IPS®
INSULATED PANEL SYSTEMS

Horizontal Wall Panels

Technical/Installation Information

IMPORTANT NOTICE

READ THIS MANUAL COMPLETELY PRIOR TO BEGINNING THE INSTALLATION OF THE HWP SYSTEM.

IF THERE IS CONFLICT BETWEEN PROJECT ERECTION DRAWINGS PROVIDED OR APPROVED BY IPS AND DETAILS IN THIS MANUAL, PROJECT ERECTION DRAWINGS WILL TAKE PRECEDENCE.

THIS MANUAL IS NOT TO BE USED FOR COOLER/FREEZER APPLICATIONS.

Descriptions and specifications contained herein were in effect at the time this publication was approved for printing. In a continuing effort to refine and improve products, IPS reserves the right to discontinue products at any time or change specifications and/or designs without incurring obligation. **To ensure you have the latest information available, please inquire or visit our website at www.insulated-panels.com.** Application details are for illustration purposes only and may not be appropriate for all environmental conditions, building designs, or panel profiles. Projects should be engineered to conform to applicable building codes, regulations, and accepted industry practices.

For complete performance specifications, product limitations, and disclaimers, please consult IPS's Paint and Galvalume Plus® warranties. Upon receipt of payment in full, these warranties are available upon request for all painted or Galvalume Plus® prime products. Sample copies can be found at www.insulated-panels.com or contact your local IPS Sales Representative.

Houston, TX
14031 West Hardy
Houston, TX 77060
800-729-9324

Jackson, MS
201 Apache Dr.
Jackson, MS 39272
800-622-4136

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HORIZONTAL WALL SYSTEM

ENGINEERING

For panel load tables and other technical data, please see IPS's Technical Design Information Manual.

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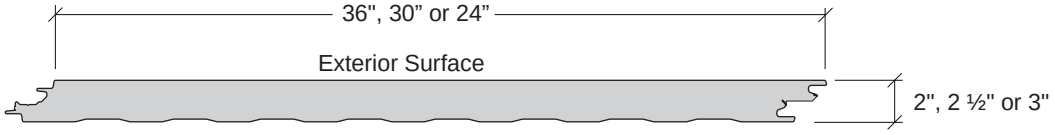
HORIZONTAL WALL SYSTEM HWP

GENERAL DESCRIPTION
HWP
(HORIZONTAL APPLICATION)



Coverage Width – 36", 30" or 24"

Panel Attachment – Concealed Clips

Panel Substrate – Galvalume® (Std.) – Other substrates available (Please inquire)

Exterior Panel Finish – Stucco Embossed

Interior Panel Finish – Stucco Embossed with Mesa profile

Exterior Panel Gauge – 22 Only

Interior Panel Gauge – 26 – Other gauges available (Please inquire)

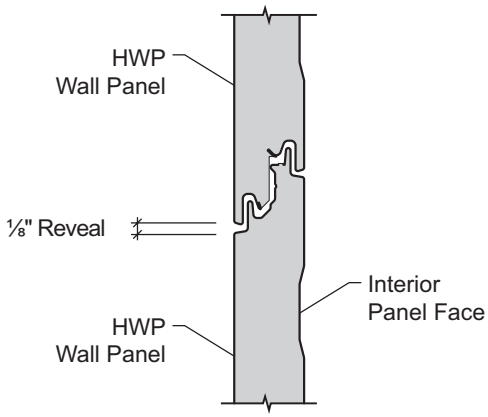
Coatings – Exterior: Signature® 200* & Signature® 300*

Interior: USDA White (Std.)

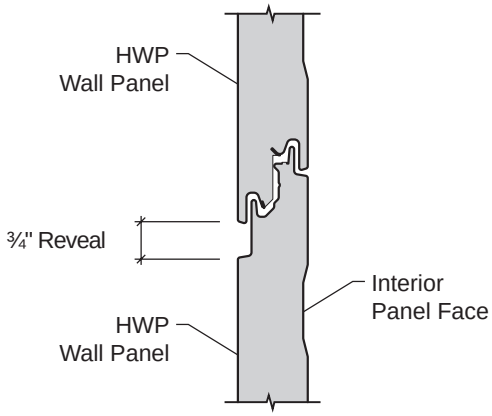
Panel Thickness – 2", 2½" & 3" – Other thicknesses are not available

R-Value – Approximately 7.69 per inch of thickness

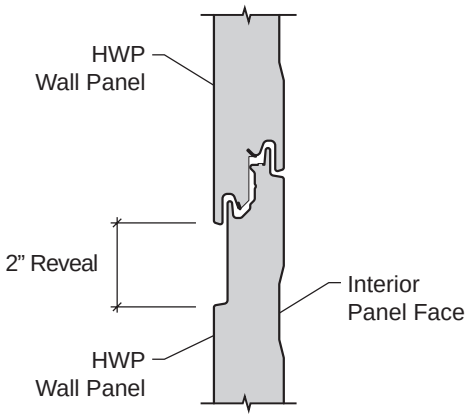
Reveal Options



⅛" Reveal (Standard)



¾" Reveal



2" Reveal

*See IPS color chart for available colors. Minimum quantities may be required.

NOTICE
Contact IPS for Positive and Negative Wind Load information.

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HWP HORIZONTAL WALL SYSTEM

ARCHITECT/ENGINEER INFORMATION

IPS's HWP panels are available in three widths, 36", 30" and 24", and thicknesses of 2", 2½" and 3". These panels are also available with horizontal joint reveals of ⅛", ¾" and 2".

HWP panels are attached to the substructure with hidden clips, which are designed to eliminate thermal "short circuits" in the wall system and to provide an architectural appearance.

HWP panels are available in custom lengths up to 24'. For panels over 24', please inquire.

To provide consistent thermal values at cavities such as at corners, rake parapets or high eave parapets, filler insulation must be installed. Fiberglass insulation or field applied foam (not supplied by IPS) is typically used and installed within the cavities. Failure to install insulation within these cavities will result in decreased thermal efficiency and may result in condensation and ice formation both within the cavity and the building's interior surfaces.

Because of the thermal efficiency of HWP panels, the potential exists for a strong vapor drive between the interior and exterior of the walls. This requires greater attention to the design and application of weather and vapor seals to prevent condensation in the wall cavity or the interior surface of the walls. Depending upon a given project's environmental conditions and the use of the building, the vapor drive may be to the interior or exterior. Where vapor pressure differentials are caused by cold exterior temperatures and heated interiors, the vapor seal is typically specified at the interior, or warm, side of the panels. It is the designer's responsibility to understand the project's unique environmental and operating conditions and to specify the appropriate vapor control measures. Location of vapor barrier sealants must be addressed by a design professional.

Proper alignment of the building's structural framing is critical to the successful use of HWP panels. Panel end support framing, as well as, window, door, and other framed openings must be located exactly as detailed (+/- 1/8") to ensure that the factory manufactured panels properly fit on each wall. It is also critical that all inside and outside corners are square and plumb (+/- 1/8" in 20').

As with all insulated metal panels, careful attention should be given to the attachment of the panels to the building's structural framing. Because foam panels do not float but expand when heated, causing "thermal bow", long panel lengths, dark colors and attachment to members that may deflect under load can cause excessive oil canning or stress buckling of the exterior panel skin. Please contact IPS for further information when designing structures that may incorporate these design elements.

HWP panels are heavier and bulkier than single skin panels and may require different equipment to unload and install, as well as different handling techniques. Review this manual carefully to ensure you have a thorough understanding of these requirements before receiving material.

All material should be checked against the shipping list as it is being unloaded. Any shortages or damages must be noted on the Bill of Lading.

For panel load tables and other technical data, please see IPS's Technical Design Information Manual.

The Engineer of Record must verify that the structure has been designed to accommodate the erection and design loads imposed by the HWP panels. For current information see www.insulated-panels.com.

THIS MANUAL IS NOT INTENDED TO BE USED AS AN INSTALLATION GUIDE FOR COOLER/ FREEZER APPLICATIONS. FOR COOLER/FREEZER APPLICATIONS, CONTACT IPS.

Caution

Diaphragm capabilities are not provided by **IPS's Insulated Wall Panels.**
Therefore, other bracing may be required to conform to A.I.S.C. or A.I.S.I specifications.

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GENERAL INFORMATION HWP

JOB #: 3422733
EXT COIL #: 51743141101
EXT COIL SIZE: 22 GA X 41.563 "
EXT COIL COLOR: CLEAR
INT COIL #: 51742941301
INT COIL SIZE: 26 GA X 39.625 "
INT COIL COLOR: USDA
BUNDLE NO: 5 OF --

SHIP TO:

DESCRIPTION	QTY	SHEET LENGTH
GRV36--2.0"	6	27 ' 1 - 0 "
--	8	24 ' 6 - 1/2 "
--	6	15 ' 7 - 0 "
--	7	7 ' 5 - 1/2 "
--	3	3 ' 1 - 0 "
--	--	-- ' -- - -- "
--	--	-- ' -- - -- "
--	--	-- ' -- - -- "

PAGE 1 OF 1

UNLOADING

Before materials arrive at the job site, the contractor should determine how the trucks are to be unloaded and where the material will be staged. The contractor must determine the proper equipment and number of personnel required to safely unload and move the material.

Upon receiving material, check shipment against packing list for shortages and/or damages. IPS will not be responsible for shortages or damages unless they are noted on the shipping list.

The maximum weight of any one bundle will not exceed 7,500 lbs. Do not attempt to lift stacked bundles. Lift only one bundle at a time. Each bundle should be lifted at its center point or at lift points evenly spaced along length of bundle. Bundles feature bearing pads with sufficient elevation to allow a forklift or insertion of nylon slings when using a crane for easy unloading from the truck.

PACKING LIST

201 APACHE DRIVE
PO BOX 720100
JACKSON, MS 39272

SOLD TO:

JOB NAME:

BILL TO

SHIP TO

DATE OF ORDER	LOAD DATE	CUSTOMER P.O.	SHIP VIA	SALESPERSON	BOL NUMBER	ORDER NUMBER
11-JUN-10	29-JUL-10	100061300001	R & R EXPRESS	R. Lloyd IPS	13555081	3422733

ITEM	DESCRIPTION	PKG	AREA	Ga	COLOR	Sheet Length	Original Order Quantity	Shipped Quantity	Remaining Quantity
1000	EMB GRV36 2.0" EMES 26 S230 _BMAS_*10*		*10*	22	T-SNWHT	24'- 6-1/2"	4	4	0
2000	EMB GRV36 2.0" EMES 26 S230 _BMAS_*10*		*10*	22	T-SNWHT	15'- 7"	6	6	0
3000	EMB GRV36 2.0" EMES 26 S230 _BMAS_*10*		*10*	22	T-SNWHT	7'- 5-1/2"	2	2	0
4000	EMB GRV36 2.0" EMES 26 S230 _BMAS_*10*		*10*	22	T-SNWHT	3'-11"	8	8	0
5000	EMB GRV36 2.0" EMES 26 S230 _BMAS_*10* PANEL LAYOUT AT COL. LN *10*		*10*	22	T-SNWHT	3'- 1"	2	2	0
6000	EMB GRV36 2.0" EMES 26 S230 _BMAS_*2A*		*2A*	22	T-SNWHT	24'- 6-1/2"	2	2	0
7000	EMB GRV36 2.0" EMES 26 S230 _BMAS_*2A* PANEL LAYOUT AT COL. LN *2A*		*2A*	22	T-SNWHT	3'-11-1/2"	1	1	0
8000	EMB GRV36 2.0" EMES 26 S230		*3*	22	T-SNWHT	24'- 6-1/2"	2	2	0

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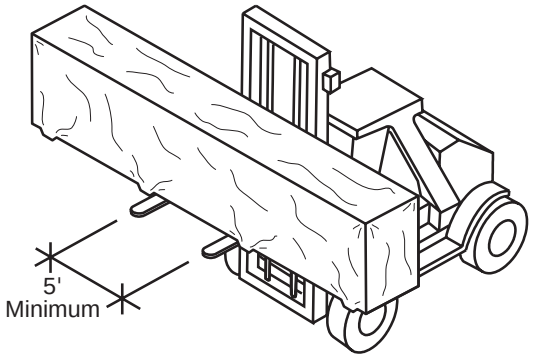
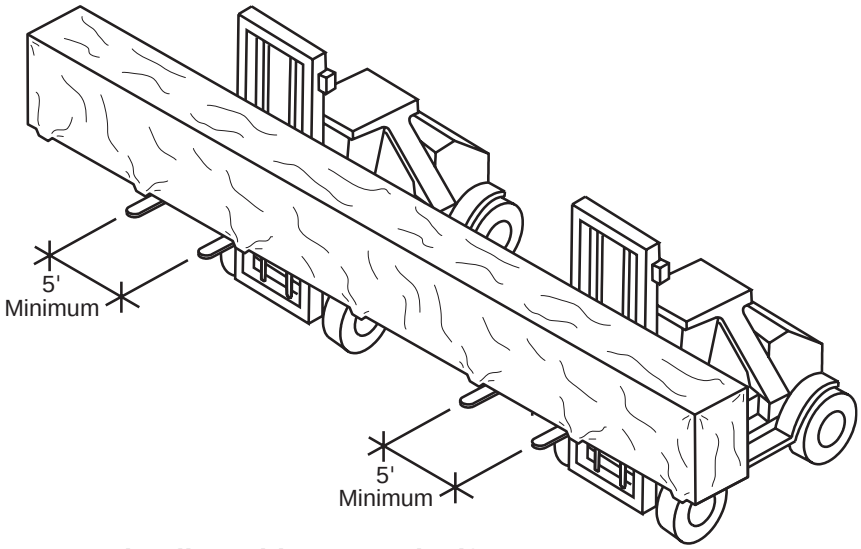
HWP GENERAL INFORMATION



Unloading with One Fork Lift



Unloading with Two Fork Lifts

UNLOADING (continued)

Unloading With A Forklift

Ensure that forks are spread apart as far as possible. Forks should be a minimum of 5' apart. Care should be taken to prevent fork damage to bundles on the opposite side of the truck. Avoid getting too far under the bundles and causing damage to the panel side laps with the mast of the forklift. Use care when moving panels. Drive slowly when traveling on rough terrain to prevent panel damage due to the bundles bouncing on the forks.

Shorter bundles can be moved with a single forklift. When two forklifts are required, this operation must be coordinated between the two forklift operators to ensure that each end of the bundle is raised and moved together.

Guidelines for bundles requiring two forklifts:

2" and 2½" thick panels - 32' and longer

3" thick panels - 40' and longer

CAUTION

Improper unloading and handling of panel bundles may cause bodily injury or material damage. IPS is not responsible for bodily injuries or material damages during unloading and staging.

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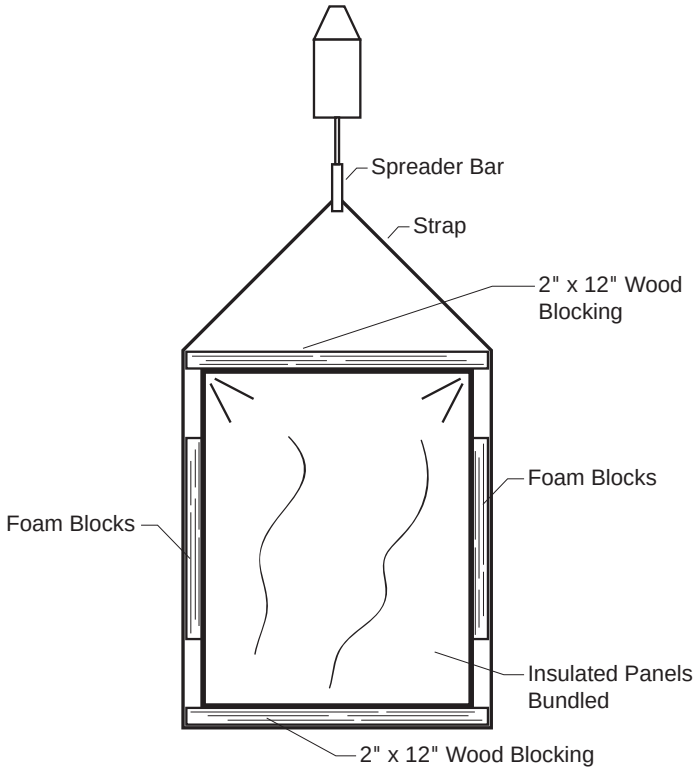
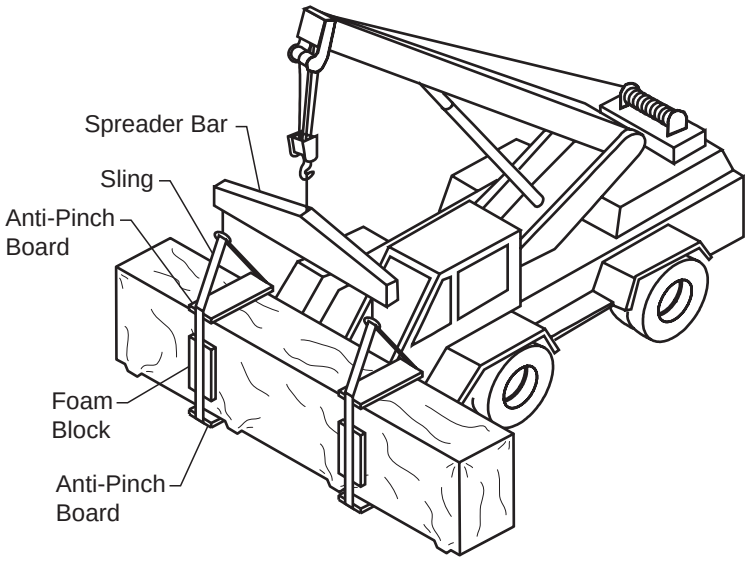


Unloading With A Crane



Bundles Under 4,000 lbs. and Under 44' in Length

UNLOADING (continued)

Unloading With A Crane

When lifting bundles with a crane, a spreader bar and slings should be used. Lifting slings must be minimum 6"-wide nylon straps. **NEVER USE WIRE OR ROPE OR CHAIN SLINGS. THEY WILL DAMAGE THE PANELS.** At each sling location, use boards at the top and bottom of the bundle to prevent the slings from crushing the edges of the panels. The boards should be 2"x12". Board length should equal the bundle width plus 4". At each side of the bundle, insert 2" thick foam blocks between the sling and the panel bundle. **LIFT ONLY ONE BUNDLE AT A TIME.**

The following is suggested rigging for various bundle lengths and weights. The final determination as to the best and safest rigging to use, based on equipment and job site conditions, is up to the contractor and crane operator.

Bundles under 4000 lbs. and under 44' in length

A single spreader bar with two slings may be used. Position slings at quarter points from each end of the bundle.

