

## DuraLife™ Capped Composite Decking Installation Instructions

### Planning the design of the deck is the beginning of a successful project.

1. Read the application instructions carefully before starting the installation of the deck.
2. Properly unload and store DuraLife™ decking
  - a. Do not dump or drop decking from the back of a truck or trailer.
  - b. Decking should be off-loaded by forklift or by hand.
  - c. Store decking on a level area on wood supports placed every 3 ft. (914 mm).
3. Protect DuraLife™ decking from the elements during storage with a lumber cover or tarp.
4. Remove factory applied protective film on deck boards within 30 days after installation.
5. Use proper lifting techniques when lifting DuraLife™ decking; it is heavier than standard wood materials.
6. Use proper joist placement to realize savings in both time of installation and from cost of materials. Make sure joist direction maximizes the desired lay-out of the deck.
7. If a railing is to be installed consult the railing manufacturer for the required spacing and structural support for the railing posts.
8. Follow all local and state building codes when planning and installing your deck.
9. Use normal wood working tools to cut, router, or fasten DuraLife™ decking.
10. For cutting, use carbide-tip saw blades with approximately 2 teeth per inch.

### Tools needed:

- a. Circular saw (24 tooth carbide blades).
- b. 15 degree pneumatic coil roofing nailer or hammer for Step-Clip™ strip fastening.
- c. Cordless screw gun for pre-drilling holes, screw fastening & Fastenator® clip installation.
- d. Non-marring dead blow hammer or mallet for tapping boards into place.
- e. A BoWrench® tool or pry bar for setting boards in tight places.
- f. Always use personal safety equipment when using tools.

### Ventilation and Drainage

1. To perform properly, DuraLife™ decking must be installed with proper drainage and ventilation.

### Ensure that:

- a) The joists are level across each span and that there is a slight slant of the deck [1/8 inch (3 mm) for every 8 feet (2.4 m)] away from your home for drainage.
  - b) The substructure has at least 2" (51 mm) clearance from grade.
  - c) Skirting or fascia does not impede airflow under the deck.
2. Where ventilation is minimal or obstructed, flow through or soffit venting must be added around the perimeter of the deck to create cross ventilation under the entire substructure to avoid accumulation of moisture and humidity.
  3. Never attach DuraLife™ decking to any solid surface, watertight membrane, concrete, or existing decking.

## **Framing Your Deck**

1. Use minimum nominal 2"x 8" (51mm x 203 mm) sized joists for deck frame constructions. KDAT (kiln dried after treatment) stamped framing lumber is recommended as it is typically straighter, lighter, easier to handle, and will not, shrink and expand as much after installation as non-KDAT lumber.
2. Install deck framing vertically with 2" (51 mm) side in contact with the decking. Do not install decking on framing that has been installed flat with the widest dimension in contact with the decking as this may cause debris and moisture to be trapped between the framing and decking.
3. Never use DuraLife™ decking as structural members when constructing the support structure of your deck.
4. Use 16" (406 mm) on center joist spacing if the decking is to be installed perpendicular to the joist.
5. Use 16" (406 mm) on center joist spacing for DuraLife Siesta boards if the decking is to be installed at an angle (maximum 45° angle). For DuraLife MVP decking, use 12" (305 mm) on center spacing for angled decking.
6. Confirm required joist spacing with local and state building code agencies.
7. If heavy equipment is going to be installed on the deck such as a hot tub, consult the equipment manufacturer for specific requirements for framing and support.
8. If a "breaker / divider board" or "picture frame" deck installation technique is utilized, the board(s) that will be installed parallel to the deck joists will require additional framing and should also be shimmed approximately 1/8" (3.2 mm) depending upon framing conditions to match the crown height of the adjacent decking running perpendicular to these boards.

