## Technical Tip

## Installing 2-Layer AdvanTech® Flooring

AdvanTech® may be installed in 2-layers if the first layer is installed like a subfloor and the second layer is installed like an underlayment. Prior to installing the second layer, the first layer must be fully installed over the floor framing and the structure needs to be dried-in. The second layer should be installed after the building is dried-in.

## **First Layer Installation**

Acceptable adhesives for AdvanTech installation are polyurethane or solvent-based and in accordance with APA AFG-01 or ASTM D 3498 standards. Panel installation should start at the corner of the floor framing.

- Place a ¼" thick line of adhesive along the top of the joists; apply two lines to joists where panel ends meet.
- Immediately after placing the adhesive, lay the first panel into place, making sure
  the panel is square on the joists and that the certification stamp is face down and
  AdvanTech branding is facing up.
- Fasten panels to floor framing using code-approved fasteners. Deformed shank nails or screws are recommended. For panels up to 3/4" thick, use minimum 8d deformed shank nails or #8 screws. For thicker panels, use 10d deformed shank nails or #9 screws.
- For extra protection against floor noise, apply a 1/8" thick line of adhesive to the groove of the fastened panel before inserting the tongue of the adjacent panel.
- Stagger end joints of adjacent panels.
- Provide 1/8" expansion gap at 4-foot ends. T&G joint is self-spacing.

## **Second Layer Installation**

Prior to installing the second AdvanTech layer, it is important to check the subfloor for movement or squeaks and re-fasten as necessary. The second layer should also be installed perpendicular to the floor joists.

- First layer must be dry prior to laying the second layer.
- Place a layer of 15-lb felt on top of the subflooring prior to installing second layer.
- Adhesives should not be used to fasten the two layers together.
- Install second layer on top of the first layer inside of the wall studs. A minimum 1/4" gap is required between the second layer and wall perimeter.
- End joints (butt joints) should be offset at a minimum of 4-inches apart from the first layer end joints. Edge joints (long dimension) should be offset a minimum one joist space from the first layer edge joints.

- Provide 1/8" expansion gap at 4-foot ends. T&G joint is self-spacing.
- Fasten top layer using wood screws of sufficient length to just penetrate the thickness of the subfloor. <u>Do not screw second layer to floor joists.</u>

HUBER ENGINEERED WOODS DOES NOT PROVIDE LOAD CARRYING CAPACITIES OF MULTI-LAYER SYSTEMS. A PROFESSIONAL DESIGNER SHOULD BE ENGAGED TO DETERMINE ADEQUACY OF MULTI-LAYER ASSEMBLIES.

ADVANTECH IS NOT APPROVED FOR USE AS AN UNDERLAYMENT FOR DIRECT APPLICATION OF ANY COMMERCIAL GLUE DOWN CARPET, RESILIENT FLOORING, OR TILE INSTALLATION.

The steps above are based on recommendations from the Engineered Wood Association (APA), formerly known as the American Plywood Association, for underlayment installation. Figure 1 below displays underlayment installed over typical floor framing.

Note: For floors installed over crawl space, follow local code requirement for ventilated or conditioned crawl space to prevent varying moisture conditions for the two flooring surfaces.

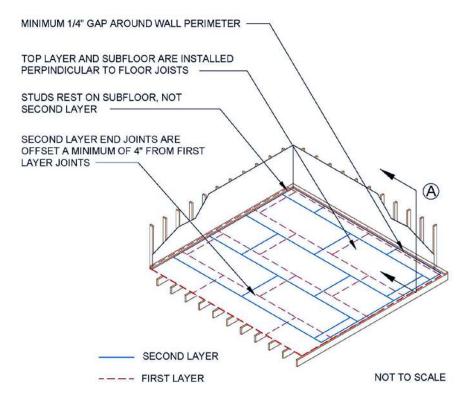


Figure 1: 2-Layer Installation

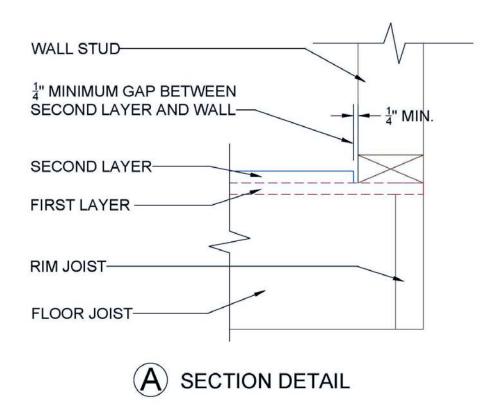


Figure 2: Section Detail

For more detailed information on AdvanTech subflooring installation, please visit <a href="https://www.advantechperforms.com">www.advantechperforms.com</a> or contact our technical services department at 800-933-9220 Ext 2716 with any questions or comments.