

PRE-FAB/OFFSITE

Supplemental Guide for AWP Installation

This document is intended to supplement the main Nichiha Architectural Wall Panel (AWP) installation guides, which can be found on our website, along with all other technical documents such as technical bulletins, architectural details, instructional videos, and code compliance reports and approvals: [Nichiha.com/resource-center](https://www.nichiha.com/resource-center).

Install products in accordance with the latest installation guidelines and all applicable building codes and other laws, rules, regulations, and ordinances. Review all installation instructions, [Intertek CCRR-0299](#), and other applicable product documents before installation. This document's effective date is June 2026.

TECHNICAL DESIGN REVIEWS

Please consult with Nichiha's Technical Department directly before installation of AWP on offsite modular or panelized exterior walls. In order to maintain the Product Warranty, a full technical review is required.

WALL ASSEMBLY OPTIONS & REQUIREMENTS

The wall assembly requirements to enable AWP installations on pre-fab construction are essentially the same as presented in the horizontal and vertical AWP installation guides. Framed exterior wall partitions will need minimum 18 gauge steel or 2X wood studs spaced no more than 16" oc. Exterior continuous insulation may require furring or a nail-base insulated sheathing option.

Please refer to the appropriate document(s) and review *Framing & Sheathing Requirements* and *Continuous Insulation & Furring* sections of AWP Installation Guides. Wall assemblies are a key focus during the Technical Design Review.

BEST PRACTICES & DESIGN

At vertical mate lines, panel edges will be aligned and stabilized by sealant backers or metal trims, which protect against lateral movement during module transportation. Trims are available in one-piece and two-piece construction.

At terminations along unit joints, panel edges will need to be cut flat, removing any factory shiplap. All cut edges must be coated with color matching exterior acrylic latex paint to protect the panels from moisture exposure.

Whenever AWP 1818 vertical shiplap joints are utilized, the Joint Tab Attachments (included with Ultimate Clips) are required. Refer to the AWP 1818 installation steps in the *Horizontal Install Guide*. The Joint Tabs are also utilized in a customized manner for the Partial Onsite method for stacked layouts of 1818mm panels, presented later in this document.

PANELIZED EXTERIOR WALLS - AWP are normally installed on vertical walls (i.e. erected structures). Particularly with horizontally-oriented AWP, gravity assists the installer to seat the panels on the Starter Track and Ultimate Clips. So whenever possible, it is recommended that offsite installation on prefab panelized walls be done with the walls **set vertically**. Horizontal (tabletop) installation can be done, but extra care must be taken to properly seat/fit the panels tightly at their shiplap joints. Utilize wood blocks and rubber mallets, tapping panels on their edges, to persuade them into place.

TRANSPORTATION & MOVEMENT

Crane lifting, loading, and setting of prefab units using balanced top-side load point connections is recommended over other methods such as forklifts.

Air suspension truck trailers are essential to preventing damage of installed finishes related to jarring movements and harsh vibrations caused by roadway imperfections and unfinished job sites.

Any straps or cords utilized during unit transportation can vibrate or flutter. Therefore, particularly at any buckles or latches, it is recommended that foam insulation board be used to protect the installed AWP against impact damage.

Nichiha is not responsible for transportation, movement, or installation-related product or finish damage. AWP are a finished product and must be protected accordingly.

COMPLETE OFFSITE PRE-INSTALLATION - HORIZONTAL AWP

The Complete Offsite approach allows for full pre-installation of Nichiha AWP in a factory setting. The AWP on each module or wall panel are detailed to make them independent of AWP on other prefab units. This is accomplished with specialized vertical and horizontal unit joints. Otherwise, standard installation practices are followed. Note: this approach does not allow for repair/proper jointing of the WRB between unit joints.

Vertical Mate Lines

See Detail A. Along the vertical (perimeter) edges of the prefab unit, install J-Mold trim. Position the trim 3/16" in from the vertical edges of each unit. This will create a 3/8" sealant joint when the units are set at the final jobsite. The J-Molds will prevent the AWP from shifting laterally during transport.