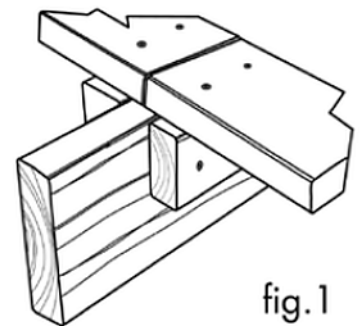
## **Using DuraLife™ Decking as Stair Treads**

1. Do not space stringers wider than 12" (305 mm) on center for DuraLife™ Siesta profile decking on stair treads. For DuraLife™ MVP profile decking, do not space stringers wider than 8" (203 mm)
2. Overhang for stair treads must not exceed 2" (51 mm).

## **Blocking Is REQUIRED Where the End of Two Deck Boards Meet**

When the design of the deck requires a run that is longer than the board length or it is a unique design, blocking ("sistering") or additional framing is required. (Fig. 1)

1. Sharing Fastenator® Clips between two boards at butt joints is allowed, but the ends of each deck board must be individually supported.
2. Sharing Step-Clips™ between two boards is NOT allowed. Sister additional framing where butt joint occurs then trim a Step-Clip™ strip to accommodate each board and attach separately to the additional framing.
3. Transition/divider boards or other intricate designs require additional blocking or framing. See "Framing Your Deck" section above.



## **Board Spacing or Gapping**

All decking expands and contracts slightly as a result of temperature change.

1. When installing DuraLife™ Siesta or MVP profile deck boards using any of the fastening methods outlined below...

Always space boards to provide the following minimum gaps to allow for these changes:

- a. Side to Side... 3/16" (4.8 mm). (Fastenator® and Step-Clip™ hidden fastening systems will automatically set this spacing)
- b. End to End... typically 3/16" (4.8mm depending on board length and temperature (see Chart 1 - "Deck Spacing").
- c. Structure... typically 1/4" (6.4mm) between all decking and any structure or post (see Chart 1 - "Deck Spacing").

Note: If the deck is located near or around a tree, be sure to allow for future growth of the tree.

### **Color and Orientation of Deck Boards**

We recommend that you lay out the deck boards before final installation to ensure an acceptable color mix. DuraLife™ Hardwoods Collection colors feature a variegated appearance with contrasting light and dark shades of color. Laying out a preferred pattern of deck boards before installation will help to achieve a desired appearance.

Note: The semi-gloss surface of DuraLife™ decking will weather to a natural matte finish over time

### **Deck Board Fastening Methods**

There are three methods that can be used to fasten DuraLife™ Siesta and MVP profile decking.

#### **1. The Step-Clip™ Hidden Fastening System.**

- a) Note: Outer edge (Starter) and divider boards that run perpendicular to the main rows of deck boards will require additional framing and should be shimmed approximately 1/8" (3.2 mm) to match the crown of the adjoining boards and the thickness of the Step-Clip™ strips. These boards should be fastened every 16" (404mm) using two #10 x 2-3/4" color-matched capped composite deck screws or the DuraLife™ /Cortex® color-matched plug system (Siesta and Starter profiles only).
- b) Locate the first deck board at outer rim joist away from the house or structure and work towards the house. For outer edge board installation (Starter, Siesta, or MVP profile), do not overhang the board more than 1" (25 mm) widthwise or 2" (51 mm) lengthwise. For a standard 1" (25 mm) overhang, measure and mark a location 22" (559 mm) from the outer rim joist on the outermost joists that run perpendicular to that joist and snap a chalk line across the entire length of the deck. Position the Step-Clip™ strips with one edge along chalk line and fasten the first row of strips to each joist with a 1-1/4" (32 mm) stainless steel or hot dipped galvanized ring shank roofing nail using 2 nails between each set of clips. (locate nails approximately 3/4" (19 mm) from each clip with a total of 8 nails per each four board strip). Note: the side tabs on all of the strips should be orientated on the same side of the joists and flush against the joist to allow for linking subsequent strips together along each row of clips. Trim the overhang of the first row of Step-Clip™ strips flush with the outer rim joist. Slide the outer deck board securely into the first clip (ensure it is properly engaged in the groove of the board) and screw down the opposite, outer edge of the board at each joist location using color-matched, capped composite deck screws or the DuraLife™ / Cortex® color-matched plug system (Siesta and Starter profiles only).
- c) Once the first 4 boards have been installed into the outer Step-Clip™ strip and proper alignment has been confirmed (measured for "square" on joists), position the remaining Step-Clip™ strips and fasten until all of the joists have been covered. For elevated decks, install Step-Clip strips in 4 board increments as an added safety precaution. An interlocking tab is located at the end of each strip to allow for proper spacing along the length of each joist. The strip closest to house or structure will likely need to be trimmed and the final board fastened in a similar manner as the first board.
- d) Measure and trim each deck board to your desired length and place one edge of the board into the side of the Step-Clip™ strip adjacent to a previously installed board. Step down (or tap with a non-marring rubber mallet) on the opposite elevated edge of the board to secure it in place. You should hear an audible "click" sound as the

