PRIZM™

COMPOSITE DECKING



# INSTALLATION AND CARE GUIDE

PrizmDeck.com

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# STOP – Must Read Guidelines

**Failure to install Prizm Composite Decking products in accordance with local building codes and the following guidelines will void the product warranty.**

**Avon Plastics, Inc. Disclaimer:** Prizm deck boards must be supported by a code compliant substructure and CANNOT be installed on top of existing deck boards. All installations are unique and should be reviewed by a licensed architect, engineer or local building official before installation begins. Avon Plastics does not accept liability or responsibility for any improperly installed decks or docks.

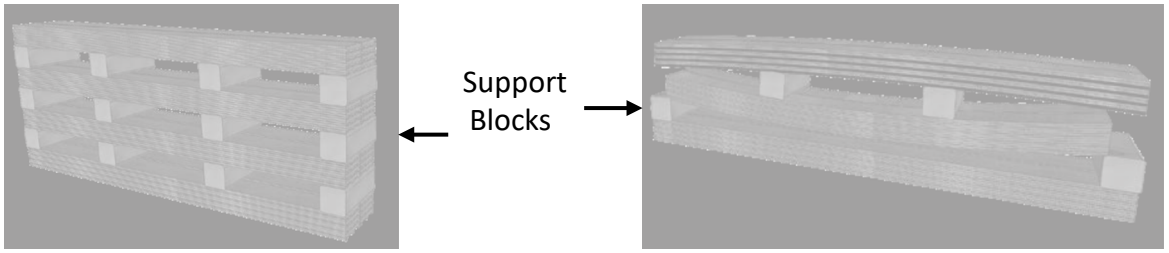
## The Basics:

1. Do NOT use nails with Prizm Composite Deck boards. Use only approved TurboClip Hidden Deck Fasteners and/or Starborn color matched screws.
2. Install Prizm deck boards with the embossed side up.
3. As with all polymer decking products, limiting the amount of build up of dust, dirt, sand, etc. from products such as concrete, masonry products, paver blocks, etc. is essential to protecting the deck surface from unnecessary scratching. Immediate removal of such materials is necessary or risk the potential damage of the deck's surface. Scratching is not covered by the warranty.
4. If this is a new build, a good practice would be to install the deck boards after all other exterior construction activities (roofing, painting, siding etc.) are completed.
5. Do Not use the composite deck as a work surface.
6. Always check to make sure the factory end cuts are square before installing. There can be some variations.
7. Inspect your material before installation. In the unlikely event you receive defective materials, you will save time and money if discovered before installing.
8. All composite products will expand and contract with changes in temperature. It is a best practice to avoid butt joints and design and install transition boards for longer decks to reduce the appearance of gapping.
9. Low-emissivity (Low-E) glass reflects more sunlight. The extra reflectivity resulting from the concavity in the glass can act like a mirror, concentrating sunlight onto the decking. The result can be an extreme increase in the amount of heat concentrated on areas of the decking surface and potentially cause damage to the board.
10. **Sealing exposed board ends is optional and is NOT required for warranty coverage.** However, for added moisture protection, we recommend sealing all exposed board ends, including ripped/exposed Prizm board cores, with Extreme Moisture Repellent End Board Sealer. Apply a thick, even coat to all exposed areas to help reduce moisture absorption.
11. Variation or changes in board colors does occur. We recommend laying out your deck boards before installation begins.

## Job Site Storage and Handling:

Prizm must be stored flat and level. Adjust support blocks accordingly.

- When stacking Prizm products, supports should start at each end and be spaced 2' (60.96 cm) on center. Supports should line up vertically.
- DO NOT stack Prizm products higher than 6 bundles or 12' (3.66 m) high.
- Cover materials on site until ready for installation.




