

Interior Paneling Installation Guidelines



PLACING YOUR PANELING ORDER

Proposals

Your salesperson will provide you with a written proposal based on the product selections you have made and the quantities you have provided. Upon receipt of your signed proposal and deposit, the stated lead time will begin, and the order will be entered into production in our shop.

Samples & Reference Photos

Because wood originates from trees, and no two trees are exactly alike, each piece of material will vary from the next. These natural variations in the material can result in differences in texture, color, and finish throughout an order even when the same processes are applied to each piece. Pioneer Millworks provides product photos and samples as a reference for our products; however, it is impossible to show every possible variation that could be seen across an order. Therefore, variations beyond these references are to be expected. If you have a single sample piece of your chosen material, please request a range sample (consisting of multiple pieces) of your final selection(s) prior to ordering.

> It is the <u>responsibility of the purchaser</u> to confirm the accuracy of <u>all information</u> outlined on the proposal including the details of each product, quantity ordered, billing and delivery address(es), and delivery contact information **BEFORE ORDERING**.

By placing the order, you acknowledge that you have read and understand the recommended installation and maintenance procedures outlined on the following pages.

Overages

Cutting waste (overage) is an inherent part of any wood installation, and the percentage of additional material should not be minimized. We suggest ordering a minimum of 15% overage for prefinished exterior paneling. A higher waste percentage of 20%-25% is recommended for reclaimed and weathered materials.

Please note the overage percentage should consider not only cuts related to installation but also the discretionary cuts and defecting that may be done on site to accommodate job-specific appearance requirements. We suggest ordering enough overage to have a few bundles of material left over for long-term repairs and maintenance. Doing so will be far less costly than additional small orders with shipping charges.

Shipping & Handling

Our in-house Logistics Team makes transportation recommendations for each proposal based on the material ordered, delivery location, order volume, and scheduling needs of the project. If your project location has any challenges such as a steep/long driveway, or delivery in a congested metro area or a tight residential neighborhood, it is your responsibility to inform your salesperson before placing your order. This information will help us to provide accurate shipping costs which will be indicated as a line item on your proposal.

Additional charges resulting from unforeseen conditions at delivery are the responsibility of the receiver.

If you have any questions about your delivery once your order is placed, please contact us at 800-951-9663.

SUGGESTION

Order a minimum of 15% overage for exterior paneling installations.

I YOUR RESPONSIBILITY

Additional Charges resulting from unforeseen conditions at delivery are the responsibility of the receiver.

RECEIVING YOUR PANELING

Your order will arrive on skids with the product banded to the skid, and each skid covered by breathable lumber wrap and the ends shrink-wrapped. Before unloading, inspect the skids for any visible damage to the skid and the product. If any damage is found, please notify the driver and take photos for record, as well as noting the damage on the bill of lading **before** it is signed. Then notify Pioneer Millworks logistics team immediately. <u>Unless specific arrangements are made otherwise, the receiver is responsible for all equipment and labor to unload the order from the truck.</u>



Your paneling will come wrapped in breathable lumber wrap.



Please remove wrap within 3 days to inspect materials. Leave wrap off for storage.

Inspection

All materials have been graded per the specification sheets for the product purchased. During transit and unloading, and due to changes in the surrounding environment, it is possible for minor defects beyond these specifications to appear. These may include loose/missing knots, scratches or finish damage, as well as inherent cupping, bowing, twisting, or crowning. In addition, our efforts to preserve the length of the boards often leave visible cracks or splits in planks, particularly at the ends. In most cases of proper installation, these defects will not affect the finished project or the performance of the product. Because of the natural variations in wood, boards that lie slightly higher or



After unloading, please unpack and further inspect your material, and inform us within 3 business days of any discrepancies.

Otherwise, it will be assumed that the correct product and quantity was received and after this time, no claims for material shortage or damaged materials will be accepted.

YOUR RESPONSIBILITY

Proceeding with the installation of any material constitutes acceptance of the materials as delivered. Pioneer Millworks is not liable for any costs for labor, materials, or replacement related to any products that have been installed with defects, damage, or discrepancies. lower than these specifications may be found in any order. Please refer to the grade specifications for your product and contact the team at Pioneer Millworks with any questions. Grade specifications can be found at www.pioneermillworks.com/product-spec-sheets .