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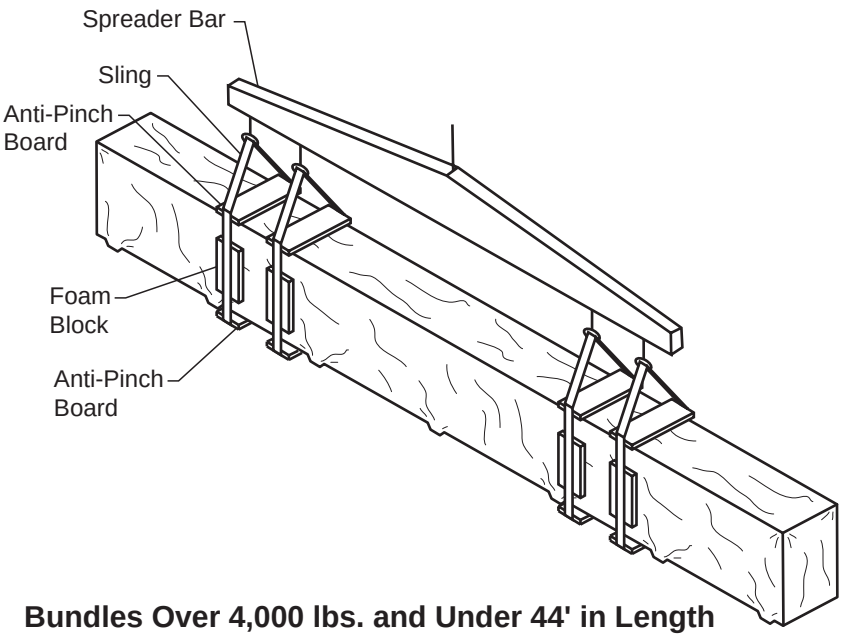
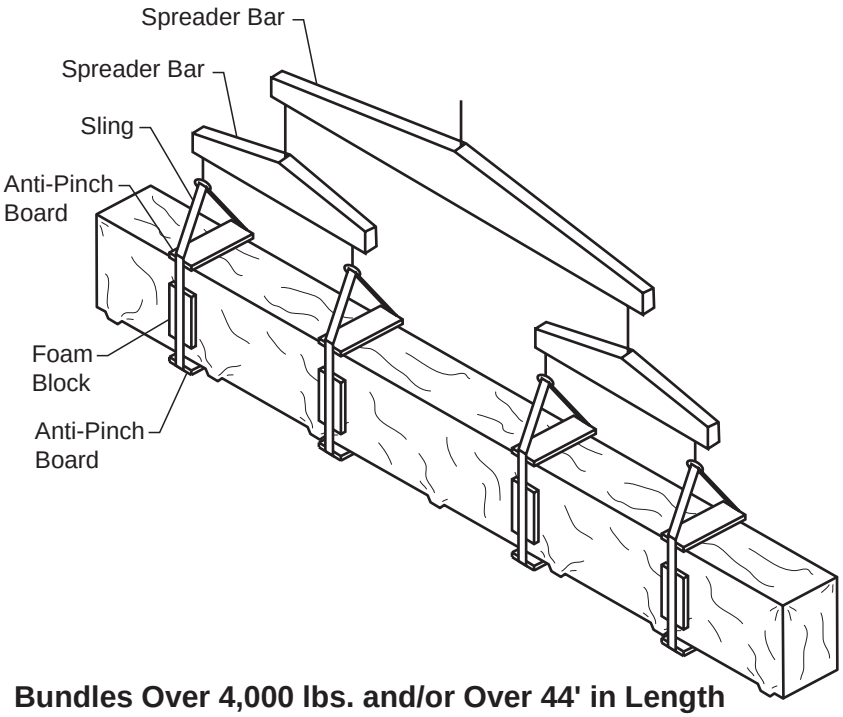


Bundles Over 4,000 lbs. and Under 44' in Length



Bundles Over 4,000 lbs. and/or Over 44' in Length

UNLOADING (continued)

Bundles over 4000 lbs. and under 44' in length

A single spreader bar with four slings should be used. Position two sets of slings at each end of the spreader bar at quarter points from each end of the bundle.

Bundles over 4000 lbs. and/or over 44' in length

Ganged spreader bars with four slings should be used. The slings should be placed at even spaces along the length of the bundle.

CAUTION

Too few or too many lift points can cause damage to the panels. Improper unloading and handling of panel bundles may cause bodily injury or material damage. IPS is not responsible for bodily injuries or material damages during unloading and staging.

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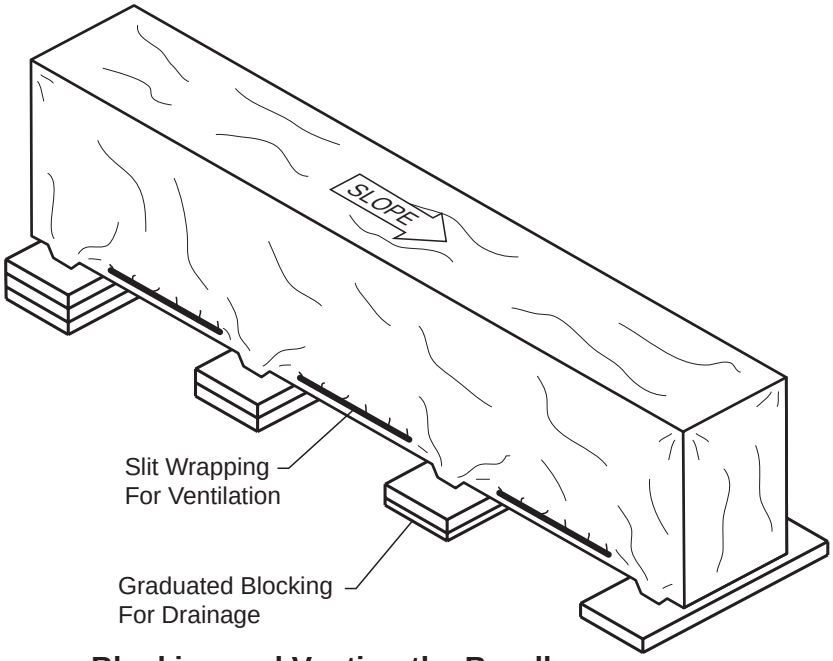
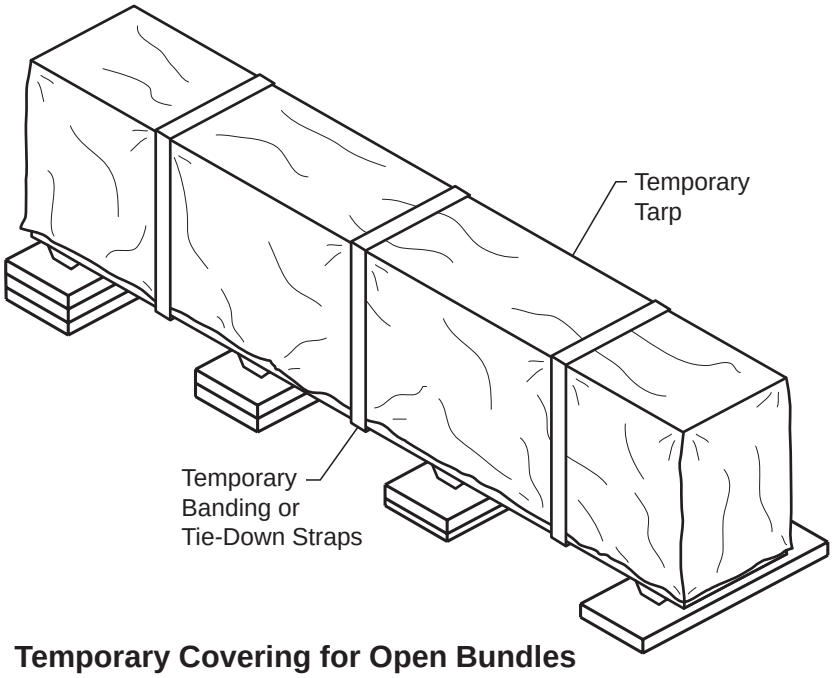


Blocking and Venting the Bundles



Temporary Covering for Open Bundles

STORAGE

The panels are shipped in stretch-wrapped bundles consisting of a single stack of panels in the flat position. The bundles must be protected against impact damage, water exposure and chemical contamination.

Store bundles off the ground sufficiently high enough to allow for air circulation beneath the bundle and to prevent water, mud or snow from entering. Slightly elevate one end of the bundle. Slit the stretch wrap at intervals along each side at the bottom of the bundles to allow for ventilation and evaporation of any moisture within the bundles.

Bundles that are opened but still have panels that have not been installed should be protected with a tarp or other waterproof cover to prevent exposure to water or contamination from construction residue. Opened bundles should be secured with banding or some other method to prevent damage by sudden high winds. Be sure not to over tighten and damage the panels. **MOVING BUNDLES AFTER THEY ARE OPENED MAY RESULT IN PANEL DAMAGE.**

CAUTION

Improper and/or prolonged storage of panels may cause damage to the panel finish. IPS is not responsible for panel damage caused by improper or prolonged storage of panels.

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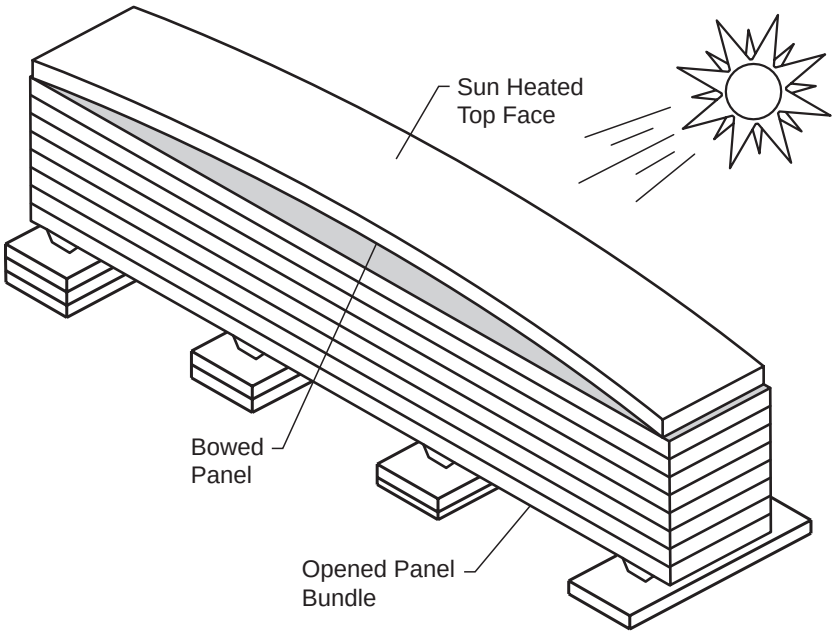
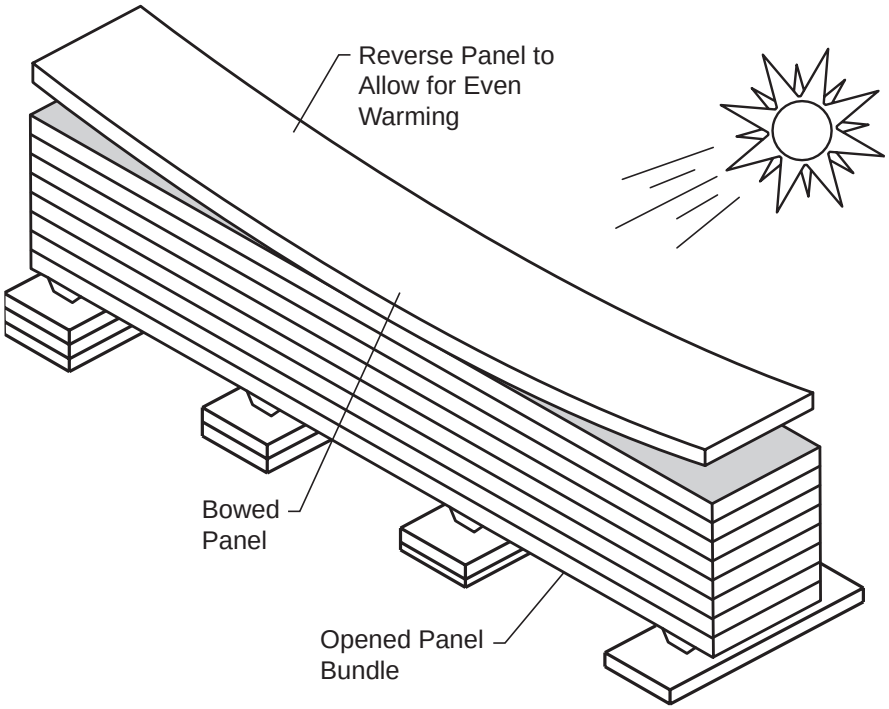


Thermal Bowing

STORAGE (continued)

Thermal Bow

When the top panel in a bundle is exposed to the hot sun, it may bow up, causing difficulty in engaging it to the previous panel during installation.



Thermal Bowing

If this occurs, turn the panel over to allow the backside to warm equally, which will relieve the bow and allow for proper panel sidelap engagement during installation.

CAUTION

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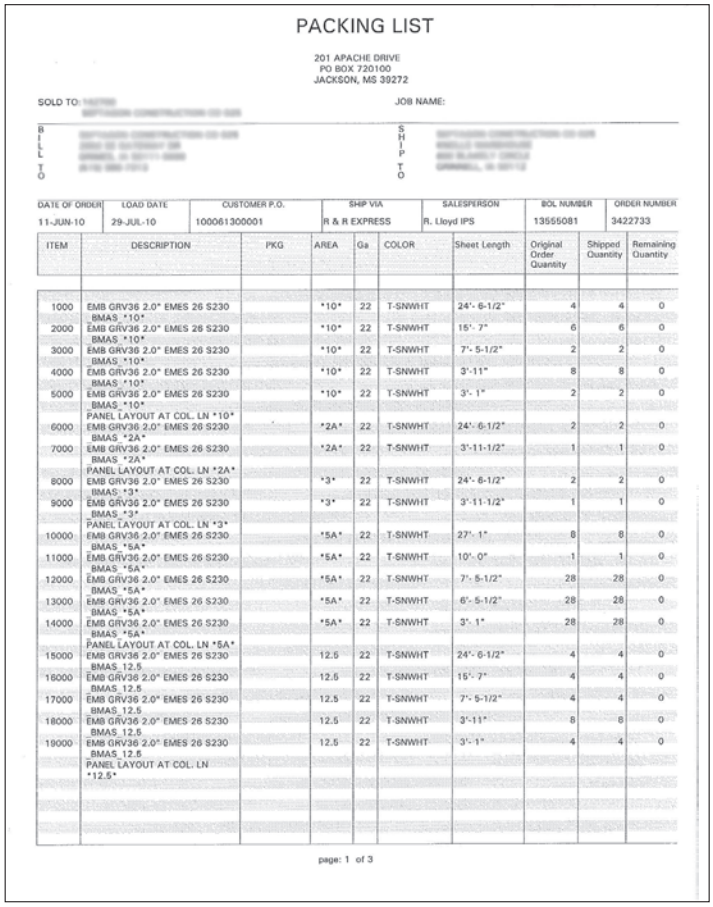


PACKING LIST

201 APACHE DRIVE
PO BOX 720100
JACKSON, MS 39272

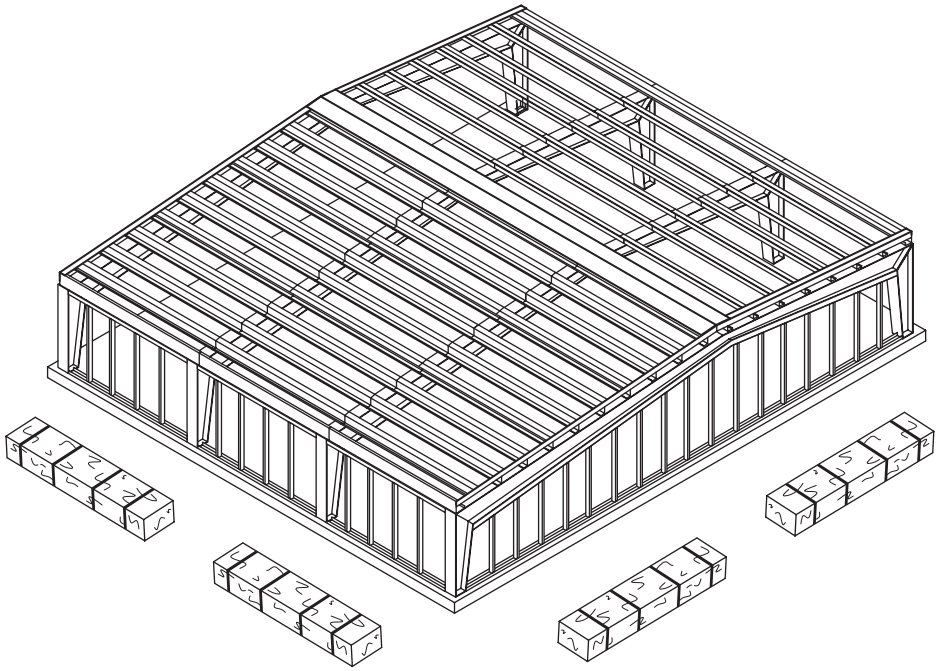
SOLD TO: [redacted] JOB NAME:

BILL TO [redacted] SHIP TO [redacted]

DATE OF ORDER	LOAD DATE	CUSTOMER P.O.	SHIP VIA	SALESPERSON	BOL NUMBER	ORDER NUMBER
11-JUN-10	29-JUL-10	100061300001	R & R EXPRESS	R. Lloyd IPS	13555081	3422733

ITEM	DESCRIPTION	PKG	AREA	Ga	COLOR	Sheet Length	Original Order Quantity	Shipped Quantity	Remaining Quantity
1000	EMB GRV36 2.0" EMES 26 S230 BMAS *10*		*10*	22	T-SNWHT	24'- 6-1/2"	4	4	0
2000	EMB GRV36 2.0" EMES 26 S230 BMAS *10*		*10*	22	T-SNWHT	15'- 7"	6	6	0
3000	EMB GRV36 2.0" EMES 26 S230 BMAS *10*		*10*	22	T-SNWHT	7'- 5-1/2"	2	2	0
4000	EMB GRV36 2.0" EMES 26 S230 BMAS *10*		*10*	22	T-SNWHT	3'-11"	8	8	0
5000	EMB GRV36 2.0" EMES 26 S230 BMAS *10* PANEL LAYOUT AT COL. LN *10*		*10*	22	T-SNWHT	3'- 1"	2	2	0
6000	EMB GRV36 2.0" EMES 26 S230 BMAS *2A*		*2A*	22	T-SNWHT	24'- 6-1/2"	2	2	0
7000	EMB GRV36 2.0" EMES 26 S230 BMAS *2A* PANEL LAYOUT AT COL. LN *2A*		*2A*	22	T-SNWHT	3'-11-1/2"	1	1	0
8000	EMB GRV36 2.0" EMES 26 S230 BMAS *3*		*3*	22	T-SNWHT	24'- 6-1/2"	2	2	0
9000	EMB GRV36 2.0" EMES 26 S230 BMAS *3* PANEL LAYOUT AT COL. LN *3*		*3*	22	T-SNWHT	3'-11-1/2"	1	1	0
10000	EMB GRV36 2.0" EMES 26 S230 BMAS *5A*		*5A*	22	T-SNWHT	27'- 1"	8	8	0
11000	EMB GRV36 2.0" EMES 26 S230 BMAS *5A*		*5A*	22	T-SNWHT	10'- 0"	1	1	0
12000	EMB GRV36 2.0" EMES 26 S230 BMAS *5A*		*5A*	22	T-SNWHT	7'- 5-1/2"	28	28	0
13000	EMB GRV36 2.0" EMES 26 S230 BMAS *5A*		*5A*	22	T-SNWHT	6'- 5-1/2"	28	28	0
14000	EMB GRV36 2.0" EMES 26 S230 BMAS *5A* PANEL LAYOUT AT COL. LN *5A*		*5A*	22	T-SNWHT	3'- 1"	28	28	0
15000	EMB GRV36 2.0" EMES 26 S230 BMAS 12.5		12.5	22	T-SNWHT	24'- 6-1/2"	4	4	0
16000	EMB GRV36 2.0" EMES 26 S230 BMAS 12.5		12.5	22	T-SNWHT	15'- 7"	4	4	0
17000	EMB GRV36 2.0" EMES 26 S230 BMAS 12.5		12.5	22	T-SNWHT	7'- 5-1/2"	4	4	0
18000	EMB GRV36 2.0" EMES 26 S230 BMAS 12.5		12.5	22	T-SNWHT	3'-11"	8	8	0
19000	EMB GRV36 2.0" EMES 26 S230 BMAS 12.5 PANEL LAYOUT AT COL. LN *12.5*		12.5	22	T-SNWHT	3'- 1"	4	4	0

page: 1 of 3



Staged Horizontal Wall Panels

PANEL STAGING

Each bundle of panels is shrink wrapped and marked with a bundle number at the factory. A bundle report and shipping list are included with each panel shipment. These documents provide the quantity and length of the panels within each bundle. They also provide a description of the panels such as color and gauge of the interior and exterior skins, as well as panel thickness.

These reports, in conjunction with the installation drawings, will allow the contractor to determine where each bundle of panels should be pre-positioned around the building to minimize additional bundle movement and maximize efficiencies during panel installation.

Bundles should be close to the area of the building that they will be installed on, but still allow clearance for lifting equipment and workmen during the installation process. Be sure to allow adequate space for layout and cutting of panels at corners and wall openings.