Correct Stacking

Incorrect Stacking

## Tools Required:

**SAWS:**

**Miter Saw**



Recommend using a carbide-tipped blade with 60 teeth or more

**Jig Saw**



Recommend using a carbide-tipped blade for making cuts

**DRILLS:** Install TurboClip Hidden Deck Fasteners with standard power drills, impact drivers or right-angle drills.







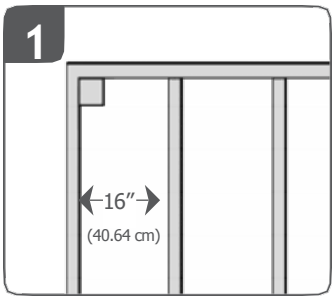
**OTHER TOOLS:** Chalk Line , Tape Measure, Carpenter Square, Level, Spacing Tools, Rubber Mallet

**SAFETY ITEMS:** Safety Glasses, Ear Protection, Gloves, Dust Mask, Protective Clothing

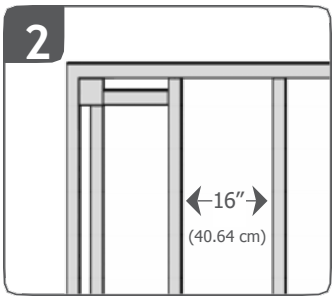
## Deck Framing Guidelines:

*Prizm deck boards must be supported by a code compliant substructure.*

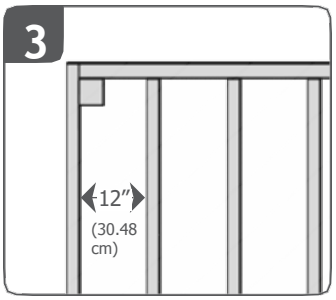
- As joists are installed, run string line frequently to ensure that the tops of the joists are in plane, as Prizm Decking will conform to the contour of the joists to which it is attached. It may be necessary to shim or plane joists due to size variations in lumber. Be sure to sort and exclude any extremely crowned joists/lumber material.
- Install solid wood blocking between each joist, placed in rows at maximum every 4' - 6' (1.22-1.83 m) within the structure using exterior grade screws. Solid blocking will help reduce up or down movement and/or twisting of joists. Limiting joist movement can help reduce excessive gapping and also ensure a more uniform finished surface of the Prizm Deck.
- Use of Prizm Joist Covers can provide excellent protection to the joist substructure, extending its life.
- Prior to installation, check to make sure all joists are level, structurally sound, and there are no nails or screws protruding.
- Proper joist spacing is required for proper installation. Joist spacing should never exceed 16" (40.64 cm) on center. Or 12" (30.48 cm) on center for commercial and Canadian applications. For a more rigid feel, 12" (30.48 cm) may be preferred.



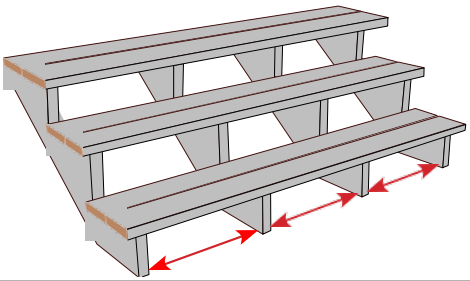

Perpendicular Installation Substructure 16" (40.64cm) on center maximum joists. Or 12" (30.48 cm) on center for commercial and Canadian applications.




Picture Frame-Perpendicular Installation Substructure 16" (40.64cm) on center maximum joists plus additional support for picture frame structure. Or 12" (30.48 cm) on center for commercial and Canadian applications.




Diagonal (45 degree) Installation Substructure 12" (30.48 cm) on center maximum joists. Different angles will require – 60 degrees 14" (35.56 cm) on center spacing, 30 degrees 6" (15.24 cm) on center. (Building codes may vary by location.)

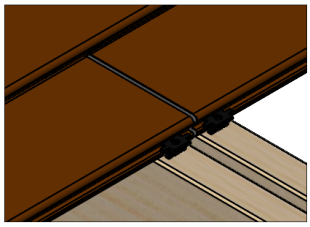


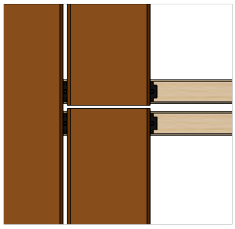
Perpendicular Stair Pattern
9" (230 mm) max on center.

## Gapping (Expansion and Contraction):

When installing Prizm composite decking, gapping guidelines must be followed to minimize expansion and contraction issues and allow for proper drainage and the shrinking of treated wood joists that can happen over time.