Non-structural cracks and splits are permitted in our paneling materials. These may run 12" or more from the end of the plank, or be seen in in multiples over the length of the plank:



Handling

While our products are designed to be durable, natural wood products can have relatively delicate finishes which can be damaged by rough or improper handling of the planks. We recommend longer planks be lifted by one person at each end, and that care is taken to not allow other materials or objects to scrape against the surface.

Storage

The packaging on our skids is designed to protect the product in transit, but it is not intended to provide protection for long-term storage outdoors. All **interior** paneling materials should be moved indoors immediately upon delivery and stored in a climate-controlled environment.

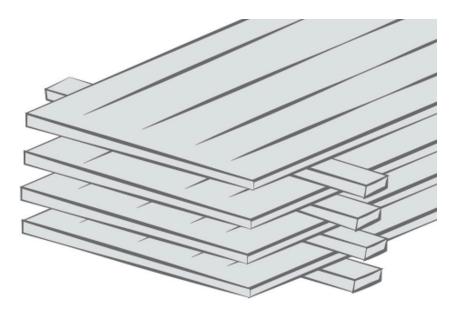
Jobsite Requirements

Prior to installation, any "wet work" involving water, concrete, plaster, or similar materials should be completed. The indoor environment must have proper HVAC systems operating to maintain living conditions at 60-70F/15-21C and humidity levels between 35-55% for a minimum of one week prior to installation. These conditions must be maintained throughout installation to minimize movement in the wood once installed.

Acclimation

Wood is hygroscopic and will respond to changes in humidity by expanding or contracting accordingly. Just as it is important to allow your paneling to acclimate to your living conditions prior to installation, it is equally important to note that any substrate framing, sheathing or furring strips themselves must be acclimated to the living conditions of the space prior to delivery. Do not use any substrate materials which are not properly kiln-dried or have been exposed to excessive moisture.

- \rightarrow Store paneling on a flat, dry, level surface away from exterior walls.
- → Planks should be unbundled and stacked with space between each layer using perpendicular shorter planks from the order, or ¾"+ thick strips of wood as shown.
- → As the planks are being stacked, check your paneling's moisture level using a properly calibrated moisture meter, testing 10-15 random planks for every 250 sf delivered.
- → Also using a moisture meter, perform the same number of tests on the substrate and/or furring strips to which the paneling will be installed.
- → Acclimate materials in the living conditions outlined previously until the difference in average moisture level between the substrate and the paneling is 2% or less, using fans to gently circulate air throughout the stack(s).
- → The amount of time required for acclimation varies widely, but in most cases, 1 to 2 weeks is sufficient.



SUGGESTION

Wood moisture meters are easy to find online or at your local hardware store.

NOTE

HVAC system should be running/active steadily prior to acclimating the wood. Be sure it remains running throughout the acclimation process so the wood is exposed to the same conditions that will exist for the life of the space.

6

INSTALLING YOUR PANELING

Substrate

Pioneer Millworks recommends installing interior paneling over a minimum ½" plywood substrate. Do not use particle board or MDF for substrate materials.

If furring strips are required, they should be nominal 1x4 SPF or plywood and installed perpendicular to the direction of the paneling at 16"-24" on center.

For the best possible installation, ensure that all substrate materials/assemblies are flat and true. Use shims as necessary to minimize bowing.

Fasteners

Use interior finish nails, sized appropriately for the thickness of your paneling and the underlying substrate. Adjust the pressure and faceplate of any pneumatic tools to minimize damage to the paneling. Pioneer Millworks does not recommend using staples or screws for paneling installation. Note that if using Accoya paneling, 304 or 316 stainless steel fasteners must be used.

Installation

Use a spacer material to leave a $\frac{1}{2}$ " gap between paneling and any other walls or permanent structural elements to facilitate any expansion of the paneling.

T&G:

For horizontal installation (See Figure 1): Start at the bottom of the installed area. If using a T&G product, the tongue should be facing up. Carefully blind-nail through the tongue into the substrate with the finish nailer set such that the nail is flush to the profile of the tongue every 8" – 12". Then face-nail through the opposite edge of the plank into the substrate at the same spacing no less than 1" from the edge of the plank. Insert the tongue of the first plank into the groove of the next and use a wood block and rubber mallet to gently tap planks together. Be sure to keep profiles free of sawdust and debris. Expect that materials with original patina may not sit flush across the face due to natural irregularities and character in the surface. Should any bow or twist be observed, carefully guide the planks together or cut longer lengths down.

