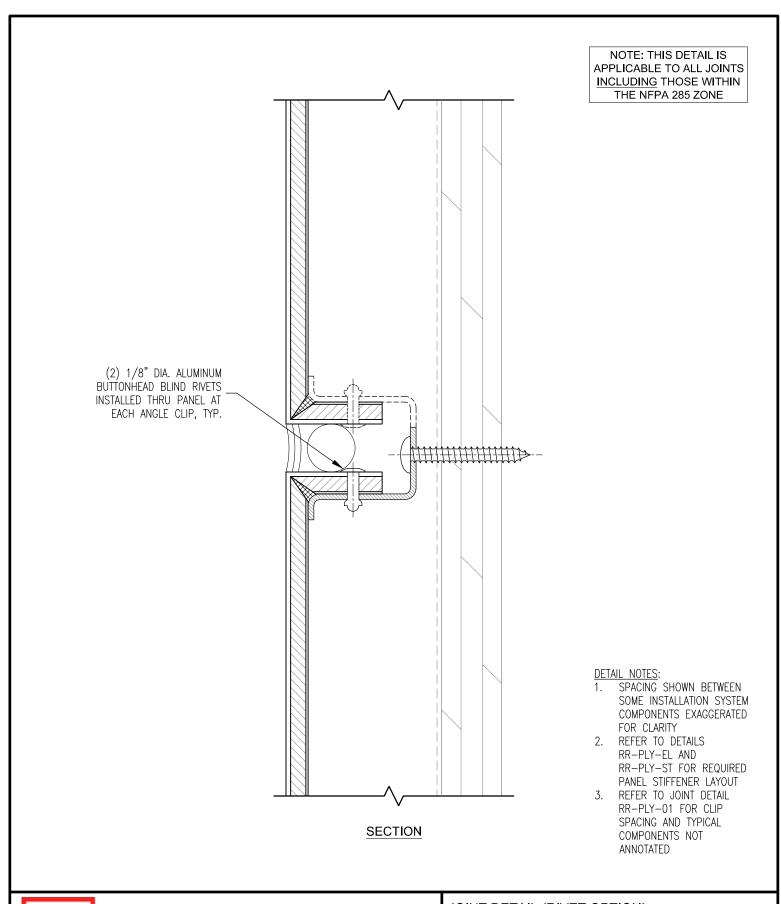
HORIZONTAL JOINT DETAIL (NFPA 285 ZONE)

ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: 12/3/2020

Drawn By: Dwg. No.:

JJM RR-PLY-01A





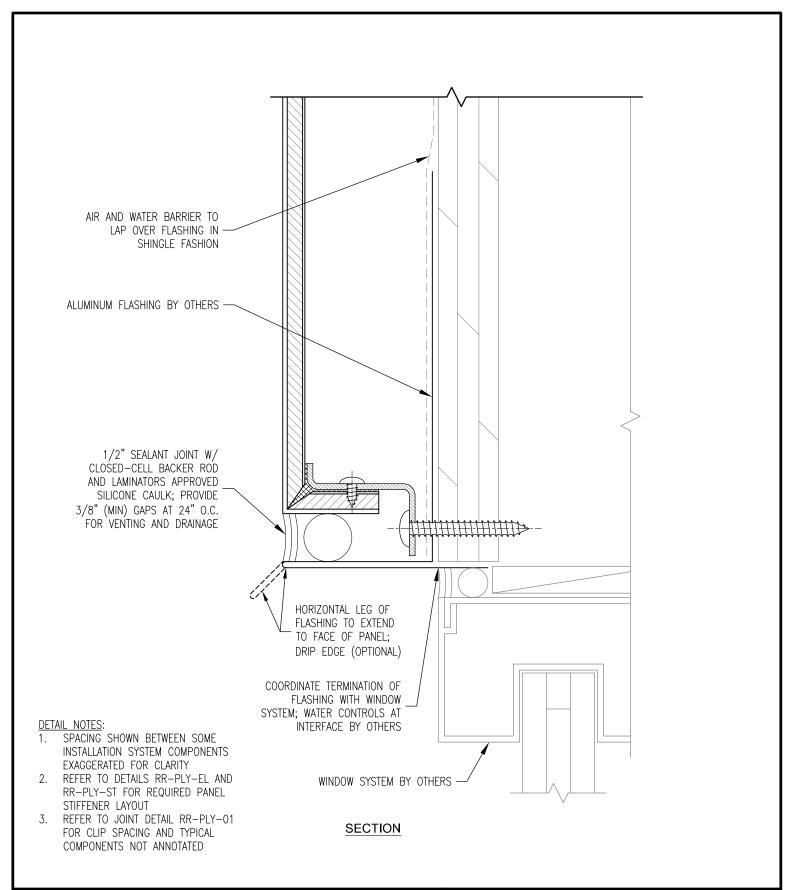
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JOINT DETAIL (RIVET OPTION)

ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 8/4/2020 JJM

Dwg. No.: RR-PLY-01B





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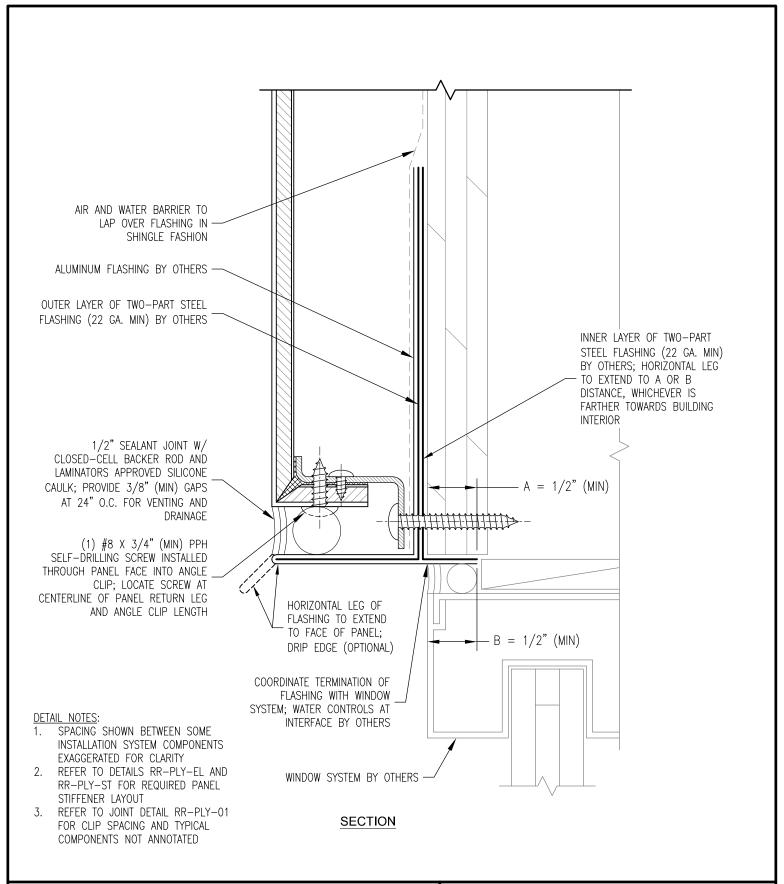
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WINDOW HEAD DETAIL

ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 8/4/2020 JJM

Dwg. No.: Rev: RR-PLY-02 00





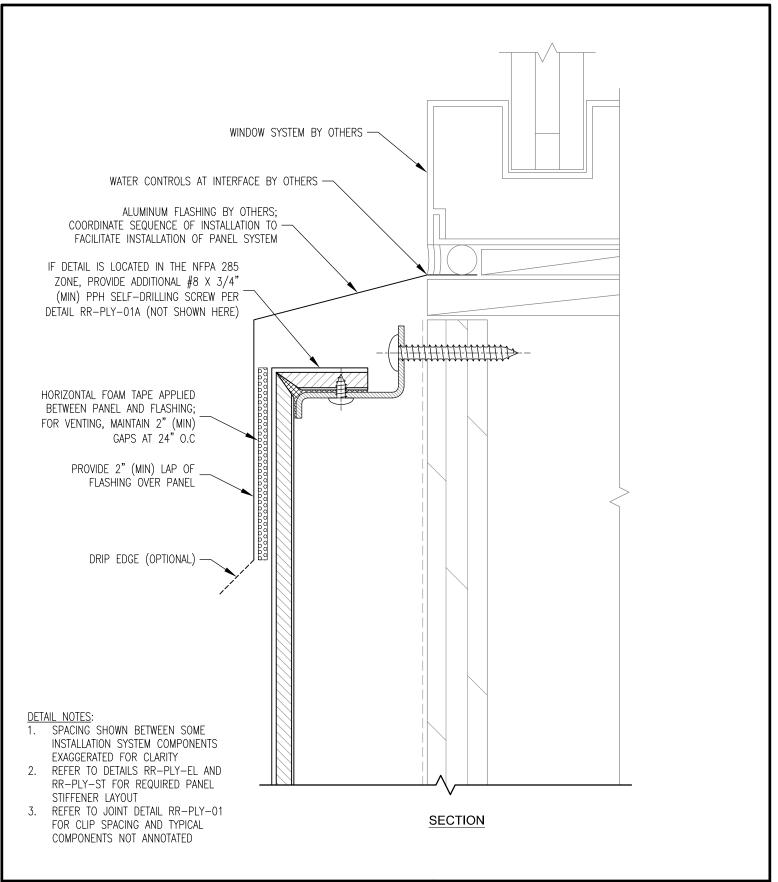
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WINDOW HEAD DETAIL (NFPA 285 ZONE)

ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 12/3/2020 JJM

Dwg. No.: Rev: RR-PLY-02A 01





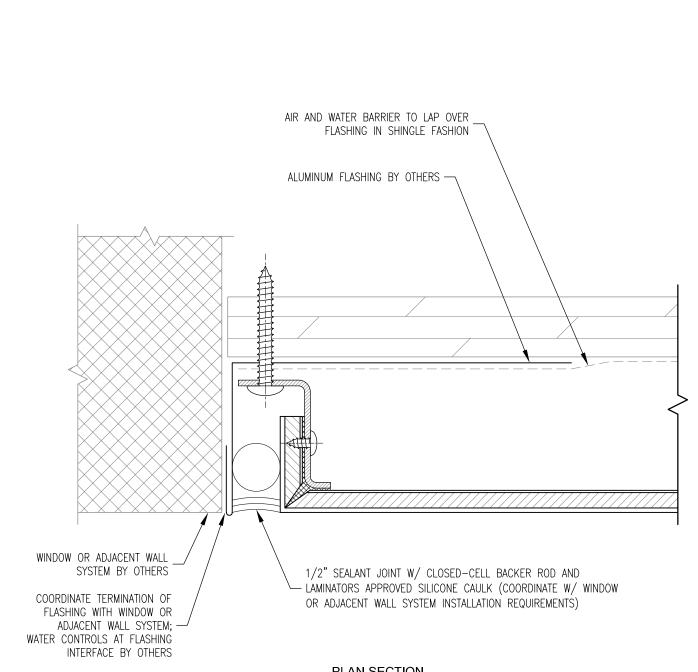
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TYPICAL SILL DETAIL

ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 8/4/2020 JJM

Dwg. No.: Rev: RR-PLY-03 00



PLAN SECTION

DETAIL NOTES:

- SPACING SHOWN BETWEEN SOME INSTALLATION SYSTEM COMPONENTS EXAGGERATED FOR CLARITY
- REFER TO DETAILS RR-PLY-EL AND RR-PLY-ST FOR REQUIRED PANEL STIFFENER LAYOUT
- REFER TO JOINT DETAIL RR-PLY-01 FOR CLIP SPACING AND TYPICAL COMPONENTS NOT ANNOTATED

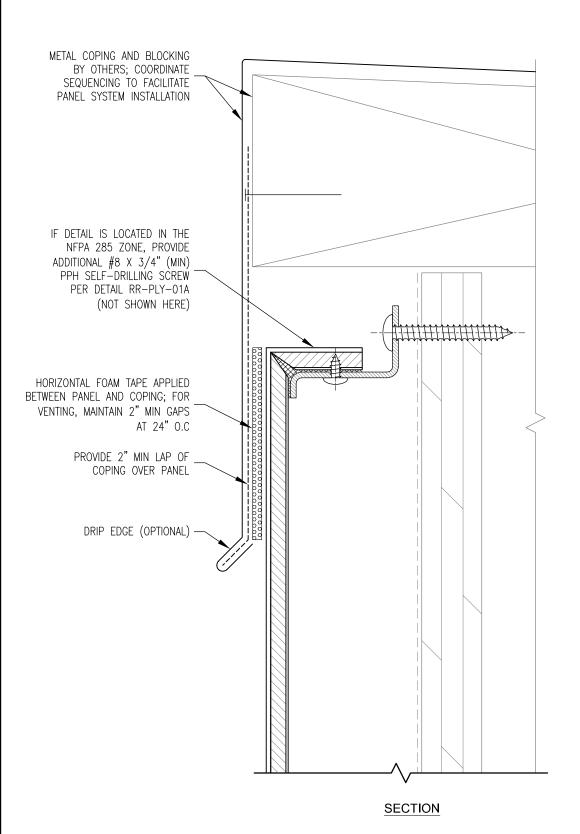


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ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 8/4/2020 JJM