- Expansion/contraction is most significant where extreme temperature change may exist.
- We recommend a minimum temperature of 40° F (4.44° C) when installing.
- Best practice is to fasten the deck boards as soon after cutting as possible. Cutting in the heat of the afternoon and leaving them overnight in the cooler air will cause contraction.
- For better results keep decking as cool as possible during attachment. Direct full sun exposure will increase board temperature and length. If attaching during high heat, larger gapping can be expected. Be sure to keep butt joints, splices or miters tight.
- Be sure to fasten ends of boards, splices, or abutments to building or structure securely into framing using 2 screws. Position the screws at or within ½" (12.7 mm) of each board end or joint and ¾" (19.05 mm) from side of deck plank.
- For butt joints, be sure to trim cut factory ends to ensure squareness. Do not scarf cut butt joints. Use nailer boards on either side of joist to properly connect butt joints with two TurboClip fasteners. See diagrams below.





- Note: It is recommended to avoid butt joints and expansion contractions issues and install a transition board in between lengthy spans.




- Provide a 1/8" (3.175 mm) to ¼" (6.35 mm) side to side gap between deck boards.
- End Gapping Chart on next page

## Gapping (Expansion and Contraction) continued:

End Gapping Charts below:

| END GAPPING CHART (EXACT DIMENSIONS) | | | | | | |
|---|---|---|---|---|---|---|
| **End Gap Distance for every 16' (4.88 m)** | | | | | | |
| **Maximum Expected Temperature Fahrenheit (Celsius)** | | | | | | |
| Current Temp Fahrenheit (°C) | 70°F (21.11°C) | 80°F (26.67°C) | 90°F (32.22°C) | 100°F (37.78°C) | 110°F (43.33°C) | 120°F (48.89°C) |
| 40°F (4.44°C) | 0.099" (2.5146mm) | 0.132" (3.3528mm) | 0.165" (4.191mm) | 0.198" (5.0292mm) | 0.231" (5.8674mm) | 0.264" (6.7056mm) |
| 50°F (10.00°C) | 0.066" (1.6764mm) | 0.099" (2.5146mm) | 0.132" (3.3528mm) | 0.165" (4.191mm) | 0.198" (5.0292mm) | 0.231" (5.8674mm) |
| 60°F (15.56C) | 0.033" (0.8382mm) | 0.066" (1.6764mm) | 0.099" (2.5146mm) | 0.132" (3.3528mm) | 0.165" (4.191mm) | 0.198" (5.0292mm) |
| 70°F (21.11°C) | - | 0.033" (0.8382mm) | 0.066" (1.6764mm) | 0.099" (2.5146mm) | 0.132" (3.3528mm) | 0.165" (4.191mm) |
| 80°F (26.67°C) | - | - | 0.033" (0.8382mm) | 0.066" (1.6764mm) | 0.099" (2.5146mm) | 0.132" (3.3528mm) |
| 90°F (32.22°C) | - | - | - | 0.033" (0.8382mm) | 0.066" (1.6764mm) | 0.099" (2.5146mm) |
| 100°F (37.78°C) | - | - | - | - | 0.033" (0.8382mm) | 0.066" (1.6764mm) |

| END GAPPING CHART (NOMINAL FRACTIONS) | | | | | | |
|---|---|---|---|---|---|---|
| **End Gap Distance for every 16' (4.88 m)** | | | | | | |
| **Maximum Expected Temperature Fahrenheit (Celsius)** | | | | | | |
| Current Temp Fahrenheit (°C) | 70°F (21.11°C) | 80°F (26.67°C) | 90°F (32.22°C) | 100°F (37.78°C) | 110°F (43.33°C) | 120°F (48.89°C) |
| 40°F (4.44°C) | 3/32" | 1/8" | 5/32" | 3/16" | 7/32" | 1/4" |
| 50°F (10.00°C) | 1/16" | 3/32" | 1/8" | 5/32" | 3/16" | 7/32" |
| 60°F (15.56C) | 1/32" | 1/16" | 3/32" | 1/8" | 5/32" | 3/16" |
| 70°F (21.11°C) | - | 1/32" | 1/16" | 3/32" | 1/8" | 5/32" |
| 80°F (26.67°C) | - | - | 1/32" | 1/16" | 3/32" | 1/8" |
| 90°F (32.22°C) | - | - | - | 1/32" | 1/16" | 3/32" |
| 100°F (37.78°C) | - | - | - | - | 1/32" | 1/16" |

## Flashing and Joist Cover Installation:

### Flashing




- Plastic flashing is the perfect solution for directing water away from the house and over the ledger board. By preventing that moisture from seeping into the stud wall and rotting the house frames supporting your deck.
- Simply place the flashing on top of the ledger board with the long side against the house and attach with nails or staples every 16” (40.64 cm) to the structure.