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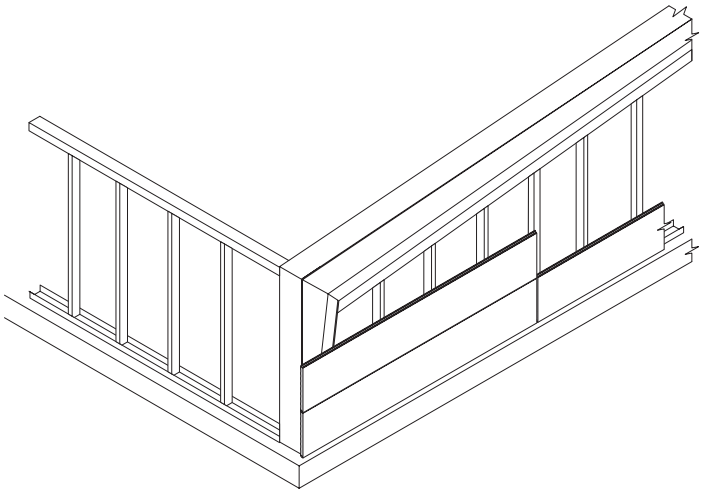
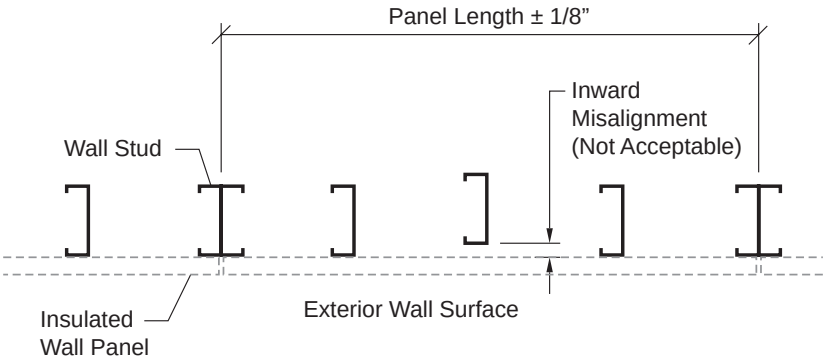
INSULATED PANEL SYSTEMS

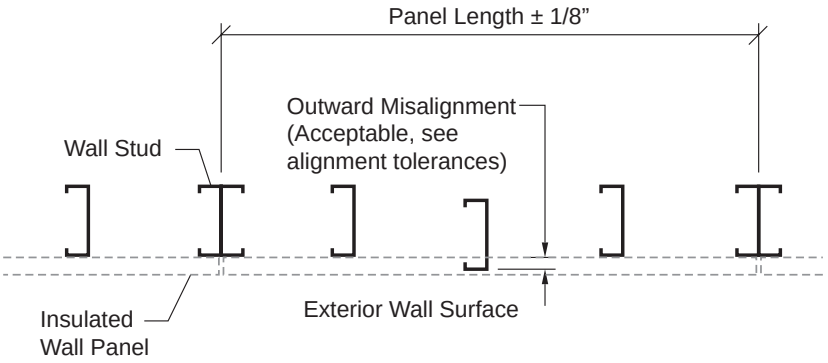
HWP GENERAL INFORMATION



Panel Layout Alignment



Unacceptable Misalignment



Acceptable Misalignment

PREPARATORY REQUIREMENTS

Structural Alignment

Proper alignment of the structural members to which the panels are to be attached is critical. Before beginning installation of wall panels, verify that all structural framing is properly aligned.

To allow for the proper fitting of the vertical joint assemblies, the structural supports at the panel ends must be positioned and plumbed to within +/-1/8" of the specified spacing. Once these supports are verified to be properly installed, pull a string line between them to ensure that the intermediate structural supports are in line. Any structural members that are inside of the string line will cause the wall panels to bow inward, resulting in panel stress and oil canning.

- Panel tolerance varies according to the structural support spacing, though the substructure must not allow installed panels to bow inward of the steel line.
- Support spacing over 8'– ¼" out-of-plane tolerance **(Outward Only)**
- Support spacing between 8' and 4' – ⅛" out-of-plane tolerance **(Outward Only)**
- Support spacing less than 4'–1⁄16" out-of-plane tolerance **(Outward Only)**

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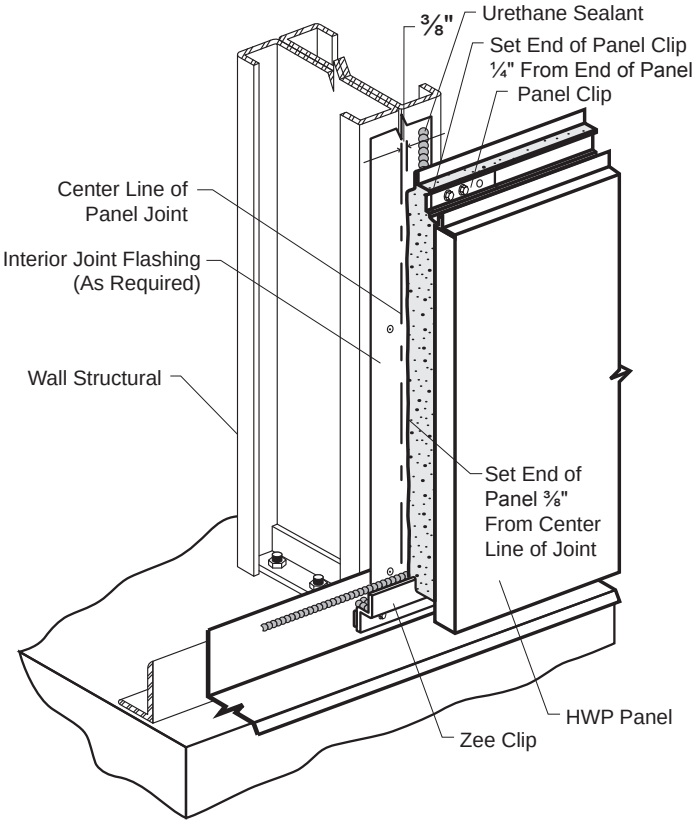
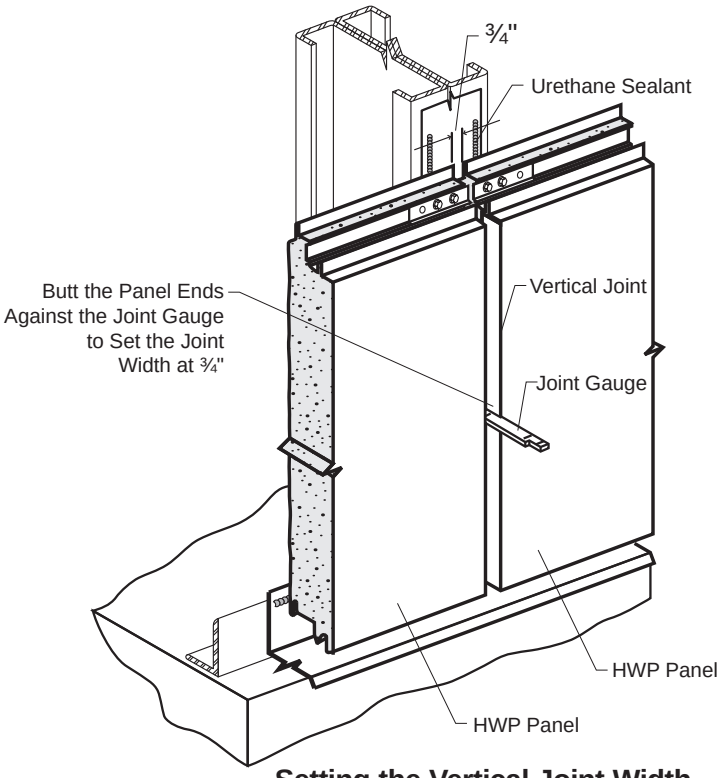
GENERAL INFORMATION HWP



Setting the Vertical Joint Width



Setting the Vertical Joint Width

PREPARATORY REQUIREMENTS (continued)

Panel Alignment

To ensure proper fit and aesthetics of the vertical joints, the wall panels must be properly positioned so panel joints are at the specified spacing and the joint width (space between panels) is 3/4".

- Tolerance for panel positioning – +/- 1/16"
- Tolerance for joint width – +/- 1/16"

Use the joint gauge to set the panel joints at the correct width.

The opposite end of the joint gauge serves as a go/no-go gauge to check that the joint width is within tolerance for the installation of the rubber gasket.

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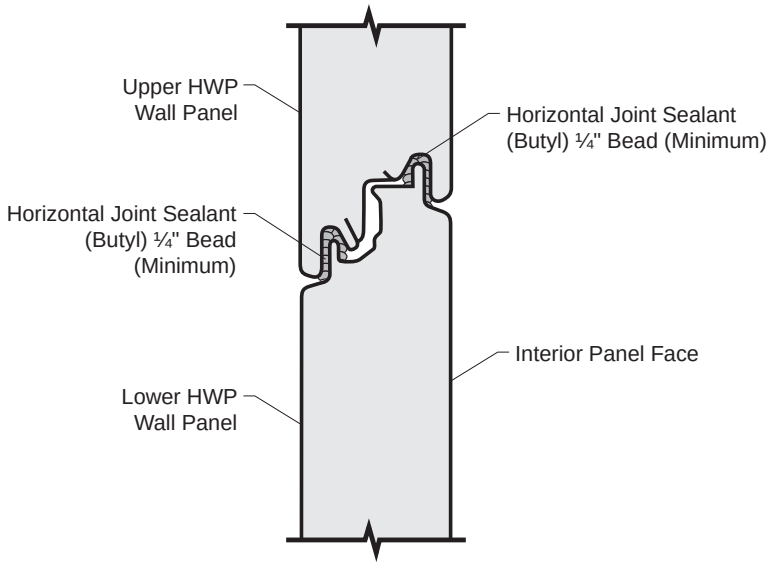

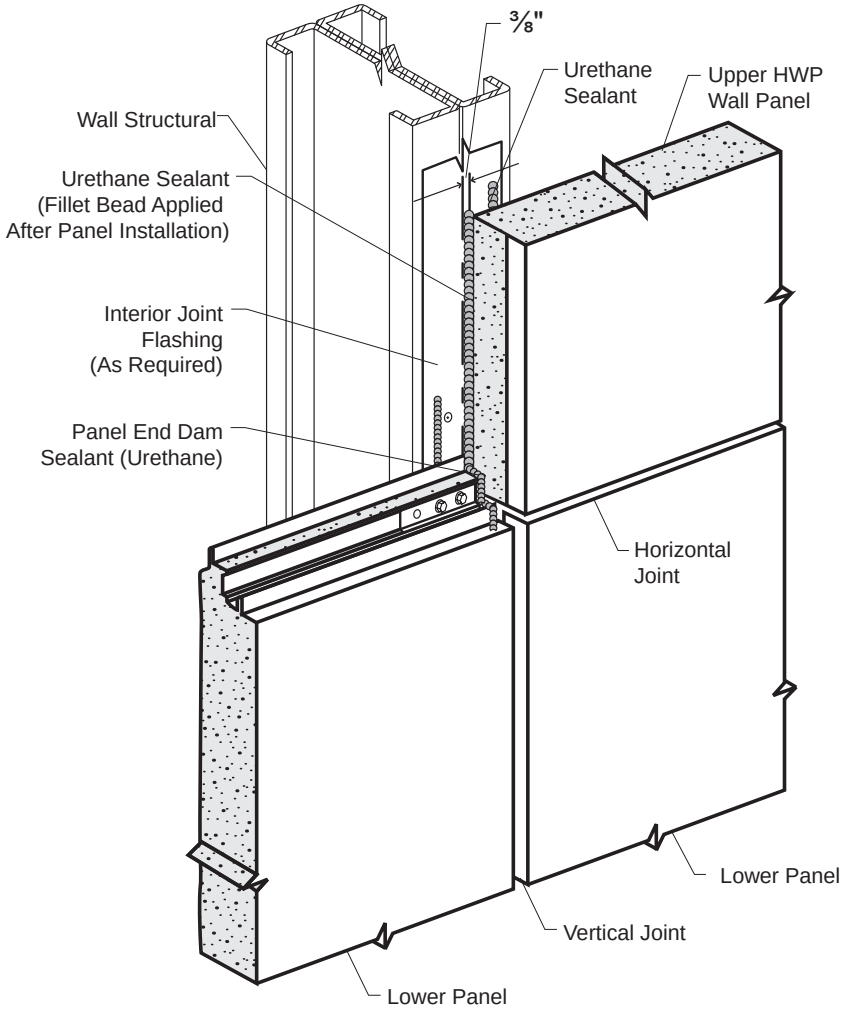

Sealant Locations

PREPARATORY REQUIREMENTS (continued)

Sealant Requirements

The proper installation of sealants during panel installation is critical to ensure that the wall remains weathertight and to provide vapor control.

Always refer to the specifications and construction drawings to ensure that sealants are being properly placed for your specific project. Typically, the panels will require horizontal joint sealant to be installed in the panel groove at the warm side of the panel, which is often the exterior groove. However, depending upon environmental conditions, horizontal joint sealant may be required at the interior panel groove or both grooves.

If panels were not ordered with factory applied mastic, ensure that field applied mastic is installed into the proper sealant groove joint before installing the next panel. Refer to the project drawings to determine whether the interior, exterior or both sealant grooves require sealant.

Vapor sealant locations must be determined by the appropriate engineer for proper application of panel system.

Panels should also be sealed to the building structure at panel ends and at all wall openings. Careful attention must be paid to sealant requirements at the panel ends to ensure the weathertightness of the wall assembly. Panel end joints require (1) sealant to be applied between the panel and the wall structural before the panel is installed, (2) end dam sealant to be applied to the panel's horizontal joinery to prevent water from running along the horizontal shelf of the panel and behind the rubber gasket at the vertical joint, and (3) additional sealant within the vertical joint, to be applied as a fillet bead from the panel end to the wall structural.

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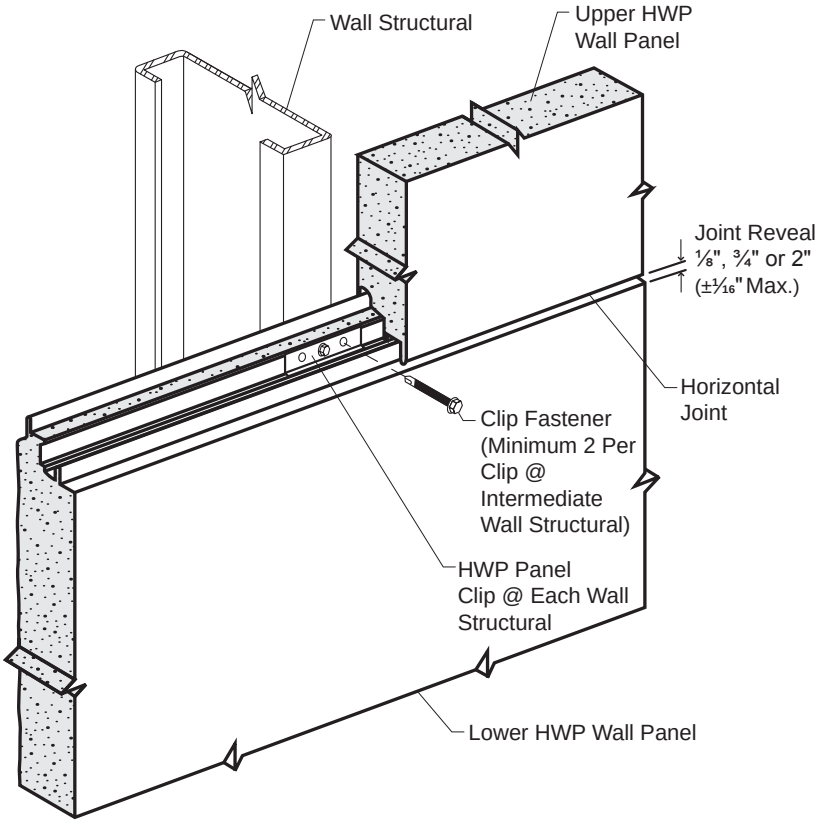
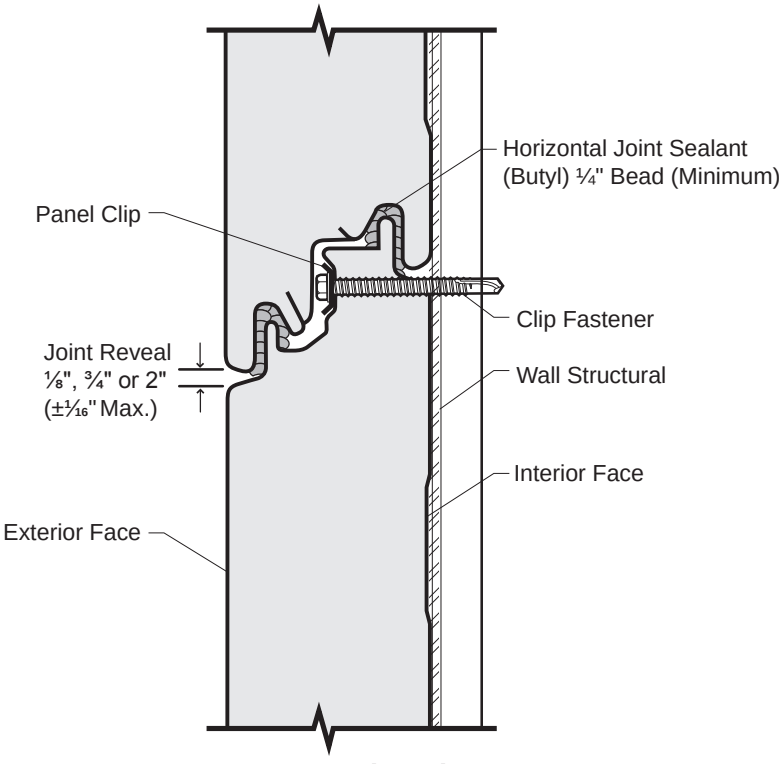


Intermediate Wall Structural Attachment



Cross Section View

PREPARATORY REQUIREMENTS (continued)

Panel Engagement

Proper panel engagement is critical to the performance and appearance of the wall panels. When the panels are fully engaged to one another, the actual panel width may vary by up to ⅛" due to manufacturing and field tolerances. The joint reveal at the exterior of the panel should be as specified (⅛", ¾" or 2") ±1/16" maximum when the panels are fully engaged. If the joint gap is greater than this, check the panels for the cause of engagement interference.

The edges of the panels have an offset side joint, which allows for a concealed clip that is attached within the side joint. Clips are set onto the panel's clip shelf at each structural location and attached through the panel and into the structural member. Consult the project drawings for the proper type and number of fasteners to be used at each clip. Do not overtighten fasteners to a point that damages or deforms the clip or panel.

