Standard Deck Board Face Installation Guide

THERMAL PRO

This guide is for non-grooved, standard ThermalPro Wood deck boards being fastened on the face. Please read completely and follow these recommended installation guidelines. Before ordering, consult your local building code to ensure your project is installed in accordance with local requirements and consult your local building office to understand permitting requirements. This guide address installation of deck boards only. For substructure, flashing, fascia board, perimeter trim and stair installation, please consult with your builder/installer. Drawings in this document are for reference purposes only

Hidden Fastener Installation

ThermalPro Grooved Deck Boards work with DeckWise Ipe Clips and similar sized clips. Please refer to the clip manufacturers installation instructions.

Ordering Preparation

COLOR

The thermal modification process darkens the color of the wood. This is a natural byproduct of the process. When used unfinished in exterior applications the wood's color will change to a silver patina due to UV exposure. To maintain the original color or install a different color, we recommend applying a UV coating designed specifically for thermally modified wood. See the finishing section for more information.

FINISHING

ThermalPro Wood can be used unfinished or finished. Utilizing the wood unfinished does not change its performance. However, there are several finishing options for your decking:

- Wood oil coating: Thermally modified wood can be coated with a performance oil to improve its stability. Options include Sansin Dec or Wood Stabilizer, CUTEK Extreme Wood Oil, and exotic species natural oils like Ipe oil. These do not include a UV protectant.
- To maintain or change the color of your deck boards, a UV protectant must be applied. This requires the addition of a color additive which contains the UV protectant. Please consult with your dealer for options.

FASTENERS

To ensure the longest life span of your thermally modified decking installation, please follow these guidelines:

- Stainless steel fasteners are recommended for exterior installations.
- When using non-grooved deck boards in a face installation it is important to pre-drill the face of the board before fastening with outdoor rated deck screws. Self-drilling deck screws may also be used however it is important to use the correct size and to not over tighten to cause cracking.

Storage & Handling

While thermally modified wood is resistant to expansion and contraction, it is still good practice to ensure the materials are handled properly and acclimated to their installation environment for the best results. The product may get damaged if stacked improperly or submerged in water. For proper storage and handling:

- Skidded material: Store off the ground covered with its original, or similar, element-resistant barrier.
- Lay flat on an even and drainable surface away from standing water. Ground clearance should be 12 inches.
- Product should not be exposed to the sun or excess heat during storage.
- We recommend a 1-week on-site acclimation period before installation.

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Joist Spacing

Consult your local building codes for approved joint spacing. ThermalPro Wood boards are a true 1.25" thickness to account for the 10% loss in strength which occurs during the modification process. Therefore, you can use standard joist spacing up to 16" on-center for all decking products.

Face Fastening

Pre-drilling of all holes is highly recommended to prevent over tightening and cracking of the wood. When screwing through the front of the board, utilize 2 screws per joint. Spacers sized at 1/4" are recommended for even distribution of boards. Fastener recommended for best results: #10 8x3" square drive flat head nibs deck screw type 17 2/3 thread, 18 8 stainless steel.

Standard deck boards are not grooved for hidden fasteners. Grooved boards are available. Please be sure to order grooved deck boards from your dealer.

INSTALLATION INSTRUCTiONS

ThermalPro Wood decking products should not be installed in contact with the ground or a solid surface such as a rooftop or cement. Adequate airflow ensures that moisture is not trapped under the decking. A sub-frame that provides a minimum open space of 4" below the decking surface is highly recommended.

Step 1 | Install Joist Tape

Prior to installing the first deck board, we recommend the installation of joist tape to the top of all joists. This prevents wood rot, seals the deck screw seams, and helps prevent movement and squeaking caused by changes in the weather. This is not required but is recommended.

Step 2 | Drill Pilot Holes

Using a 1/8" drill bit, pre-drill a pilot hole for the screw locations on the face of the first board. Do not drill through the entire board. Utilize (2) screws/holes per joint (joist connection). To avoid splitting, avoid holes within 1" of the board edge.

Installation Note For Commercial Applications:
For commercial installations, pre-drilling pilot holes in the joists can help speed up the deck board installation process —especially in dense or hardwood substructures.

To prevent future water damage, be sure the pilot hole diameter is smaller than the fastener diameter. This allows for a secure fit while minimizing the chance of moisture infiltration around fasteners.

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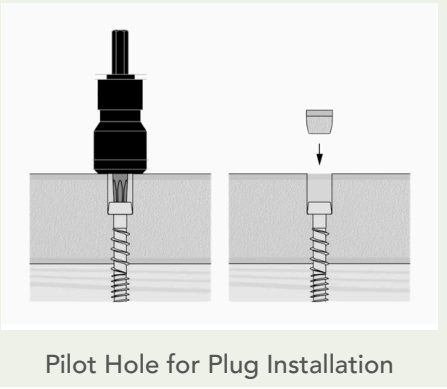
Step 3 | Plug Installation Optional

If you are using wood plugs to hide the screw holes, drill a 3/8" countersink bore hole to a 1/4" to 3/8" depth, depending on plug used, for each screw to be hidden with a plug. If using trim screws, proceed to step 4.

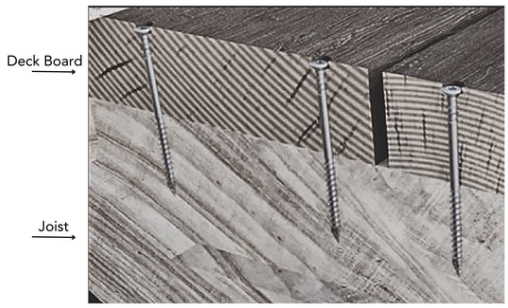


Pilot Hole for Plug Installation

Step 4 | Installing Boards

Securely drive a deck screw into the pilot holes of the first board. Do not overtighten to prevent cracking. If using, wood plugs: applying a dab of wood glue into the countersunk hole and insert wood plug, using a hammer or mallet to set.

Next, continue installing deck boards using a 1/4 inch spacer between each board and repeating steps 2 and 3. Remember to avoid board splitting, do not overtighten screws or place within 1" of the boards edge.



Screw Placement and Spacing

Step 5 | Installing Final Board

Install the final deck board the same as the first board. It is recommended that construction adhesive be applied on the outside joist or the outside joist to secure the last board.

Step 6 | Wood Plug Finishing

If using wood plugs to provide a smooth, hole free finish, you need to clean and finish the installed wood plugs. First, remove any excess plug material protruding above the countersunk hole with a belt sander, orbital sander or a flush cut pull saw. Next, sand all plug areas smooth and flush to the deck surface using an random, orbital sander with 80-120 grit sandpaper. Clean the deck surface to remove any sanding debris.

Care & Maintenance

ThermalPro products are 100% natural wood which means there are naturally occurring imperfections. You may find variances in grain pattern and color from board to board, or small cracks, surface checking or knots. These are common imperfections found with real wood products.

ThermalPro Wood finished and unfinished wood can still stain from items like red wine or dark stained mulch allowed to sit on the wood. It can also take on surface growth from standing water or in shaded areas. Just like rocks can grow moss, so too can any surface if not allowed to dry properly. A mild cleaning agent and a scrub brush or light pressure wash will remove any surface items.