### Joist Cover



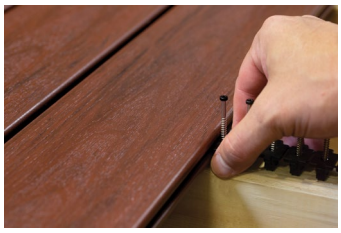

- Our low maintenance decking is a smart investment. Protect that investment by guarding its foundation. When leaves and debris get trapped between your deck boards and joists it causes deterioration. Prizm Joist Covers protect the underlying lumber where moisture collects to prevent rotting. Protect the sub-structure of your deck.

## Fasteners:

TURBOCLIP™
UNIVERSAL HIDDEN DECK CLIP

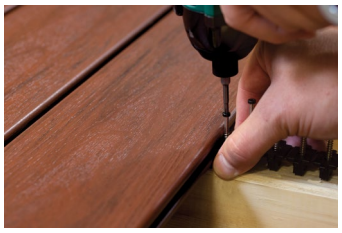
**Hidden Deck Fasteners**

- Use only approved, non-evasive, hidden deck fasteners. Prizm recommends the use of TurboClip Hidden Deck Fasteners and Starter Clips for grooved board installation. Use of any alternative fastener does not void the Prizm warranty; however, if a decking failure is caused by using one of these alternative fastening methods, any corresponding claims will be denied. See list at end of guide.
- Install two TurboClips to each board per joist.



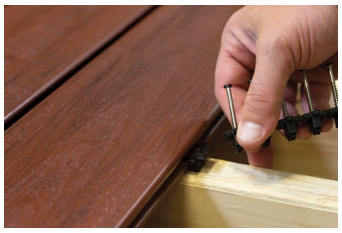
### Insert

Insert the TurboClip Universal Hidden Deck Clip into the groove of the deck board. Unlike regular deck clips, TurboClip Universal Hidden Deck Clips come in “sticks” of 16, so you aren't continuously reaching for another clip at every joist.



### Drive

Drive the preloaded screw through the Universal Hidden Deck Clip and into the deck support. TurboClip Universal Hidden Deck Clips come with preloaded, stainless steel screws.



### Snap

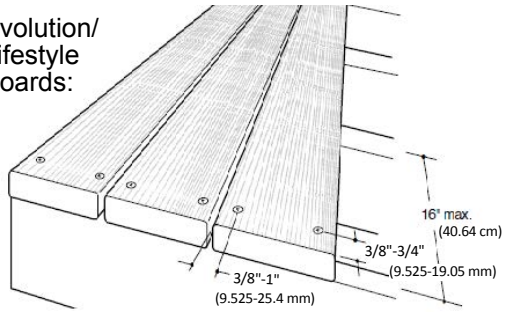
Snap off the remaining stick of TurboClip Universal Hidden Deck Clips. To continue your decking install, simply snap off the clip that you previously screwed in and continue across the length of the board.

## Fasteners: Face Screws

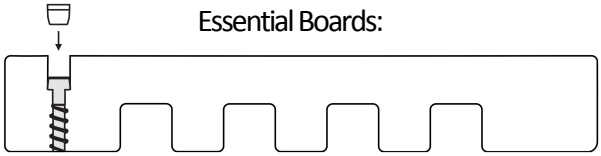
- Use reverse-threaded composite deck screws.
- For Evolution™ and Lifestyle™ decking screws must be 3/8" to 3/4" (9.525-19.05 mm) from side of board, and 3/8" to 1" (9.525-25.4 mm) from end of board.
- IMPORTANT: Prizm Essential™ boards MUST only be installed from outer edges. Install fasteners 1/2" (12.7 mm) from the edge of each side of the board. Placement of plugs elsewhere will void warranty.
- Use Starborn Cap-Tor®xd Prizm color-matched screws for best results. Always pre-drill 9/64” (3.571 mm) pilot hole.
- Use caution not to overdrive screw.

