WoodWorks® Wall Panels

Assembly and Installation Instructions

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World Industries

Please completely read all instructions before beginning installation to avoid potential re-work.

1. GENERAL

1.1 Product Description

WoodWorks® wall panels consist of 2' × 4', 2' × 8', 2' × 9' or 2' × 10' perforated and unperforated panels (millwork quality) that are designed to be installed on an aluminum spline system or per the installing contractor's discretion with Z-Clips or another specified method.

1.2 Storage and Handling

Ceiling components should be stored in a dry interior location and should remain in cartons prior to installation to avoid damage. The cartons should be stored in a flat, horizontal position. The protectors between panels should not be removed until installation. Proper care must be taken when handling to avoid damage and soiling. Do not store in unconditioned spaces with humidity greater than 55% or lower than 25% RH and temperatures lower than 50°F or greater than 86°F. Panels must not be exposed to extreme temperatures, for example, close to a heating source or near a window where there is direct sunlight.

1.3 Site Conditions

WoodWorks wall panels should be permitted to reach room temperature and have a stabilized moisture content for a minimum of 72 hours before installation. (Remove plastic wrap to allow panels to climatize). They should not, however, be installed in spaces where the temperature or humidity conditions vary greatly from the temperatures and conditions that will be normal in the occupied space.

1.3.1 HVAC Design

Proper design for both supply air and return air, maintenance of the HVAC filters, and building interior space are essential to minimize soiling. Before starting the HVAC system, make sure air supply is properly filtered and the building interior is free of construction dust.

1.3.2 Temperature and Humidity During Installation

WoodWorks wall panels are interior finish products that are designed for installation to be carried out in temperature conditions between 50°F (10°C) and 86°F (30°C), in spaces where the building is enclosed, and HVAC systems are functioning and will be in continuous operation.

Relative humidity must not fall below 25% or exceed 55%. Additionally, the fluctuation in relative humidity should not vary more than 30% over the life of the wall panels. All plastering, concrete, terrazzo, or any other wet work should be completely dry. All window and doors must be in place. The heating, ventilation and air-conditioning system should be installed and operable where necessary to maintain proper temperature before, during and after installation of the WoodWorks panels.

1.4 Material and Surface Finish

Face cut veneer with clear or tinted semi-gloss coating.

1.5 Color

WoodWorks wall panels are made with a variety of real wood veneers. Natural variations in color and grain are characteristic of wood products. To maximize visual consistency, panels should be unpacked and examined collectively to determine the most desirable arrangement for installation. Where consistency is critical, Armstrong can offer custom solutions to meet your budget and aesthetic requirements. Consult HPVA for additional information on veneers and veneer grades.

IMPORTANT NOTE: For phase projects, it is recommended to work with your local rep to give advance notice prior to placing an order. This will allow the manufacturing facility to secure the quantity of material needed for your project and have the best chance to produce coordinating panels for a selected finish.

1.6 Ordering Considerations

Be sure to account for attic stock that is normally needed for wood installations. When installing WoodWorks wall panels, you should consider ordering at least 5% extra material. It is the customer's responsibility to plan each layout and order the correct amount of installation material needed, taking into account their design. If extra material is ordered after the first batch of material has been placed, panels will be produced to best coordinate with the finish of the first order, refer to section 5 for important notes for phase projects.

1.7 Cleaning

WoodWorks® wall panels can be vacuumed to remove dust or dirt from the panel face. For greasy fingerprints or stubborn stains, use a clean, dry, soft cloth. If needed, dampen a soft white cloth or sponge with mild detergent. Remember to wipe the panel face gently—avoid scrubbing.

2. DESIGN AND INSTALLATION CONSIDERATIONS

2.1 Panel Sizes Larger than 2' × 10'

Panels larger than 2' × 10' may not be installed using wall splines and must be custom ordered from Architectural Specialties.

2.2 Installation Method Options

2.2.1 Refer to Section 5 for Wall Splines Installation.

2.2.2 Refer to Section 6 for Z-Clip Installation.

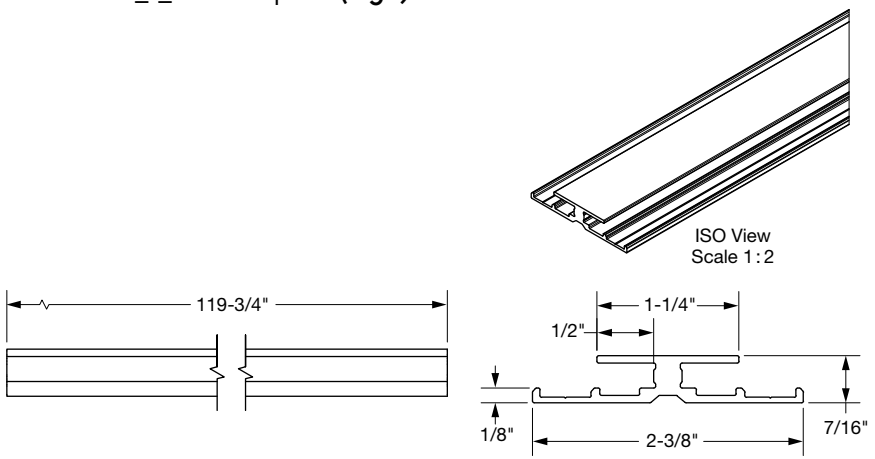
2.3 Micro-Perforated Panels

2.3.1 2' x 4' Micro-perforated panels are recommended for vertical installations only and should not be installed horizontally. For applications requiring horizontal panel orientation, the spline installation method is recommended.

2.3.2 When a project requires perimeter panels to be field-cut and installed using Z-Clips, WoodWorks® Walls micro-perforated border panels must be specified for those locations. These panels are specifically designed to accommodate field cutting while maintaining installation flexibility, allowing Z-Clips to be attached as required after cutting. Border panels are intended for perimeter applications only and are available exclusively for WoodWorks Wall Panels.

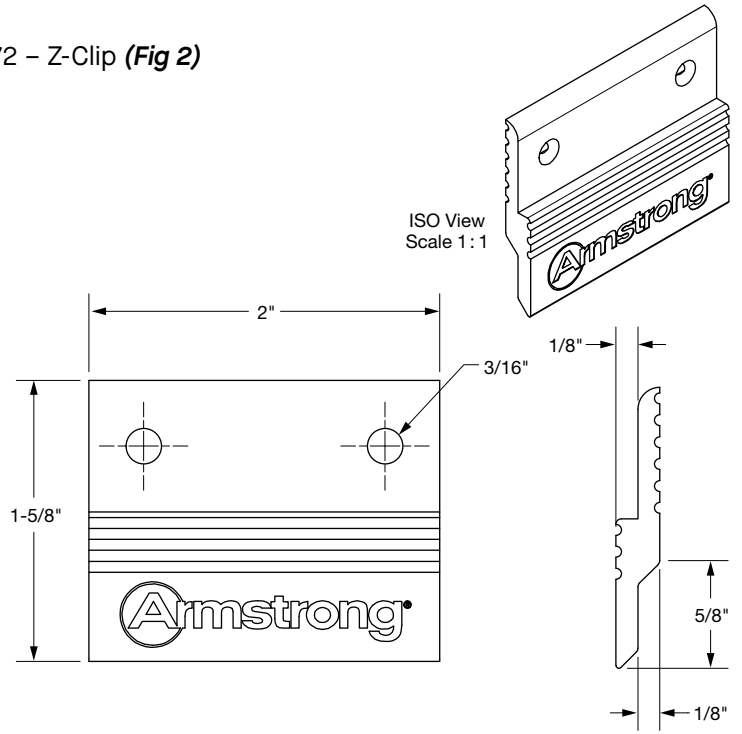
3. INSTALLATION COMPONENTS

3.1 663910_ _ – Wall Spline ***(Fig 1)***



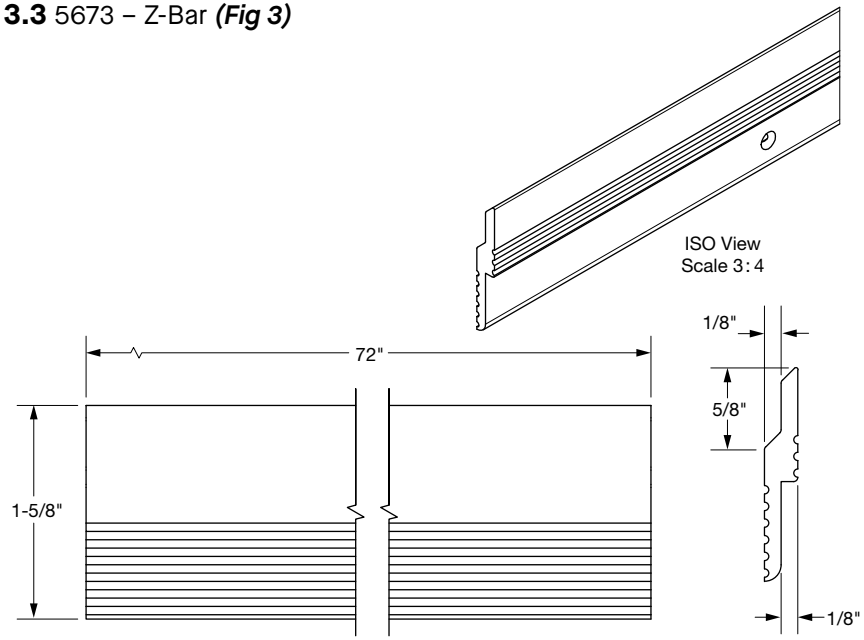
(Fig 1)

3.2 5672 – Z-Clip ***(Fig 2)***



(Fig 2)

3.3 5673 – Z-Bar ***(Fig 3)***

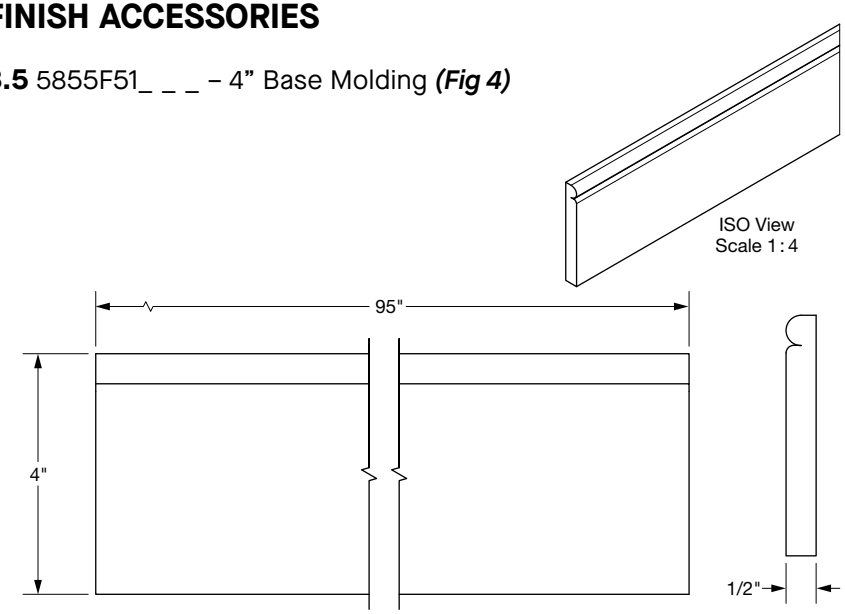


(Fig 3)

3.4 Horseshoe shims (by others) may be needed

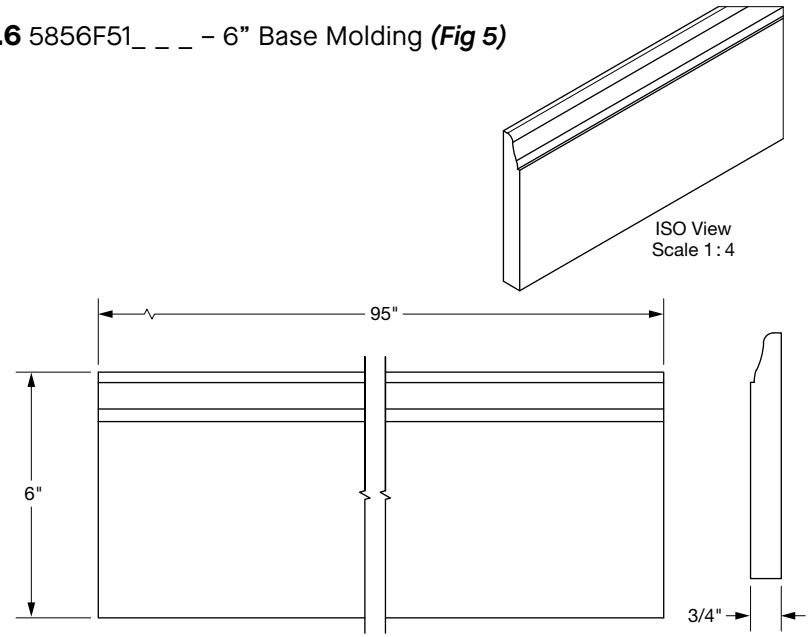
FINISH ACCESSORIES

3.5 5855F51_ _ _ – 4” Base Molding ***(Fig 4)***



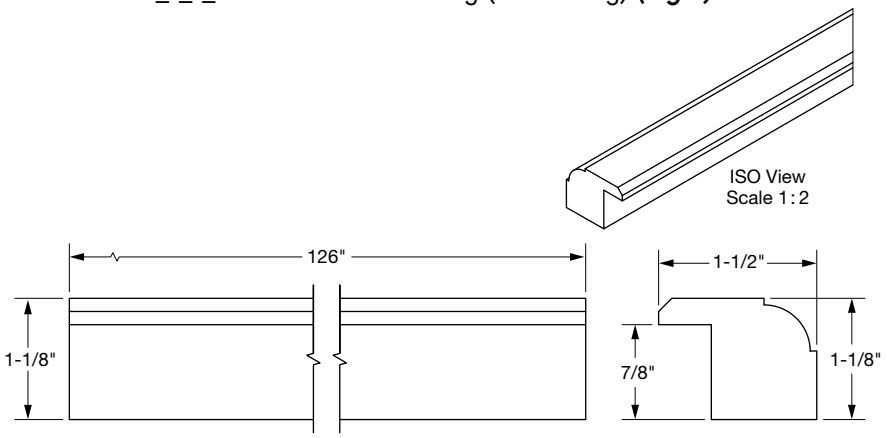
(Fig 4)

