



Installation Guide

Installation Guidelines

All local building codes and principles should be followed during the installation of TIVADEK PVC decking. Any installation of TIVADEK PVC decking that does not adhere to local building codes or this installation manual shall void the product warranty. TIVADEK Building Products assumes no liability or responsibility for the improper installation of this product. All installations are unique and will have different requirements for each application. Determining the specific requirements for their individual application is the sole responsibility of the installer. TIVADEK Building Products strongly recommends consulting a licensed engineer, architect and/or local building inspector to review all construction designs prior to installation.

IMPORTANT – Before You Begin!**TIVADEK PVC Decking: Do's and Don'ts**

- DO check the ends of your TIVADEK PVC deck boards to ensure they are square.
- DO follow all tool and fastener recommendations and installation practices listed in this manual.
- DO ensure your substructure is code-compliant to support your TIVADEK PVC decking.
- DO design your decking structure with sufficient clearance underneath to allow for proper airflow. TIVADEK recommends a minimum of 8" below the joist. For applications with restricted airflow such as rooftops or on-grade applications, a sleeper system of at least 2" must be installed.
- Do NOT nail TIVADEK PVC deck boards.
- Do NOT use vinyl or rubber products on top of your deck boards. A reaction can occur that can cause discolouration beneath these products (mats, planters, tarps, etc).
- Do NOT use TIVADEK PVC decking for support posts, beams, columns, guard railing, joist stringers or for any other primary load bearing purposes.
- Do NOT install TIVADEK PVC decking on top of existing deck boards.
- Do NOT cantilever over 1".
- Do NOT use a router on TIVADEK Fascia edges, with the exception of start/stop boards.

Storage & Handling

- Store TIVADEK PVC deck boards on a flat and level surface.
- Keep decking cool and shaded prior to installation by storing in a garage or warehouse. Keep factory protective wrapping on the product until time of installation for protection against dirt or debris. If decking is stored outdoors, cover the product using a non-translucent, light coloured material.
- Do NOT stack product bundles over 8 units high.
- Handle TIVADEK PVC decking with caution when using a forklift. Forks can easily damage the product.
- If using plastic banding to bundle the product, use corner protectors to prevent indenting or damaging the product's edges.
- Do NOT store product in areas of excessive heat or direct sunlight.

Tool Requirements

The tools required for the installation of TIVADEK PVC decking are similar to those of wood or composite decking installations. The use of all tools should be done in accordance with the applicable manufacturer's instructions. The basic tool requirements are as follows:

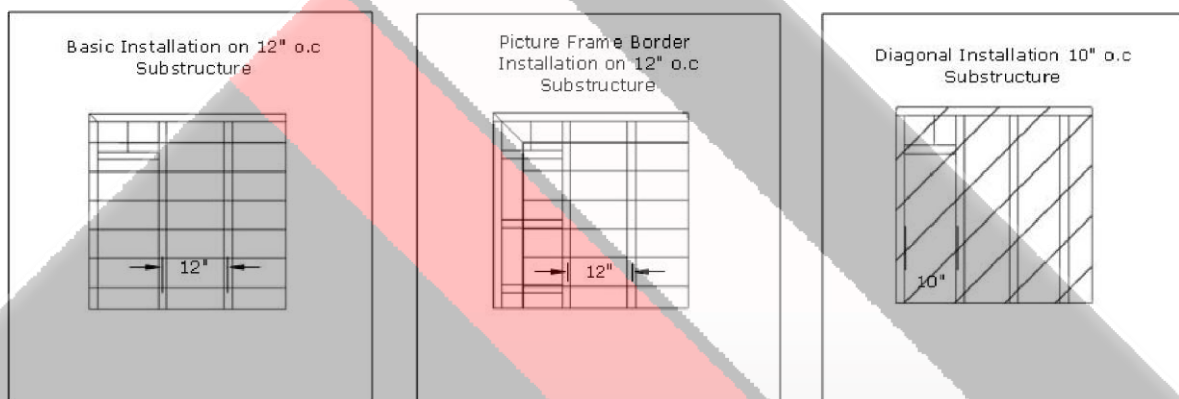
- Tape Measure
- Chalk Line
- Cordless drill/screwdriver (self-feeding screw guns may also be used)
- Spacing Tools
- Carpenter Square
- Miter Saw – a fine-toothed carbide tipped finish trim blade is required
 - 7 1/4" 40 tooth minimum;
 - 10" 80 tooth minimum;
 - 12" 90 tooth minimum;
- Jig Saw – a premium quality fine-toothed blade designed for PVC cutting. Use this to cut around obstructions such as posts, trees, etc.
- Safety Glasses – must be worn at all times during installation

EXTREME HEAT WARNING

Extreme increases in the surface temperature of TIVADEK PVC decking, exceeding that of normal exposure, can cause damaging effects to the product. These effects include the potential for the product to sag, melt, warp, discolour, and increase thermal expansion/contraction and weathering. External sources of heat that could generate extreme temperatures include, but are not limited to, fire or reflection of sunlight through Low-emissivity (Low-E) glass. For those TIVADEK customers who have concerns regarding Low-emissivity glass in their home, or that may effect their application, TIVADEK Building Products strongly recommends contacting the manufacturer of the product containing Low-E glass. The manufacturer should be able to aid in determining a solution for reducing or eliminating the effects of reflected sunlight.