**STARBORN INDUSTRIES, INC.**
IDEA DRIVEN PRODUCTS: Deck Screws, Drilling Tools, Construction Fasteners
45 Mayfield Avenue, Edison, NJ 08837 **tel** (732) 381-9800 **fax** (732) 381-9830 **web** www.starbornindustries.com

Evolution/ Lifestyle Boards:




Essential Boards:



Note: Placement of plugs other than shown here will void warranty.

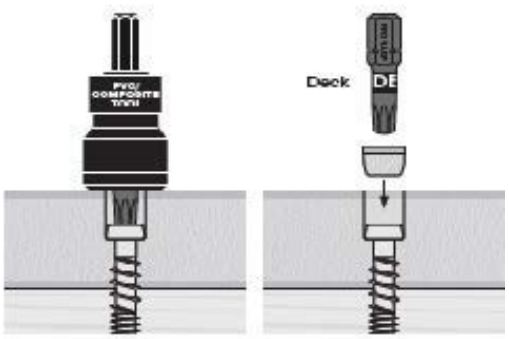
- Use Starborn Pro Plug System with color matched Prizm plugs for Deck boards. (Can Not be used for fascia and riser boards.)
- Make sure to pre-drill 7/32” (5.556 mm) pilot hole. Drill pilot hole only through the deck board. Do not drill pilot hole into framing.

STARBORN.

**PRO PLUG® SYSTEM**
Deck

Hidden Fastening for PVC/Composite Decking.

Scan code to visit starbornindustries.com

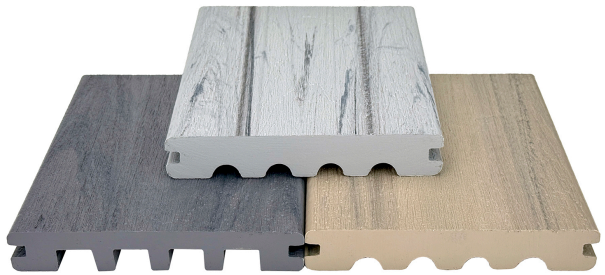



| | Starborn Color | Armadillo Color | Pro Plug Available |
|---|---|---|---|
| | Chocolate #71 | Bourbon, Saloon, Twilight | Yes |
| | Brown #34 | Firewood , Mesa | Yes |
| | White #39 | Linen | Yes |
| | Dark Gray #53 | Steel Wool, Thunder | Yes |
| | Sand #64 | Saw Grass, Sand Storm | Yes |
| | Cool Gray #56 | Dovetail, Silverstone | Yes |

- For proper installation, refer to www.starbornindustries.com for all installation instructions for deck screws and the Pro Plug system.