3.6 5856F51_ _ _ – 6” Base Molding ***(Fig 5)***



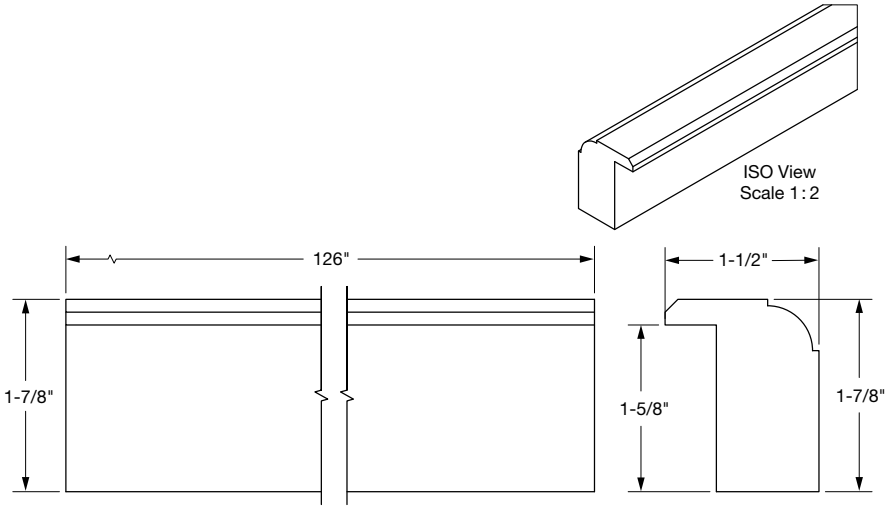
(Fig 5)

3.7 5849F51_ _ _ – Trim Finish Molding (No Furring) ***(Fig 6)***



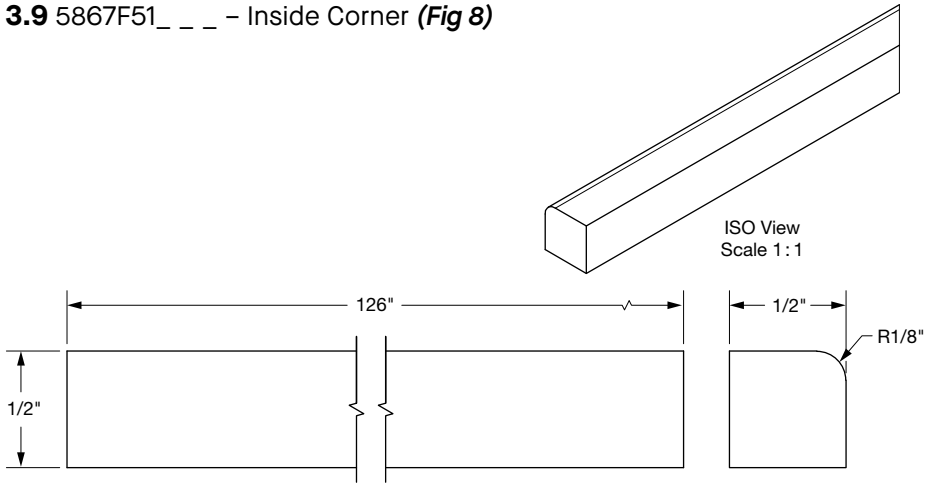
(Fig 6)

3.8 5907F51_ _ _ – Trim Finish Molding (With Furring) ***(Fig 7)***



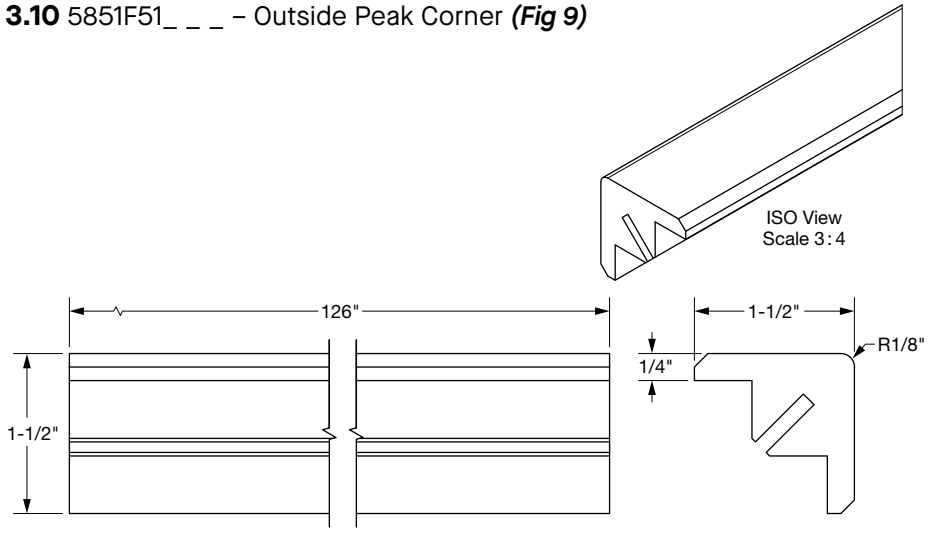
(Fig 7)

3.9 5867F51_ _ _ – Inside Corner ***(Fig 8)***



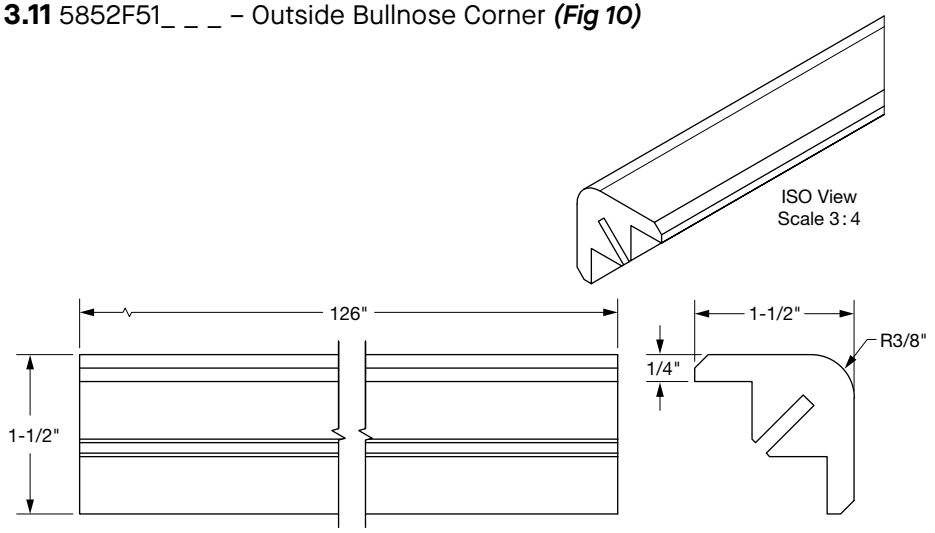
(Fig 8)

3.10 5851F51_ _ _ – Outside Peak Corner ***(Fig 9)***



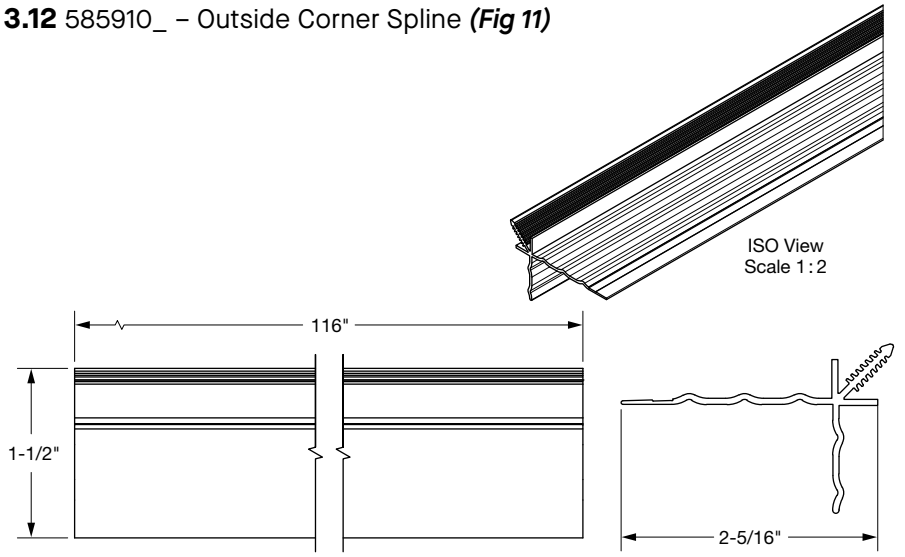
(Fig 9)

3.11 5852F51_ _ _ – Outside Bullnose Corner ***(Fig 10)***



(Fig 10)

3.12 585910_ – Outside Corner Spline ***(Fig 11)***



(Fig 11)

3.13 6408_ _ _ – Edge banding: To treat exposed edges of veneer panels

4. TOOLS AND CUTTING RECOMMEDATIONS

4.1 Tools

You'll need the following tools: utility knife, laser or other level, straight edge, drill with bits, screw gun, circular saw, wood cutting blade and metal cutting blade, jig saw, countersink, tape measure, pneumatic nail gun, and compressor. Always wear safety glasses and cut-resistant gloves when handling or cutting wood or metal.

4.2 Cutting Instructions for Wood Components

Circular saw – A circular saw makes a clean cut when the panel is cut from the back side. If the cut is made on the front side, there is too much splintering on the face due to the direction of the teeth on the blade. A considerable amount of dust is made with this cut.

CAUTION! WOOD DUST. Sawing, sanding, and machining wood products can produce dust. Airborne wood dust can cause respiratory, eye and skin irritation. The International Agency for Research on Cancer (IARC) has classified wood dust as a nasal carcinogen in humans.

Precautionary measures: If power tools are used, they should be equipped with a dust collector. If high dust levels are encountered, use an appropriate NIOSH-designed dust mask. Avoid dust contact with eyes and skin.

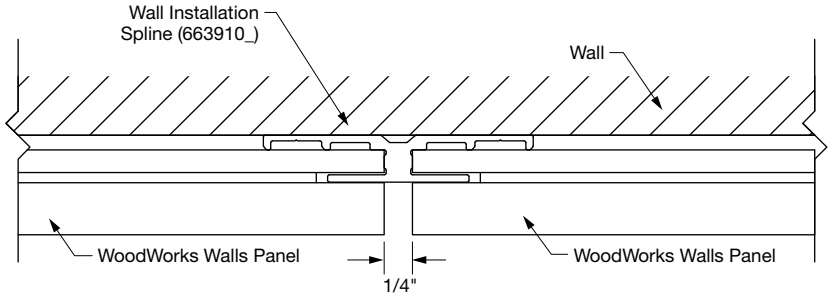
First Aid Measure in case of irritation: Flush eyes or skin with water for at least 15 minutes.

4.3 Cutting Instructions for Metal Components

Cutting the wall splines or Z-Bars can be done using standard tools and methods for cutting metal panels. It is recommended to use a metal cutting circular saw or band saw with a new non-ferrous metal cutting blade (consult blade manufacturer for specific recommendation). Depending on the quality of the cut, the cut edge may also need to be filed and deburred for a clean edge.

5. INSTALLATION USING WALL SPLINES

WoodWorks® wall panels, when installed with aluminum wall splines, follow a progressive installation process. To prevent re-work, read this entire wall spline installation section. Panels intended for wall spline installation have kerfs on all four edges to accommodate the wall spline. When aligning the vertical joints with a ceiling grid or another feature on a 2' or 4' module, keep in mind that the panels are 23-3/4" wide and work with splines that allow a 1/4" gap to maintain a 24" module ***(Fig 12)***.



(Fig 12)

5.1 Determine Width of Border Panels

If the installation of wall panels does not start and end against another wall, all of the panels should be full width.

If one or both ends of the installation are butted against other walls, it is unlikely that you will install all full-width panels. The panels at each end should be equal and should be as large as possible.

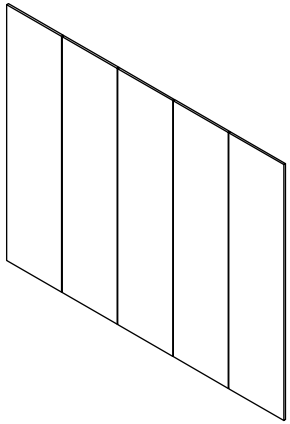
The panel O.C. spacing, counting the spline reveal, is 24". To calculate the width of the border panels, measure the length of the wall. Divide the room's measurement by 2'. Take the remainder, add 2', and divide in half. This is the width of the border panels.

EXAMPLE: If the room measures 17' 4", divide this by 2' and get eight full panels with a remainder of 1' 4". Dividing 1' 4" in half, results in 8" border panels which may be too small. To create larger border panels, add the dimensions of a full panel (2') to the 1' 4", which will get you 3' 4". Divide this in two to get 20" border panels, along with seven full panels.

5.2 Installation Configuration Option

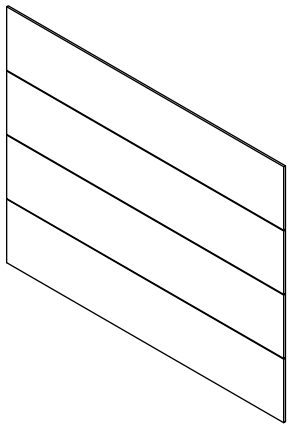
Each panel installation configuration has a recommended method for furring the wall and fastening the wall splines to structure. Refer to the section that best describes the configuration specified in the architectural drawing.

