

2-Layer Floating Subfloor with AdvanTech® Subflooring

AdvanTech is an excellent subfloor for use in 2-layer floating subfloor systems. Floating subfloor systems can be installed over below-grade, on-grade or above-grade concrete slabs. Prior to installing AdvanTech, the concrete slab must be installed and cured per the applicable building code with the building fully dried in. The following steps outline the construction sequence specified by the National Wood Flooring Association (NWFA) for floating subfloor installation.

Step 1a: Sub-Grade and On-Grade Slab Preparation

Cover the slab with vapor retarder. NWFA defines a vapor retarder as having permeance level less than one perm. Minimum 6 mil polyethylene sheeting is commonly used. The vapor retarder should be spot glued to the slab with a polyurethane based adhesive that will bond to both concrete and retarder. All joints should be lapped a minimum 4". These laps should also be glued to ensure an adequate moisture seal. The vapor retarder should extend up the sides of the walls a few inches. Once the AdvanTech panels are installed, the excess material can be trimmed flush.

Step 1b: Above-Grade Slab Preparation

Concrete slab should be fully cured and no longer emitting moisture from the concrete. Although NWFA recommends a vapor-retarder anytime solid wood flooring is installed over a concrete slab, it is only required when:

- Slab is on-grade or below-grade
- Slabs with a calcium chloride reading greater than three pounds
- Slabs with a calcium carbide reading greater than 2.5%

Step 2: First Layer Installation

- The minimum AdvanTech panel thickness used in a 2-layer floating subfloor is 1/2".
- Starting at the corner of the concrete slab, the first AdvanTech panel layer should be placed with edges parallel to wall, without fastening.
- A minimum 3/4" space should be left between AdvanTech panels and walls. A minimum 1/8" gap should be maintained between all panel edges.

Step 3: Second Layer Installation

- Install the second layer of AdvanTech panels perpendicular or at a 45 degree angle to the first layer.
- A minimum 3/4" space should be left between AdvanTech panels and vertical obstructions or wall lines. A minimum 1/8" space should be left between AdvanTech panels.
- Staple or staple and glue¹ the second layer to first layer on 12" interior grid pattern and on 6" around the perimeter. Screws or screws and glue may also be used in lieu of staples. Be careful not to penetrate any vapor retarder present between the first layer and the concrete slab.

¹Huber Engineered Woods recommends using polyurethane or solvent-based subfloor adhesives that conform to industry standard APA AFG-01 or ASTM D 3498.

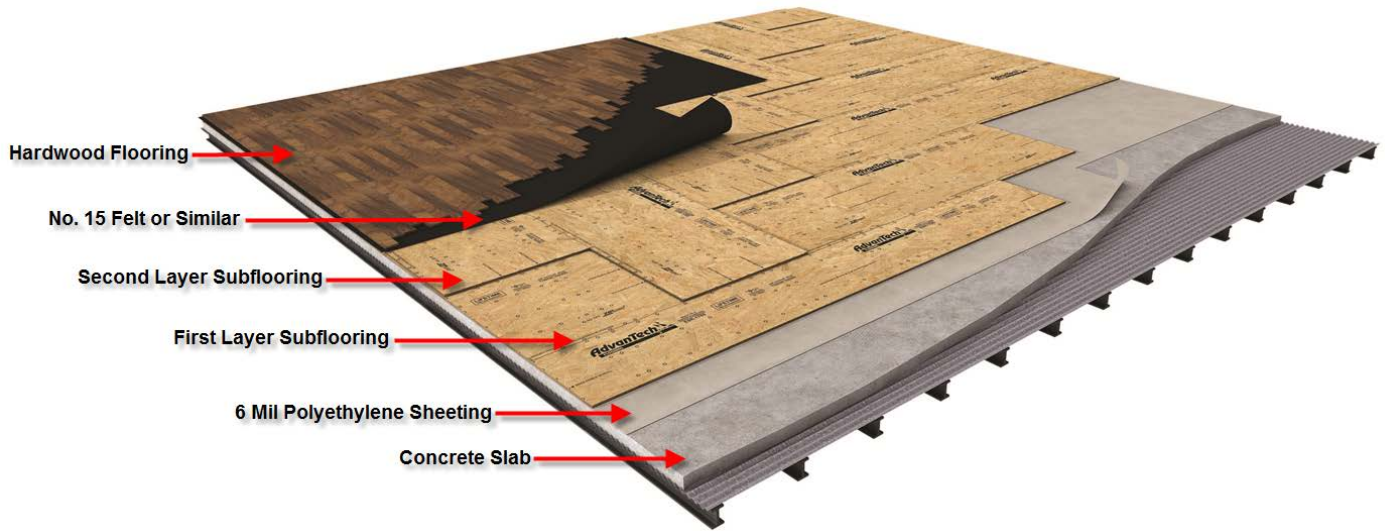


Figure 1: Typical 2-Layer Floating Subfloor Assembly with Hardwood Flooring

For hardwood flooring installation guidelines, please see our technical bulletin [Hardwood Flooring over AdvanTech Subflooring](#). For more detailed information on AdvanTech subflooring installation, please visit www.advantechperforms.com or contact our technical services department at 800-933-9220 Ext 2716 with any questions or comments.



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

For additional resources regarding 2-layer floating subfloor installation or hardwood flooring installation, please contact:

NWFA

National Wood Flooring Association
111 Chesterfield Industrial Boulevard
Chesterfield, MO 63005
800-422-4556
www.woodfloors.org

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