Horizontal Plate Lines

See Detail B. At each floor line, the top edge of the wall will be finished using face fasteners. At the base of the second story unit and thereafter up to and including the parapet wall, utilize a two-piece compression flashing base. Two-piece compression flashing base can be temporarily tacked in place using roofing nails, with permanent fastening being completed later on when the Starter Track is installed.

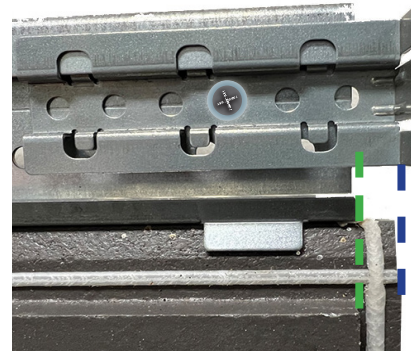
PARTIAL ONSITE COMPLETION - HORIZONTAL AWP

The Partial Onsite approach allows for majority installation in an offsite factory setting, leaving off AWP adjacent to unit joints so that limited installation is required at the jobsite. Note: this approach allows for repair/proper jointing of the WRB between unit joints.

AWP 1818 - STACKED

Vertical Mate Lines

See Details C and E. Working from left to right, install the AWP normally until reaching the next to last panel, leaving off the last panel that will span the vertical mate line at the jobsite. Secure the next to last panel with an Ultimate Clip positioned to align with the edge of the **face** of the panel. The shiplap (to be covered by the last panel) will protrude to the right. It is 3/8" (10mm) wide and features the sealant gasket. After positioning and fastening the clip to the framing or furring, next add a Joint Tab Attachment to extend to the right with the forward facing flanges aligning with the edge of the **shiplap**. This will serve as a lateral movement stop for the second course of panels. **Fasten the Joint Tab Attachment to the Ultimate Clip with the provided fastener (pictured below).** Repeat this step as the stack of AWP builds upward. The left side of the next unit will utilize a continuous Sealant Backer joint at the starting point just to the right of the mate line.

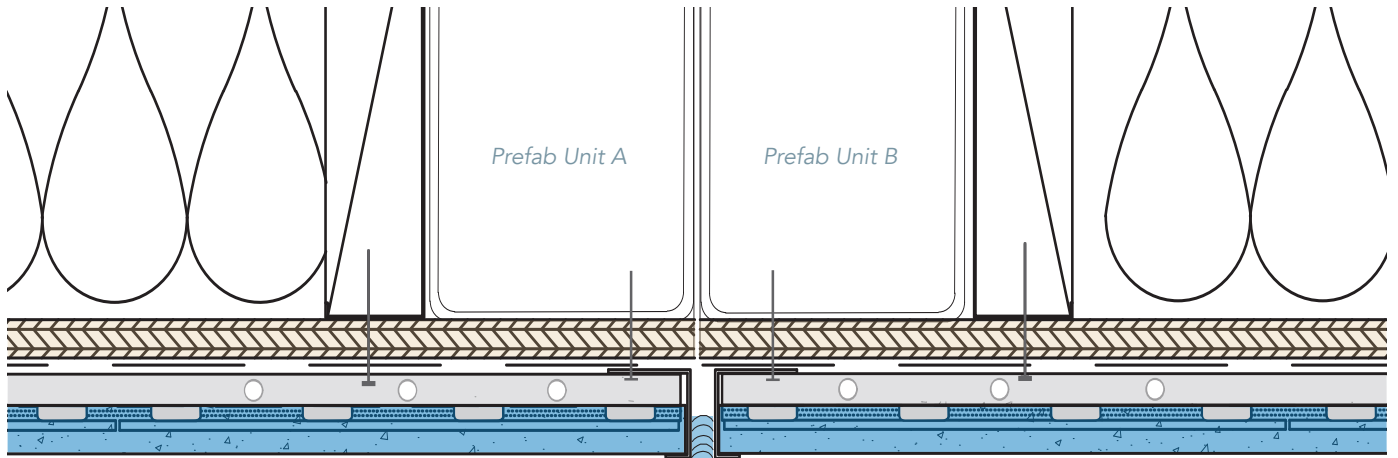


Align Joint Tab flange with the edge of the shiplap.