- **Vertical Panel Installation (Refer to Section 5.4)**
  A single panel is installed from floor to ceiling, and stacking only occurs horizontally across the wall ***(Fig 13)***.



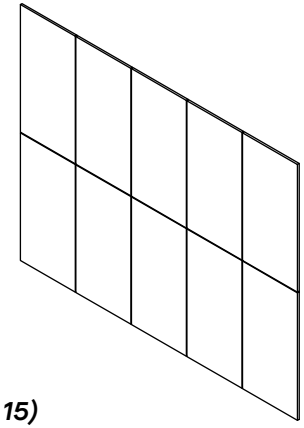
(Fig 13)

- **Horizontal Panel Installation (Refer to Section 5.5)**
  A single panel is installed from wall to wall, and stacking only occurs vertically (from floor to ceiling) ***(Fig 14)***.

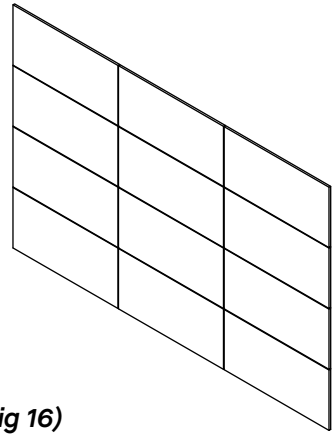


(Fig 14)

- **Vertical/Horizontal Stacking Installation (Refer to Section 5.6)**
  Panels are oriented either vertically or horizontally, and stacking occurs in both directions (vertically and horizontally) across the wall ***(Figs 15 & 16)***.



(Fig 15)

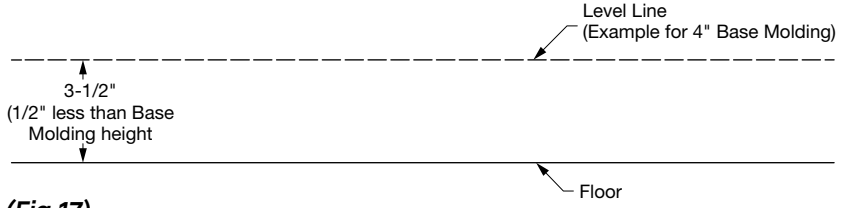


(Fig 16)

IMPORTANT NOTE: Follow the instructions for establishing a level line and mounting the "ground strip" as shown in Section 5.3.1 regardless of the installation configuration being installed.

5.3 Establishing a Level Line & Furring the Wall

Establish a level line along the wall near the floor as a base for the wall panels. Make sure it sits at least 1/2" inch lower than the finished height of the base molding you plan to use (4" or 6" molding) ***(Fig 17)***. When using a perforated panel, consider where base molding will fall in relation to perforated area vs. solid border.

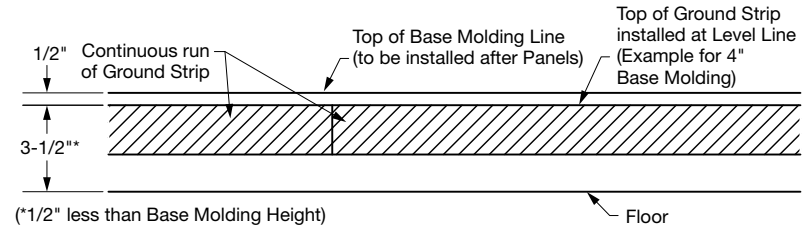


(Fig 17)

NOTE: Ensure that the level line does not exceed the height of the base molding. If the floor is extremely out of level, you may have to strike more than one level line to accommodate the floor slope. This would result in a "stepped" level line. If the level line is "stepped", the step must occur between panels. Refer to Section 5.3.1 for more detail.

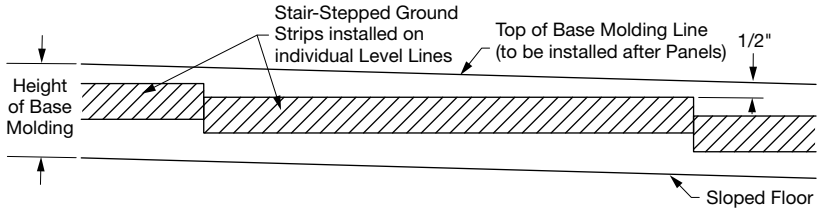
5.3.1 Installing the Ground Strip

Regardless of whether there's furring, a "ground strip" is required for all installations. Use 3/4" thick lumber (provided by others) for this step. The width of the lumber should be 2" to 4", depending on slope conditions and base molding height. This lumber (ground strip) will serve as the base for the wall panels. Align the top of the "ground strip" with the established level line. Ensure the "ground strip" is installed level to keep the panels plumb and secure the "ground strip" firmly to the structure using appropriate fasteners ***(Fig 18)***.



(Fig 18)

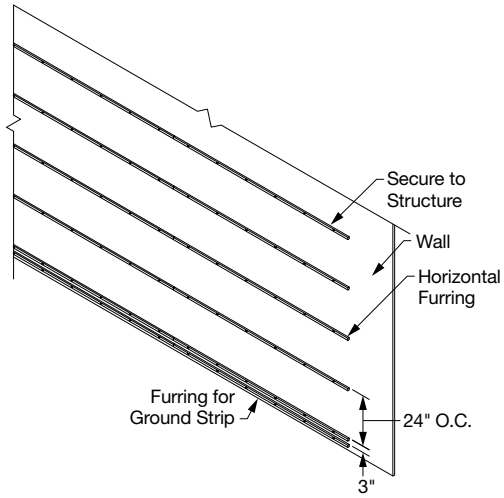
If the floor is significantly uneven, consider stepping the "ground strip" ***(Fig 19)***.



(Fig 19)

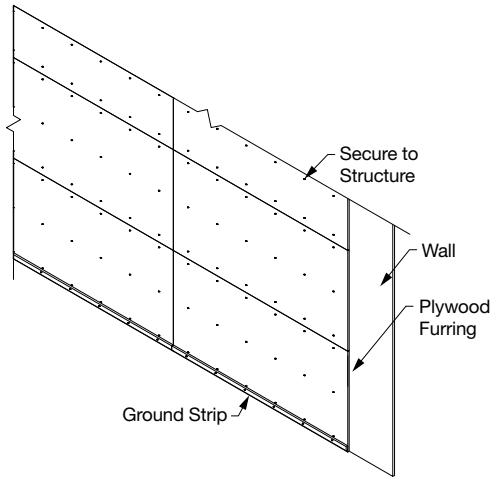
5.3.2 Furring the Wall

All wall splines require secure attachment to the wall structure. Depending on the installation, this may involve framing that runs perpendicular to the wall spline or installing 3/4" plywood across the entire wall to create a solid attachment point for all the splines. Refer to architectural drawing and confirm the direction of the wall spline for your installation and frame out accordingly. Horizontal wall installation normally does not require furring since splines will run perpendicular to wall studs. For installations requiring furring, the first row of furring should be placed 3" above the baseboard. Then secure rows of furring every 24" O.C. and within 3" of the top ***(Figs 20 & 21)***.



Furring for Vertical Panel Installation

(Fig 20)



Furring for Vertical/Horizontal Stacking Installation

(Fig 21)

Consider the furring needed behind the "ground strip" to flush out with the face of the wall panel.

When installing panels using splines mounted on furring, the 4" or 6" baseboard trims can be used for a finished look.

5.4 Vertical Panel Installation

Follow the instructions for establishing a level line, mounting the “ground strip” and furring as described in Section 5.3.

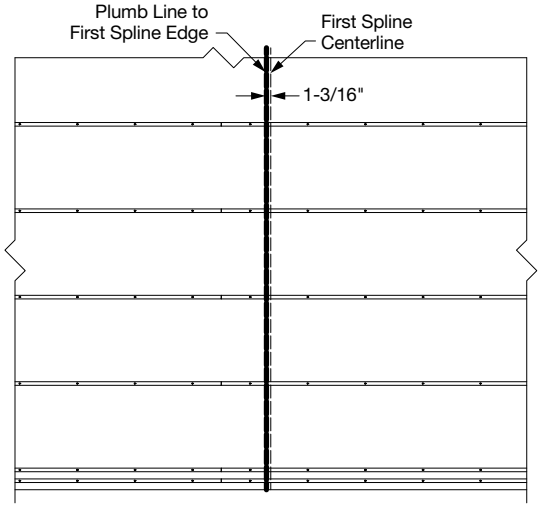
5.4 Laying Out the Wall

Begin by identifying the center point of the wall where panel installation is recommended to begin. Measure to the end of your wall installation to determine proper border panel sizes. Based on border panel size the center point of the wall will typically fall at the center of a panel or the center of a spline.

Consider other factors, such as wall panel alignment with ceiling features. If vertical joints between panels need to align with ceiling features recurring on a 2' (or multiple of 2') module, adjust the length or width of the first panel accordingly.

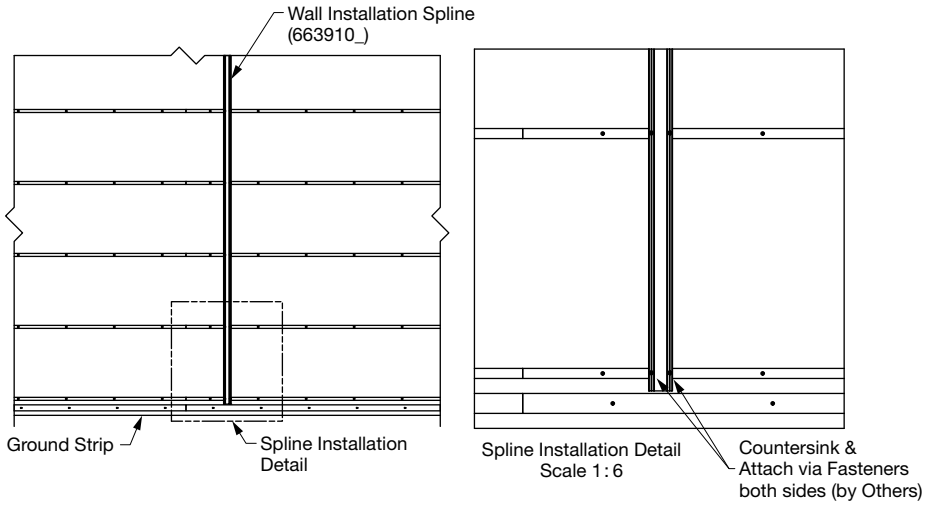
5.4.2 Starting the Installation

Strike a plumb line on the wall where the edge of the first spline will be installed ***(Fig 22)***.



(Fig 22)

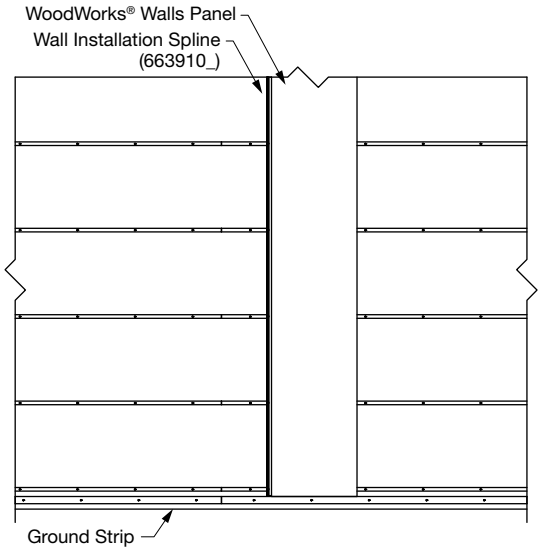
Cut the length of the spline to the desired length of the panel being installed. Layout fastening furring location at no more than 24" O.C. to both sides of the spline flange, predrilll and countersink those locations for screw attachment to furring. It is recommended to countersink the screw heads, so they do not interfere with the next panel fitting into the spline. Fasten the flange of the wall spline to the furring strip using appropriate fasteners for the wall composition ***(Fig 23)***.



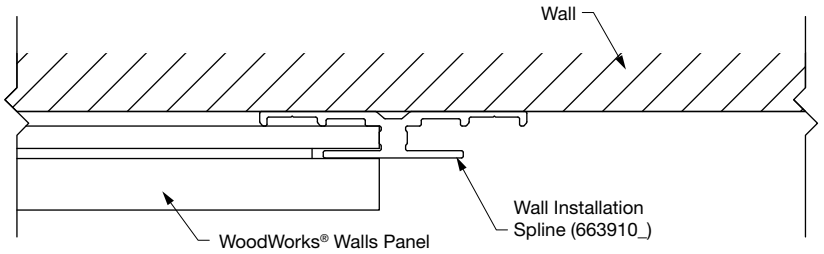
(Fig 23)

5.4.3 Panel & Remaining Spline Installation

Measure the desired panel height and cut accordingly. Starting with full panel installation at the center of the room, place the factory edge of the cut panel on the "ground strip". Slide the kerf edge of the panel onto the wall spline until fully engaged ***(Figs 24 & 25)***.