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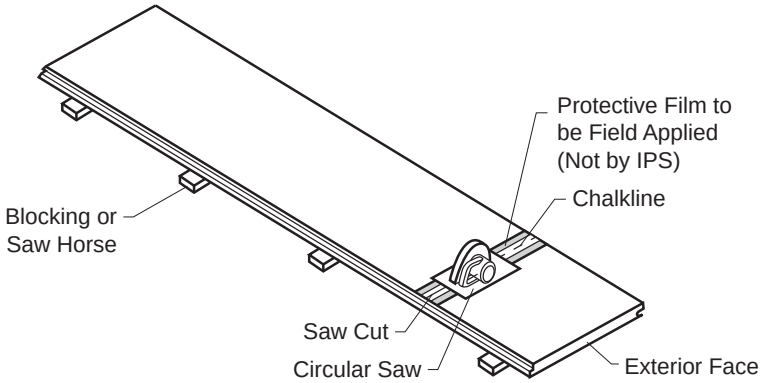

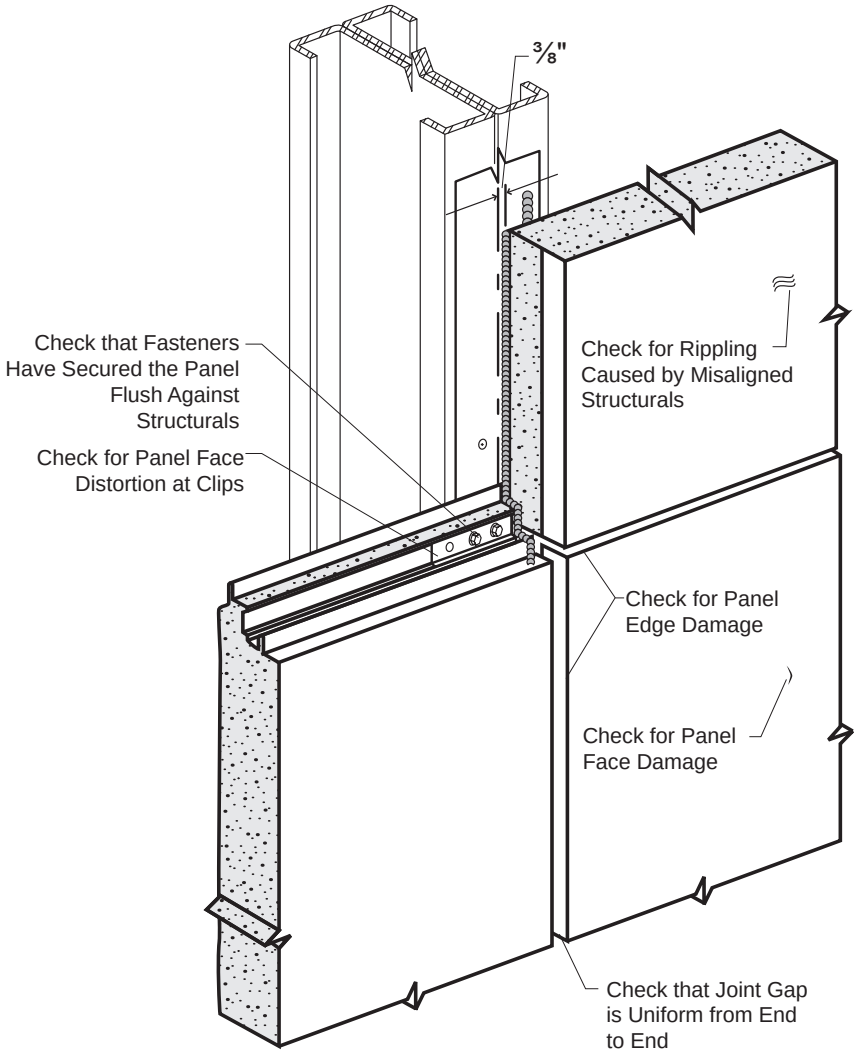

Checking the Installed Panels

PREPARATORY REQUIREMENTS (continued)

Field Cutting Panels

Panels can be cut with a circular saw using a metal cutting blade. Do not use an abrasive blade. An abrasive blade will melt the Galvalume® coating causing rust problems. It may be necessary to cut thicker panels on both sides. Properly support the panel during cutting. Protect against scuffing the panel finish from the shoe of the saw or from sliding the panel on the supports. **Blade must cut cool and not melt coating or finish.**

Panel Inspection

Inspect each panel for damage before installing. Replacement of installed damaged panels is difficult and costly. Damaged panels should be set aside for possible use at a location that allows for the damaged area to be cut out of the panel, such as at a door or window.

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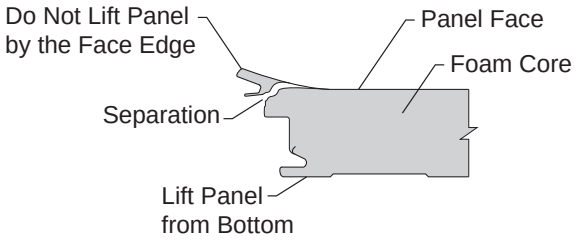
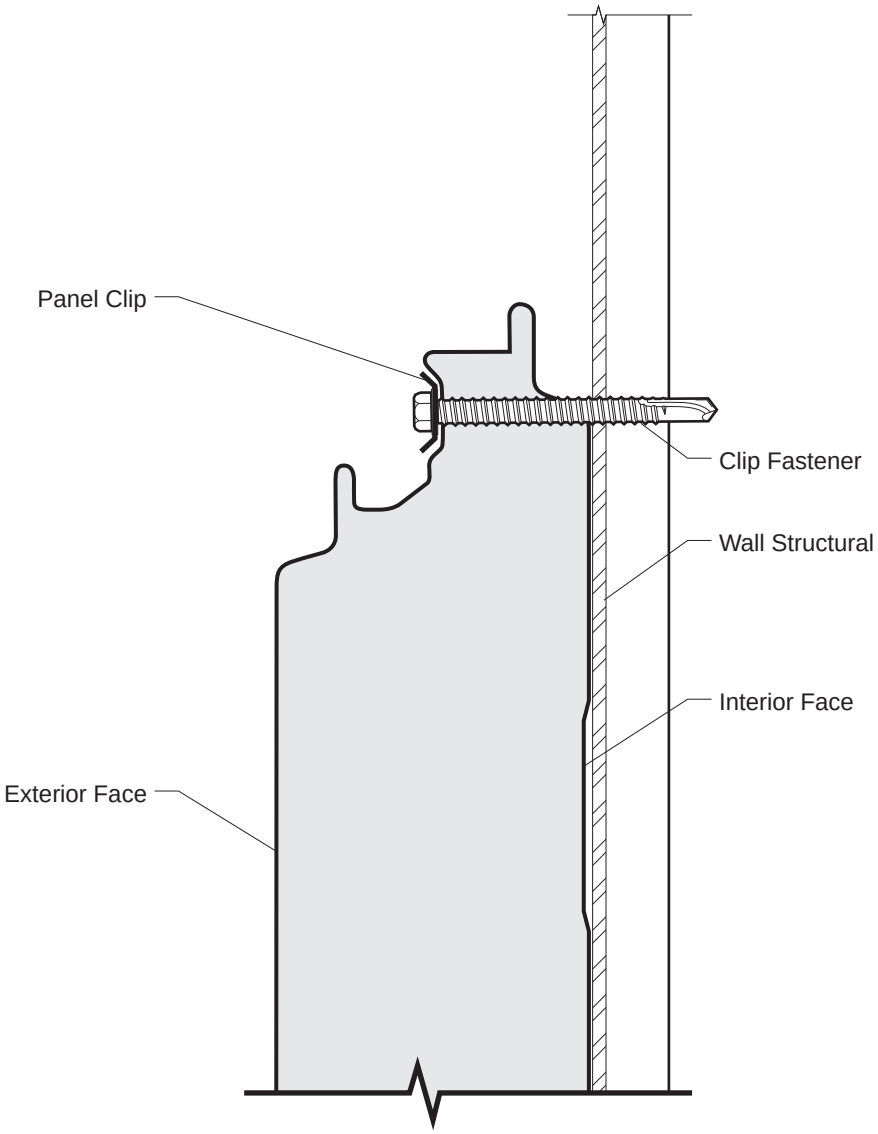


Panel Face Separation



Panel Orientation

HANDLING PANELS DURING INSTALLATION

Always protect exposed panel surfaces from damage caused by temporary supports, lifting slings or clamps. Do not slide panels across rough or abrasive surfaces. Resting it on a sharp or irregular surface can dent the panel face. Because of their weight, the panels have considerable inertia, which makes them susceptible to impact damage while moving them.

Lift panels from the bottom face only. DO NOT lift panels by the edge of the top metal face; this will cause the metal face to separate from the foam core. When panels are to be turned over or tilted up on edge, place a cushioning material under the panel edge to prevent crushing or damage to the panel finish. Roll onto male leg of panel only.

Before setting a panel into place, make sure the interior face is turned inward and the clip leg is at the top of the panel .

CAUTION

Improper handling of the panels can be hazardous to the workers and can cause damage to the panels and adjacent materials. It is the contractor's responsibility to provide an adequate work force and lifting equipment to safely carry and raise panels into place.

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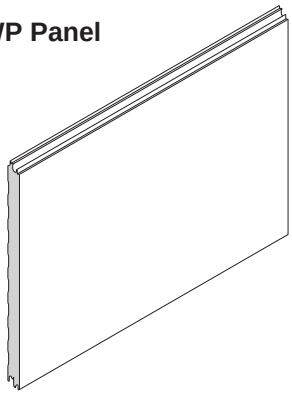
HWP GENERAL INFORMATION

PRODUCT CHECKLIST

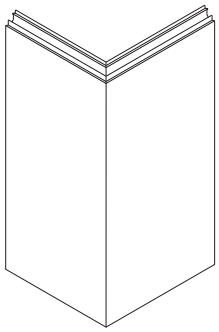
HWP Panel



- 36", 30" or 24" wide
- Specify left, right, both or no endfold.
- Standard reveal is ⅛". For other reveal options, please inquire.

Panel Thickness
2" ❑
2½" ❑
3" ❑

HWP Corner Panel

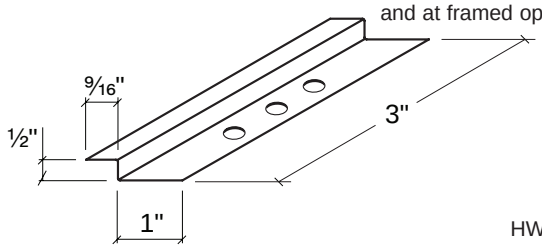


- 36", 30" or 24" wide
- Specify left, right, both or no endfolds.
- Specify length of each panel leg - min 1'-0" max - 8'-0".
- Standard reveal is ⅛". For other reveal options, please inquire.

Panel Thickness
2" ❑
2½" ❑
3" ❑

Zee Clip

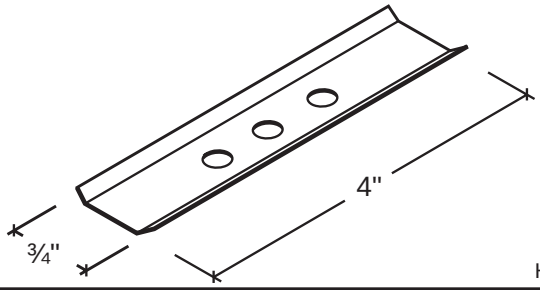
- 16 gauge Galvanized
- Used to attach first panel course to structure at base, and at framed openings.



HW-2325 ❑

Wall Panel Clip

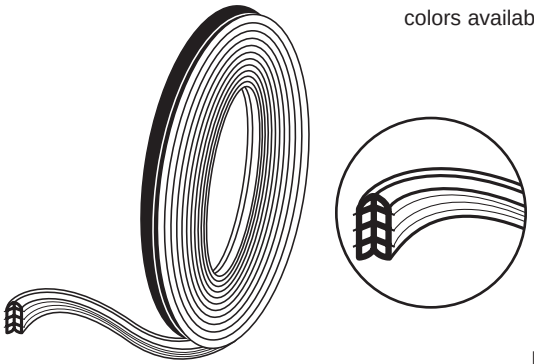
- 14 gauge Galvanized



HW-2320 ❑

Vertical Joint Gasket

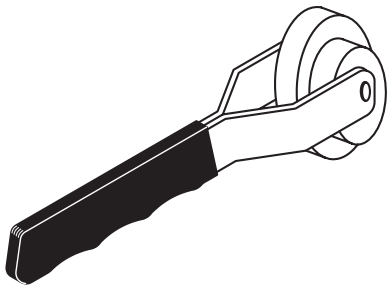
- EPDM
- Std Color-Black, Other colors available



HW-1285 ❑

Gasket Installation Tool

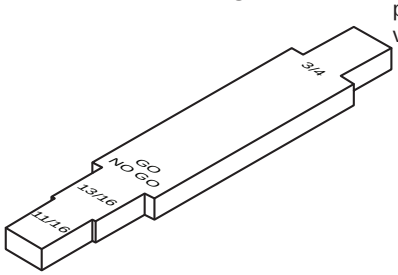
- Used to install EPDM Gasket at vertical joints.



HW-1284 ❑

Vertical Joint Gauge

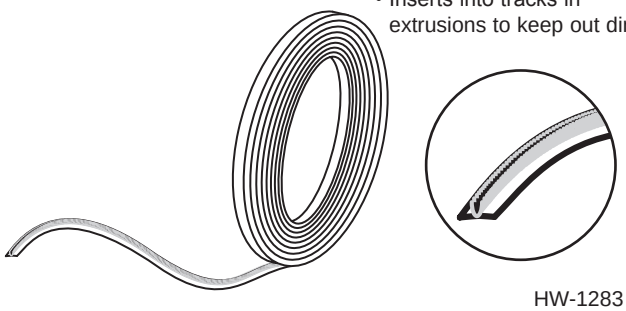
- Used to set panel joints to proper width for EPDM vertical joint gasket.



HW-1286 ❑

Wiper Gasket

- Vinyl
- Inserts into tracks in extrusions to keep out dirt.



HW-1283 ❑

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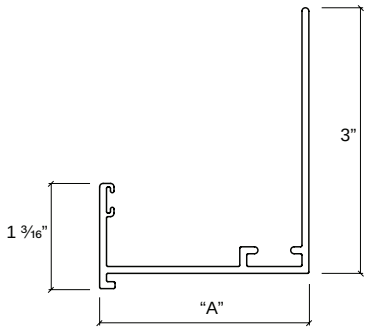
PRODUCT CHECKLIST

Base / Head Extrusion

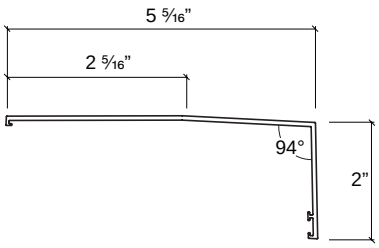
- 20' length
- Wiper gasket req'd at one location



	Panel Thickness	DIM A	
HW-1274A	2"	2⅜"	❑
HW-1274B	2½"	2⅞"	❑
HW-1274C	3"	3⅜"	❑

Sill Extrusion

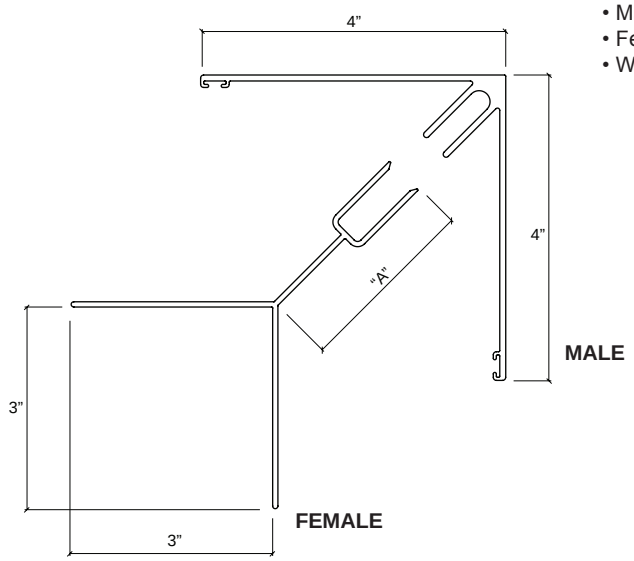
- 20' length
- Wiper gasket req'd at one location
- For use with 2", 2½" and 3" thick panels



HW-1282 ❑

Outside Corner Extrusions

- 20' length
- Male extrusion used on 2", 2½" and 3" panel thicknesses
- Female extrusion specific to panel thickness
- Wiper gasket req'd on male extrusion at two locations



MALE

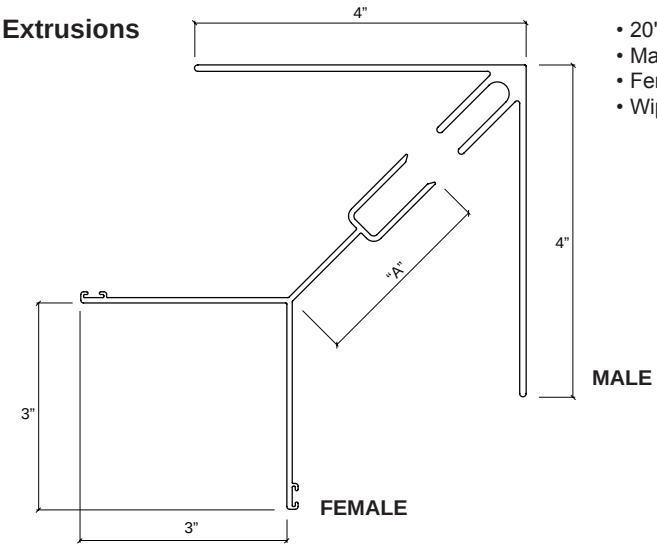
HW-1275 ❑

FEMALE

	Panel Thickness	DIM A	
HW-1276A	2"	2⅝"	❑
HW-1276B	2½"	3⁵⁄₁₆"	❑
HW-1276C	3"	4"	❑

Inside Corner Extrusions

- 20' length
- Male extrusion used on 2", 2½" and 3" panels
- Female extrusion specific to panel thickness
- Wiper gasket req'd on female extrusion at two locations



MALE

HW-1277 ❑

FEMALE

	Panel Thickness	DIM A	
HW-1278A	2"	2¹¹⁄₁₆"	❑
HW-1278B	2½"	3⅜"	❑
HW-1278C	3"	4¹⁄₁₆"	❑

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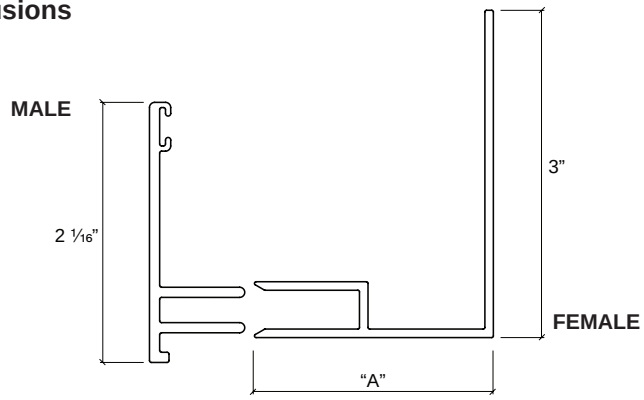
PRODUCT CHECKLIST

Jamb Extrusions

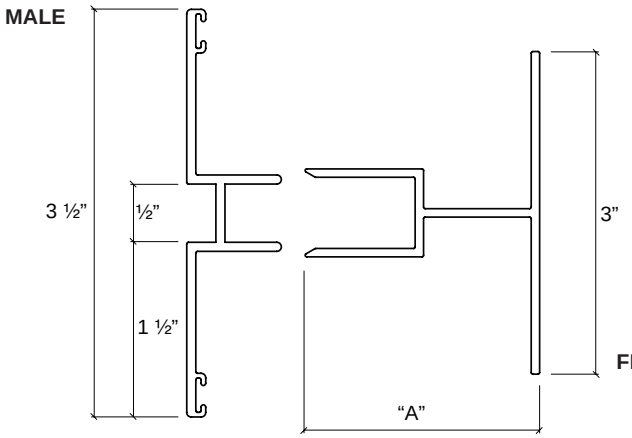


- 20' length
- Male jamb used on 2", 2½" and 3" panel thickness
- Female jamb specific to panel thicknesses
- Wiper gasket req'd for male extrusion at one location

MALE
HW-1272 ❑

	FEMALE Panel Thickness	DIM A	
HW-1273A	2"	2 1⁄16"	❑
HW-1273B	2½"	2 9⁄16"	❑
HW-1273C	3"	3 1⁄16"	❑

Vertical H Joint Extusions



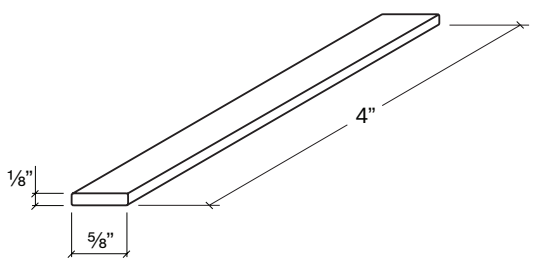
- 20' length
- Male extrusion used on 2", 2½" and 3" panels
- Female extrusion specific to panel thickness
- Wiper gasket req'd on male extrusions at two locations

MALE
HW-1279 ❑

	FEMALE Panel Thickness	DIM A	
HW-1280A	2"	2 1⁄16"	❑
HW-1280B	2½"	2 9⁄16"	❑
HW-1280C	3"	3 1⁄16"	❑

Coupler

- Used to align base/head and stack joint extrusions at splices

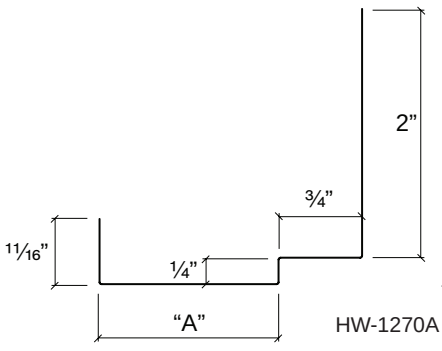


HW-1271 ❑

Splice Cap

1½" x 1" x 6"

- Used to waterproof base/head and stack joint extrusions at splices



	Panel Thickness	DIM A	
HW-1270A	2"	1 7⁄16"	❑
HW-1270B	2½"	1 15⁄16"	❑
HW-1270C	3"	2 7⁄16"	❑