Horizontal Plate Lines

See Detail G. When work reaches the next to last course at the top of the unit, secure the next-to-last panels normally with Ultimate Clips, leaving the clips exposed below the horizontal plate line. At the bottom of the unit to be stacked above, install a two-piece compression joint base, positioned above the plate line. Install Starter Track and AWP normally above, but including the special step with Joint Tabs for the last right side panels adjacent to the vertical mate line. At the jobsite, measure and cut the fill-in panels to span across the horizontal plate line once the WRB has been repaired/jointed. Face fasten the top of the panel through 10mm Spacer. Install the compression flashing face to complete the compression joint.

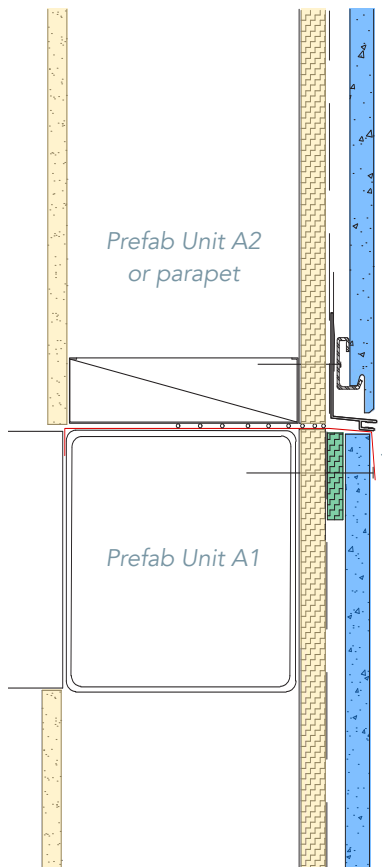
Detail A - Vertical Mate Line - Complete Offsite Pre-Installation



Install Horizontal AWP on Horizontal Starter Track (FA700) and Ultimate Clips.

Cap the panels with J-mold trims at the vertical mate line, leaving a 10mm gap for sealant between the trims. Sealant will be applied after modules are assembled in the field.

Detail B - Horizontal Plate Line - Complete Offsite Pre-Installation

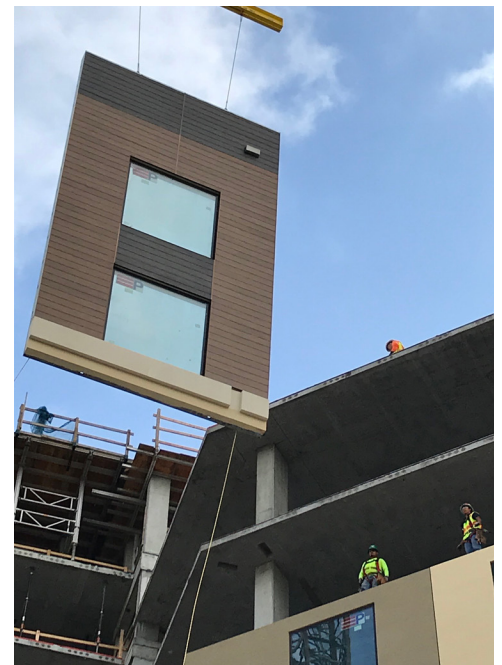


Install Horizontal AWP on Starter Track (FA700) and Ultimate Clips above Compression Flashing base plate.

Horizontal plate line covered by two-piece compression flashing. Base trim can be installed in-factory. Outer face can be snapped into place after modules are assembled in the field.