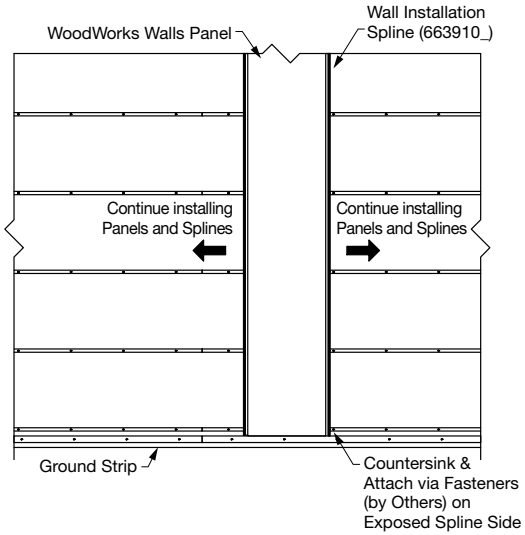


(Fig 24)



(Fig 25)

Cut then predrill and countersink fastening locations on the next wall spline. Fastening locations will only be done to one side of the spline flange that will be left exposed after installation. Slide the wall spline along the length of the panel already installed and fasten in place using appropriate fasteners ***(Fig 26)***.

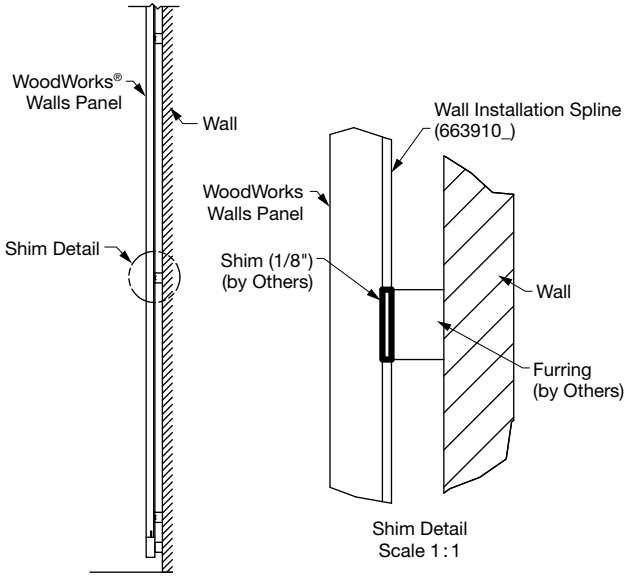


(Fig 26)

Continue in this process until you reach the other end of the wall.

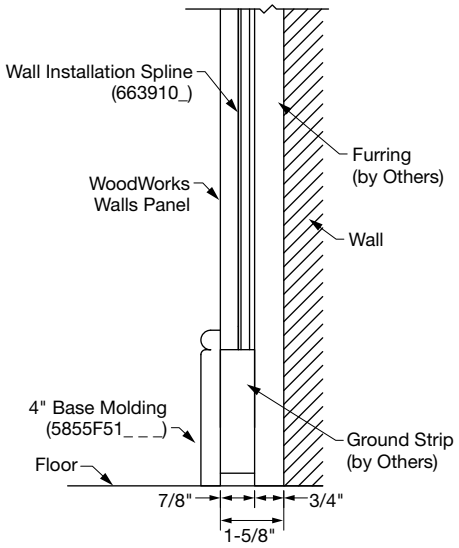
5.4.4 Completing the Installation

Due to a lack of wall spline at the borders, shim the back of all cut panel edges to flush out the panel face with the rest of the panel installation ***(Fig 27)***.



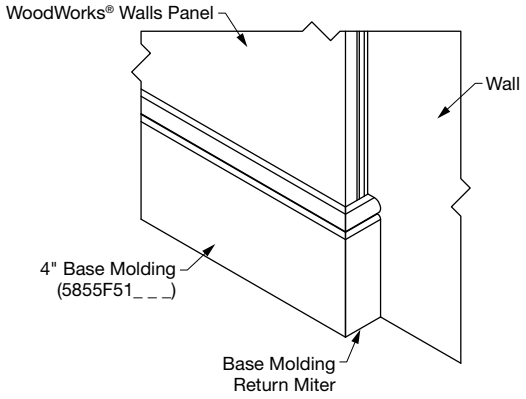
(Fig 27)

Trim the ends of the base molding, as needed. Fasten the base molding to the already installed "ground strip" on the wall. The bottom edge of the base molding should rest against the floor surface, covering the "ground strip". Use an appropriate fastener (a pneumatic nail gun works well) ***(Fig 28)***.



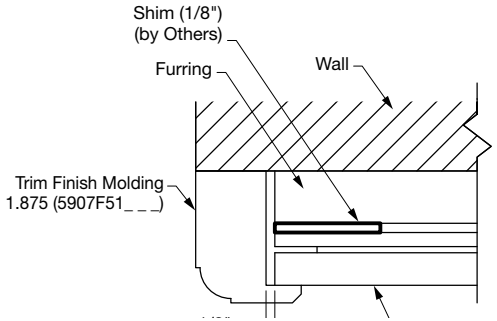
(Fig 28)

If the base molding doesn't span from wall to wall, create a "return" by mitering the molding where it ends ***(Fig 29)***. If your floor is significantly uneven, consider scribing the base molding to the floor.



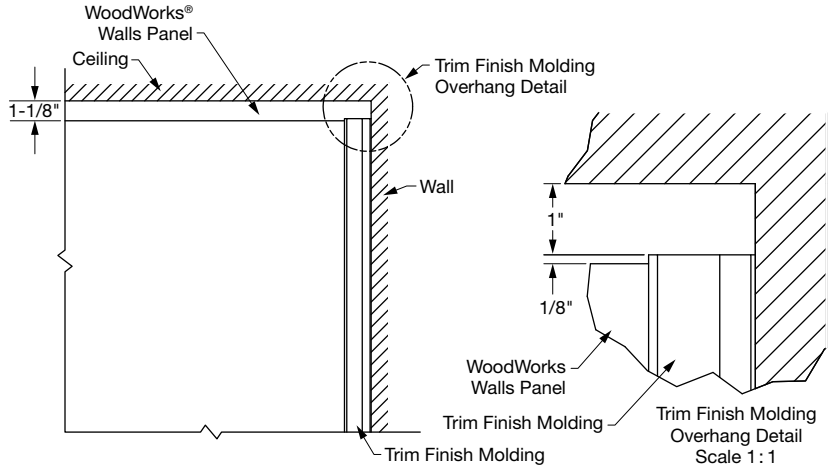
(Fig 29)

Trim Finish Molding molding can be used to cover the raw edges of panels. The molding can be used on each side and at the top of all installations. Begin by installing the Trim Finish Molding vertically at each end of the installation. The bottom end of the finish molding will rest on the top of the base molding with a straight cut. Allow a 1/8" gap inside the rabbet (the groove in the back of the molding) for panel ***(Fig 30)***.



(Fig 30)

If the panels are to reach the existing ceiling, make sure to allow 1-1/8" gap from the ceiling height to leave room for the finish trim molding attachment ***(Fig 31)***. If no trim is to be used to finish the top of the panel installation, then panel should be cut to meet the desired ceiling height.



(Fig 31)

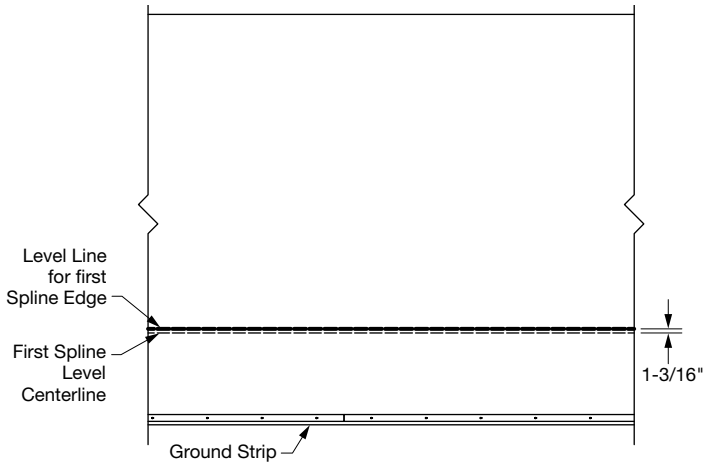
5.5 Horizontal Panel Installation

Follow the instructions for establishing a level line, mounting the “ground strip” and furring as described in Section 5.3.

Typical horizontal panel installation will not require wood furring due to the horizontal splines being attached to vertical studs. Wall spline attachment should be no more than 24" O.C. Confirm your wall stud spacing does not exceed 24" O.C.

5.5.1 Laying out the Wall

Start by locating the center line of the first spline from the "ground strip". Then, measure 1-3/16" above the center line and mark a level line on the wall. This line will serve as the top outer edge of the first spline ***(Fig 32)***.

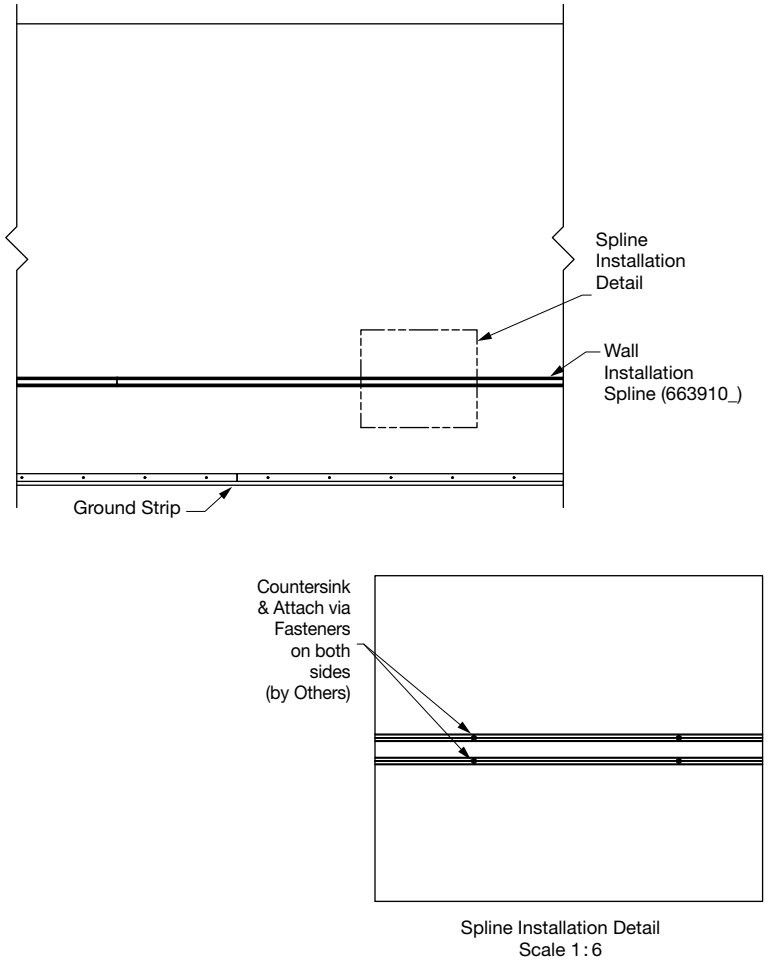


(Fig 32)

IMPORTANT NOTE: Depending on the wall substrate, shimming the splines may be required for a level and plumb installation.

5.5 Starting the Installation

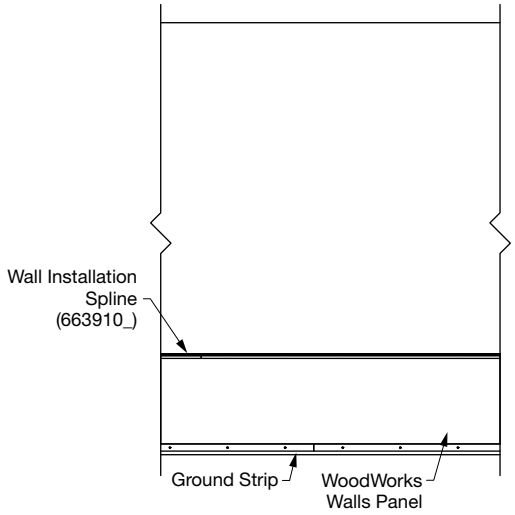
Cut the length of the spline to the desired length of the panel being installed. Layout fastening location no more than 24" O.C. to both side of the spline flange, predrill and countersink those locations for screw attachment to studs. It recommended to countersink the screw heads so they do not interfere with the next panel fitting into the spline. Ensure spline edge aligns with the established level line and fasten the spline to wall studs using appropriate fasteners for the wall composition ***(Fig 33)***.



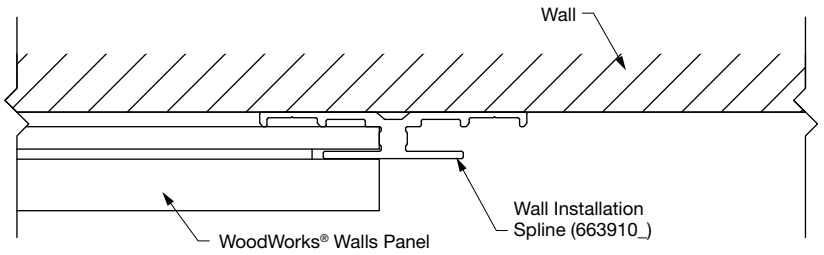
(Fig 33)

5.5.3 Panel Installation

Measure the desired panel length and cut accordingly. Place the cut edge of the panel on the "ground strip" and lift panel kerf edge up into the spline, ensuring panel fully engages the wall spline ***(Figs 34 & 35)***.