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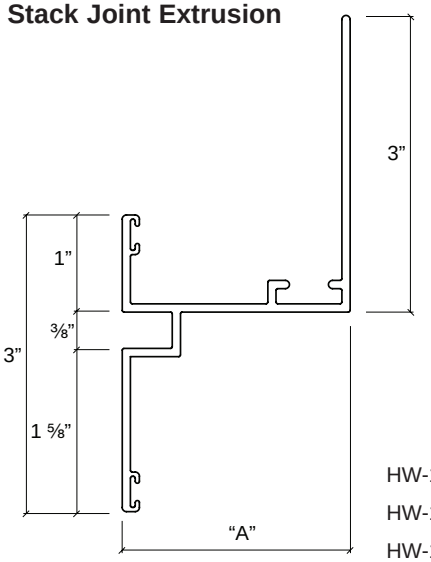
PRODUCT CHECKLIST

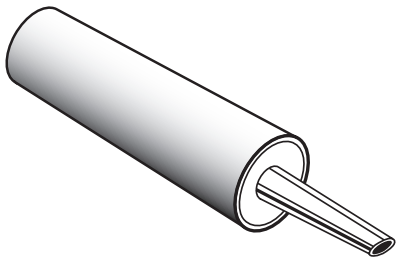
Stack Joint Extrusion



- 20' length
- Wiper gasket req'd at two locations

	Panel Thickness	DIM A	
HW-1281A	2"	2⅜"	❑
HW-1281B	2½"	2⅞"	❑
HW-1281C	3"	3⅜"	❑

Tube Sealant



- **Urethane**
  - HW-540 - (White) ❑
  - HW-541 - (Gray) ❑
  - HW-542 - (Bronze) ❑
  - HW-544 - (Almond) ❑
- **Non-Skinning Butyl**
  - HW-549 - (White) ❑

Clip Fasteners
16 GA. - 12GA. Steel

Fastener #115 ❑
¼"-14 x 2" TEK3 – 5/16" Hex Washer Head –
Use w/ 2" Thick Panels

Fastener #56 ❑
¼"-14 x 3" TEK3 – 5/16" Hex Washer Head –
Use w/ 2½" or 3" Thick Panels

Clip Fasteners
⅛" - ½" Thick Steel

Fastener #281 ❑
¼"-20 x 3" TEK5 – ⅜" Hex Washer Head –
Use w/ 2" Thick Panels

Fastener #282 ❑
¼"-20 x 4" TEK5 – ⅜" Hex Washer Head –
Use w/ 2½" or 3" Thick Panels

Clip Fasteners
½" or Greater Thick Steel (Pre-Drill)

Fastener #284 ❑
¼"-14 x 2" Type B – ⅜" Hex Washer Head –
Use w/ 2" Thick Panels

Fastener #285 ❑
¼"-14 x 3" Type B – ⅜" Hex Washer Head –
Use w/ 2½" or 3" Thick Panels

Fastener #287 ❑
¼"-14 x 2" Type B 304 Stainless
⅜" Hex Washer Head
Use w/ 2" Thick Panels

Fastener #288 ❑
¼"-14 x 3" Type B 304 Stainless
⅜" Hex Washer Head
Use w/ 21/2" or 3" Thick Panels

Trim Fasteners

Fastener #14 ❑
⅛" x 0.337" Pop Rivet
3/16" Grip Range

Fastener #14A ❑
⅛" x 0.525" Pop Rivet
⅜" Grip Range

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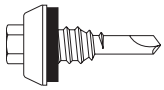
Fastener #4
¼-14 x ⅞ Laptek Long Life

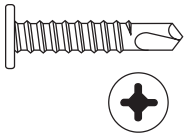
- Use to attach trim to panels



❑

Fastener #12A
12 x 1" Pancake Head Driller
#2 Quadrex Drive Pankcake Head

- Use at Rake Angle attachment



❑

Thru-Fasten Panel Fasteners
16 GA.-12 GA. Steel

Fastener #161 ❑
12-24 x 3¾" TEK4
#3 Recessed Square Drive Flat Head
Use w/ 2" Thick Panels

Fastener #162 ❑
12-24 x 4¾" TEK4
#3 Recessed Square Drive Flat Head
Use w/ 2½" or 3" Thick Panels

Fastener #199
¼"-14 x 1" S.D. TEK 3
5/16" Hex Washer Head w /o Washer

❑

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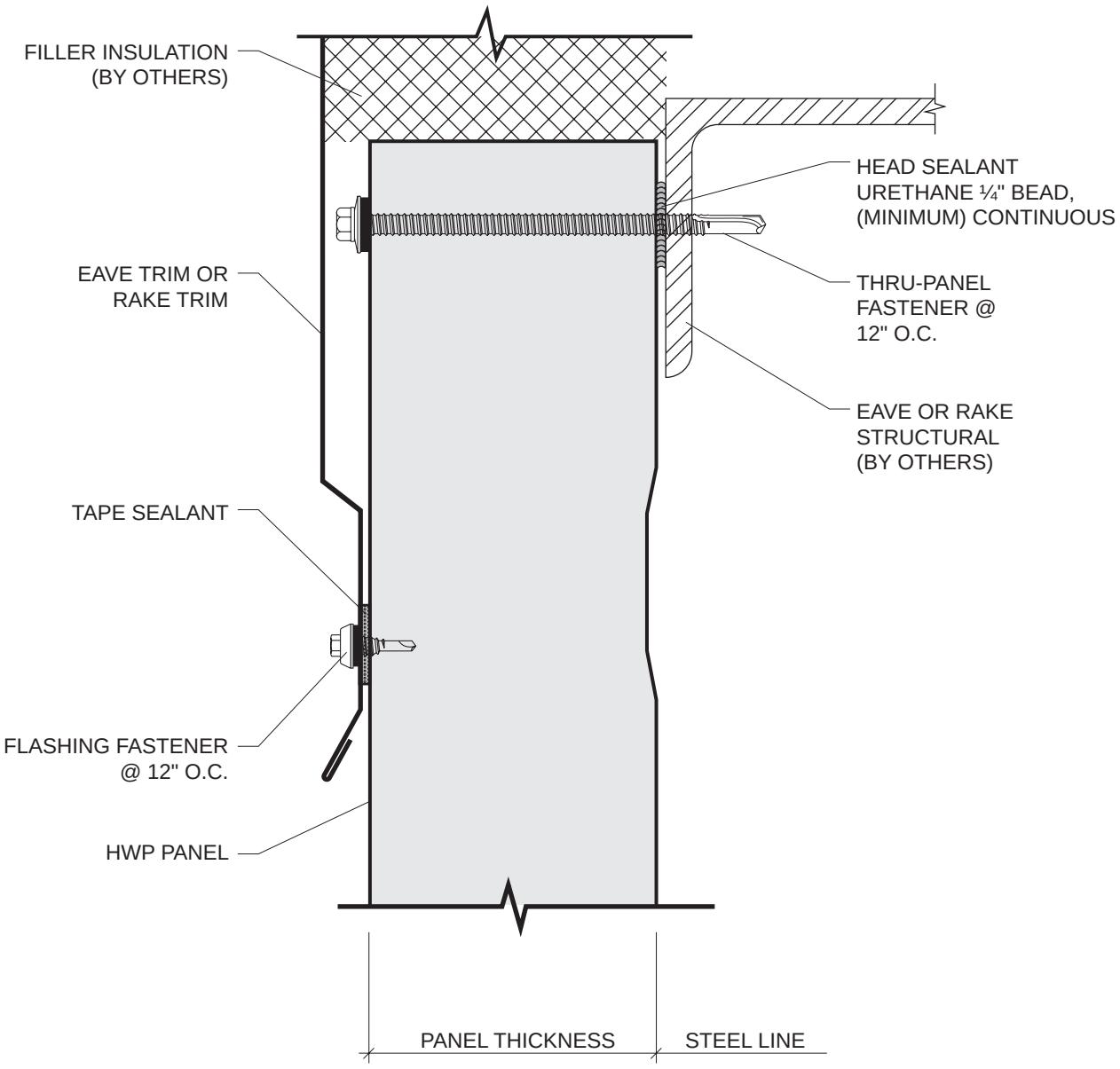
ARCHITECTURAL DETAILS HWP

EAVE / RAKE TERMINATION WITH TRIM



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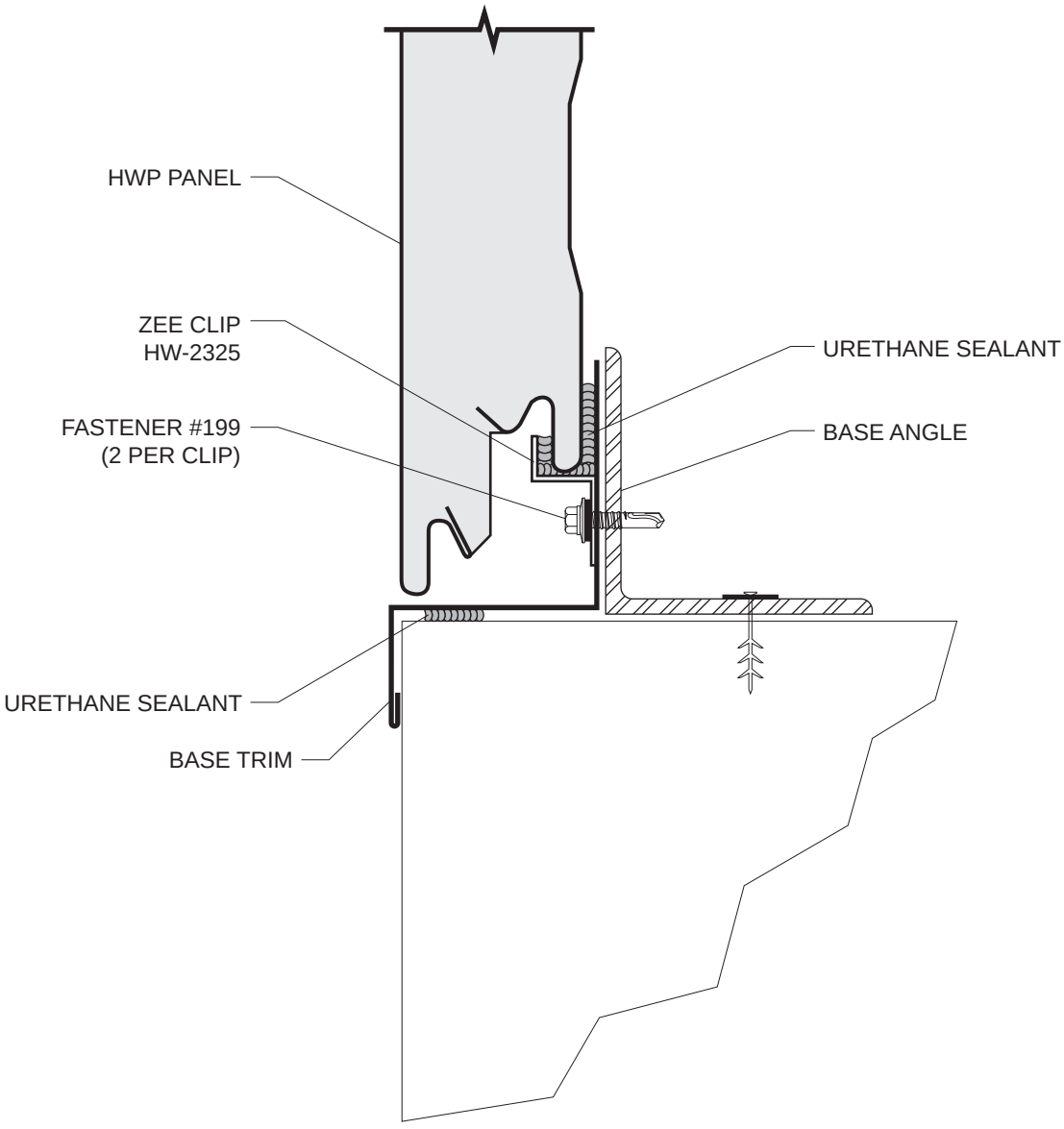
HWP ARCHITECTURAL DETAILS

BASE WITH TRIM



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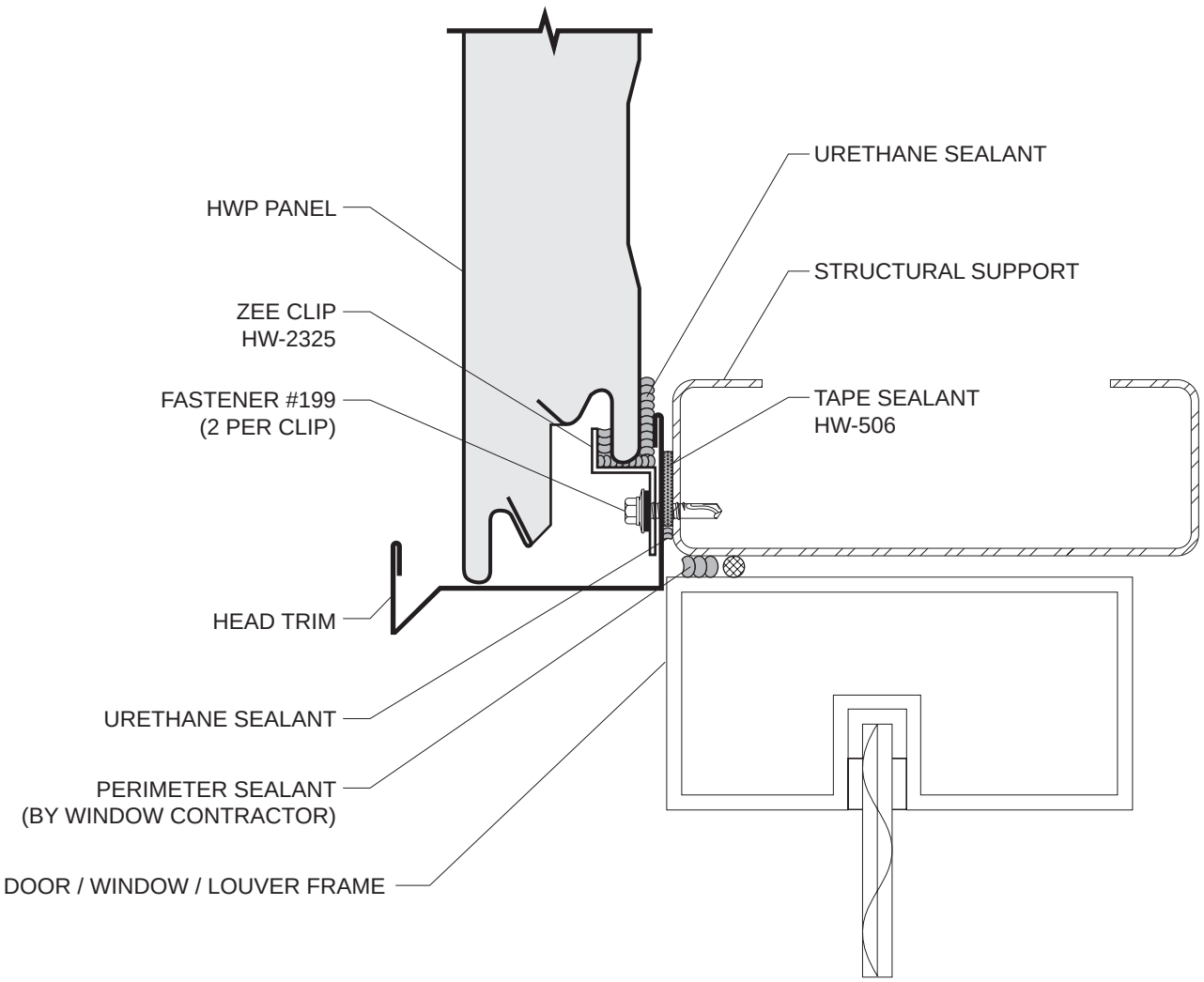
ARCHITECTURAL DETAILS HWP

HEAD DETAIL WITH TRIM



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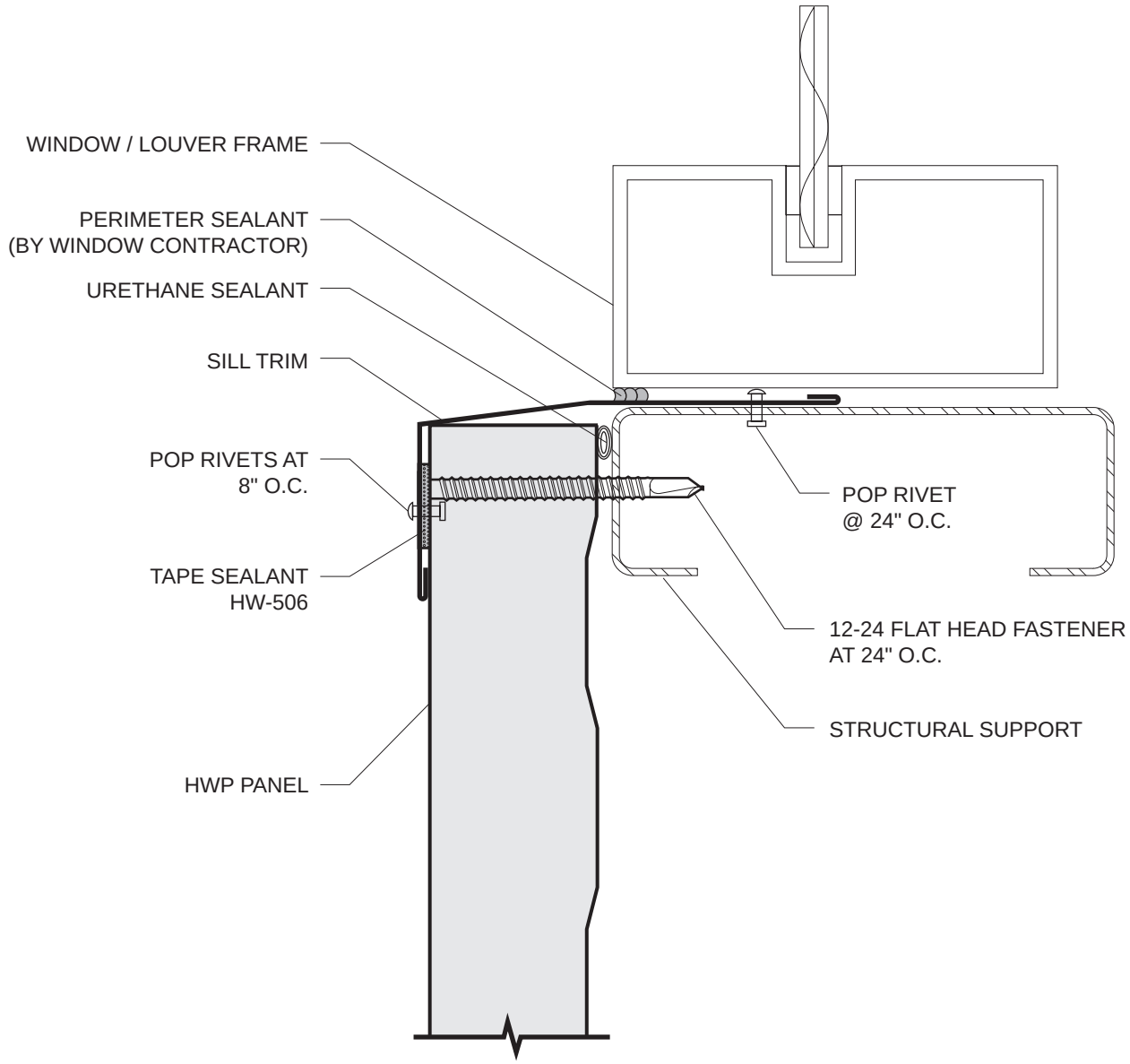
HWP ARCHITECTURAL DETAILS

