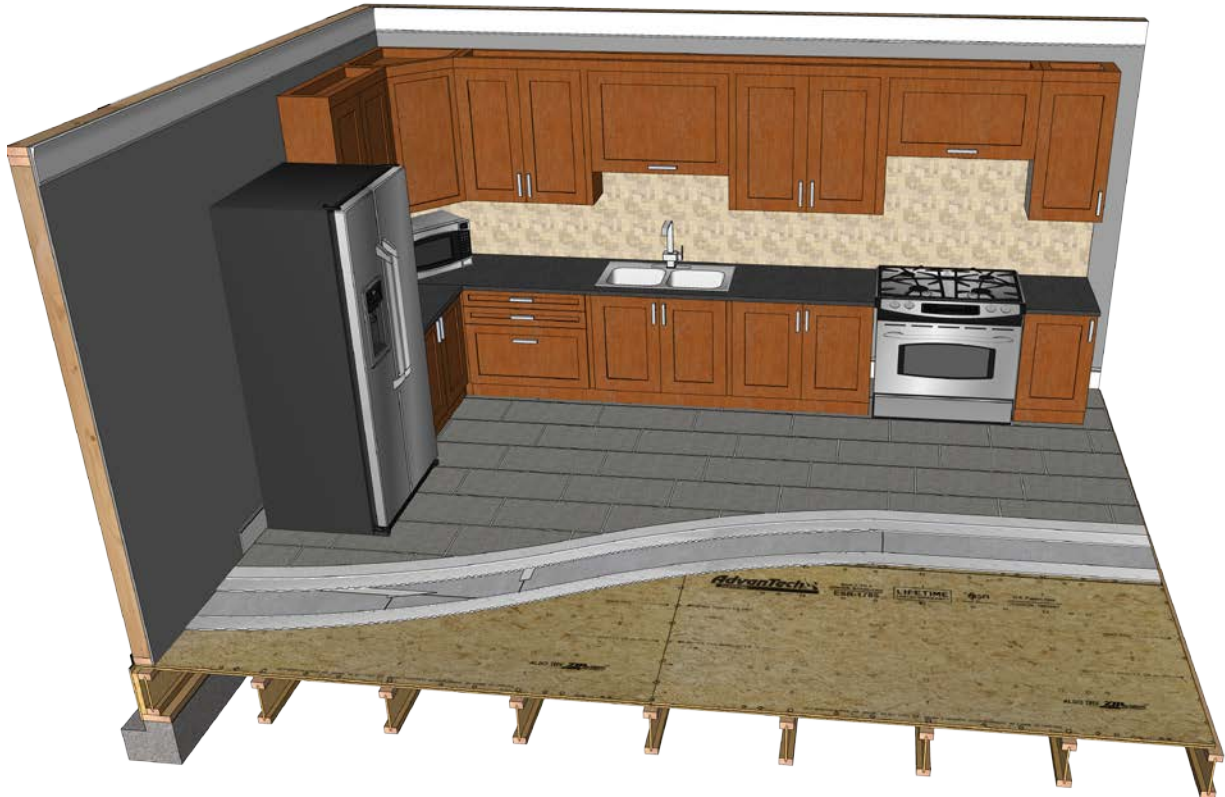


Technical Tip

Ceramic Tile over 1-1/8" AdvanTech® Subflooring Spaced at 24" o.c.

AdvanTech subflooring is an excellent substrate for a variety of floor coverings including ceramic tile. The following steps outline the construction sequence for the AdvanTech flooring and ceramic tile per the Tile Council of North America (TCNA) Handbook for Ceramic Tile Installation. Please note, the TCNA requires a minimum 1-1/8" subflooring panel when floor framing is spaced 24" o.c.