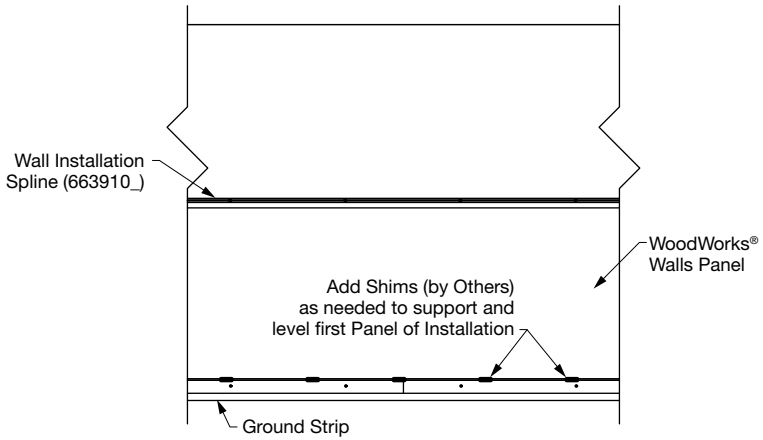


(Fig 34)



(Fig 35)

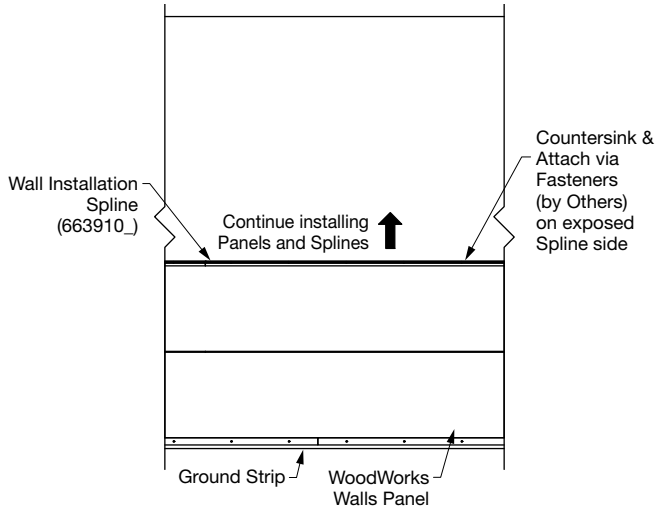
NOTE: If panel needs to be raised for full engagement into the spline, shim the bottom of the panel up and off the grounding strip ***(Fig 36)***.



(Fig 36)

Starting with your second panel installation, insert panel kerf edge into installed spline.

Cut second spline to length, predrill and countersink screw location only on one side of the flange. Install on to the panel, then fasten to the wall studs using appropriate fasteners for wall composition ***(Fig 37)***.

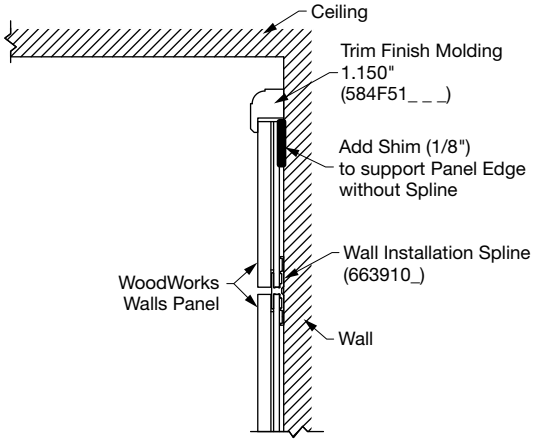


(Fig 37)

Continue this process until you reach the desired wall height.

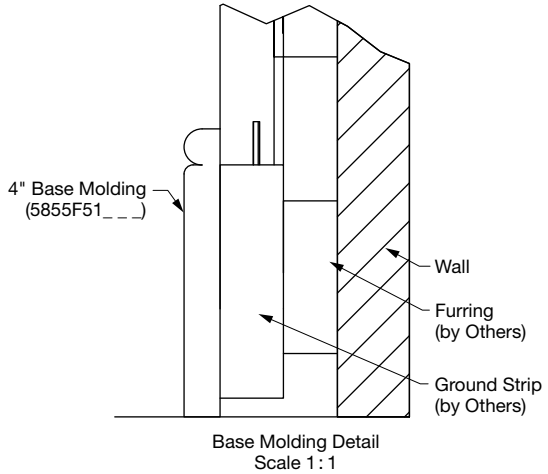
5.5.4 Completing the Installation

Due to a lack of wall spline at the borders, shim the back of all cut panel edges to flush out the panel face with the rest of the panel installation ***(Fig 38)***.



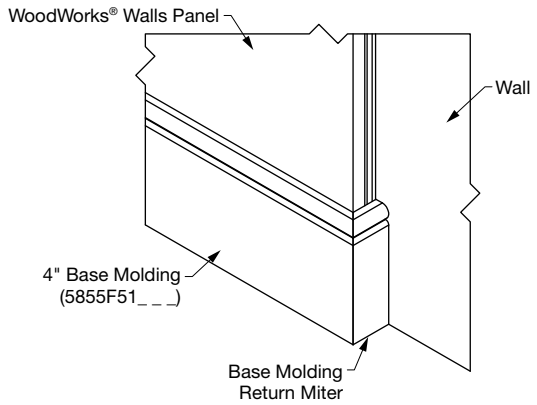
(Fig 38)

Trim the ends of the base molding, as needed. Fasten the base molding to the already installed “ground strip” on the wall. The bottom edge of the base molding should rest against the floor surface, covering the “ground strip”. Use an appropriate fastener (a pneumatic nail gun works well) ***(Fig 39)***.



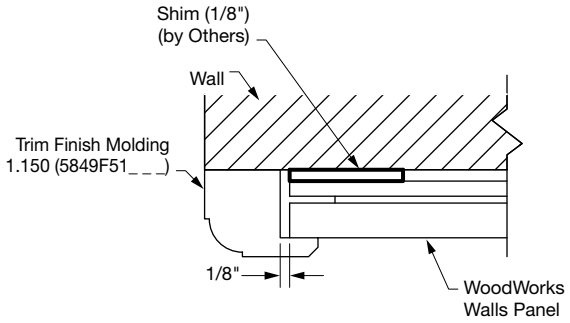
(Fig 39)

If the base molding doesn't span from wall to wall, create a "return" by mitering the molding where it ends ***(Fig 40)***. If your floor is significantly uneven, consider scribing the base molding to the floor.



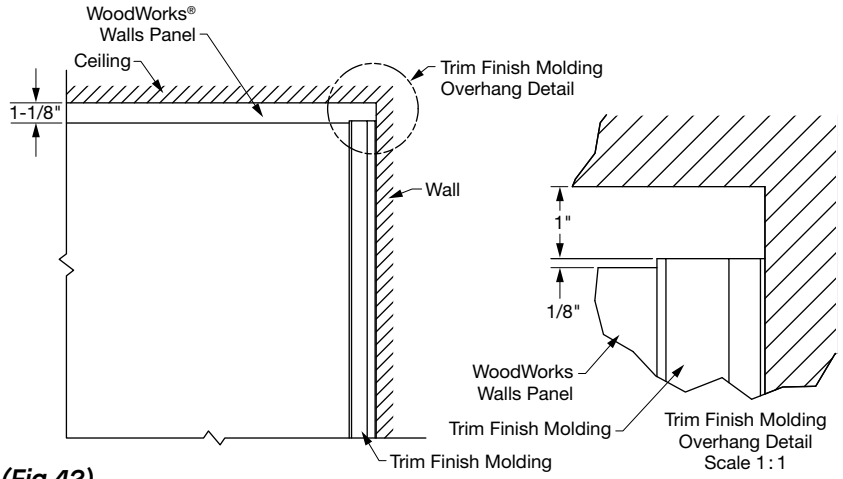
(Fig 40)

Trim Finish Molding can be used to cover the raw edges of panels. The molding can be used on each side and at the top of all installations. Begin by installing the Trim Finish Molding vertically at each end of the installation. The bottom end of the finish molding will rest on the top of the base molding with a straight cut. Allow a 1/8" gap inside the rabbet (the groove in the back of the molding) for panel ***(Fig 41)***.



(Fig 41)

If the panels are to reach the existing ceiling, make sure to allow 1-1/8" gap from the ceiling height to leave room for the Trim Finish Molding attachment ***(Fig 42)***. If no trim is to be used to finish the top of the panel installation, panel will require a minimum 5/8" clearance to the clear the spline and sit panel in place.



(Fig 42)

5.6 Vertical/Horizontal Stacking Panel Installation

When stacking panels vertically or horizontally, it's recommended to use 3/4" plywood as a secure base for the vertical and horizontal splines. Plywood should be attached to the structure. If plywood isn't used, install furring strips both vertically and horizontally to provide a stable base for the splines. Follow the instructions for establishing a level line, mounting the "ground strip" and furring out the wall as described in Section 5.3.

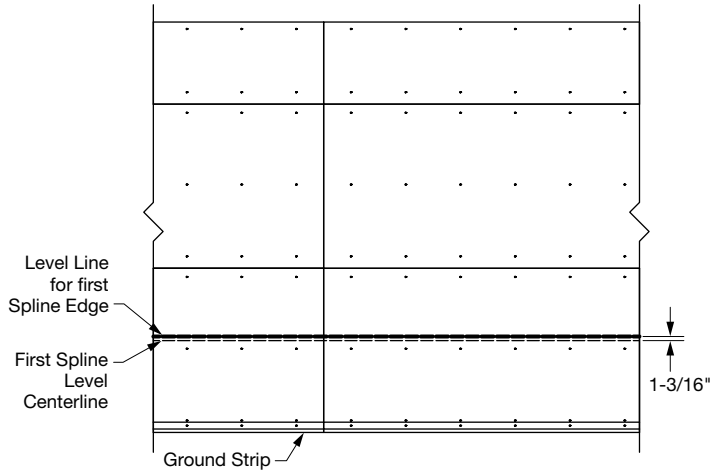
5.6.1 Laying Out the Wall

Start by identifying the center point of the wall where panel installation should begin. Measure to the end of your wall installation to determine proper border panel sizes. The center point of the wall will fall at the center line of a panel or the spline, based on the preferred border panel size.

Consider other factors, such as wall panel alignment with ceiling features. If vertical joints between panels need to align with ceiling features recurring on a 2' (or multiple of 2') module, adjust the length or width of the first panel accordingly.

5.6.2 Starting the Installation

Strike a level line on the wall where the top edge of the first horizontal spline will be installed ***(Fig 43)***.

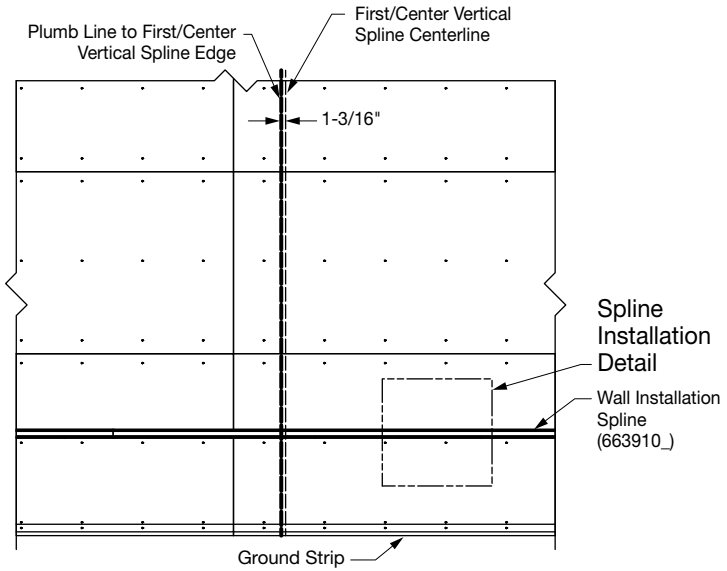


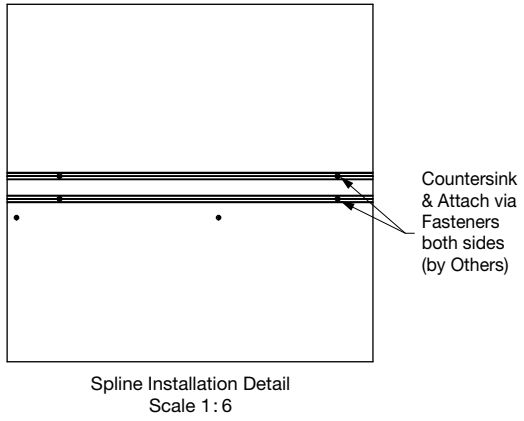
(Fig 43)

Start by laying out the fastening locations to both sides of the spline flange no more than 24" O.C. Predrill and countersink screw holes. Add horizontal splines and fasten in place once alignment has been confirmed. Be sure to countersink screws head to avoid interferences with panels during installation.

Continue installing the first row of all horizontal splines, following the steps described above.

After installing the first row of horizontal splines, begin installing the first vertical spline on the wall, working from the middle outward. Strike a plumb line to mark the edge where the first vertical spline will be installed ***(Fig 44)***. If the spline reveal needs to align with any ceiling feature, adjust accordingly.

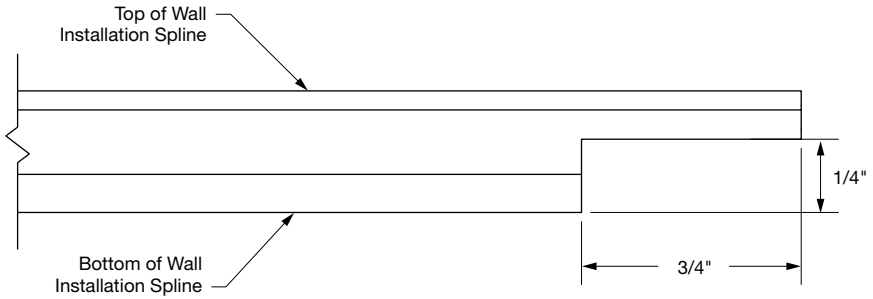




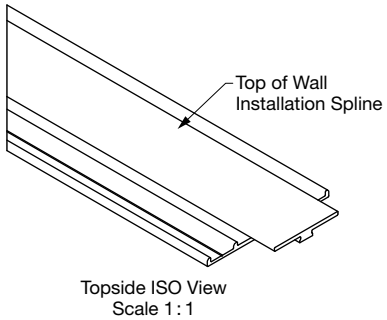
Spline Installation Detail
Scale 1 : 6

(Fig 44)

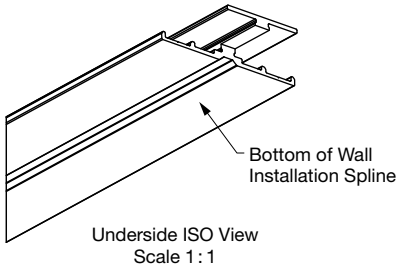
Cut the vertical splines for the first row of panels, making them 1" shorter than the desired panel lengths or widths. Notch one end of each spline: Remove a 3/4" × 1/4" section. This notched side will align with the horizontal spline. All vertical splines for the first and last row should be notched in the same way (notch one end only) ***(Figs 45 – 48)***.