WINDOW SILL WITH TRIM



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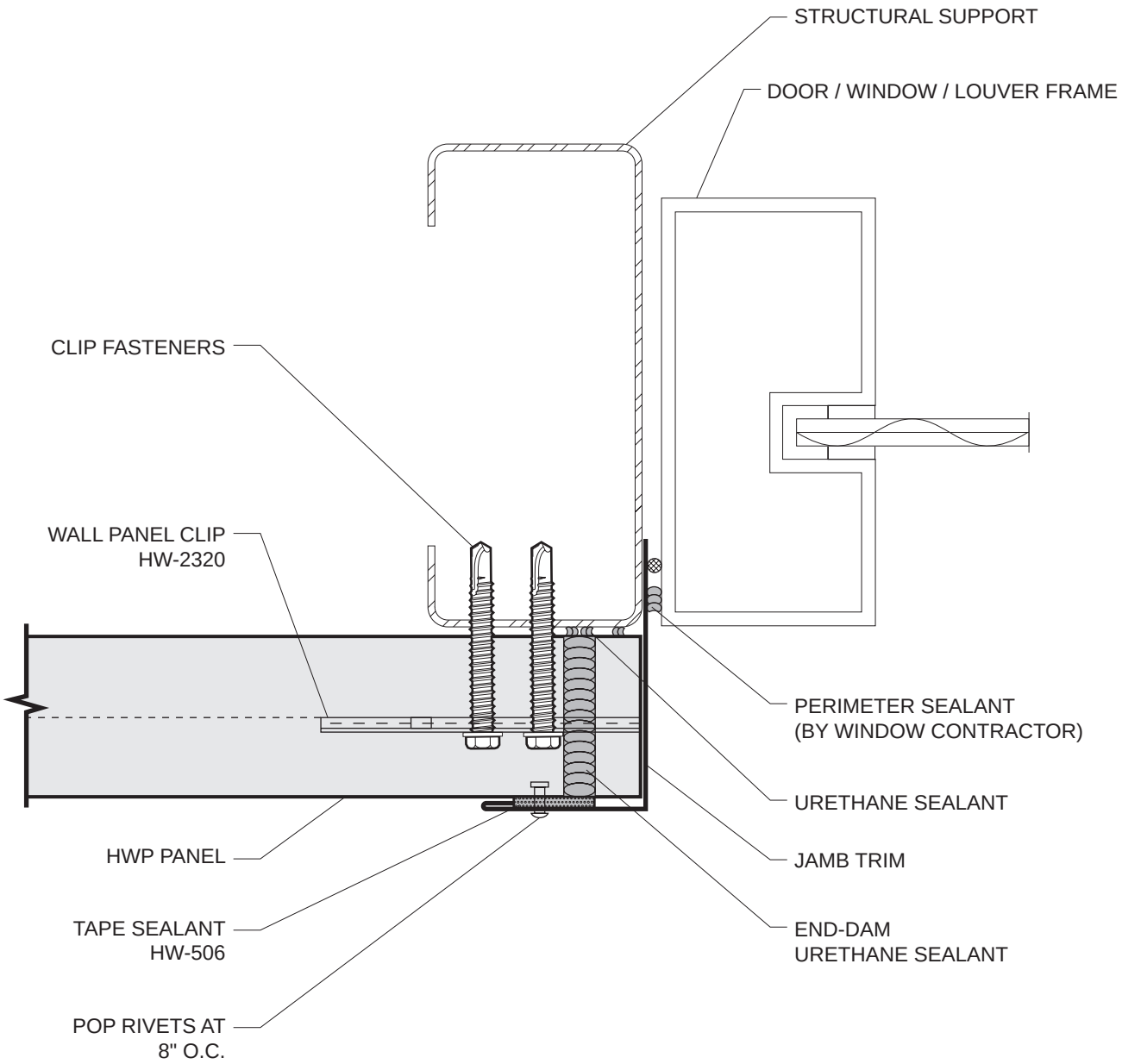
ARCHITECTURAL DETAILS HWP

JAMB WITH TRIM



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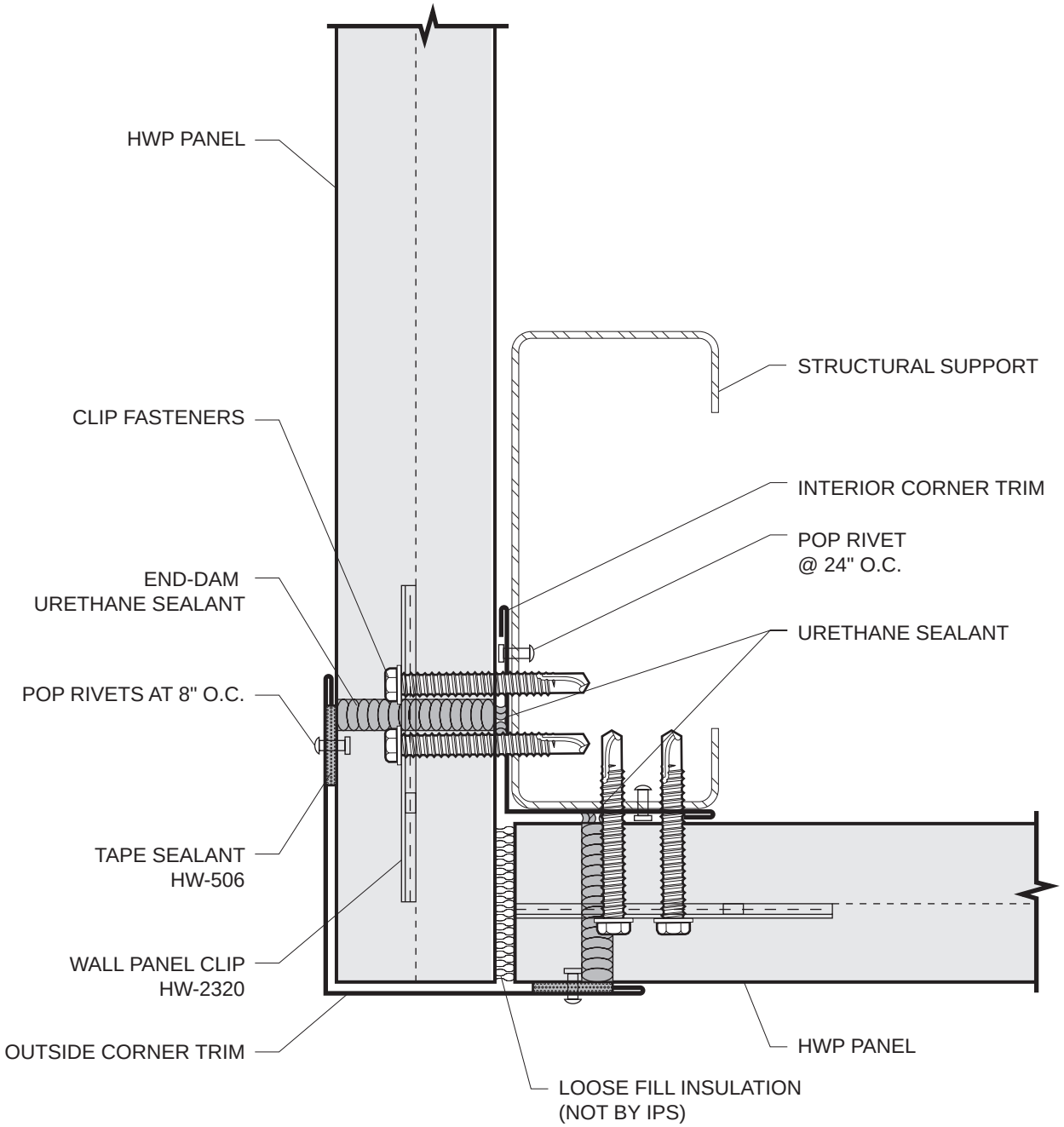
HWP ARCHITECTURAL DETAILS

OUTSIDE CORNER WITH TRIM



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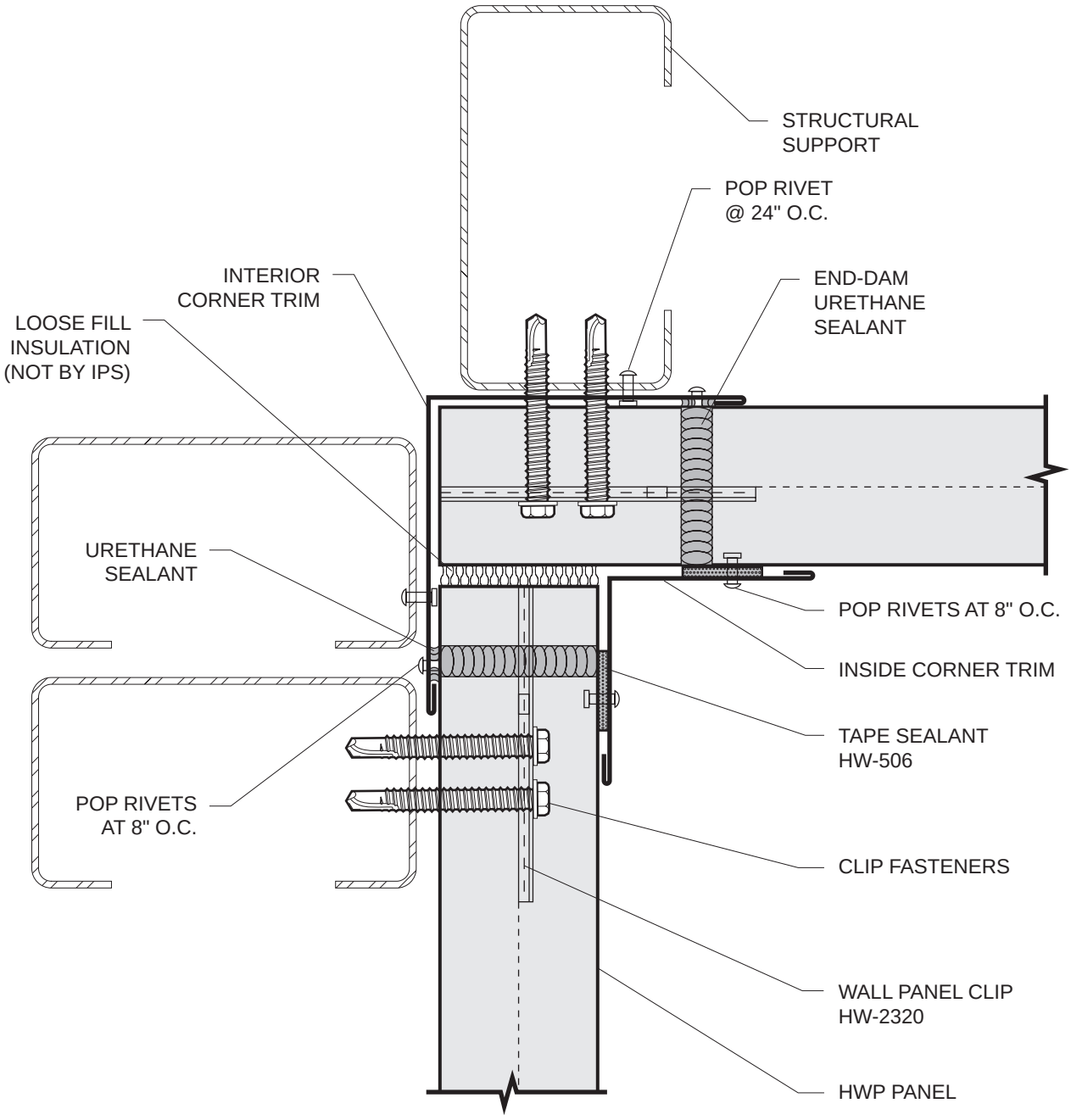
ARCHITECTURAL DETAILS HWP

INSIDE CORNER WITH TRIM



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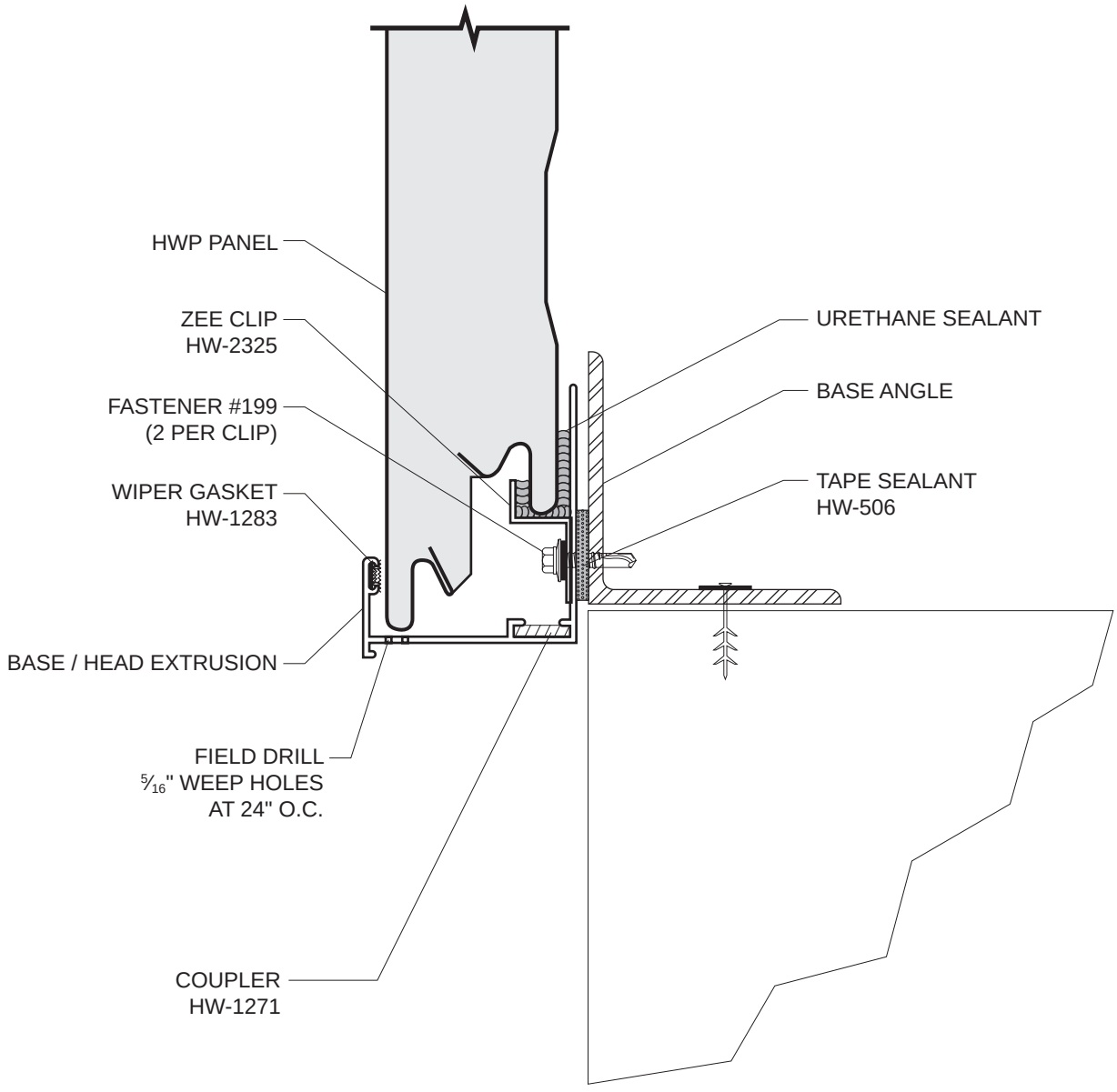
HWP ARCHITECTURAL DETAILS

BASE EXTRUSION



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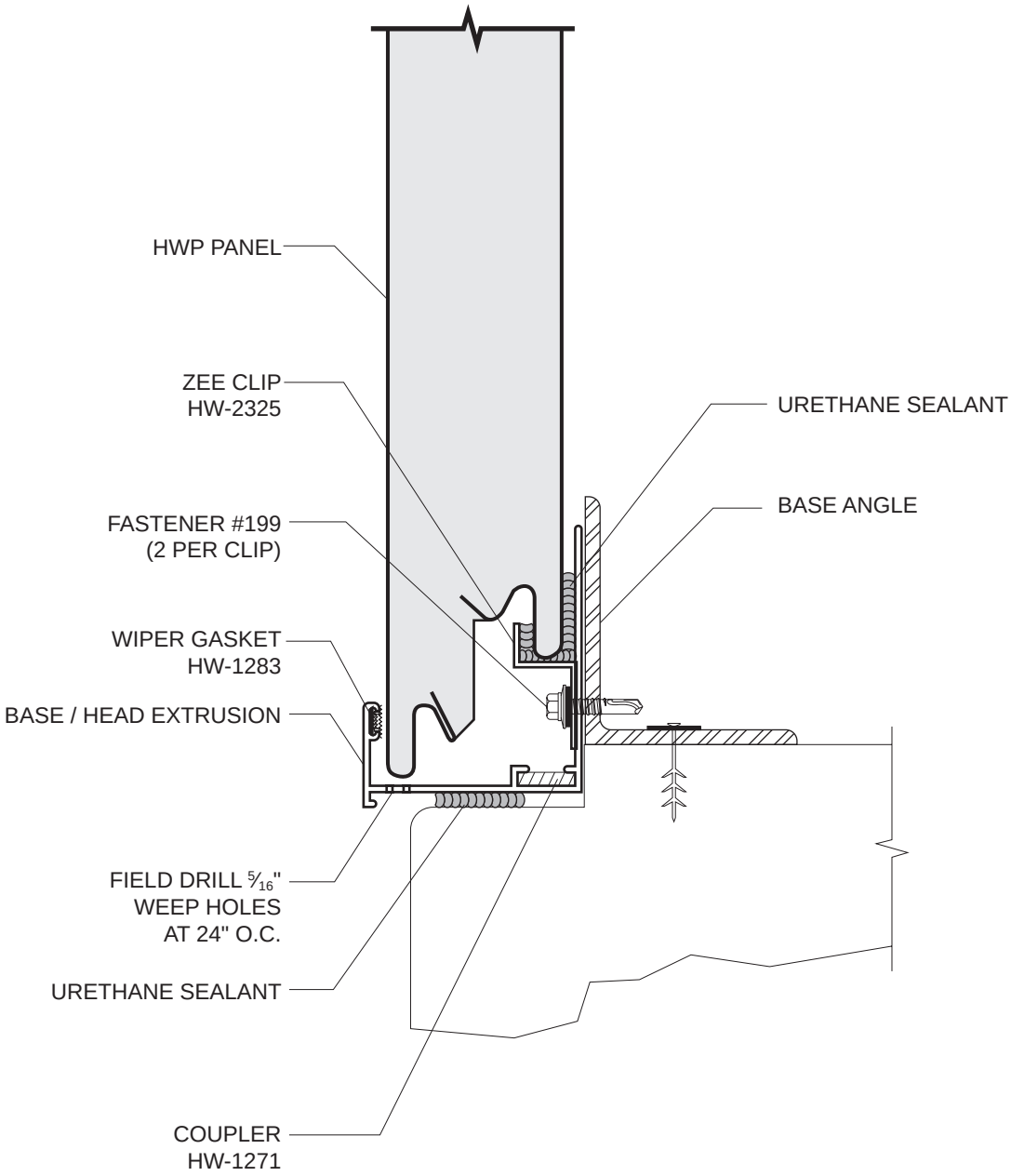
ARCHITECTURAL DETAILS HWP