Step 1: AdvanTech Subflooring Installation



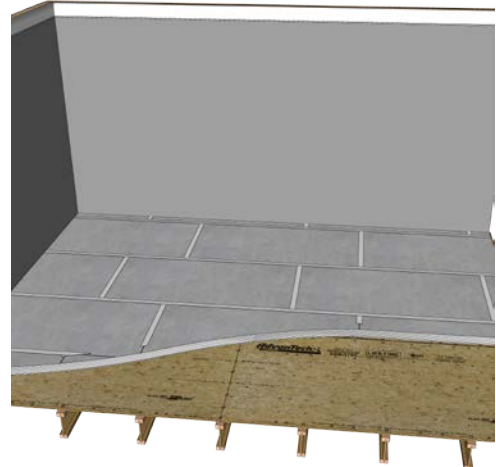
- Joists spaced a maximum 24" o.c. using a deflection criteria of L/360.
- Minimum panel thickness is 1-1/8".
- Install panels with long dimension perpendicular to supports.
- Apply a continuous 1/4" bead of construction adhesive to joists. Use only polyurethane or solvent-based adhesives which conform to industry standard AFG-01 or ASTM D 3498.
- Although code allows the use of 10d common nails, it is recommended to use 10d ring shank, screw shank nails or minimum #10 deck screws. Fasteners should penetrate the framing member at least 1". Space fasteners no greater than 6" o.c. at supported ends and no greater than 12" o.c. at intermediate supports in the field.
- Provide 1/8" expansion gap at 4-foot ends. T&G joint is self-spacing.
- Ensure panels are dry, clean and free of dirt, dust and oily film prior to installation of finished floor covering.

Step 2: Underlayment Installation

- The type of underlayment to be used is the decision of the homeowner or general contractor. The decision should be based on the type of floor construction present and size of tile being used. Various types of acceptable underlayment exist, including cement backer board and uncoupling membrane membranes. Refer to the TCNA for Ceramic Tile Installation for suitable underlayments to be used in conjunction with structural panel substrates at corresponding support spacing.

Uncoupling Membrane

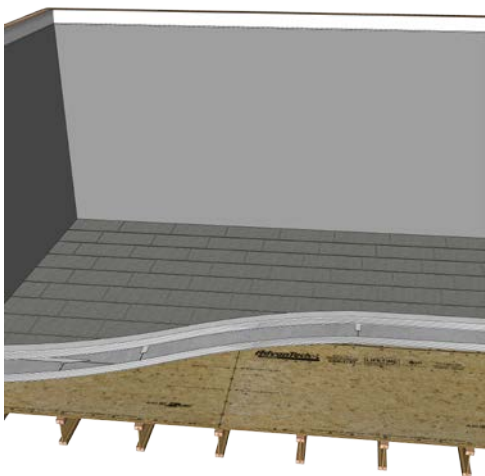
- These steps will cover the installation of an uncoupling membrane tile underlayment
- Sand any areas of the AdvanTech flooring that may be uneven to ensure flatness. Vacuum all dust and debris. A commercial drum sander can be used to sand larger areas.
- Apply layer of modified thin-set mortar and install membrane according to membrane manufacturers' recommendations.



Cement/Fiber Cement Backer Unit (CBU)

- These steps will cover the installation of the following three approved underlayment on top of AdvanTech subflooring.
 1. Cement backer board
 2. Fiber cement backer board
 3. Embedded glass reinforced gypsum tile backer board
- Sand any areas of the AdvanTech flooring that may be uneven to ensure flatness. Vacuum all dust and debris. A commercial drum sander can be used to sand larger areas.
- Apply layer of modified thin-set mortar and install CBU according to CBU manufacturers' recommendation over the AdvanTech subflooring.

Step 3: Ceramic Tile Installation



- Apply a layer of thin-set mortar to the underlayment in straight beads using the appropriate trowel. Try to avoid making curved strokes.
- Different grades of thin-set mortar exist. Use what is specified by the method used in the TCNA Handbook and what is recommended by the underlayment manufacturer.
- Install tile per manufacturer's instructions.
- Refer to the latest TCNA Handbook for Ceramic Tile Installation for acceptable methods of installing ceramic tile on structural panel substrates.

Note: Do not install ceramic tile directly to AdvanTech subfloor panels. An approved underlayment must be installed over AdvanTech subfloor panels prior to ceramic tile installation. Refer to the TCNA for more information on ceramic tile installation.