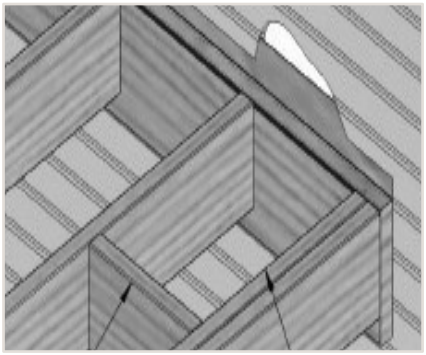
# Color Match Paint Codes

| Sherwin Williams - Quart Size - Exterior Satin | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Prizm Color** | **Exterior** | **Latitude** | **Satin** | **Quart** | **Paint Base** | **W1 - Whit** | **B1 - Black** | **R2 - Maroon** | **Y3 - Deep Gold** | **R3 - Magenta** | **N1 - Raw Umber** |
| Bravo | Architectural | Acrylic Latex | IFC 8112NP | K62T00654 | Ultra Deep #651201592 | - | 37 | 4 | 34 | 19 | - |
| Ember | Architectural | Acrylic Latex | IFC 8112NP | K62T00654 | Ultra Deep #651201592 | 8 | 26 | 14 | 31 | - | - |
| Canvas | Architectural | Acrylic Latex | IFC 8112NP | K62W00651 | Extra White #651201568 | - | - | - | - | - | 1 |
| Tejano | Architectural | Acrylic Latex | IFC 8112NP | K62T00654 | Ultra Deep #651201592 | 8 | 30 | 20 | 20 | - | - |
| Slate | Architectural | Acrylic Latex | IFC 8112NP | K62W00653 | Deep #651201568 | - | 42 | 3 | 19 | - | - |
| Dusk | Architectural | Acrylic Latex | IFC 8112NP | K62W00653 | Dee p #651201568 | - | 27 | 11 | 8 | - | - |
| Prairie | Architectural | Acrylic Latex | IFC 8112NP | K62W00653 | Deep #651201568 | 7 | 10 | 2 | 12 | - | - |
| Summit | Architectural | Acrylic Latex | IFC 8112NP | K62W00651 | Extra White #651201568 | - | 30 | 1 | 8 | - | - |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

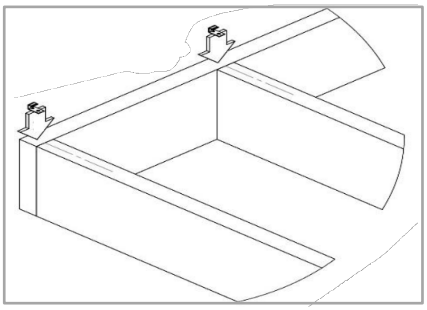


## General Installation Guidelines:

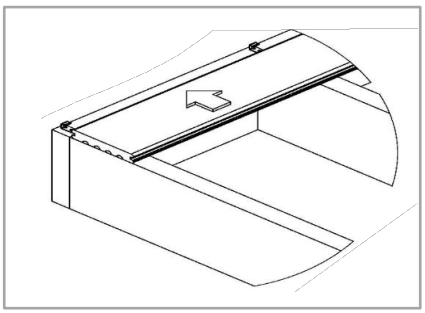
### SOLID AND GROOVED



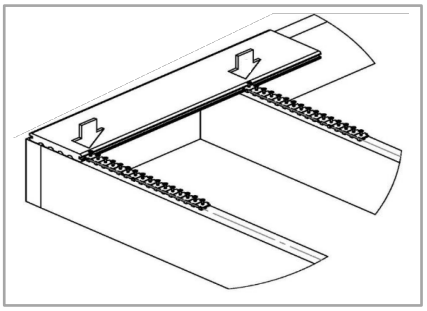

- Add a support joist to the outside or inside of the outer joists. Insert the Prizm flashing so the shorter edge rests over the house ledger wood board and the longer plastic edge is inserted behind the house siding. Add notches in the Prizm flashing to clear wood joists as needed. Add an additional support joist to the outer edge (prevents stringer movement). For longer spans/runs of decking please add additional support blocks throughout substructure, preventing twisting and adding rigidity.



- Start at the end of the deck away from the house. First, place the TurboClip® Starter Clip on the joist 1/4" (6.35 mm) from the outside edge of the deck frame. Align the screw with the center of the perpendicular joist and secure. Continue across the length of the deck frame using one (1) Starter clip at every cross joist. Be sure to align the starter clips so that the deck boards are installed level across the lineal path.



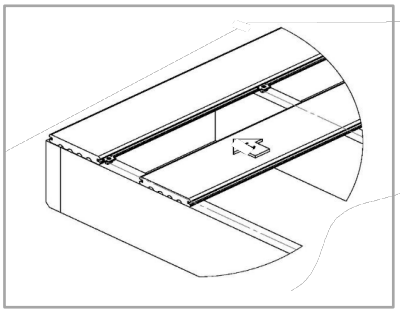
- Push the first deck board into the starter clip.
- Insert TurboClip® Hidden Deck Clip into the side groove of the board. The arrow on each clip indicates which side to insert. Align the screw with the center of the joist. Drive the screw so that the head is flush with the clip. DO NOT OVERDRIVE SCREW. Overdriving screws will cause clip failure. Pull up, twist and snap off the remaining TurboClip® stick.



- Slide the next deck board into place. Continue across the length of the deck board. Continue to measure the distance to home and adjust accordingly so the last board doesn't have to be trimmed lengthwise at an angle.