BASE EXTRUSION WITH NOTCH



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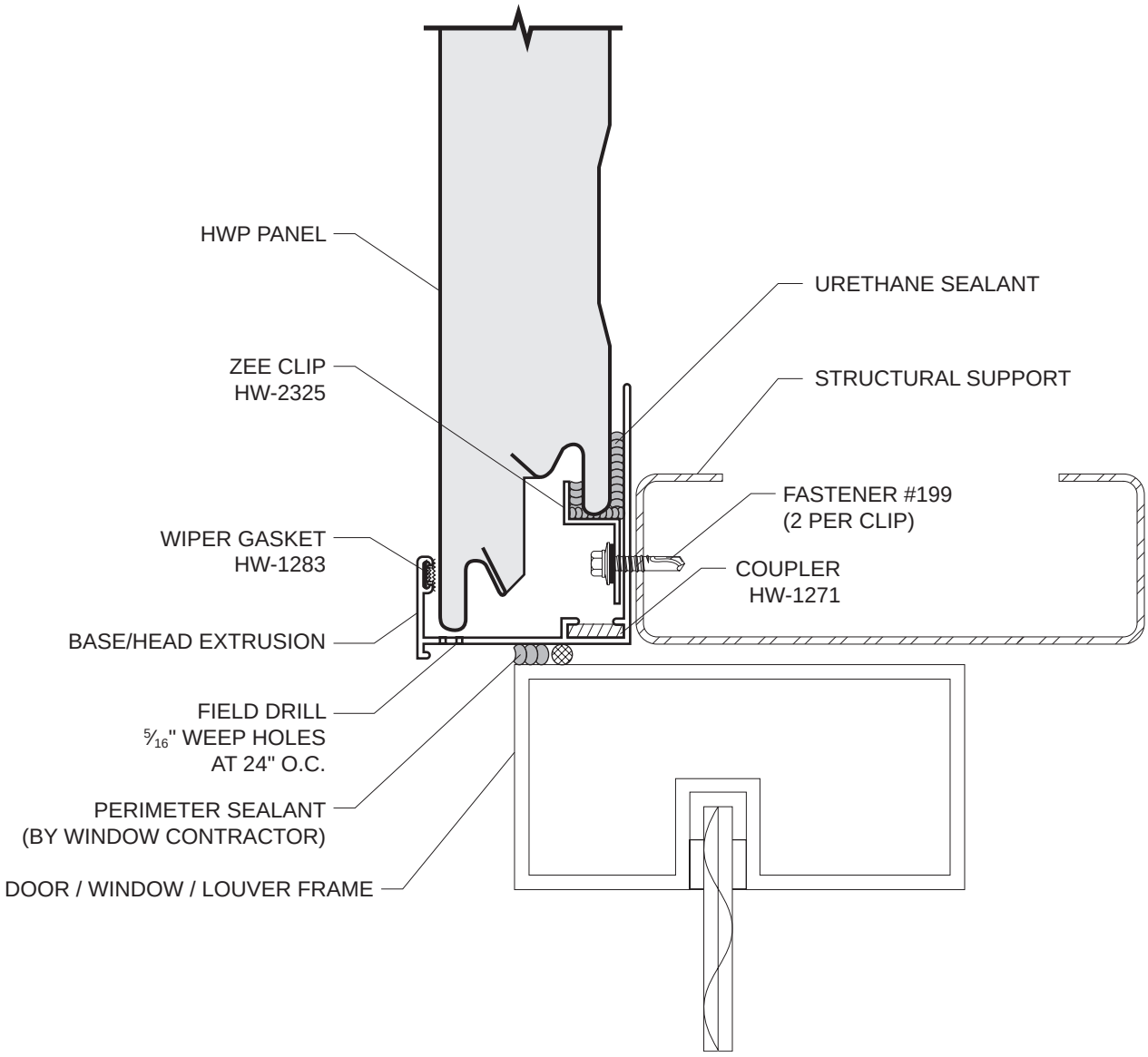
HWP ARCHITECTURAL DETAILS

HEAD WITH EXTRUSION



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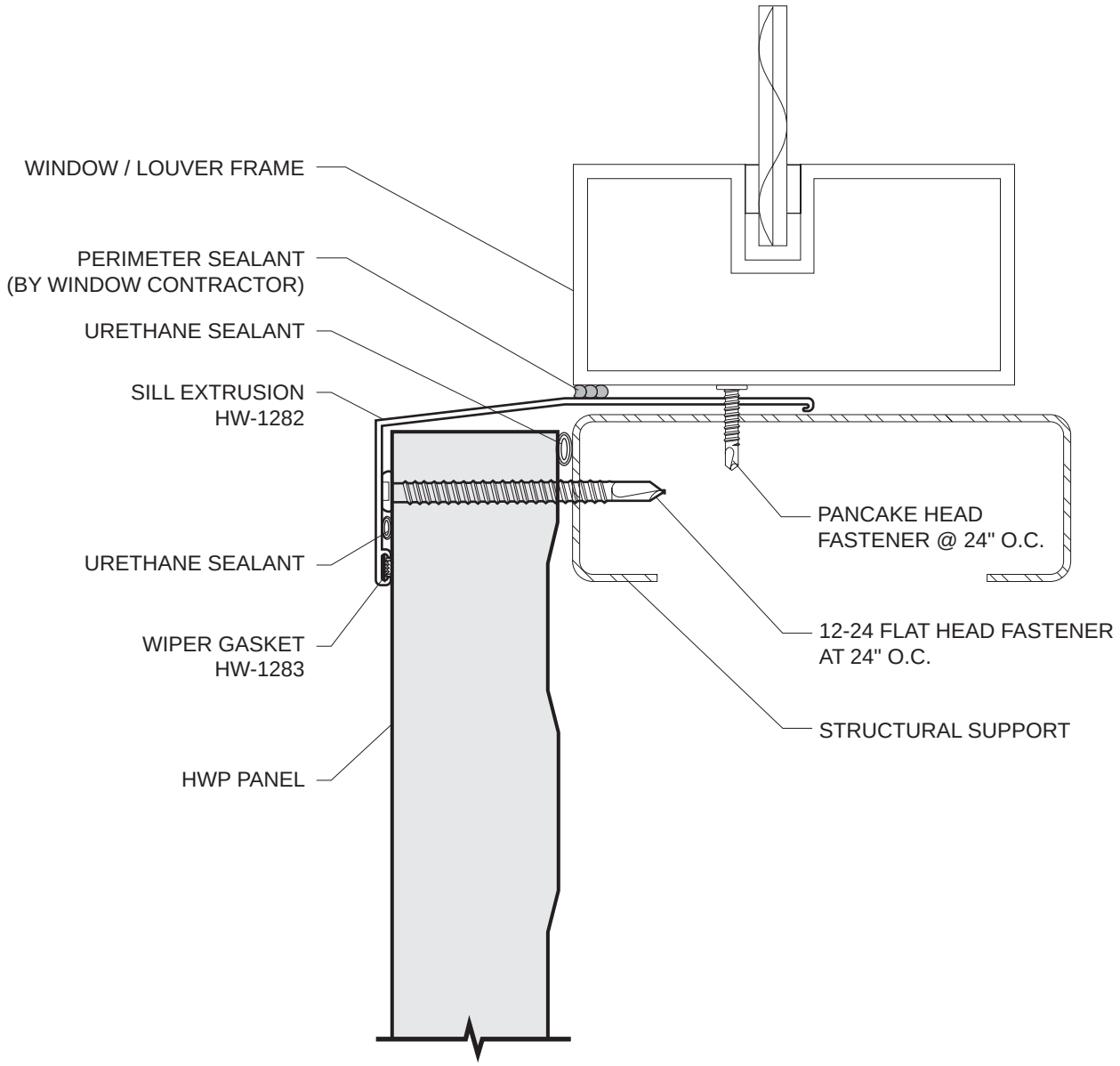
ARCHITECTURAL DETAILS HWP

WINDOW SILL WITH EXTRUSION



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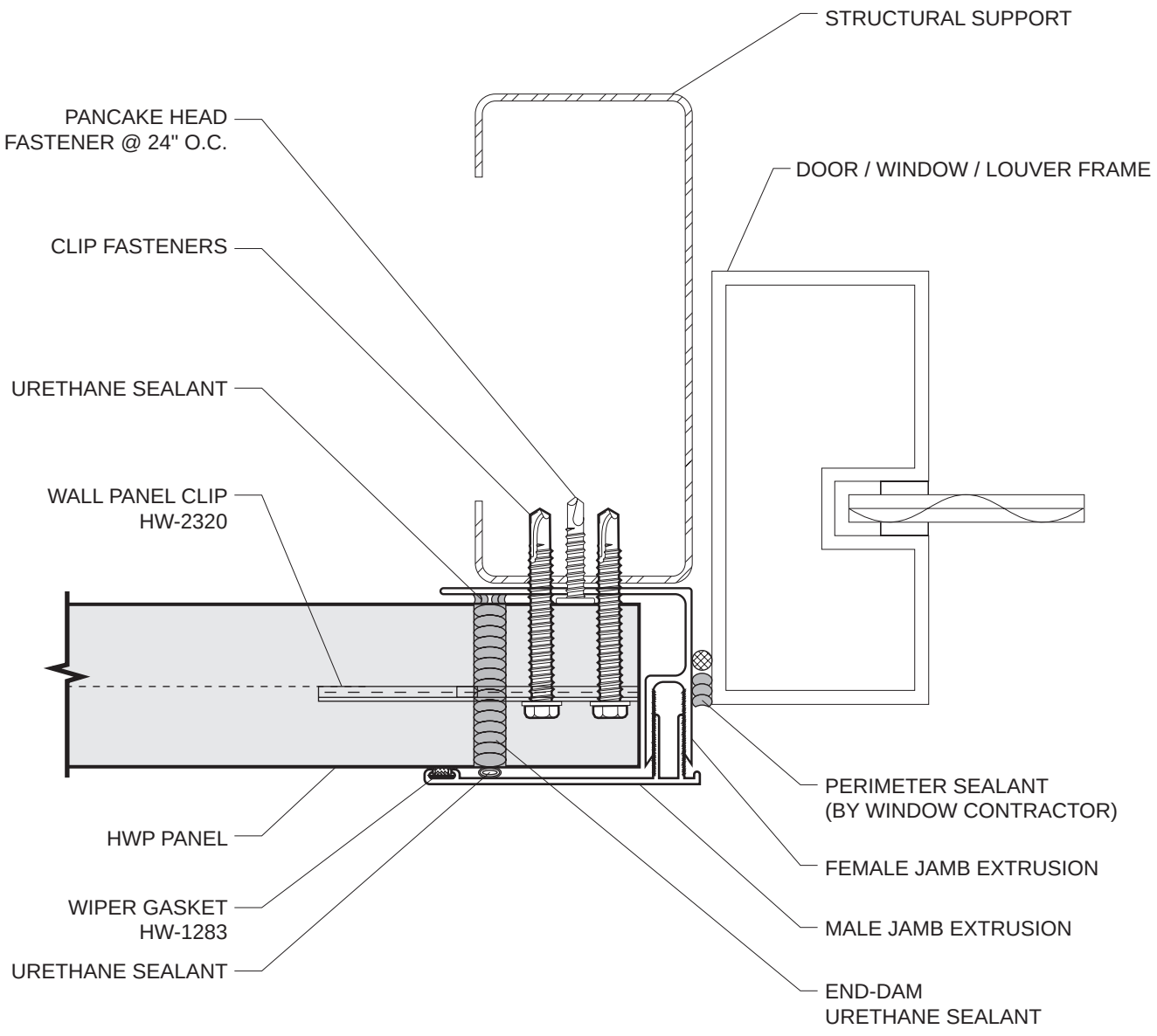
JAMB WITH EXTRUSION



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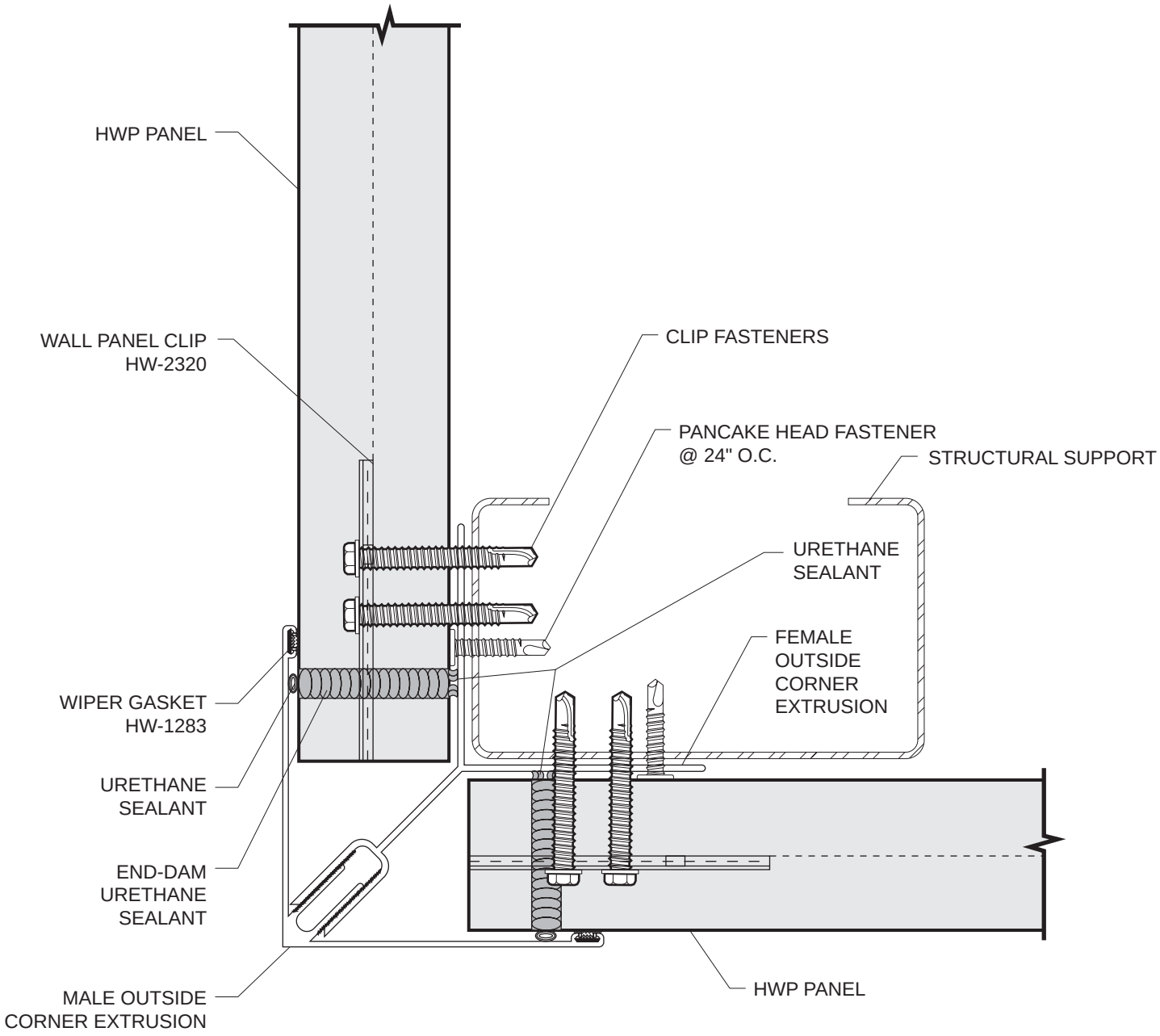
ARCHITECTURAL DETAILS HWP

OUTSIDE CORNER WITH EXTRUSION



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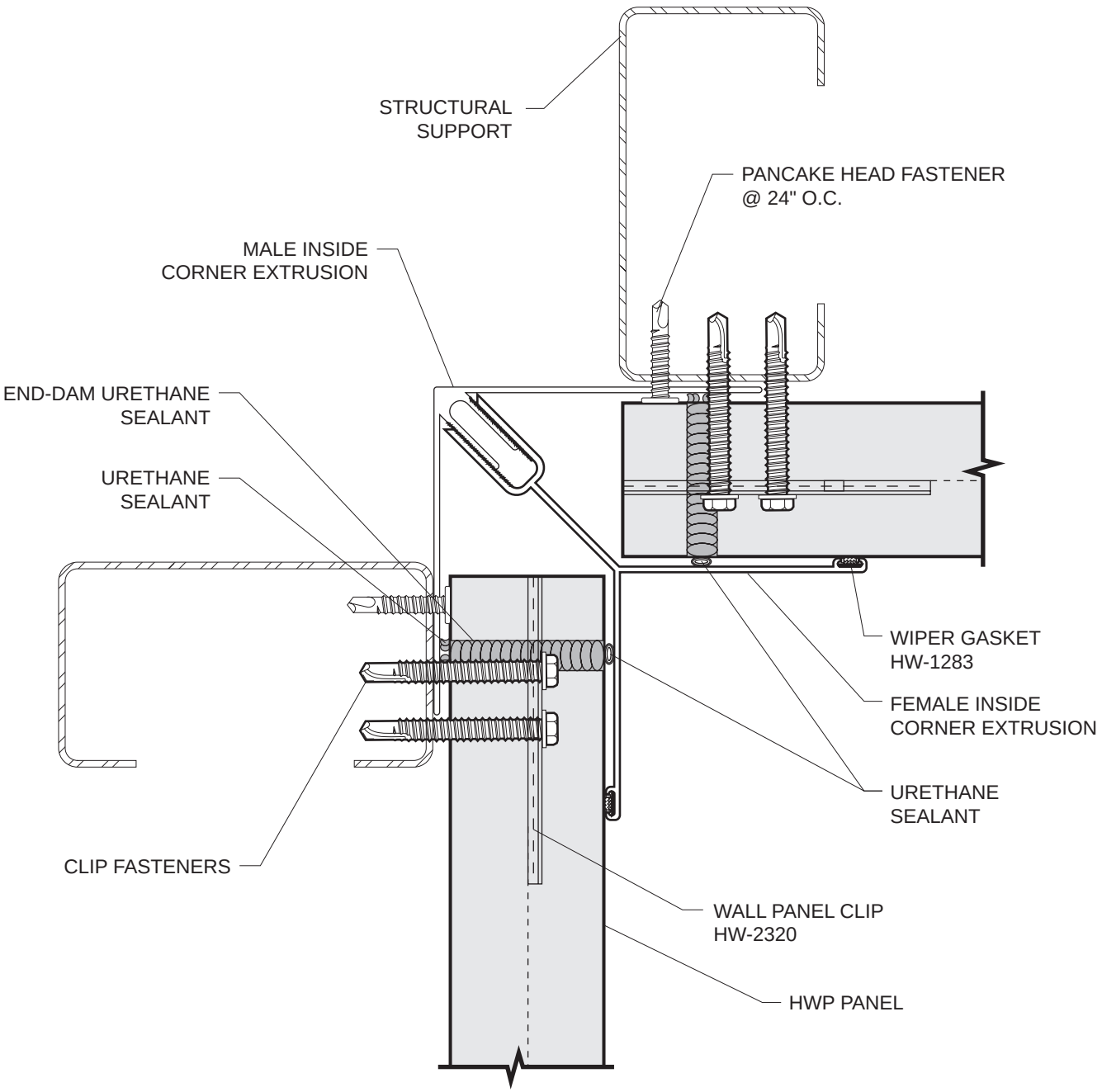
HWP ARCHITECTURAL DETAILS

INSIDE CORNER WITH EXTRUSION



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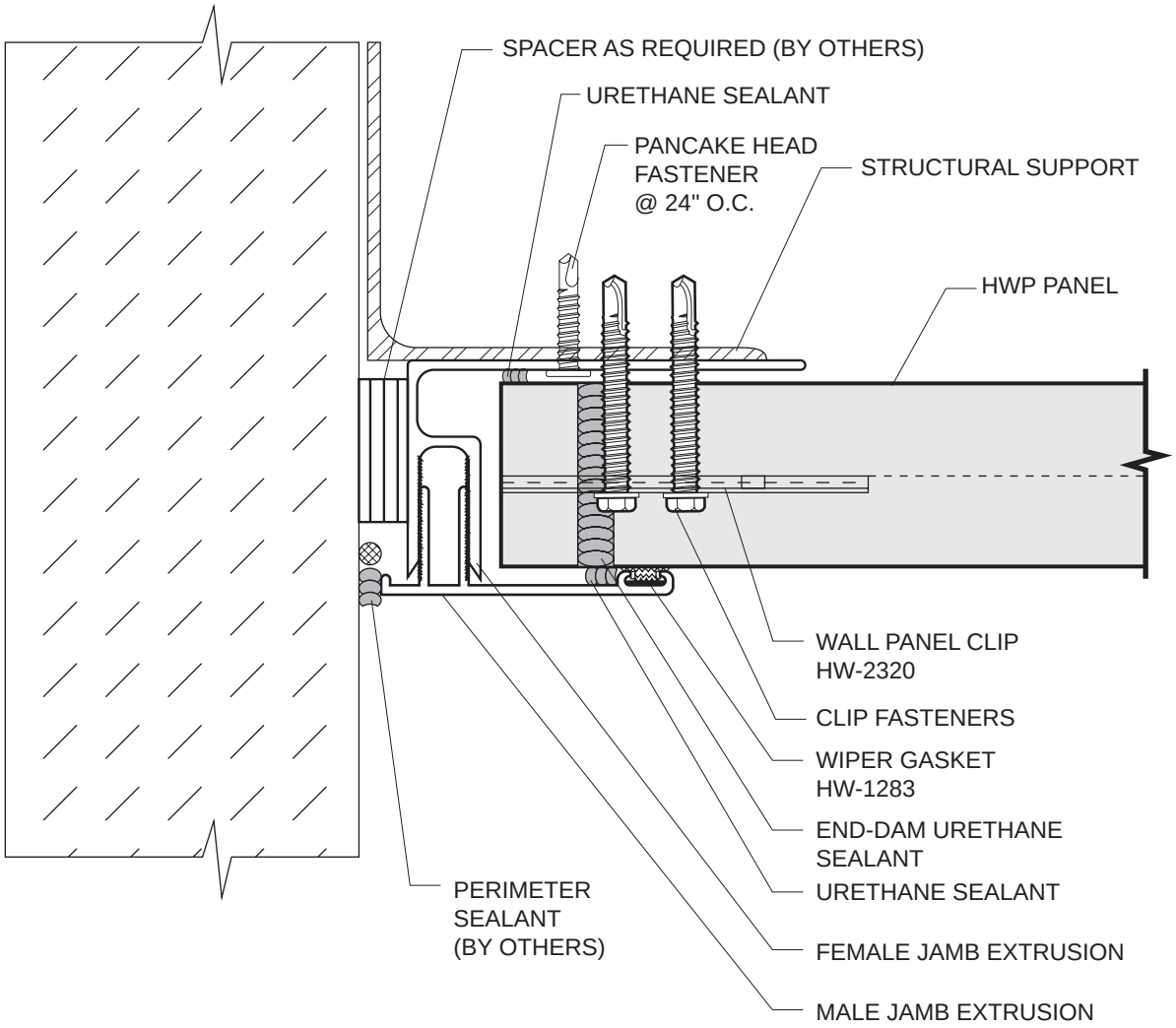
ARCHITECTURAL DETAILS HWP