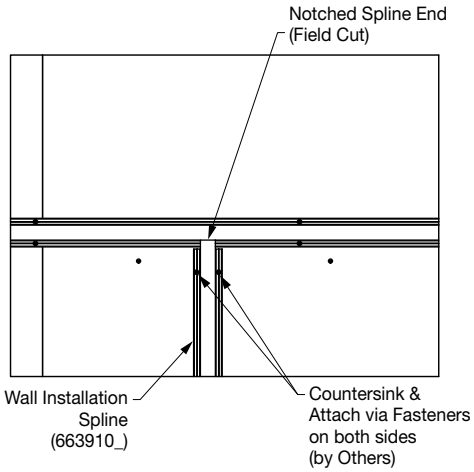
(Fig 45)



(Fig 46)



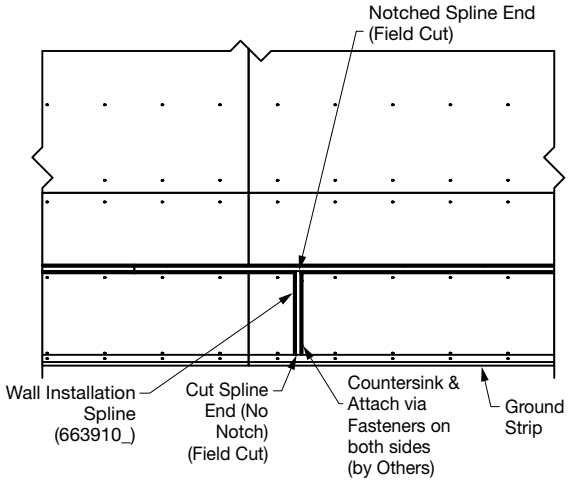
(Fig 47)



(Fig 48)

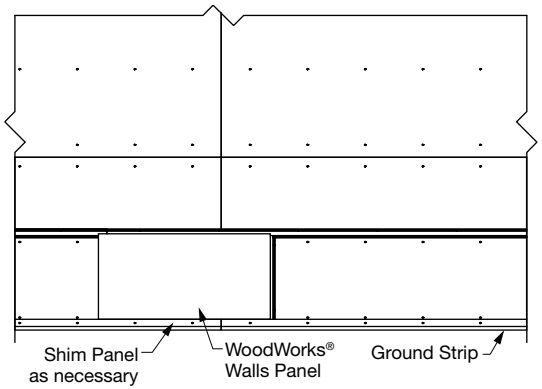
Mark the fastening locations on both sides of the flange. Predrill and countersink screw holes.

Align the notched section of the vertical spline with the horizontal spline. Confirm alignment and then fasten the spline in place ***(Fig 49)***.

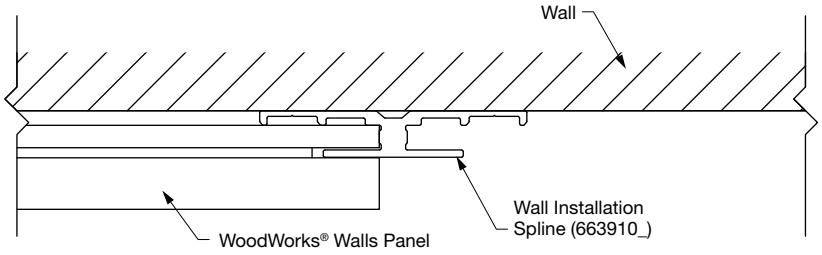


(Fig 49)

Measure the desired panel height or length and cut panel accordingly. Placing the first panel with the cut edge on the "ground strip", lift panel to engage the wall spline. For the panel to fully engage the horizontal spline, the bottom of panel may need to be shimmed ***(Figs 50 & 51)***.

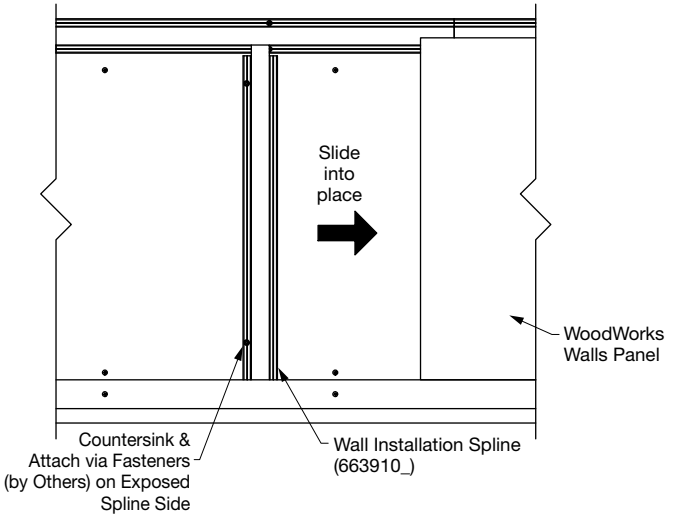


(Fig 50)

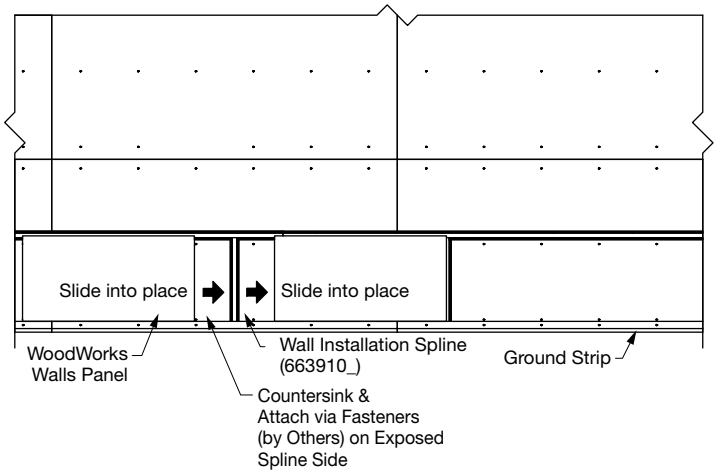


(Fig 51)

Once panel is seated in place, add the second vertical spline. Mark fastening location to one side of the flange only, then predrill and countersink screw holes. Slide the wall spline into the panel edge, ensure the notched edge on the spline is butted to the horizontal spline. When alignment is confirmed, fasten in place ***(Figs 52 & 53)***.



(Fig 52)



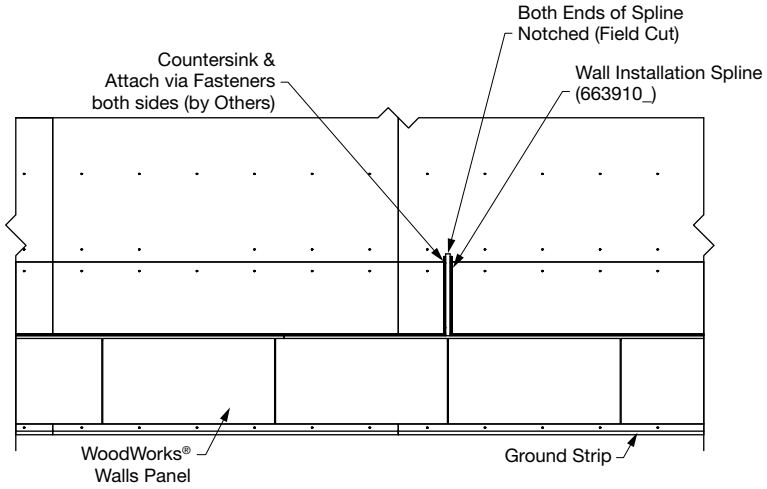
(Fig 53)

Continue down the wall installing the first row of panels and vertical splines, as described above.

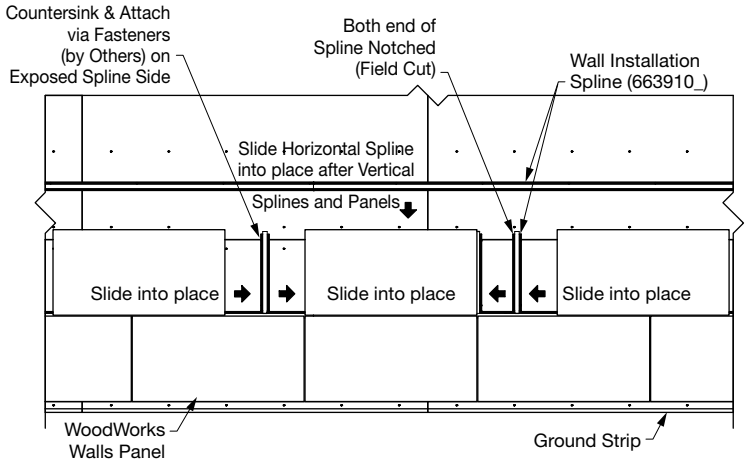
5.6.3 Remaining Panel & Spline Installation

After installing the first row of panels, move on to the second row. For all subsequent rows of panels, it requires all vertical splines to install before the horizontal ones.

Cut all vertical splines 1" shorter than the panel length or width as described in Section 5.6.2. Notch a 3/4" × 1/4" section on both ends of each panel ***(Fig 54)***. Layout the fastening locations, predrill, and countersink the holes. Install the first full panel, ensuring it fully engages with the wall spline, once all vertical splines and panels are installed, proceed with installing the horizontal spline ***(Fig 55)***.



(Fig 54)

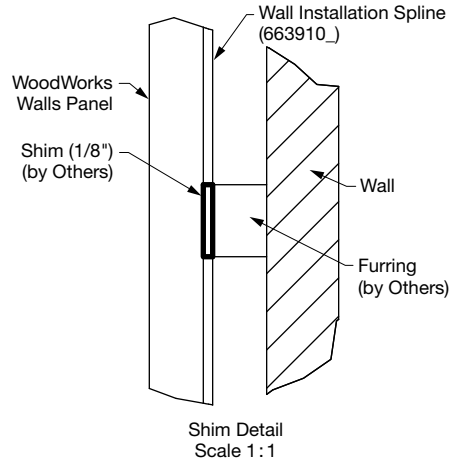


(Fig 55)

Continue progressively installing splines and panels along the wall and subsequent rows as described.

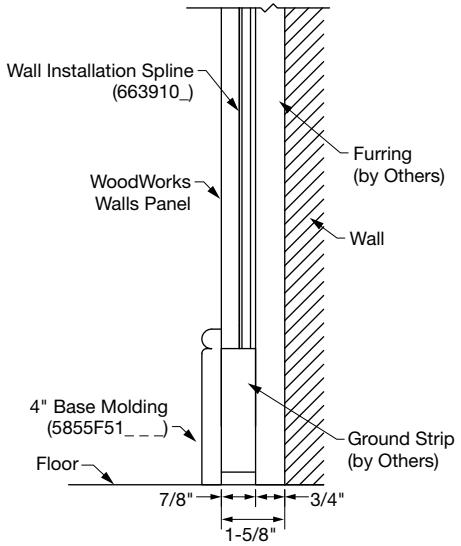
5.6.4 Completing the Installation

Due to a lack of wall spline at the borders, shim the back of all cut panel edges to flush out the panel face with the rest of the panel installation ***(Fig 56)***.



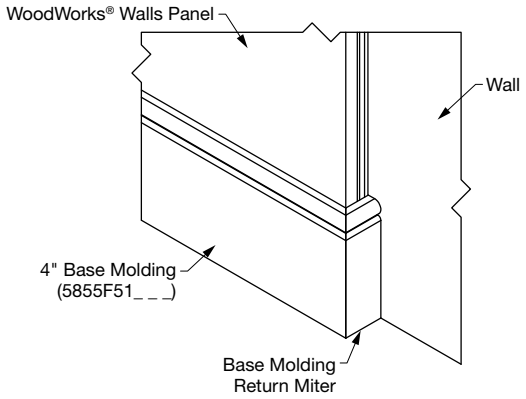
(Fig 56)

Trim the ends of the base molding, as needed. Fasten the base molding to the already installed "ground strip" on the wall. The bottom edge of the base molding should rest against the floor surface, covering the "ground strip". Use an appropriate fastener (a pneumatic nail gun works well) ***(Fig 57)***.



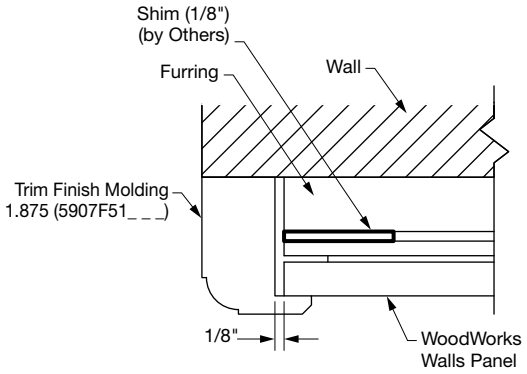
(Fig 57)

If the base molding doesn't span from wall to wall, create a "return" by mitering the molding where it ends ***(Fig 58)***. If your floor is significantly uneven, consider scribing the base molding to the floor.



