

## Getting Started

Careful planning of the finished deck layout will result in better looking finished projects.

1. Joist location plays an important role in the safety of the deck itself but may also affect the ease, method and price of your railing system.
2. Before starting, read the instructions of both the decking and railing systems planned for the project.
3. Remember that prefabricated rail systems often assemble faster than wood railing but they are less flexible and do not assemble in the same way as wood rail systems. To enjoy the maximum benefit of prefabricated rail systems, it is important to construct the deck framing with the specific rail system in mind.
4. Thoroughly reading all instructions first will make for more profitable projects. Failure to do so may result in more difficult installation and may void warranty.

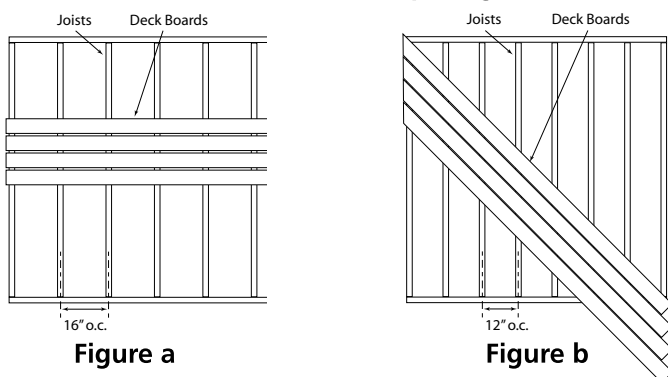
## Joists

Joists used in deck frame construction should be 2"x 8" or larger.

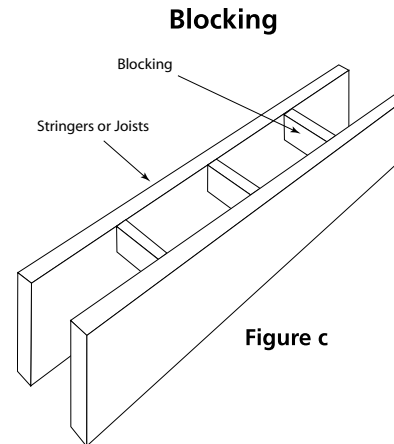
When installing deck boards perpendicular to the joists in residential applications, spacing is 16" on-center (Figure a). When the decking is to be laid diagonally, reduce the on-center joist spacing by 4" (Figure b). For stair treads, follow local approved building codes. Stair stringers should not exceed 9" on center. Allow 1/8" space between stair treads and risers. Leave 3/16" space between stair treads. For special situations, or when in doubt, consult your local building inspection department.

When installing heavy loads atop your decking project, a hot tub, for example, it is important to also understand the requirements of the manufacturer as they may have specific framing and support requirements for their warranty coverage.

### Residential Joist Spacing



When installing blocking for more intricate decking patterns, remember that solid blocking (blocking laid on the flat) will inhibit water flow and result in buildup of organic materials over time, which will make cleaning more difficult. For best results when blocking is required, it should be installed ladder style (Figure c).



## Board Spacing

All decking materials, whether wood, composite or metal, undergo some degree of linear expansion with the changes of weather and the season. To compensate for the effects of contraction and expansion, the following installation standards must be maintained:

- 3/16" side to side spacing between the boards (Figure d)
- 1/4" gap between the deck board and any solid structure such as a wall or post (Figure d)
- Between board ends: 3/16" below 45° F, 1/8" 45° - 85° F, lightly butt (1/16") over 85° F (Figure e)

Adhering to these spacing parameters will:

- Promote proper drainage and ventilation
- Aid in the removal of organic debris
- Meet board spacing requirements for ArmorGuard warranty coverage