WALL TERMINATION WITH EXTRUSION



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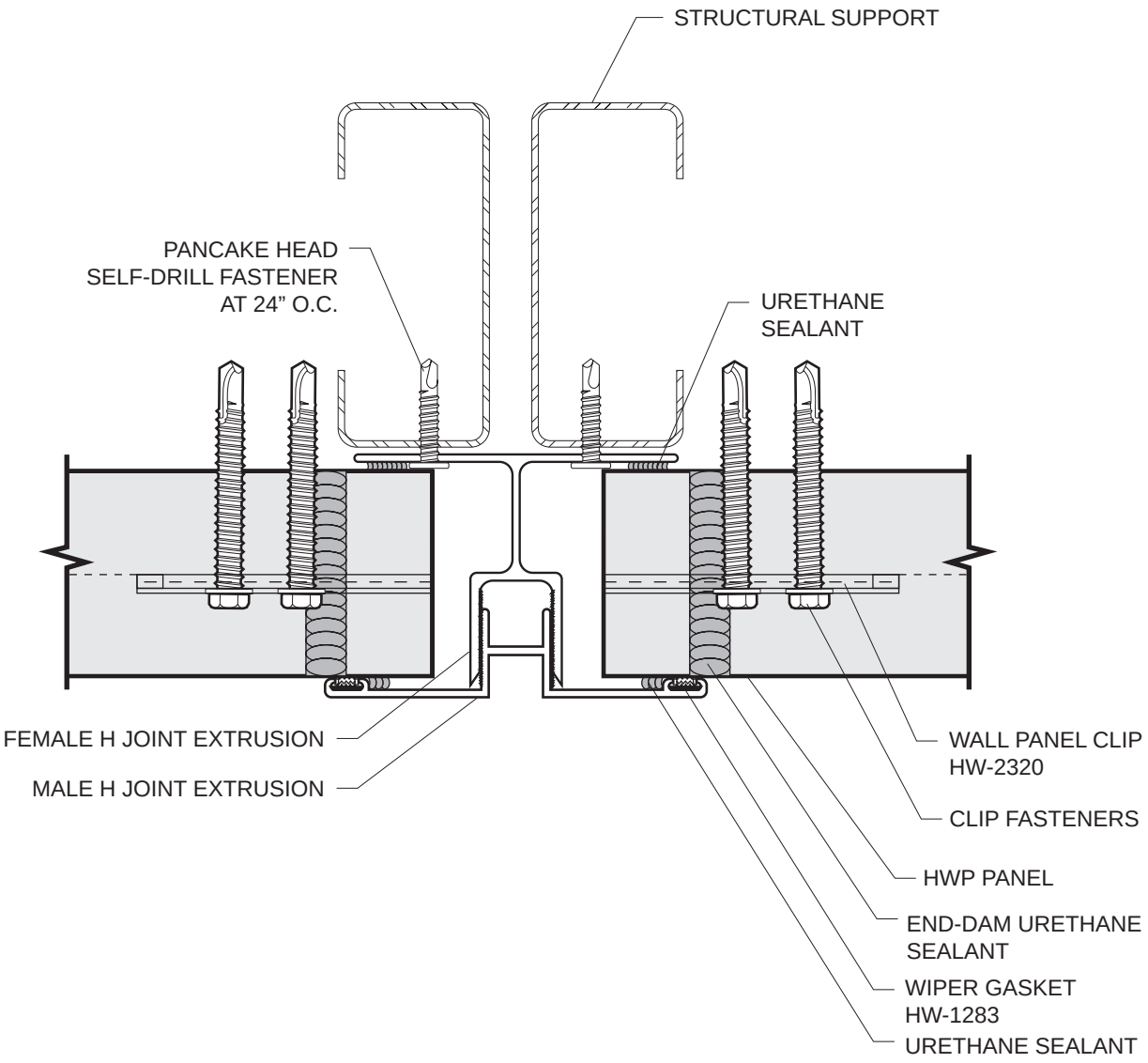
HWP ARCHITECTURAL DETAILS

BUTT JOINT WITH EXTRUSION



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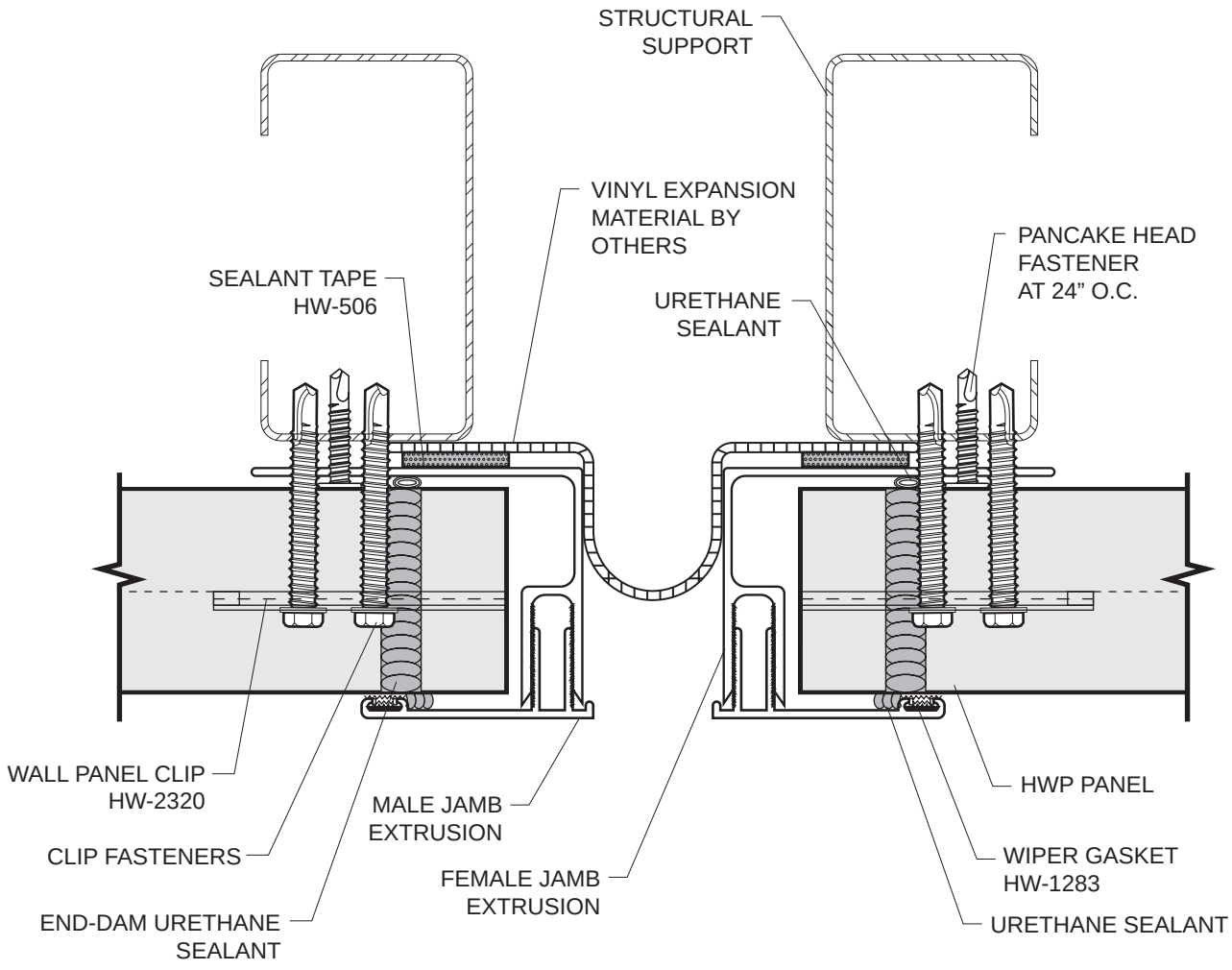
EXPANSION JOINT WITH EXTRUSION



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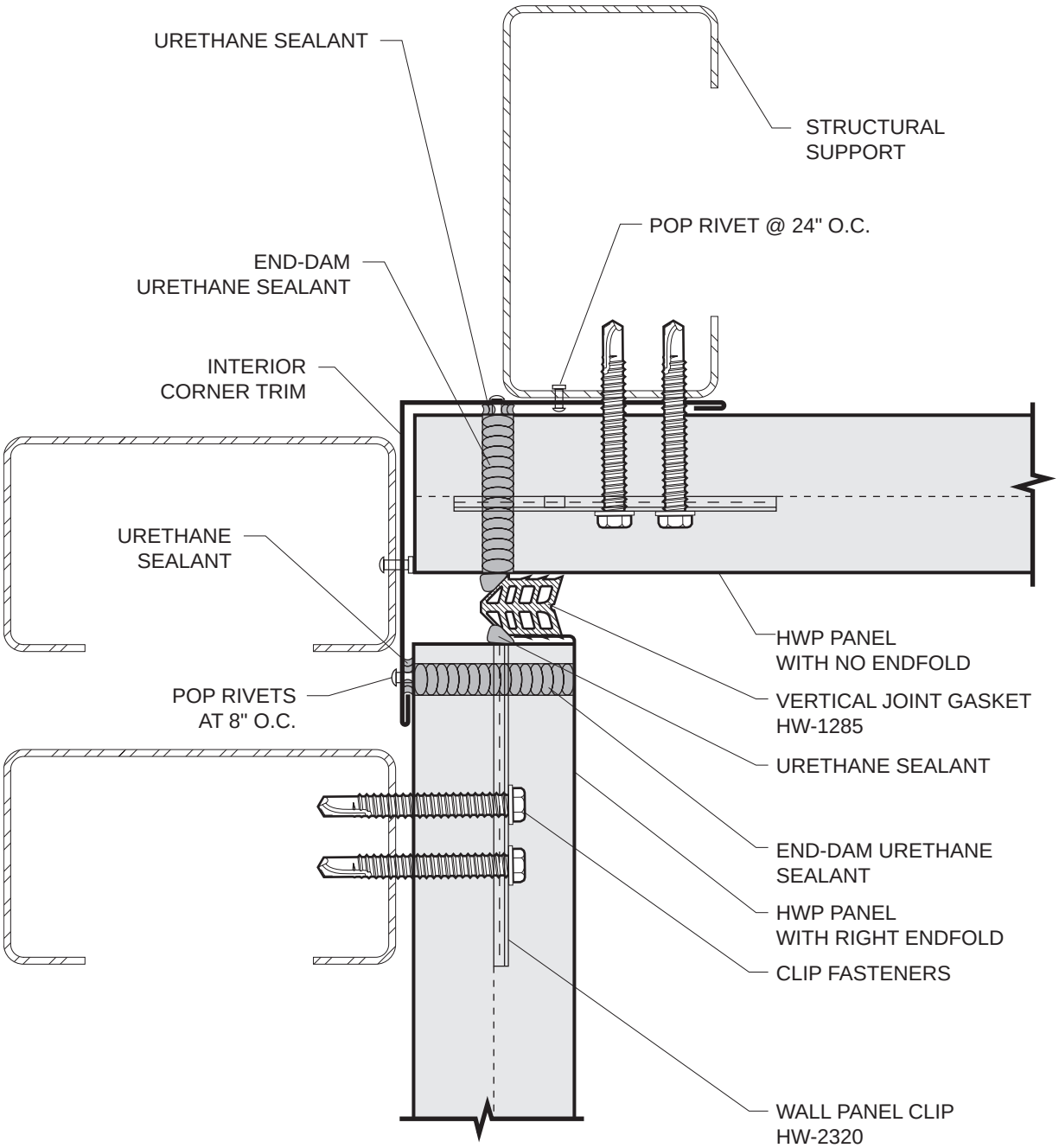
HWP ARCHITECTURAL DETAILS

INSIDE CORNER WITH JOINT GASKET



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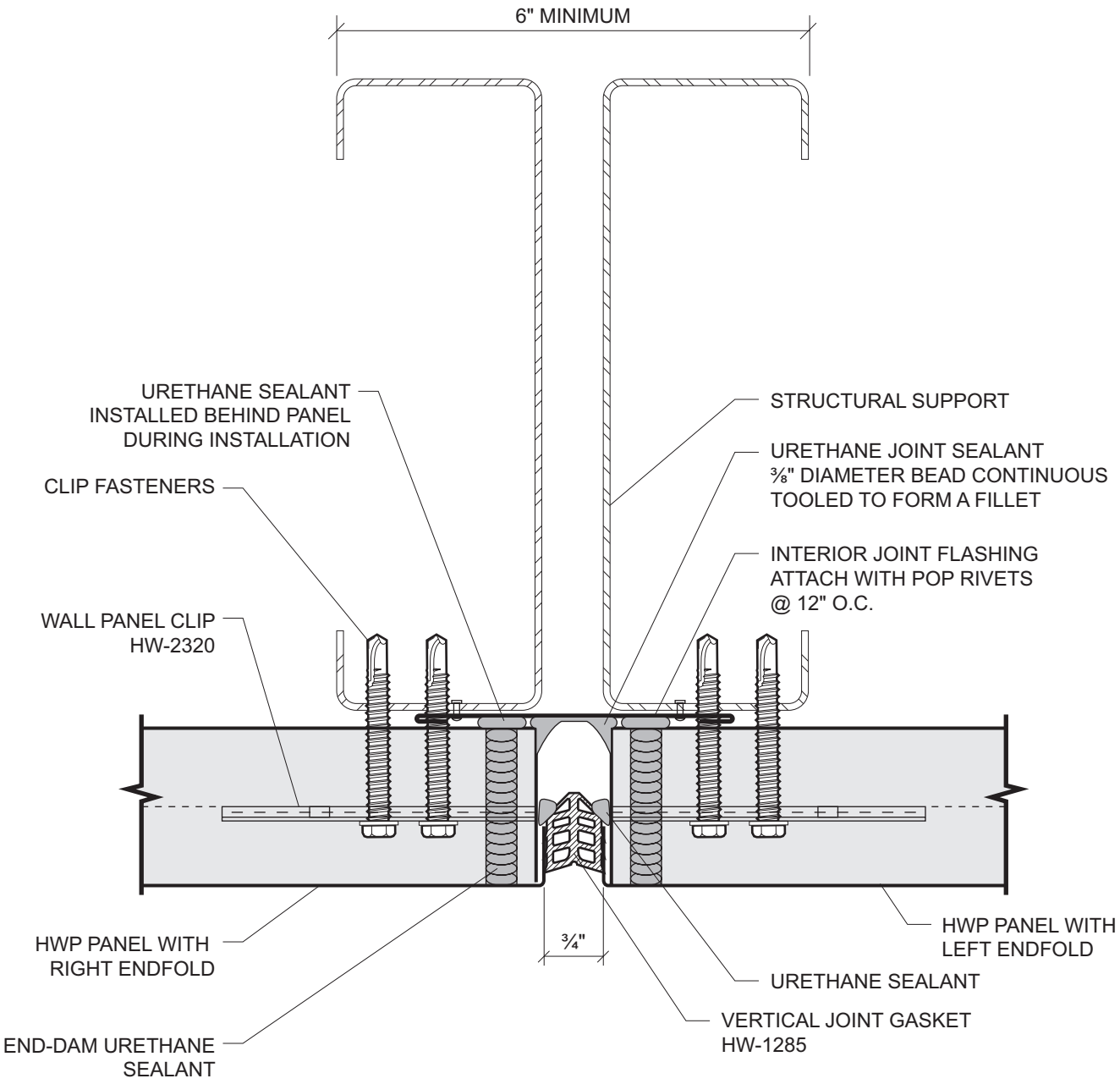
BUTT JOINT WITH JOINT GASKET



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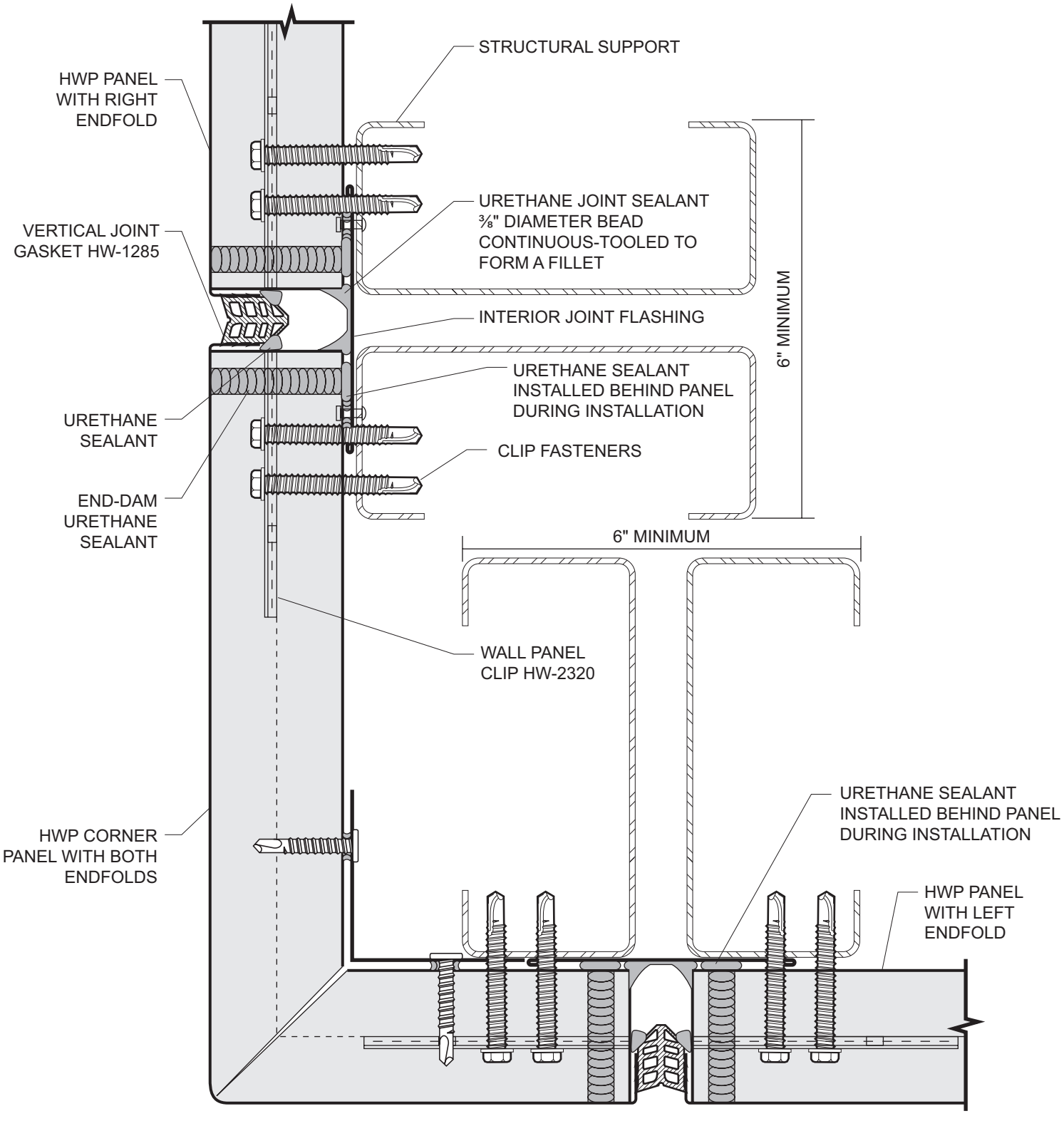
HWP ARCHITECTURAL DETAILS

FACTORY FORMED OUTSIDE CORNER



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