Vertical Mate Line at jobsite prior to the addition of sealant.



AWP 3030 - STACKED

Vertical Mate Lines

See *Detail F*. With 3030mm panels, all vertical joints are aligned/stacked. Use a Single or Double Flange Sealant Backer or Two-piece H-Mold trim base as the stopping point, leaving a gap at the vertical mate line. To complete the installation in the field, install AWP 3030 normally to cover the unit vertical joint, and apply sealant or install the H-mold face plate to close off the joint..

Horizontal Plate Lines

See *Detail G* and follow the same steps as with AWP 1818 - Stacked.

AWP 1818 - STAGGERED

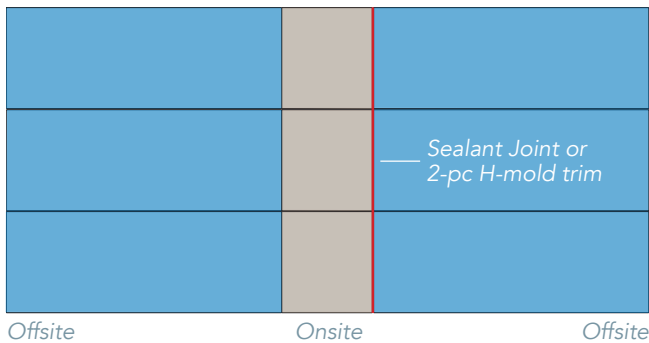
Vertical Mate Lines

See *Details D and F*. Working from left to right, install the AWP normally until reaching the next to last panel, leaving off the last panel that will span the vertical mate line. Remove the right-side (with sealant gasket) vertical shiplap edge and then secure the next to last panel with an Ultimate Clip positioned to align with the edge of the face of the panel. Add a Single or Double Flange Sealant Backer. The panels will all terminate at the same continuous line and the Sealant Backer will aid in preventing lateral shifting of AWP during transportation. The starting point for panels on the adjacent unit will also be a Nichiha Sealant Backer. The panel that spans the vertical mate line will have this sealant joint on both vertical edges.

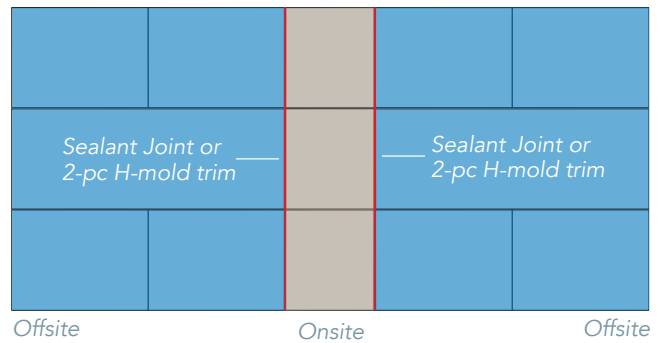
Horizontal Plate Lines

See *Detail G* and follow the same steps as with AWP 1818 - Stacked.

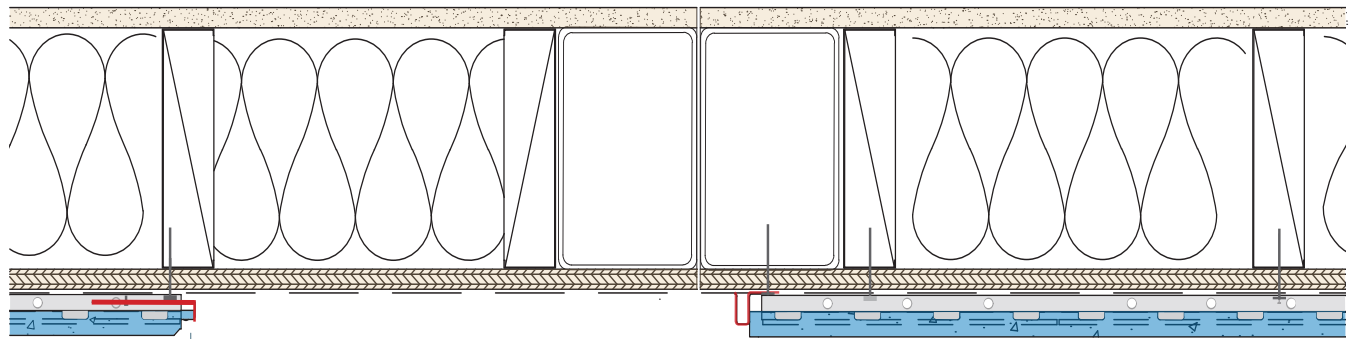
Detail C - Elevation/Layout - 1818 Stacked