Dwg. No.: RR-PLY-04



DETAIL NOTES:

- SPACING SHOWN BETWEEN SOME INSTALLATION SYSTEM COMPONENTS EXAGGERATED FOR CLARITY
- 2. REFER TO DETAILS
 RR-PLY-EL AND
 RR-PLY-ST FOR REQUIRED
 PANEL STIFFENER LAYOUT
- 3. REFER TO JOINT DETAIL RR-PLY-01 FOR CLIP SPACING AND TYPICAL COMPONENTS NOT ANNOTATED



TOP OF WALL DETAIL

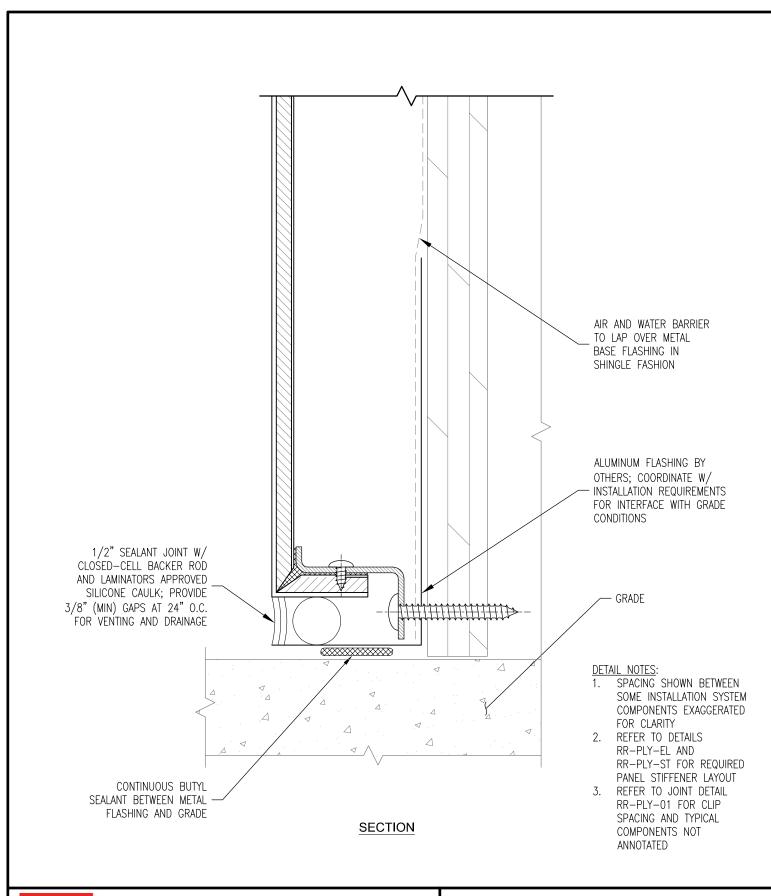
ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 8/4/2020 JJM

Dwg. No.: Rev: RR-PLY-05 00

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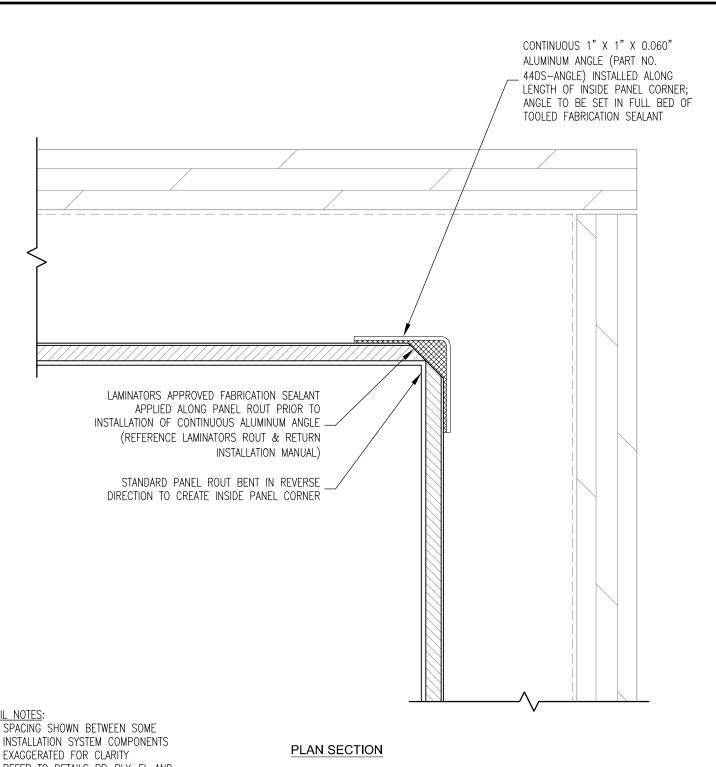
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BASE OF WALL (GRADE) DETAIL

ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 8/4/2020 JJM

Dwg. No.: Rev: RR-PLY-06 00



DETAIL NOTES:

INSTALLATION SYSTEM COMPONENTS EXAGGERATED FOR CLARITY

- REFER TO DETAILS RR-PLY-EL AND RR-PLY-ST FOR REQUIRED PANEL STIFFENER LAYOUT
- REFER TO JOINT DETAIL RR-PLY-01 FOR CLIP SPACING AND TYPICAL COMPONENTS NOT ANNOTATED

NOTE: THIS DETAIL IS ALSO APPLICABLE FOR SOFFIT-TO-WALL TRANSITIONS



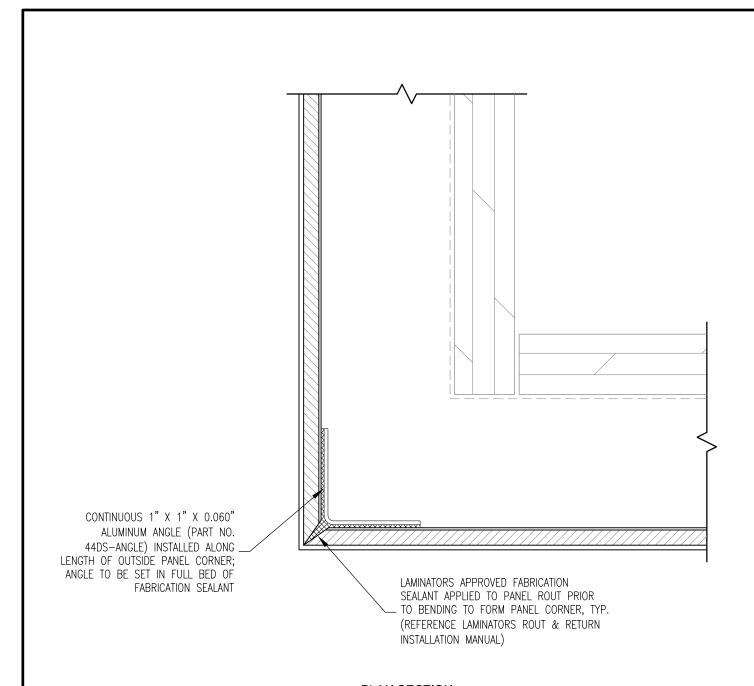
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Drawn By:

JJM

ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date 8/4/2020 Dwg. No.: RR-PLY-07



PLAN SECTION

DETAIL NOTES:

- SPACING SHOWN BETWEEN SOME INSTALLATION SYSTEM COMPONENTS EXAGGERATED FOR CLARITY
- 2. REFER TO DETAILS RR-PLY-EL AND RR-PLY-ST FOR REQUIRED PANEL STIFFENER LAYOUT
- 3. REFER TO JOINT DETAIL RR-PLY-01 FOR CLIP SPACING AND TYPICAL COMPONENTS NOT ANNOTATED

