



ULTRA HIGH PERFORMANCE
STRUCTURAL COMPOSITE DECKING SYSTEM

Installation Guidelines



OVERVIEW AND DISCLAIMER

Review these installation guidelines completely and thoroughly before installing STRONGDEK®. It is imperative that installers follow all standard, generally-accepted construction practices and adhere to all building code requirements. It is also important to respect all safety practices outlined below.

Strongwell recommends a licensed architect or engineer review any non-standard designs prior to installation. Strongwell claims no responsibility for the improper or unsafe installation of its products.

As with any decking structure, be sure all joists are spaced and installed according to local codes, and all joists are in the same plane prior to installing any of the STRONGDEK components.

SAFETY

There are inherent dangers when working on any construction project. Observe all safety precautions to minimize risk of injuries. Utilize proper tools (including blades and bits) for working with STRONGDEK, and follow all installation guidelines. A Safety Data Sheet (SDS) for STRONGDEK is available at <https://www.strongwell.com>.

PPE

Strongwell recommends wearing protective eyewear and closed-toed shoes at all times when working with STRONGDEK. A dust mask is recommended when cutting or drilling in confined spaces to reduce exposure to nuisance dust.

TOOLS

- Tape Measure
- Pencil, marker, or other marking tools
- Miter Saw (equipped with a non-toothed diamond or carbide grit blade)
- Circular Saw (equipped with a non-toothed diamond or carbide grit blade)
- Jigsaw (equipped with a non-toothed diamond or carbide grit blade)
- Drill with drill bits (carbide tipped bits recommended)
 - If using #8 screws, a 3/16" bit is recommended
 - If using #10 screws, a 7/32" bit is recommended
- Drill Driver (use care with impact drivers to avoid over-torquing, shearing, or stripping screws during installation)
- Dust-Off (purple) Marking Chalk Line (do not use standard chalk lines, as the chalk may be difficult to remove from decking components)
- Non-marring rubber mallet
- Plank gapping jig (optional)

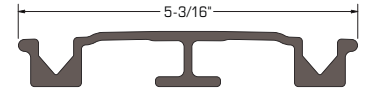
RECOMMENDED FASTENERS

For Plank: Standard 82° taper head decking screws with a type-17 point. Bugle head screws with type-17 point are also acceptable. Do not use trim or wafer head screws. Stainless steel screws will offer most corrosion resistance, especially near saltwater or other corrosive environments.

For Caps: Liquid Nails® Fuze-It® construction adhesive

Installing STRONGDEK®

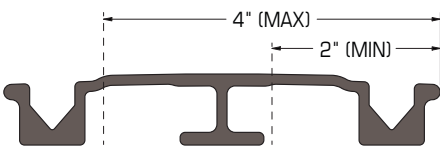
Plank (assuming wood or similar substrate)



A



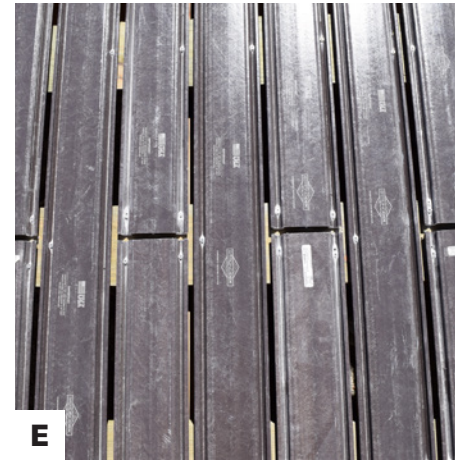
B



C



D



E

[A] Ensure all joists or sleepers on top of the joists are in the same plane, and fully prepared for installation of surface boards per local codes and standards, using generally-accepted construction practices.

[B] STRONGDEK planks should be installed with a minimum 7/16" open gap between the long edges of planks to ensure sufficient space to install cap components and provide a 1/8" gap between finished boards. An optional plank gapping jig can be used for convenience. No gap is required at end-to-end butt joints.

Measure overall dimensions of your deck to determine if any STRONGDEK planks will need to be ripped to a narrower width. *See inset drawing [C] for details on width limitations.* If a plank must be narrowed, the ripped edge should be against the structure so that the exposed plank edge will be hidden. Alternatively, you can slightly alter spacing between planks within local code allowances in lieu of ripping a plank.