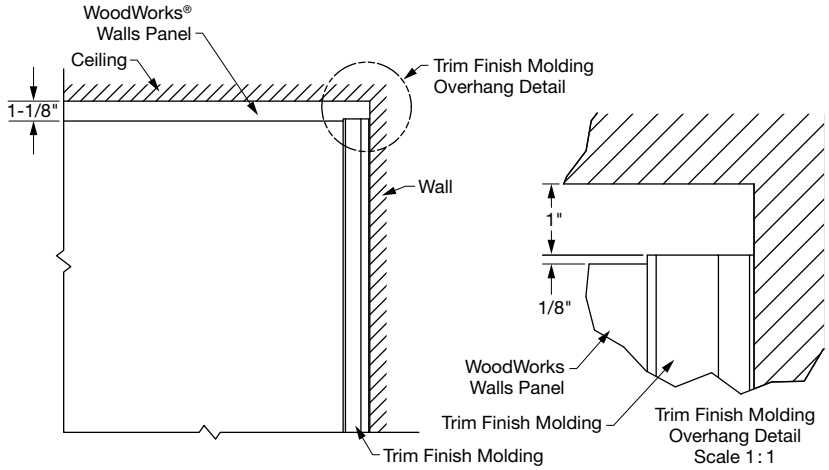
(Fig 58)

Trim Finish Molding can be used to cover the raw edges of panels. The molding can be used on each side and at the top of all installations. Begin by installing the Trim Finish Molding vertically at each end of the installation. The bottom end of the finish molding will rest on the top of the base molding with a straight cut. Allow a 1/8" gap inside the rabbet (the groove in the back of the molding) for panel ***(Fig 59)***.



(Fig 59)

If the panels are to reach the existing ceiling, make sure to allow 1-1/8" gap from the ceiling height to leave room for the finish trim molding attachment ***(Fig 60)***. If no trim is to be used to finish the top of the panel installation, panel will require a minimum 5/8" clearance to the clear the spline and sit panel in place.



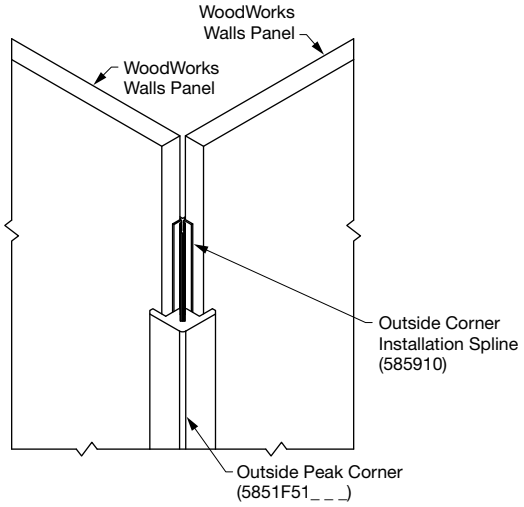
(Fig 60)

5.6.5 Cutouts for Switches and Receptacles

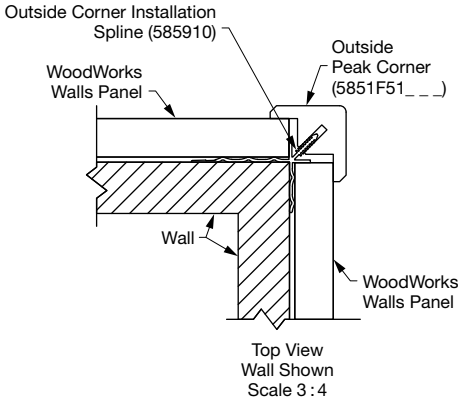
Carefully locate the desired cutouts on the face of the panel to allow access to remount the switch or receptacle. A qualified electrician may have to install a box extension for the switch or receptacle before the panel is installed. Mount the panel on the wall and secure with a spline. Have the electrician remount the switch or receptacle.

5.6.6 Outside Corners

Outside corners are handled by installing a corner spline on the corner of the wall. Be sure to leave a gap of 1/8" – 1/4" between the panel edge and the stop on the corner spline. Then drive a decorative wood corner onto the spline after the panels are in place ***(Figs 61 & 62)***.



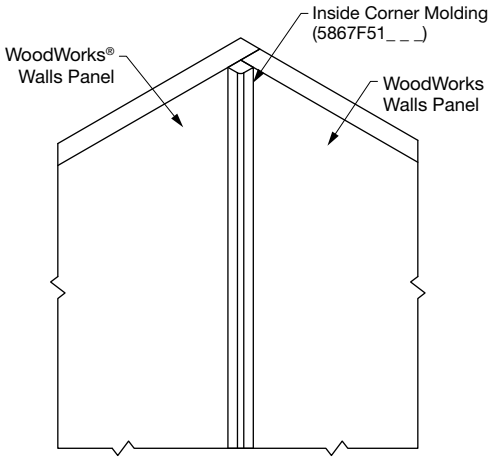
(Fig 61)



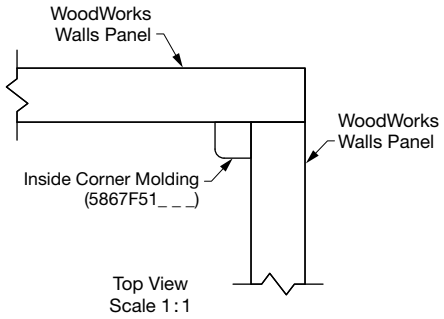
(Fig 62)

5.6.7 Inside Corners

When panels meet at an inside corner, you should scribe fit one of the panels to butt against the other panel. Use a construction adhesive (follow the adhesive manufacturer's recommendations for application) to secure the panels to the wall where you have no splines or other means of securing them. Corner Molding (Item 5867F51) can be used to trim this inside corner ***(Figs 63 & 64)***.



(Figs 63)



(Figs 64)

6. Z-CLIP INSTALLATION

All panels intended for Z-Clip installations should be ordered with no kerfs in any of the edges.

6.1 Tools Needed

You'll need the following tools: plumb bob, level or laser, tape measure, screw gun, #8 × 5/8" truss head screws (Item 7123PKG300) to attach Z-Clip to the panel, and appropriate screws or fasteners to attach the Z-Clip to the wall. For proper install and alignment, you may want to consider using a story pole during installation. An assortment of horseshoe shims may be needed for your install to plumb and level the wall.

Generally, panels will not be cut except for service penetrations like receptacles and switches.

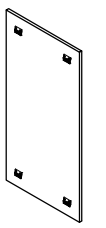
6.2 Installation Option

Panels can be installed horizontally or vertically. There is no limit to the length of run. Each panel is isolated from every other panel. Panels installed with Z-Clips shall have a gap of at least 1/4" between panels.

IMPORTANT NOTE: 2' × 4' Micro-perforated panels are recommended for vertical installations only and should not be installed horizontally. For applications requiring horizontal panel orientation, the spline installation method is recommended.

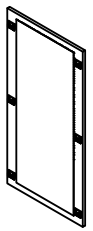
6.3 Number of Z-Clips per Panel

- Panels 2' × 4' or smaller require 4 Z-Clips ***(Fig 65)***
  Exception: 2' × 4' Micro-perforated panels require 6 Z-Clips ***(Fig 66)***
- Panels 2' × 8' require 8 Z-Clips ***(Fig 67)***



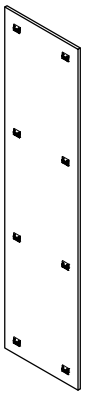
2' x 4' WoodWorks Walls Panel
Install (4) Z-Clips
Scale 1:16

(Fig 65)

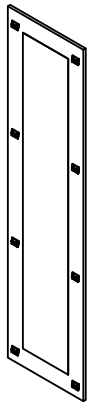


2' x 4' WoodWorks Walls Microperforated Panel
Install (6) Z-Clips
Scale 1:16

(Fig 66)



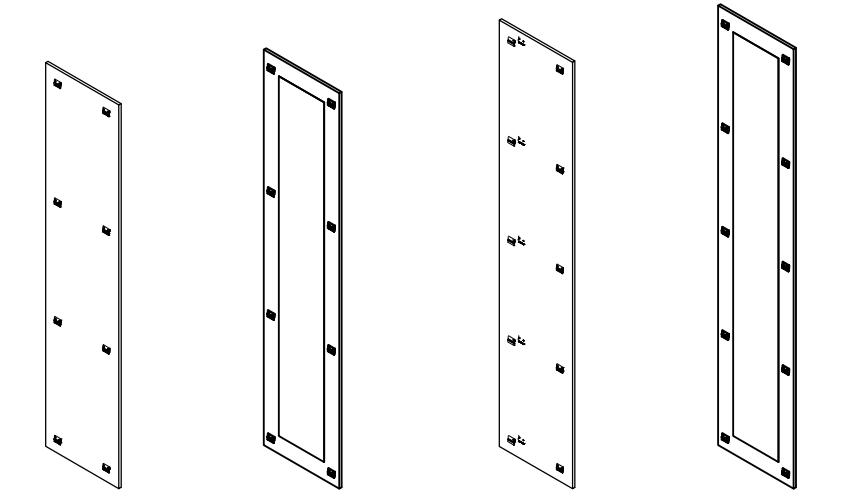
2' x 8' WoodWorks Walls Panel
Install (8) Z-Clips
Scale 1:16



2' x 8' WoodWorks Walls Microperforated Panel
Install (8) Z-Clips
Scale 1:16

(Fig 67)

- Panels 2' × 9' require 8 Z-Clips ***(Fig 68)***
- Panels 2' × 10' require 10 Z-Clips ***(Fig 69)***

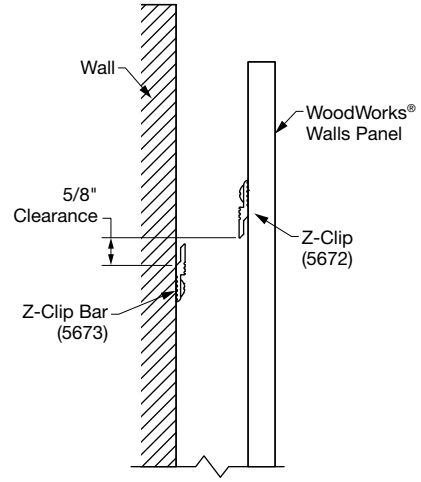


(Fig 68) ***(Fig 69)***

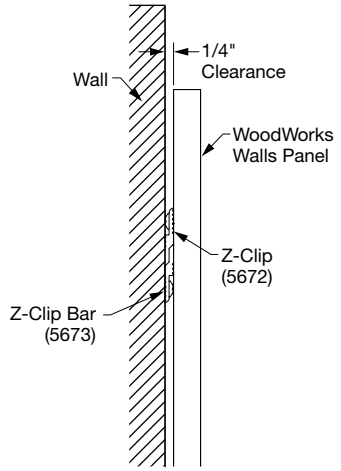
6.4 Z-Clip and Z-Bar Installation

Z-Clip location and spacing is critical to keep and maintain WoodWorks wall panel alignment.

Z-Clips liftoff is 5/8" to allow Z-Clip and Z-Bar engagement, therefore, panels must have a 3/4" minimum clearance between the top of the panel and the ceiling ***(Fig 70)***. Additionally, Z-Clip installations will require the wall to be straight and solid. The Z-Clip and Z-Bar will have a 1/4" standoff from wall once engaged ***(Fig 71)***.



(Fig 70)

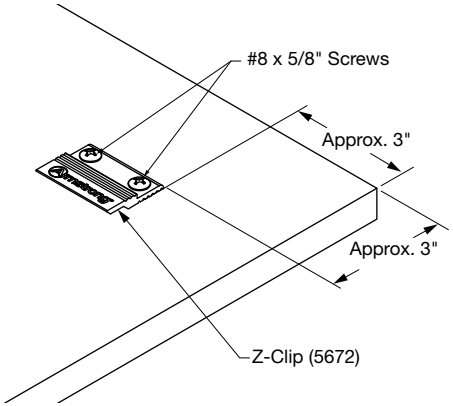


(Fig 71)

6.4.1 Installing Z-Clip

Each Z-Clip should be secured to the back of the panels with two #8 × 5/8" truss head screws (Item 7123PKG300).

Clips are recommended to be installed approximately 3" from clip edge to panel edge ***(Fig 72)***.

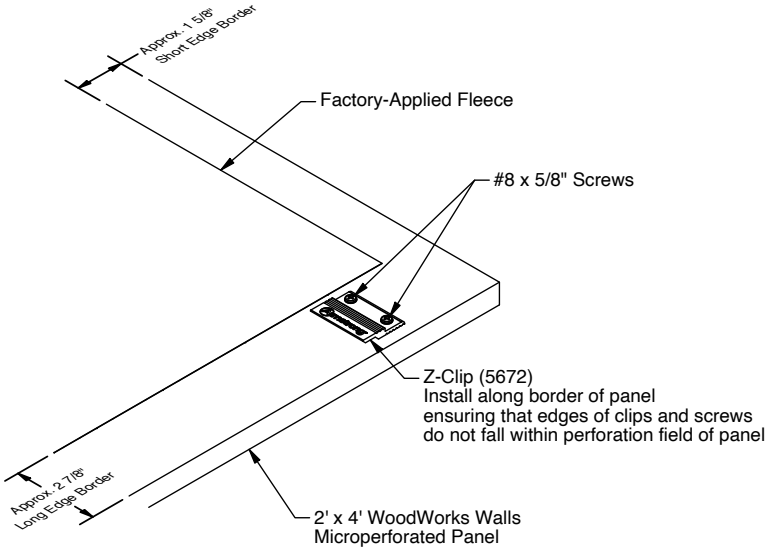


(Fig 72)

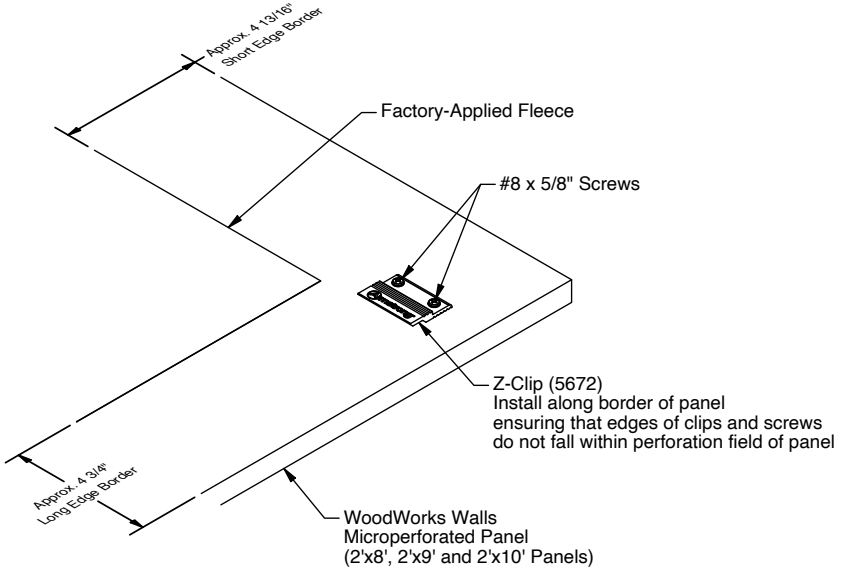
WoodWorks Wall Panels (Perforated)

When installing perforated panels, the Z-Clip location may need to be adjusted to prevent attachment screws from aligning with panel perforations. Ensure that the corresponding Z-Bar location aligns with the final Z-Clip position. In many cases, the Z-Clip can be shifted horizontally on the panel to avoid perforations without requiring relocation of the Z-Bar on the wall.