NOTE: REFER TO DETAIL RR-PLY-09 FOR FASCIA-TO-SOFFIT TRANSITIONS

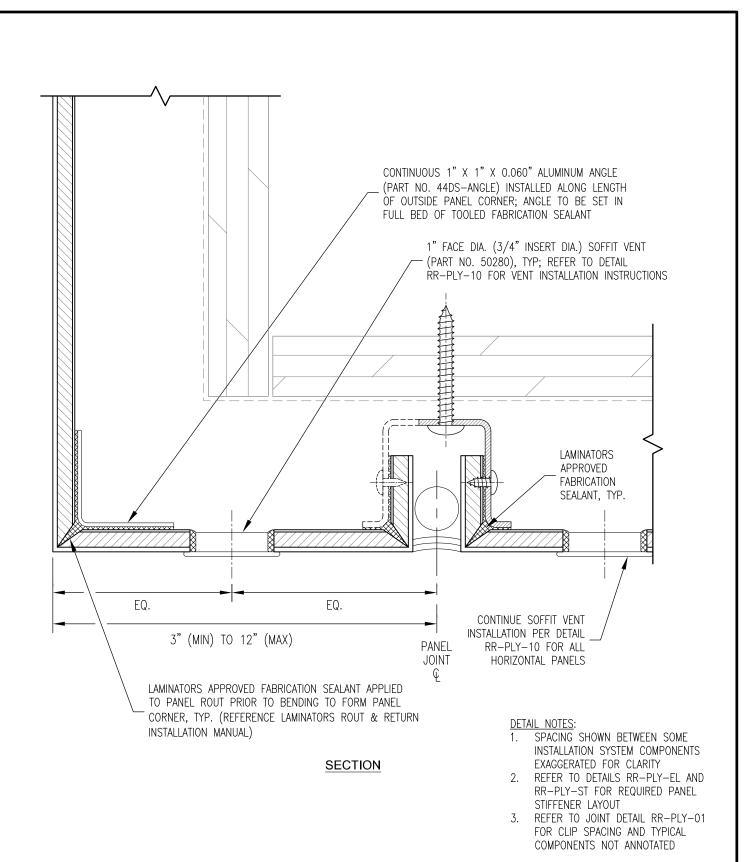


OUTSIDE CORNER DETAIL

ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 8/4/2020 JJM

Dwg. No.: Rev: RR-PLY-08 00



OMEGA PANEL PRODUCTS Ω www.LaminatorsInc.com 877.0MEGA.77

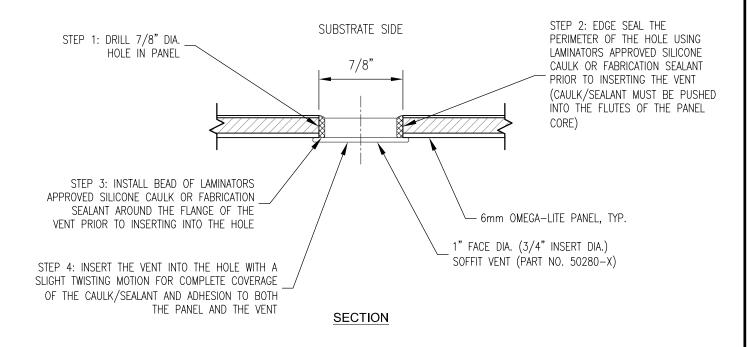
FASCIA-TO-SOFFIT TRANSITION DETAIL

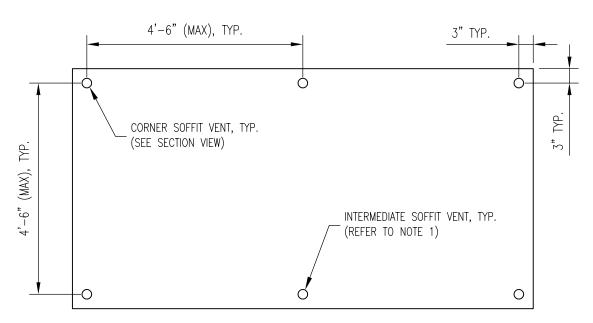
ROUT & RETURN INSTALLATION SYSTEM OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Date: Drawn By: 8/4/2020 JJM

Dwg. No.: Rev:

RR-PLY-09 00





OMEGA-LITE SOFFIT PANEL

DETAIL NOTES:

- FOR PANEL EDGE DIMENSIONS LARGER THAN 5'-0", INTERMEDIATE VENTS SHALL BE INSTALLED WITH **EQUAL SPACING**
- FOR PANEL EDGE DIMENSIONS 12" AND SMALLER, A SINGLE ROW OF VENTS MAY BE INSTALLED ALONG THE CENTERLINE OF THE PANEL IN THE LONGER DIRECTION (IN PLACE OF TWO ROWS AS SHOWN ABOVE)
- CONTACT LAMINATORS TECHNICAL SUPPORT FOR ADDITIONAL INFORMATION ON REQUIRED SOFFIT VENT INSTALLATION FOR UNIQUE PROJECT-SPECIFIC PANEL GEOMETRIES

OMEGA PANEL PRODUCTS Ω

Date:

8/4/2020

Drawn By: JJM

SOFFIT VENT REQUIREMENTS

ROUT & RETURN INSTALLATION SYSTEM

OVER PLYWOOD OR OSB (STRUCTURAL) SHEATHING

Dwg. No.: Rev: RR-PLY-10 00

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