Continue nailing through the tongue for subsequent courses, checking for level often. Since the tongue holds the groove of each following course in place, additional facenailing is not necessary until the last course at the top of the wall. It may be necessary to cut the last course to width, be sure to account for a ½" expansion space at the top of the wall.

Figure 1: Horizontal Paneling over Furring Strips

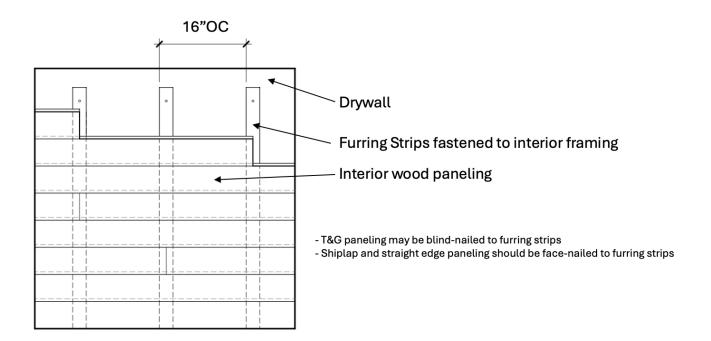
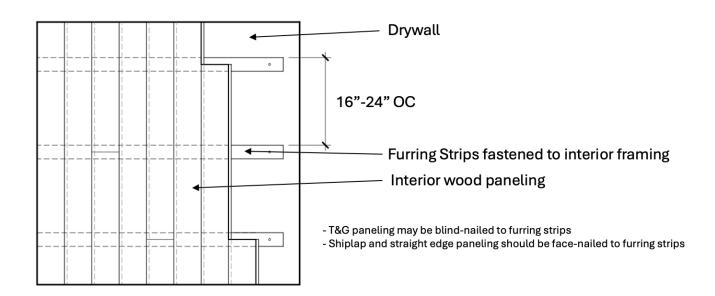


Figure 2: Horizontal Paneling over Furring Strips

Follow horizontal installation instructions but orient vertically.



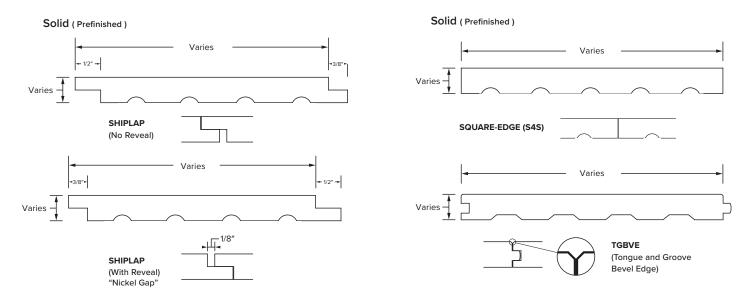
Shiplap:

If using a shiplap product, the top lip of the shiplap should be against the wall. Carefully use two nails through the face into the substrate every 8"-12", with each nail no less than 1" from the edge of the plank. Otherwise general installation follows the same instructions as T&G above.

Milling Patterns

Our standard profile for all Fir, Larch, Accoya, and ABODO, paneling products is a shiplap, with or without a nickel gap. This profile works well in both vertical and horizontal installations. The below drawings show our typical profiles, with the thickness and width varying by product.

Standard reclaimed and weathered siding products are created with ripped edges only (R2E) and a variable thickness. Please refer to your proposal or ask your salesperson for details.



T&G is not intended to be used as an exterior cladding profile and is not available in any Shou Sugi Ban finish.

S4S materials can be ordered for trim, or for open slat installations: note that there is no relief cut on the back of these materials.

Trim Details

Each project has its own unique architectural design, therefore we do not provide specific trim details drawings. We recommend always leaving appropriate space in trim work for expansion, contraction.

MAINTAINING YOUR PRE-FINISHED PANELING

Continue to maintain the living conditions of the interior space at 60-70F/15-21C and humidity levels between 35-55%. Some seasonal movement may still be observed during extremes of dry or humid air throughout the year. As a result, natural expansion and contraction of wood (which may result in subtle changes in dimension) is to be expected and occasional cupping, crowning, bowing, and cracking may be observed.

Direct sunlight can fade the color of paneling. Curtains, blinds and other window treatments which help to filter sunlight and/or reduce the intensity can help to protect the surface.

These natural reactions to the surrounding environment are not a defect in the material or finish, and cannot be controlled.