Installation Preparation

- When using an existing substructure, check that all joists are level and structurally sound. Ensure that no nails or screws are protruding.
- It is important to ensure all joists are level across the top and crowned correctly, as TIVADEK PVC decking will conform to the shape of the support structure.
- Correct joist spacing is crucial to proper installation. TIVADEK PVC decking is rated for 16" O.C. (on center); however, TIVADEK strongly recommends 12" O.C. for best results and to minimize deflection. Joist spacing must never exceed 16" O.C.



- Do NOT exceed 12" O.C. for commercial or stair applications.
- Do NOT exceed 12" O.C. when installing deck boards diagonally. TIVADEK recommends 10" O.C. for diagonal applications, such as a herringbone pattern.
- Use two fasteners for every joist.
- A double joist is required when installing deck boards end-to-end, to fasten deck boards to joists.
- TIVADEK highly recommends installing solid wood blocking between each joist every 4' within the substructure. Blocking will help to stabilize the frame and minimize the movement or twisting of the substructure.

Expansion and Contraction

Due to changes in temperature, minimal expansion and contraction can occur in TIVADEK PVC decking. Slight gaps may be observed at end of boards or in splice joints in colder weather due to contraction; however, no side-to-side movement should occur. Expansion and contraction is most likely to occur where extreme temperature changes occur. Following instructions exactly as outlined in this manual will greatly minimize the occurrence of expansion and contraction.

To limit the amount of expansion and contraction in your TIVADEK PVC decking, the following installation principles must be followed:

- Ensure structure design allows for proper ventilation. For applications with restricted airflow such as rooftops or on-grade applications, a sleeper system of at least 2" must be installed.
- Fasten boards immediately after cutting.
- Fasten each end of board at joints, mitres, splices, or abutments securely into framing with two screws. Screws must be placed at or within 1/2" of the ends of boards and 1/2" from side of deck board.
- Install deck boards tightly together at splices and mitres.
- Ensure there is a minimum gap of 1/8" between deck boards and any structure, such as a wall or post.
- In all applications, deck frame and substructure must be securely attached to a building structure or ground footings. Floating substructures should not be used.
- Ensure that mitres and splices are staggered so they do not all break on the same joist or beam.
- Certain area building codes require double joisting when installing boards end to end. Always check the specific building requirements with your area's code authority, prior to installation.

Recommended Spacing

Ambient Temperature	Butt Joints
Below 32°F	1/8"
32° - 75°F	1/16"
Above 75°F	No Space

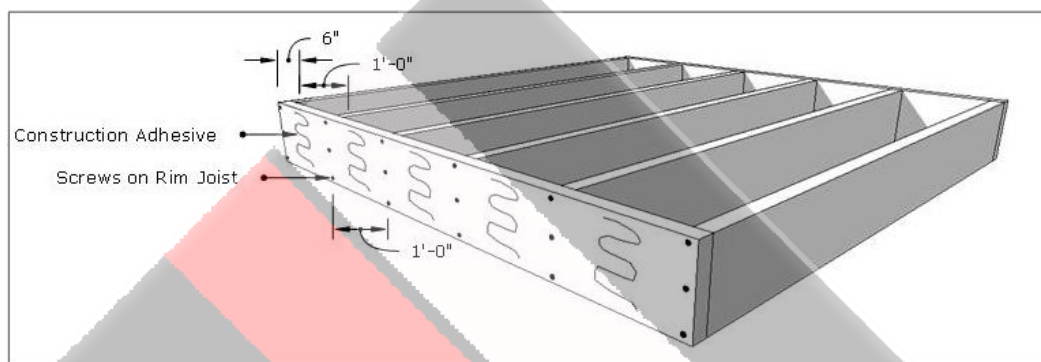
Using recommended fasteners will provide an approximate side-to-side spacing of 1/8" between boards.

Approximate expansion and contraction for unattached TIVADEK PVC deck boards based on a 50°F temperature change: 16' = 3/16" and 20' =

1/4".

*Direct sun exposure will vary these measurements, and increase the potential of expansion and contraction.