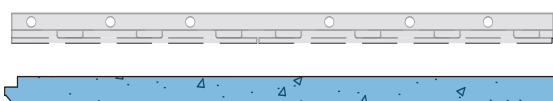
Detail D - Elevation/Layout - 1818 Staggered



Detail E - Vertical Mate Line - Partial Onsite Completion - AWP 1818 Stacked



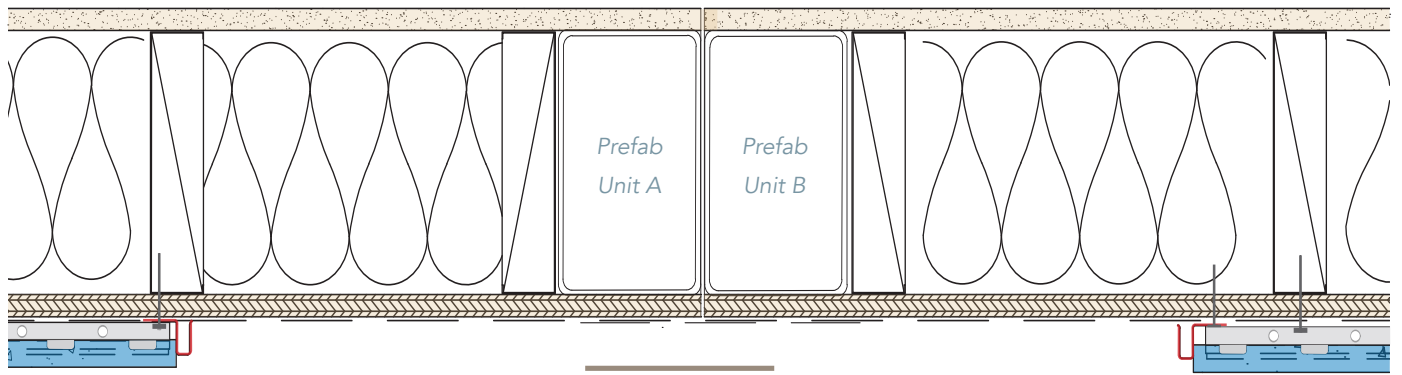
Offsite/in-factory: install AWP with a Joint Tab Attachment as the stopping point.



Offsite/in-factory: install AWP with a Nichiha Sealant Backer as the starting point.

At the final jobsite: repair WRB, install AWP on Horizontal Starter Track (FA700) and Ultimate Clips (cut as needed), and apply sealant.

Detail F - Vertical Mate Line - Partial Onsite Completion - AWP 1818 Staggered and AWP 3030 Stacked