[D] Measure and cut planks to length.

[E] Any seams must fall on a joist (or similar supporting structure) to provide adequate support to the ends of both planks. Where butt joints meet over a single joist, double blocking can be added for additional screw support as desired, or as required by applicable building codes.

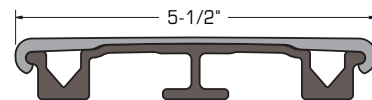
Planks shall not cantilever over the edge of a joist further than 1" in the lengthwise direction and 1/2" in the cross-wise (board width) direction.

Pre-drilling screw holes in the STRONGDEK plank is recommended, but with certain self-drilling screw types (such as a type-17 point), pre-drilling is not required. If you choose to pre-drill, use the recommended size drill bit and pre-drill screw holes at joist locations through the plank in grooves on each edge of the plank (but not into the joists). Two screws should be used at each joist (one on either edge of the plank), as well as on each plank at every seam. Do not place screws closer than 1/2" from the end of a plank to avoid tear out.

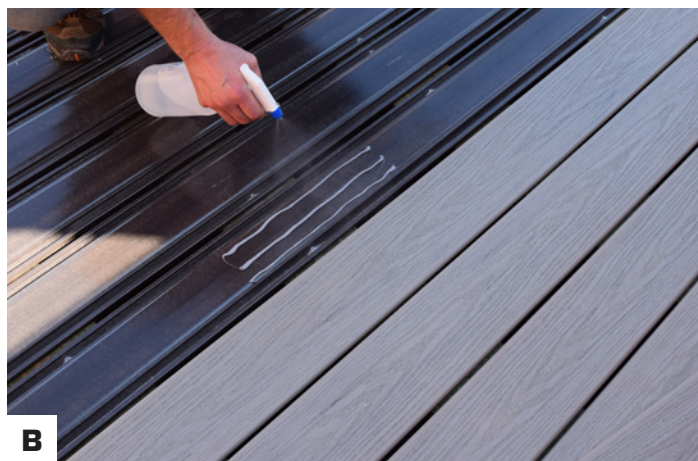
Fasten planks to joists until screws are snug.

Installing STRONGDEK®

TOP CAP



A



B



C



D

Notes:

- The recommended length range to cut STRONGDEK caps for installation is 2' (24") minimum to 20' (240") maximum.
- It is best to avoid end-to-end butt joints when installing STRONGDEK caps. If a single length of cap is insufficient for your deck installation, a preferred method over a traditional butt joint is to plan your layout using a perpendicular "breaker board" to minimize the effects of linear expansion and contraction of the caps. If a butt joint is required during cap installation, ensure there is no gap between caps. As a reminder, no gap is required at end-to-end butt joints of the plank.
- When caps will terminate on the end of a finished plank, allow cap to overhang plank by approximately 1/8" to allow for expansion and contraction.
- It is recommended to install STRONGDEK caps when the temperature is at least 40° F, as caps are less flexible and thus more difficult to install in colder weather.

[A] Measure and cut caps to length using the same blade used to cut planks. Any miters cut into planking should also be mitered into the corresponding cap before installation.

[B] Apply three, beads of adhesive (6-12" long) on the STRONGDEK plank in approximate center span and on the ends of where cap will be installed.

[B] Per recommended adhesive instructions, mist water on adhesive to assist with adhesion and cure.

[C] Hook one edge of cap over one edge of STRONGDEK plank and tap gently into place using non-marring mallet to ensure cap edge is completely hooked over the plank's edge.

[D] Hook opposite edge of cap over opposite edge of plank and use non-marring mallet with moderate force to snap in place along length of plank from one end to the other. A small flat prybar or plastic wedge may be used to assist in holding cap snug on hooked edge as final edge is being malletted into place.

Maintaining STRONGDEK®

HOW TO CLEAN

A deck built with STRONGDEK should require minimal maintenance. If your deck needs to be cleaned, use warm, soapy water and a soft bristle brush to remove dirt and debris, and rinse thoroughly with clean water.

Pressure washing is not recommended.

STRONGDEK® is made exclusively by:



The World Leader in Pultrusion and
Pultruded Fiberglass Structures & Shapes

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