## General Installation Guidelines:

### SOLID AND GROOVED



- When sliding the next deck board into place, slightly raise the outer edge of the board being installed and slide it onto the fastener until the board contacts the spacer tab. A rubber mallet can be use to tap the board into place against the spacer tab.

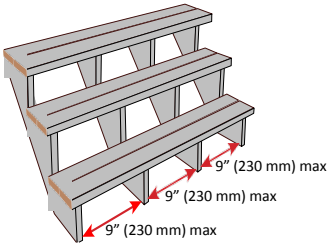




PICTURE FRAMING

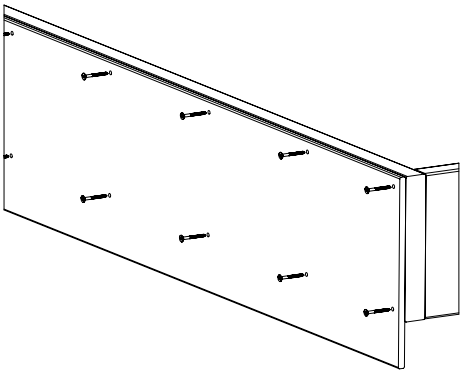
- When butt joints are used be sure to follow gapping guidelines shown on pg 6. *We recommend picture framing and using a transition board to avoid butt joints.* When butt joints are used with lack of picture frame, perimeter screws are required. When installing fascia to cover the ends of the boards, screws are not required around the outside deck perimeter.

### STAIR INSTALLATION




- Stair stringers should be placed no more than 9" (230 mm) on center. Face screw boards on stair stringers. Use solid boards only. A 1/16" (1.59 mm) minimum edge gap is required between stair treads.

### FASCIA/RISER INSTALLATION



- Pre-drill pilot holes starting 1 ¼" (3.175 cm) in from board end and ¾" (19.05 mm) from outer edge of fascia/riser board, every 12" (30.48 cm) on center using a drill bit. Pre-drilled holes should be larger than screw to allow for board movement during expansion and contraction. Screw down the fascia board using the pre-drilled holes with a composite fascia deck screw. **DO NOT FULLY TIGHTEN SCREW.** We recommend Starborn's Fascia screw system.
- Drill screws in perpendicular, not at an angle. Do not overdrive, splitting may occur.
- Gapping: A 1/16" (1.587 mm) minimum gap is required. Failure to use proper gapping will void all warranties and liabilities.
- Fascia/riser may be installed to cover the ends of boards or under the cantilevered deck surface.
- Prizm fascia/riser boards are not made to be used as deck boards.

## CARE AND CLEANING

Prizm is the ultimate choice for a low maintenance product that requires cleaning at least 2 times a year. Theses periodic cleanings will help to maintain the appearance of the deck boards. Please visit www.PrizmDeck.com for more information.

# Problems and Recommended Solutions

### DIRT AND DEBRIS

Spray the affected area with a water hose to remove dirt from surface. Use warm soapy water made with mild dish washing detergent and a soft sponge/rag to remove any dirt buildup. Thoroughly rinse off with garden hose when complete.

### STICKER ADHESIVE

Apply citrus based cleaning product (such as Zep, Goof Off, Goo Gone, etc.) to the affected area. Use a soft sponge or rag to gently remove the buildup. Be sure to thoroughly rinse off the decking surface.

### OIL AND GREASE

All oil and grease spills should be cleaned up as quickly as possible. Use warm, soapy water made with mild dish washing detergent and soft sponge or rag to remove the spill. Thoroughly rinse off with a garden hose when complete. **The deck surface must be cleaned within one week to maintain the stain portion of the warranty.**

### MOLD AND MILDEW

Mold and mildew are commonly found on outdoor building materials. To prevent pollen and debris buildup, periodic cleaning is best. If mold or mildew is present, use warm soapy water made with mild dish washing detergent and soft sponge or rag to remove it. Thoroughly rinse off with a garden hose when complete.

### ICE AND SNOW

Apply calcium chloride or rock salt if needed. Be sure to thoroughly rinse off deck surface later on to avoid residue buildup. A plastic shovel may be used to clear snow. Never use a metal shovel or sharp edged tools to remove snow and ice.