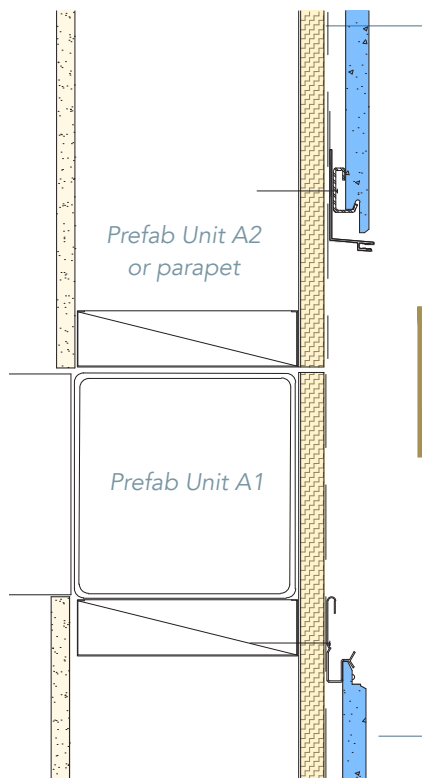


Offsite/in-factory: install AWP with a Nichiha Sealant Backer as the stopping point.

At the final jobsite: repair WRB; install AWP on Horizontal Starter Track (FA700) and Ultimate Clips over the Vertical Mate Line between prefab units.

Offsite/in-factory: install AWP with a Nichiha Sealant Backer as the stopping point.

Detail G - Horizontal Plate Line - Partial Onsite Completion



Offsite/in-factory: install AWP on Horizontal Starter Track (FA700) and Ultimate Clips over Two-piece Compression Flashing base.

At the final jobsite: repair WRB, install 10mm Spacer, and face fasten AWP to cover the Horizontal Plate Line. Compression Flashing face plate can be snapped into place after the final panel is installed.

Offsite/in-factory: install AWP on Horizontal Starter Track (FA700) and Ultimate Clips.

COMPLETE OFFSITE PRE-INSTALLATION - VERTICAL AWP 3030

The Complete Offsite approach allows for full pre-installation of Nichiha AWP in a factory setting. The AWP on each module or wall panel are detailed to make them independent of AWP on other prefab units. This is accomplished with specialized vertical and horizontal unit joints. Otherwise, standard installation practices are followed. Notes: this approach does not allow for repair/proper jointing of the WRB between unit joints. The vertical AWP details here depict continuous insulation and furring and the *horizontal hat channel furring* approach. The Structural Sheathing Method may also be followed. Refer to *Framing and Sheathing Requirements* section of the *AWP Vertical Installation Guide* for wall assembly options and requirements.

Vertical Mate Lines

See Detail H. Along the vertical (perimeter) edges of the prefab unit, install J-Mold trim. Trims are available in one-piece and two-piece construction. Position the trim 3/16" in from the vertical edges of each unit. This will create a 3/8" sealant joint when the units are set at the final jobsite. Cut the last vertical panel to the necessary width and secure the cut edge normally with face fasteners through 10mm Spacer into the framing or furring. Always keep face fasteners 1" away from cut edges.

Horizontal Plate Lines

See Detail I. Fit and install AWP on the lower module just below the horizontal plate line. At the base of the second story unit and thereafter up to and including the parapet wall, utilize a two-piece compression flashing base. Two-piece compression flashing base can be temporarily tacked in place using roofing nails, with permanent fastening being completed later on when the Starter Track is installed.

PARTIAL ONSITE COMPLETION - VERTICAL AWP 3030

The Partial Onsite approach allows for majority installation in an offsite factory setting, leaving off AWP adjacent to vertical mate lines/horizontal plate lines so that limited installation is required at the jobsite. Note: this approach allows for repair/proper jointing of the WRB between unit joints.