Additional Information for Shou Sugi Ban

Our Shou Sugi Ban paneling is a created by carefully burning the exposed surface of the boards to create stunning patterns and textures. Our Deep Char products retain the fully burned surface, while the balance of our Shou Sugi Ban products are brushed after burning, creating a pronounced raised-grain effect. All of our Shou Sugi Ban paneling is finished with two coats of sealer on the exposed face. The back face is unfinished and lightly burned for balance. While our brushed Shou Sugi Ban products are more resilient to direct contact, the Deep Char face is more delicate and should not be used in locations where frequent direct contact is unlikely. When working with any of our Shou Sugi Ban materials, wear gloves and use care when handling/installing. Take care not to over-drive fasteners into the face.

There may still be loose soot on the edges and back of all Shou Sugi Ban planks, and the exposed face of any Deep Char paneling may exhibit minor flaking with age. This is not a failure of the material or finish and can be remedied by applying touch up to the affected areas or re-coating the installation if needed.



Over-driving fasteners and aggressive material handling during installation will result in a scarred surface where the char layer comes off, revealing the lighter wood underneath. Shown on Larch Deep Char.

! CAUTION

Over-driving fasteners and aggressive material handling during installation will result in a scarred surface where the char layer comes off, revealing the lighter wood underneath.



Occasional flaking of finish due to natural aging, or handling during installation. Shown: Accoya Deep Char

Additional Information for Reclaimed & Weathered Paneling

Pioneer Millworks offers numerous reclaimed and weathered paneling options which celebrate the original surface patina of weather and age. The variations in texture, tone, character, and dimension are all part of the story this material brings to your project, and this character also provides a virtually maintenance-free, living finish. We suggest a higher minimum waste percentage of 20%-25% to provide flexibility in working with this material, especially in products where there are variations in thickness and width, or where the need for visual refinement may come up during installation.

Refer to previous guidance in this document regarding installation of these cladding options. Due to the variations in species and width in some products, it is especially important to provide ample expansion space at windows and doors.

The colors and textures seen in these products are 100% natural. No finish is applied by Pioneer Millworks as a standard part of any reclaimed or weathered cladding product, therefore it is not possible to select specific colors for any order.

Signs of previous use in any reclaimed or weathered material may include, but are not limited to: cracks and checks, holes from fasteners, ferrous staining, post/framing shadows, insect marks, chipped knots which may be loose or missing, original end conditions, and organic plant matter including lichen or moss.

A layer of 15# roofing felt may be placed over the substrate/furring strips strips before installing reclaimed/weathered cladding. This will provide a black background behind any open defects or knots.

RECOMMENDATION

Order a minimum of 20-25% overage for **RECLAIMED/WEATHERED** exterior cladding installations.



Our standard profile for all reclaimed and weathered cladding products is "R2E", meaning both edges of each plank are ripped straight, and the thickness is left to be variable as noted on the product specification sheet. If these materials are ordered with any milling to thickness or a specific profile, there will be a higher number of visible defects, most importantly missing or chipped knots, even if the order is placed for specific dimensions and lengths.

Warranty

Refer to Pioneer Millworks warranty at www.pioneermillworks.com/warranty

Accoya carries a 50 year warranty on properly installed materials. Please refer to: www.accoya.com/app/uploads/2021/10/Accoya-wood-warranty-US-and-Canada.pdf

ABODO carries a 15 year warranty on properly installed materials. Please refer to: www.abodo.co.nz/uploads/resource/Built-to-Last-Warranty-15yrs-Vulcan-Abodo-Wood. pdf

No warranty of any kind is made regarding the longevity, durability, or color of any finish on our paneling products

Pioneer Millworks is not responsible for any movement (expansion, contraction, cupping, crowning, bowing, twisting, checking, etc) which may occur following production at our facility, in storage prior to/following shipment or delivery for any length of time, while in transit, or on the jobsite before, during, and after installation. All movement in wood is a natural reaction by the product to the surrounding environment and is not able to be controlled through any manufacturing process.

These guidelines are provided as a reference for best practices. The purchaser is ultimately responsible for the proper selection and installation of the product and associated fasteners, as well as the selection and installation of all other components of the structure. All products must be installed in accordance with local building codes and regulations; questions about specific local codes must be directed to your local code enforcement official. Pioneer Millworks recommends installation by an experienced and qualified professional contractor. Pioneer Millworks accepts no responsibility for any product failure due to improper jobsite conditions, installation, or maintenance.