TIVADEK PVC Fascia must be fastened at 12" on centre, using proper fascia screws. For best results, TIVADEK highly recommends alternating gluing and fastening every 6" using a clear elastic sealant, such as Lexel, to control movement.



Recommended Fasteners

As TIVADEK PVC decking is designed for durability and longevity, a high quality fastener must be used to guarantee the quality of installation. The following requirements must be met for fasteners used in the installation of TIVADEK PVC decking:

- Stainless Steel
- #8 Screw Size Minimum
- 2 ¼" Length Minimum

NOTE: Colour matched stainless steel screws are an additional option, but not mandatory. Talk to your TIVADEK Building Products dealer for additional information.

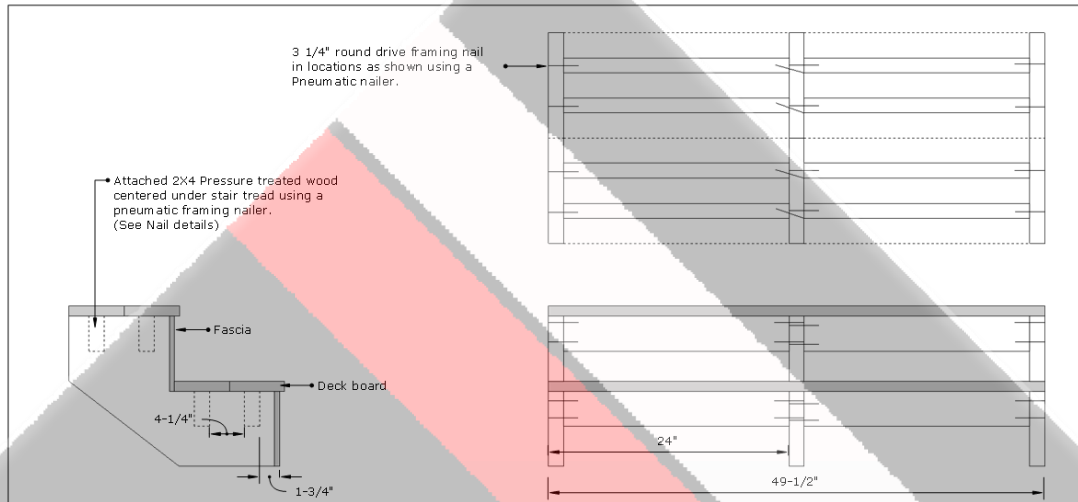
- For salt-water coastal applications, a screw of 316 Stainless Steel or better is required.
- Cortex®, HIDfast™, Mantis and CAMO™ fasteners are all recommended fastening systems to use during installation of TIVADEK PVC decking. Using other fastening systems will not void the product warranty; however, if a claim of product failure is directly caused by using an alternative fastening system other than explicitly stated above, all corresponding claims will be denied.
- Always install two screws per joist on each end of every deck board. Screws must be driven into solid wood framing to a minimum depth of 1 ¼" for optimal results.
- Waterfront applications such as docks or piers may be subject to different building codes, which may require special fastening systems. Prior to installation, consult local authorities.
- When installing TIVADEK PVC decking in temperatures of 32°F or below, pre-drilling holes will provide optimal results.

WARNING: During installation of TIVADEK PVC decking, always use a sacrificial board against side of deck board being installed. Never strike the deck board directly with rubber mallet or hammer.

Stair Code Compliance

- Stair construction must adhere to local building code requirements.
- Stringers must not be set more than 8" O.C., without an additional brace or support.
- Overhang must not be greater than $\frac{1}{2}$ ".

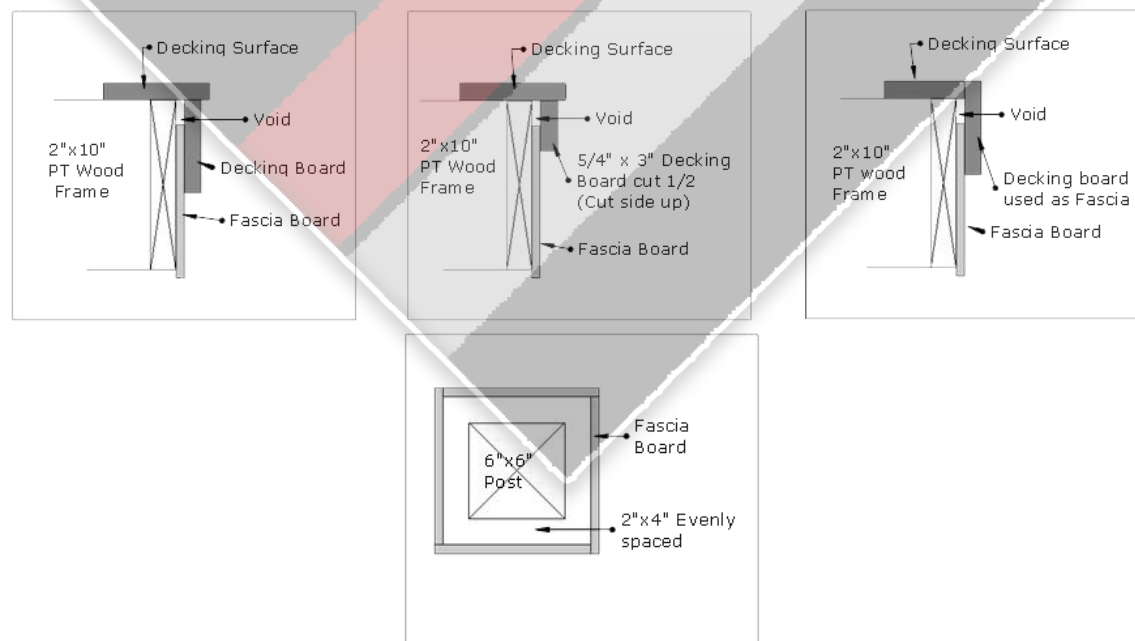
For best results, TIVADEK Building Products recommends constructing stairs as per illustrations below:



TIVADEK Fascia Installation

- Measuring a unique $\frac{1}{2}$ " x 8 $\frac{1}{2}$ " profile, the multipurpose cladding can be installed on rim joists, posts, beams and stair risers.
- For gluing and fastening recommendations for fascia, refer to the **Expansion and Contraction** section of this manual.

For best results, TIVADEK Building Products recommends installing fascia as per illustrations below:



Care & Maintenance

TIVADEK PVC decking is highly durable and is covered by a Limited Lifetime Warranty. In order to prolong the product's longevity, proper maintenance and care is required to keep your TIVADEK PVC deck looking and performing its best. The following care instructions should be followed to maintain warranty coverage:

- For dirt and debris removal, beyond power washing, periodic washing of the product using an all-surface biodegradable household cleaning product is recommended, using a firm, natural fibre cleaning brush. Using solvent-based or harsh cleaning products will void the product warranty.
- For rust removal, a biodegradable toilet bowl cleaner should be used. It is always best to test all cleaning products on a scrap piece of board or on a small inconspicuous area of your TIVADEK PVC deck.
- Chemicals found in products such as sunblock or insect repellent can cause discolouration or damage the decking surface. Avoid using these products on your TIVADEK PVC deck.
- Avoid leaving pool covers and toys, rubber-backed items, tarps and other such non-porous materials on your TIVADEK PVC deck as they can cause discolouration when left on decking surface for any extended period of time.
- During installation be careful not to transfer any PVC adhesive, or similar product, on the surface of your TIVADEK PVC deck. It can permanently damage, stain, or discolour the decking surface.

Ice and Snow Removal:

- Use caution when walking on TIVADEK PVC deck surface during winter weather. As with any walking surface, it may become slippery in winter conditions.
- For ice removal, most de-icing products containing calcium chloride can be used without damaging the decking surface. These products could leave a white residue behind, which can be removed using the instructions above. NOTE: Granular products may cause marking on the deck surface if walked on top of.
- For clearing snow, NEVER use a metal shovel or plastic shovel with a metal leading edge. Use a plastic shovel with caution to avoid surface scratches.

Considerations:

- Over time, due to natural weathering, TIVADEK PVC decking may appear to lighten depending on intensity of sunlight exposure and other environmental conditions.
- As with many plastic materials, static-build up can occur in TIVADEK PVC decking. It is a naturally occurring phenomenon that will gradually reduce and nullify as time passes and as elements such as dust and rain are encountered.
- Although TIVADEK PVC decking has a high heat resistance, all decking surfaces get hot in direct sun exposure. Lighter coloured boards will keep cooler than darker colours.
- DO NOT cut any product on or near TIVADEK PVC decking, especially metal, as shavings or sparks could cause decking to melt.
- DO NOT allow jobsite debris or dust (from concrete or masonry products), dirt, mud, etc. build up or sit on TIVADEK PVC decking as it may cause damage the decking surface
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Warranty

TIVADEK Building Products Inc. extends a Limited Lifetime Warranty of twenty-five (25) years for residential applications and fifteen (15) years for commercial applications. This warranty covers defects that cause TIVADEK PVC Decking to split, rot, splinter, delaminate, crack, excessively swell, or suffer structural damage from termites or fungal decay. For complete warranty and coverage information, please visit www.TIVADEK.com or call our Customer Service at 1-289-772-7497.

Disclaimer: The information contained in this document is true and correct at the time of print and publication. Prior to installation, refer to Installation Manual found on TIVADEK.com for the most current and up to date instructions, as installation practices and techniques are subject to change without notice.