Vertical Mate Lines

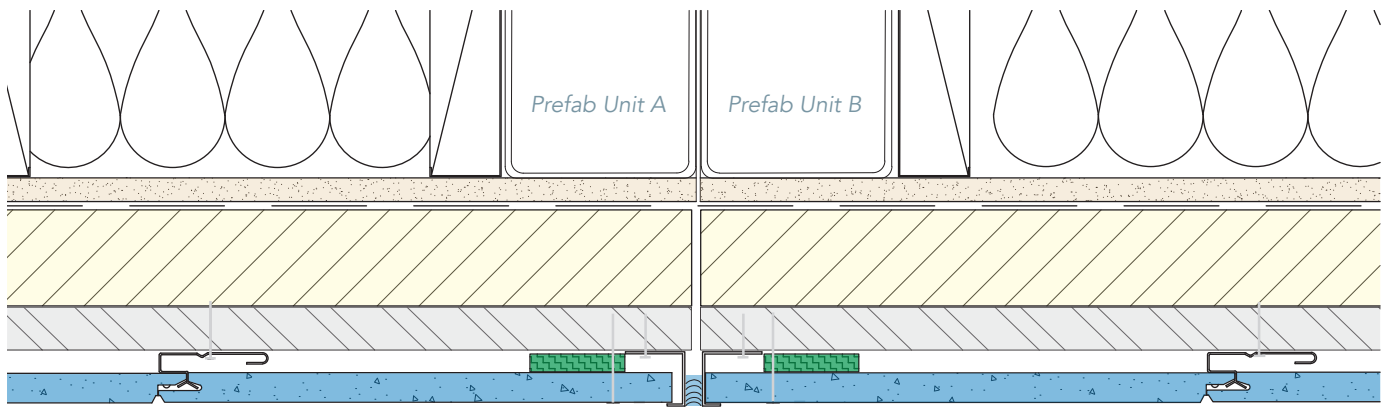
See Detail J. Working from left to right, install the AWP normally until reaching the next to last panel, leaving off the last panel that will span the vertical mate line. Secure the next-to-last panel with Ultimate Clips, leaving clips on the right side exposed. This will serve as a lateral movement stop. On the next module to the right, begin with a Nichiha Sealant Backer just to the right of the vertical mate line. Face fasten the left edge of the first panel and proceed with install from left-to-right using Ultimate Clips.

Horizontal Plate Lines

See Detail K. Install vertical AWP normally and cap the course with Compression Joint Flashing (below the horizontal plate line). At the jobsite, repair/joint the WRB between units per manufacturer best practices. Measure and cut the fill-in AWP to span across the horizontal plate line. Install normally with Vertical Starter Track (FA710T) and Ultimate Clips.



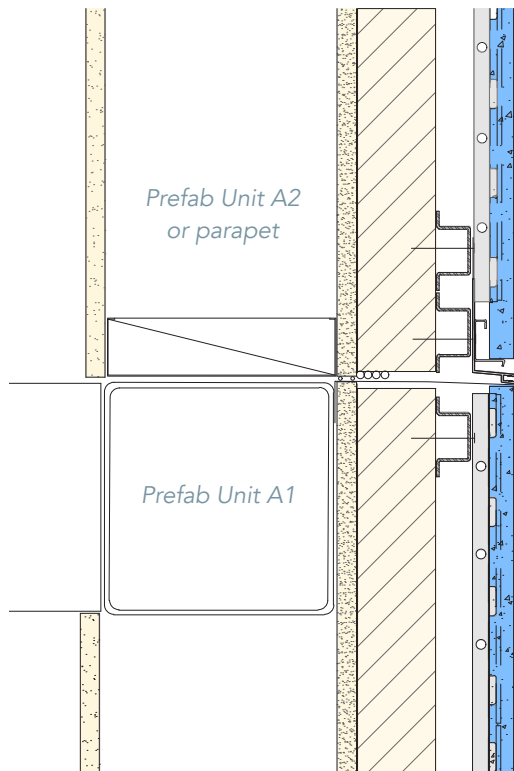
Detail H - (Vertical AWP) Vertical Mate Line - Complete Offsite Pre-Installation



Install Vertical AWP on Vertical Starter Track (FA710T) and Ultimate Clips. Refer to AWP Vertical Installation Guide for details on fastening schedule.

Cap the panels with J-mold trims at the vertical mate line, leaving a 10mm gap for sealant between the trims. Cut vertical edges are face fastened with bugle-head screws penetrating through the panel and 10mm Spacer into framing or furring. Sealant will be applied after modules are assembled in the field.