### Side-To-Side Spacing

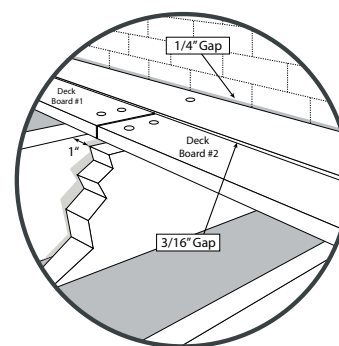


Figure d

### End Gapping

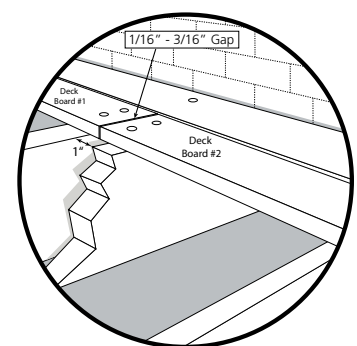


Figure e

## Fastener Setback

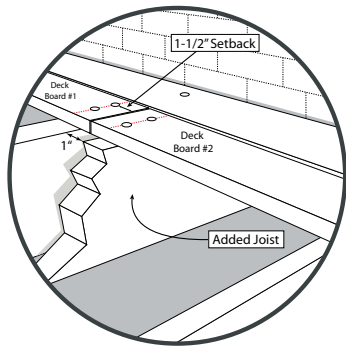


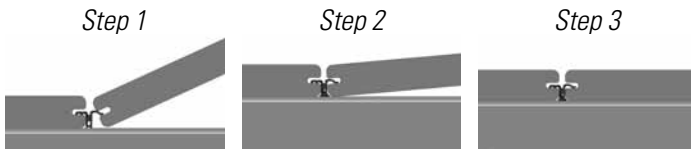
Figure f

## Surface Fasteners

The use of stainless steel composite fasteners is strongly recommended. Approved coated fasteners may also be used, but their performance may not be as good as stainless steel. Plain, galvanized surface fasteners are not recommended.

**FASTENERS RECOMMENDED FOR USE WITH ARMORGUARD GV DECKING** include ArmorGuard Hidden Fasteners, Start/Stop Hidden Fasteners and Stainless Steel Composite Fasteners. Fiberon® does not endorse or represent specific third party products. Other fasteners specifically designed for wood composite decking should be tested in an inconspicuous area first as they may result in an unacceptable appearance.

## 3 Easy Steps



The use of traditional flat or bugle head deck screws is not recommended for ArmorGuard decking and will likely result in mushrooming. Other fasteners not specifically designed for wood composite decking are not recommended. Hidden fastener systems other than ArmorGuard Hidden Fasteners are not recommended, and their use could void the product warranty.

Do Not Toe-Nail

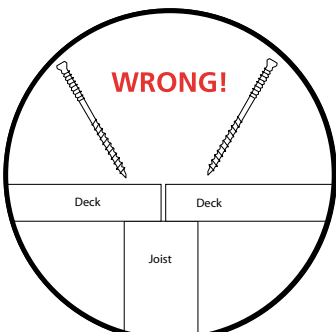


Figure g

Proper Installation

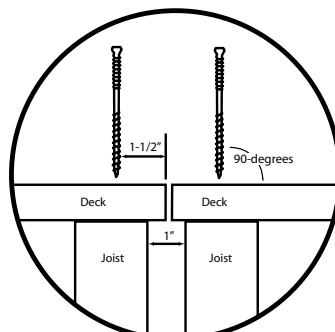


Figure h

## Requirements

Do not surface fasten within 1-1/2" of the end of a board or 1" from the side of the board. It is necessary to pre-drill end of board screw holes to prevent immediate or eventual end splitting (Figure f). Pre-drilling all holes, which will add time to the project, is not necessary, but it will result in better looking finished projects. **DO NOT** over-tighten fasteners. Over-tightening will induce cracking at board ends.

Surface Fasteners should always be driven in at a 90 degree angle to the decking surface. Toe nailing/screwing is not recommended (Figure g). Instead, the placement of an additional joist, when needed, is recommended to allow perpendicular installation of surface fasteners at board ends (Figure h). Pre-drilling is required in cold temperatures.

Clean, perfectly straight lines of fasteners look better than wobbly lines. Use white chalk, straight boards or string lines as templates for straight lines.



## Fastening Boards

ArmorGuard decking requires two fasteners at every joist location (Figure i). While face fastening is allowed on all ArmorGuard decking products, the use of hidden fasteners is highly recommended with ArmorGuard grooved decking to create a smooth, unblemished, decking surface. ArmorGuard GV boards cannot be used as stair treads.



Figure i

## Fascia Installation

Fascia is intended as a non-structural covering for rim joists, risers and stringers. ArmorGuard fascia is fastened with a combination of screws and high quality urethane/acrylic construction adhesive to prevent thermal buckling. Apply a zigzag bead of adhesive to the entire length of the back (smooth side) of the ArmorGuard fascia board, within two inches of the edges and ends. Install all fascia grain-side out with the grain peaks pointing in the same direction for visual consistency. Screws should be installed at a maximum 16" interval, with three screws across the face (Figure j). Do not over-tighten screws as buckling may result. Install with 1/16" spacing between the edges and ends in temperatures above 50° F. Leave 1/8" space between edges and ends in temperatures below 50° F.

## Static

Dry and windy environments may create a temporary condition of static electricity, which will vary depending on climate and age of deck.

## Ventilation

Do not install decking directly to a solid surface. Make sure there is adequate and unobstructed air flow under the deck to prevent excessive water absorption. Improve drainage or grade flat areas where standing water may gather. A minimum of six inches of continuous net free area under the deck surface is required for adequate ventilation on all decking applications. Install porch and deck material so air can circulate between adjacent members to promote drainage and drying. Failure to follow these requirements voids warranty.