WoodWorks Wall Panels (Micro-Perforated)
Depending on the panel size, micro-perforated panels are manufactured with either a 3" or 4" solid border around the perimeter of the panel to accommodate Z-Clip attachment. This border is designed to provide a dedicated attachment area for Z-Clips ***(Figs 73 & 74).***



(Fig 73)

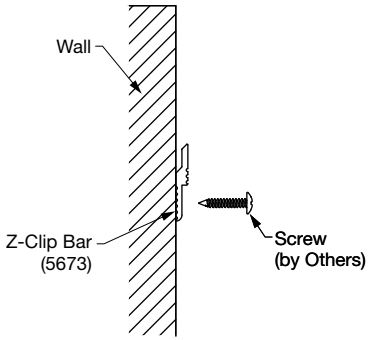


(Fig 74)

When field cutting is required for perimeter conditions or receptacle locations, WoodWorks Walls micro-perforated border panels shall be specified for those areas. Border Panels are specifically designed to accommodate field modifications while maintaining installation flexibility, allowing Z-Clips to be attached as needed after cutting.
Border panels are intended for applications requiring panels to be field-cut only and are available exclusively for WoodWorks Walls micro-perforated panels.

6.4.2 Installing Z-Bar

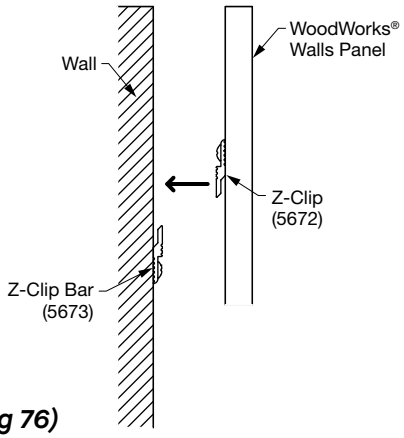
Z-Bar should be secured to the wall to structure. Determine the Z-Bar location on the wall to align with the Z-Clip on the panel. Use fasteners, appropriate for the wall substrate (provided by others) to attach the Z-Bar to the wall ***(Fig 75)***.



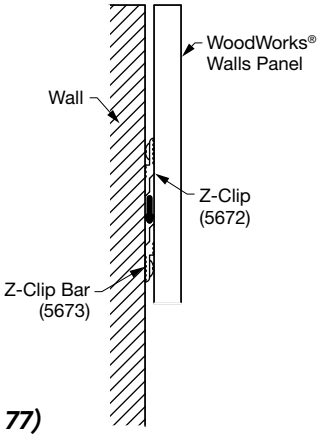
(Fig 75)

6.5 Panel Installation

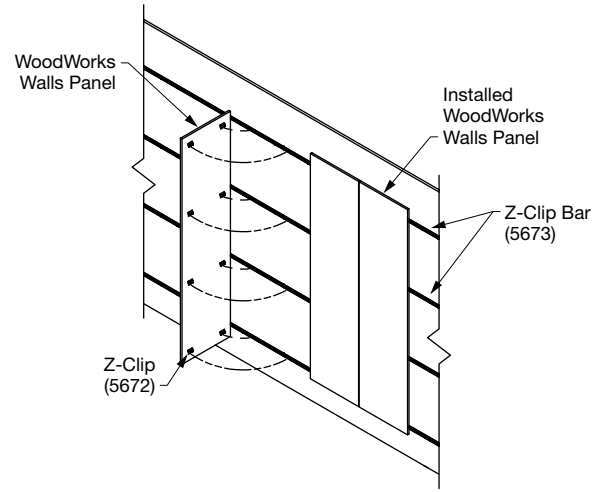
Position the panel on the wall slightly above the desired height and gently slide the panel and Z-Clips down onto the Z-Bar on the wall ensuring Z-Clip and Z-Bar fully engage. Large panels may require two people to align and engage Z-Clips ***(Figs 76 – 78)***.



(Fig 76)



(Fig 77)



(Fig 78)

Slight horizontal panel adjustment can be made from side to side by shifting the panel. Vertical adjustment must be made by mechanically adjusting the location of the Z-Clip.

6.6 Molding and Trims

Finish molding and/or trim can be used to cover raw edges of panels. The base molding will require furring or “ground strip” as a base to fasten trim to the wall. The bottom edge of the base molding will rest against the floor surface and cover the “ground strip”. Use an appropriate fastener. (A pneumatic nail gun works well for this.)

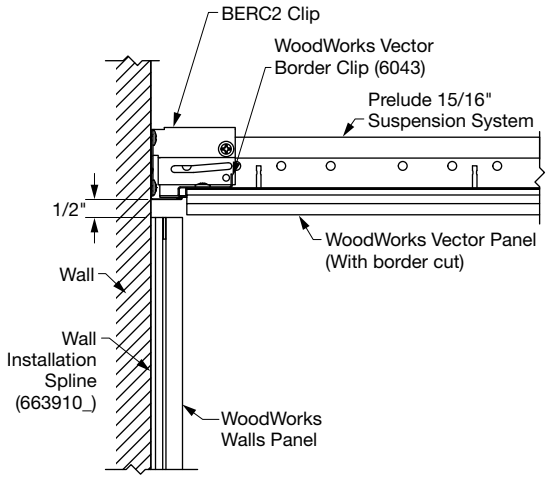
7. WALL-TO-CEILING TRANSITIONS

WoodWorks® wall panels can create elegant transitions using both wall spline and Z-Clip installations when paired with Armstrong® WoodWorks® ceilings. The most seamless transition occurs with ceiling panels that have a 1/4" reveal (such as WoodWorks® Vector®, WoodWorks Concealed, and WoodWorks Torsion Spring ceiling panels), which can align with the 1/4" reveal when installed with the wall spline or Z-Clip. Sections 7.1 and 7.2 illustrate details for two aesthetically pleasing wall-to-ceiling transition methods.

7.1 Wall Panel Butting Up to the Ceiling

This method is ideal when an existing ceiling is already in place before wall panels are installed. Ensure you leave the required clearance for each installation method below to provide enough room for panel installation.

7.1.1 Wall Spline Installation shown ***(Fig 79)***

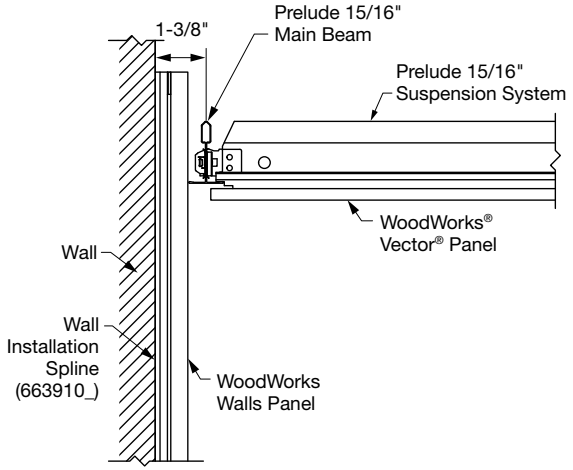


(Fig 79)

7.2 Wall Panels Extending Past the Ceiling

This installation option works well when both ceilings and walls are installed simultaneously. The grid can butt up directly against the panel, which will extend beyond the finished ceiling height. Achieve this by allowing the Prelude® Main beam to float right up to the wall panel. Be sure to account for panel offset from the wall based on the chosen installation method and whether furring is utilized. Adjust the main beam distance from the wall to minimize any potential gap between the wall and ceiling.

7.2.1 Wall Spline Installation shown ***(Fig 80)***



(Fig 80)

Item No. ◆	Description	Ordered Separately/ Included with	Required for Install
WoodWorks® Wall Panels			
5814F01_ _E1 _ _ _	2' × 4' WoodWorks Wall Panel, Square/Z-Clip	Ordered Separately	Based on Design
5818F01_ _ E1_ _ _	2' × 8' WoodWorks Wall Panel, Square/Z-Clip	Ordered Separately	Based on Design
5819F01_ _E1 _ _ _	2' × 9' WoodWorks Wall Panel, Square/Z-Clip	Ordered Separately	Based on Design
5820F01_ _E1 _ _ _	2' × 10' WoodWorks Wall Panel, Square/Z-Clip	Ordered Separately	Based on Design
5814F01_ _E4 _ _ _	2' × 4' WoodWorks Wall Panel, Kerfed/Spline	Ordered Separately	Based on Design
5818F01_ _ E4_ _ _	2' × 8' WoodWorks Wall Panel, Kerfed/Spline	Ordered Separately	Based on Design
5819F01_ _E4 _ _ _	2' × 9' WoodWorks Wall Panel, Kerfed/Spline	Ordered Separately	Based on Design
5820F01_ _E4 _ _ _	2' × 10' WoodWorks Wall Panel, Kerfed/Spline	Ordered Separately	Based on Design
WoodWorks Walls Micro-Perforated Border Panels			
6330F01P2D204_ _ _	2' x 4' Micro-Perforated Border Panel	Ordered Separately	Based on Design
6330F01P2D208_ _ _	2' x 8' Micro-Perforated Border Panel	Ordered Separately	Based on Design
6330F01P2D209_ _ _	2' x 9' Micro-Perforated Border Panel	Ordered Separately	Based on Design
6330F01P2D210_ _ _	2' x 10' Micro-Perforated Border Panel	Ordered Separately	Based on Design
FSC® Certified WoodWorks Wall Panels			
5814F02_ _ E1_ _ _	2' × 4' WoodWorks Wall Panel, Square/Z-Clip	Ordered Separately	Based on Design
5818F02_ _ E1_ _ _	2' × 8' WoodWorks Wall Panel, Square/Z-Clip	Ordered Separately	Based on Design
5819F02_ _ E1_ _ _	2' × 9' WoodWorks Wall Panel, Square/Z-Clip	Ordered Separately	Based on Design
5820F02_ _ E1_ _ _	2' × 10' WoodWorks Wall Panel, Square/Z-Clip	Ordered Separately	Based on Design
5814F02_ _E4 _ _ _	2' × 4' WoodWorks Wall Panel, Kerfed/Spline	Ordered Separately	Based on Design
5818F02_ _ E4 _ _ _	2' × 8' WoodWorks Wall Panel, Kerfed/Spline	Ordered Separately	Based on Design
5819F02_ _ E4 _ _ _	2' × 9' WoodWorks Wall Panel, Kerfed/Spline	Ordered Separately	Based on Design
5820F02_ _ E4 _ _ _	2' × 10' WoodWorks Wall Panel, Kerfed/Spline	Ordered Separately	Based on Design

◆ When specifying or ordering, include the appropriate perforation and finish suffixes. (e.g., 5814F01 W 1 E1 N W M)

Item No. ◆	Description	Ordered Separately/ Included with	Required for Install
Installation Components			
663910_ _	Wall Installation Spline, Black (BL) or Natural Anodized (NA)	Ordered Separately	Yes/Based on Design
5672	Z-Clip	Ordered Separately	Yes/Based on Design
5673	Z-Clip Bar	Ordered Separately	Yes/Based on Design
–	Assortment of Horseshoe Shims (by Others)	Ordered Separately	Yes/Based on Wall Levelness
Finish Accessories			
5855F51_ _ _	4" Base Molding	Ordered Separately	Based on Design
5856F51_ _ _	6" Base Molding	Ordered Separately	Based on Design
5849F51_ _ _	Trim Finish Molding (Without Furring)	Ordered Separately	Based on Design
5907F51_ _ _	Trim Finish Molding (With Furring)	Ordered Separately	Based on Design
5867F51_ _ _	Inside Corner	Ordered Separately	Based on Design
5851F51_ _ _	Outside Peak Corner	Ordered Separately	Based on Design
5852F51_ _ _	Outside Bullnose Corner	Ordered Separately	Based on Design
585910_	Outside Corner Spline, Plastic (X) or Aluminum (Y)	Ordered Separately	Based on Design
7123PKG300	Wood Screws	Ordered Separately	Yes/Based on Design

◆ When specifying or ordering, include the appropriate perforation and finish suffixes. (e.g., 5814F01 W 1 E1 N W M)

MORE INFORMATION

For more information, or for an Armstrong Ceilings representative, call 877 276-7876.
For complete technical information, detail drawings, CAD design assistance, installation information, and many other technical services, call TechLine customer support at 877 276-7876 or FAX 800 572-TECH.

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