Detail I - (Vertical AWP) Horizontal Plate Line - Complete Offsite Pre-Installation

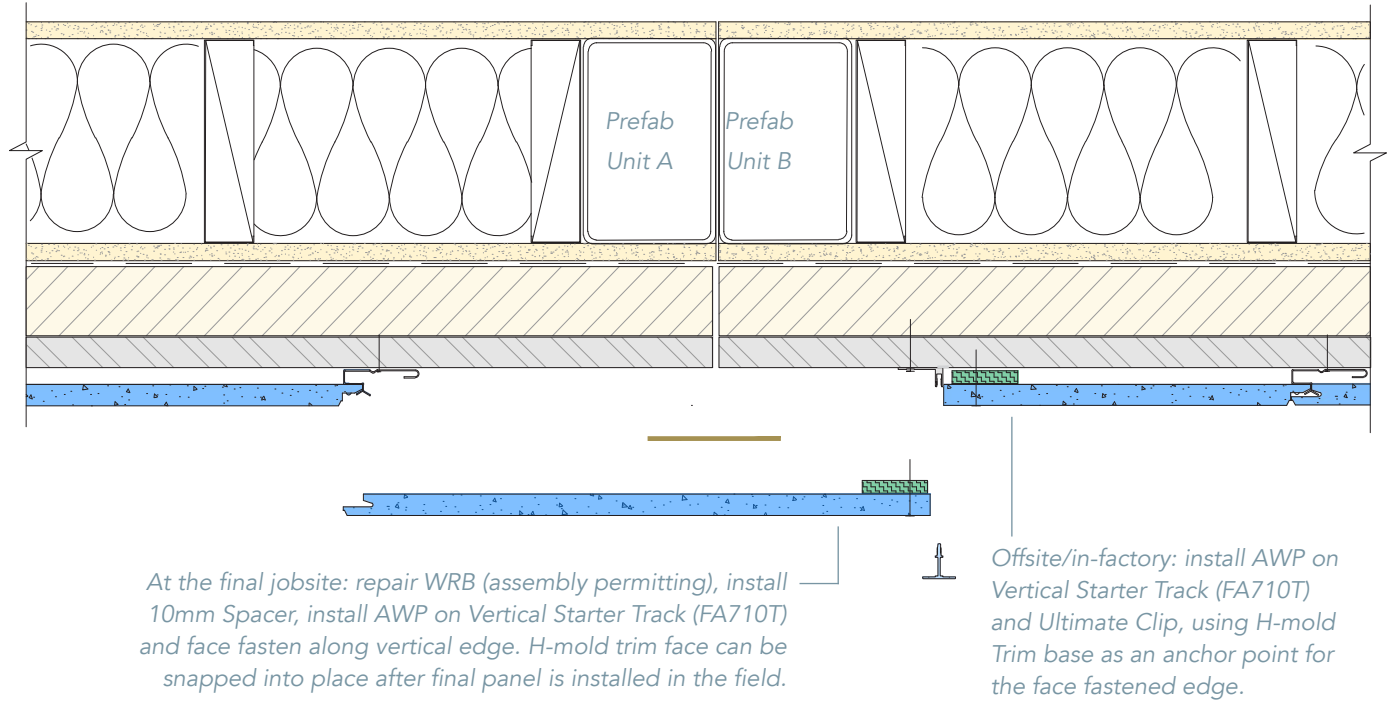


Offsite/in-factory: install AWP on Vertical Starter Track (FA710T) and Ultimate Clips above Two-piece Compression Flashing base.

At the final jobsite: Compression joint face plate can be snapped into place after modules are assembled in the field.

Offsite/in-factory: install AWP on Vertical Starter Track (FA710T) and Ultimate Clips. Refer to AWP Vertical Installation Guide for details on fastening schedule.

Detail J - (Vertical AWP) Vertical Mate Line - Partial Onsite Completion



Detail K - (Vertical AWP) Horizontal Plate Line - Partial Onsite Completion