### PRESSURE WASHER

We do not recommend the use of a pressure washer as it could damage the deck surface.

| Prizm Fastener Quick Reference Guide | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | |
| Hidden Fasteners for Deck Boards | | | | | | |
| Manufacture | Brand name | Fastener Size | Do Not Recommend | Recommended Good | Best | |
| Avon Plastics | TurboClip Universal Standard Gap Deck Clip | #8 X 1-3/4" | | | X | |
| Avon Plastics | TurboClip Universal Narrow Gap Deck Clip | #8 X 1-3/4" | | | X | |
| | | | | | | |
| Standard Fasteners for Deck Boards | | | | | | |
| Manufacture | Brand name | Fastener Size | Do Not Recommend | Recommended Good | Best | Pilot Hole Size |
| Starborn | Cap-Tor xd Headcote 316 | #10 X 2-1/2" | | | X | 9/64" |
| Starborn | Cap-Tor xd Headcote 316 | #10 X 2-3/4" | | | X | 9/64" |
| Starborn | Cap-Tor xd Headcote 305 | #10 X 2-1/2" | | | X | 9/64" |
| Starborn | Cap-Tor xd Headcote 305 | #10 X 2-3/4" | | | X | 9/64" |
| Starborn | Cap-Tor xd Epoxy Coated Carbon Steel | #10 X 2-3/4" | | | X | 9/64" |
| GRK Fasteners | RT Composite Trim Head Screw | #8 X 2-1/2" | | X | | 1/8" |
| Grip Fast | Composite Cladding Screw | #9 X 2" | | X | | 5/32" |
| DeckMate | Star Drive Composite Screws | #9 X 2-1/2" | | X | | 5/32" |
| Grip Rite | Composite Deck Screw II | #9 X 2-1/2" | | X | | 5/32" |
| Grip Rite | Composite Deck Screw II | #9 X 3 | | X | | 5/32" |
| Grip Fast | Composite Decking Screws | #10 X 2-3/4" | | X | | 9/64" |
| Camo | Edge Deck Screws | #7 X 1-7/8" | X | | | 1/8" |
| Camo | Edge Deck Screws | #7 X 1-7/8" | X | | | 1/8" |
| DeckMate | Star Drive Coated Screw | #8 X 2" | X | | | 1/8" |
| Grip Fast | Stainless Steel Deck Screw | #8 X 2" | X | | | 1/8" |
| DeckMate | Star Drive Coated Screw | #9 X 2" | X | | | 5/32" |
| DeckMate | Star Drive Coated Screw | #9 X 2-1/2" | X | | | 5/32" |
| Grip Fast | Triple Coated Deck Screws | #9 X 2-1/2" | X | | | 5/32" |
| | Note: A pilot hole must be drilled prior to installing any | | | | | |
| | fastener in the Prizm boards whether or not the | | | | | |
| | fastener company recommends pre-drilling. | | | | | |
| | | | | | | |
| Standard Fasteners for Fascia Boards | | | | | | |
| Manufacture | Brand name | Fastener Size | Do Not Recommend | Recommended Good | Best | Pilot Hole Size |
| Starborn | Deckfast Fascia Epoxy Coated Carbon Steel | #10 X 1-7/8" | | | X | 5/32" |
| Starborn | Deckfast Fascia Stainless | #9 X 1-7/8" | | | X | 5/32" |
| Grip Fast | Ultra Clip Hidden Fastener System Decking Screw | #6 X 1-1/2" | | X | | 3/32" |
| Grip Rite | Trim Screws | #7 X 1-5/8" | | X | | 1/8" |
| DeckMate | Star Drive Composite Screws | #8 X 1-5/8" | | X | | 1/8" |
| Grip Rite | Composite Deck Screw II | #8 X 1-5/8" | | X | | 1/8" |
| DeckMate | Star Drive Coated Screw | #8 X 1-5/8" | | X | | 1/8" |
| Grip Fast | Stainless Steel Deck Screw | #8 X 1-5/8" | | X | | 1/8" |
| | Note: A "pilot" hole must be drilled prior to installing | | | | | |
| | any fastener in the Prizm fascia whether or not the | | | | | |
| | fastener company recommends pre-drilling. | | | | | |