clip engages with the groove on the edge of board. If a board does not properly engage the clip while stepping down on the elevated edge, strike the board above the clip with a non-marring dead blow rubber mallet to secure it in place. Repeat this process until all deck boards have been installed.

#### **Helpful hints:**

- Store Step-Clip™ strips indoors before use. The strips install best between 40°F and 80°F (4°C and 27°C).
- Use a non-marring dead blow or rubber mallet to set the leading edge of the deck boards into the clips prior to stepping down on the opposite edge of the board. Tapping the boards at a 45 degree angle on the high edge works best.
- If “re-skinning” a deck, ensure that all joists are level to each other before installing the Step-Clip™ system. If not level, shim or shave joists as needed to get them within 1/8" (3.2 mm).
- Walking along joists and non-secured deck boards can be dangerous and is therefore not recommended.

## **2. The Fastenator® Hidden Fastening System.**

- a. Install a DuraLife™ Starter profile board using capped composite deck screws 5/8" (16 mm) from the outer board edge. Screw down the outer edge of the DuraLife™ Starter profile board at every joist location. #10 x 2-3/4" color matched, capped composite deck screws (similar to Starborn® Deckfast Cap-tor xd or FastenMaster® TrapEase 3) are recommended for face-fastening DuraLife™ decking, and for the outer board edge of the Siesta starter profile boards in a grooved profile decking installation.
- b. Do not overhang DuraLife™ Starter profile board over joists by more than 1" (25 mm) widthwise and 2" (51 mm) lengthwise.
- c. Always place one Fastenator® hidden fastener in the slot in the board edge at every joist, between deck boards, regardless of the joist spacing. (Side to side spacing is maintained by the Fastenator® hidden fasteners.)
- d. Use a #7 x 2 1/4" stainless steel screw through the center of the Fastenator® Clip at a 90° angle (or use a Fastenator® Clip with a pre-installed #7 x 2 1/4" star drive trim head screw).
- e. Starting at one end... slide the next DuraLife™ Siesta or MVP profile board onto the exposed Fastenator® Clips of the first board and install a single Fastenator® Clip at one end of the out-board edge to hold the board in place.
- f. While standing on the new board and straddling each joist, pound it tight into the clip with a non-marring dead blow hammer. Repeat steps “c” through “f” for the remaining boards, installing Fastenator® Clips at fully each joist.
- g. Always face-fasten the outer most edge of the first and last board with capped composite deck screws when using Fastenator® Hidden Fastening System.

#### **Helpful Hints:**

- Store Fastenator® Clips indoors before use. Fastenator Clips install best between 40°F and 80°F (4°C and 27°C).
- Use a non-marring dead blow hammer as necessary to tap the Fastenator® Clip into the slot.
- A non-marring dead blow hammer or BoWrench® tool can also be used to help secure the next DuraLife™ Siesta or MVP profile board into place.
- If the joists are uneven, apply pressure to the deck board where it does not touch the joist. As pressure is being applied, tap the board into the Fastenator® Clip using the non-marring dead blow hammer.
- In the case of a low joist, shim the Fastenator® Clip as necessary to seat in the slot in the edge of the deck board.
- Take a measurement of the total width of the installed boards to make sure they are parallel every 3-4 courses
- Walking along joists and non-secured deck boards can be dangerous and is therefore not recommended.

### 3) Installing DuraLife™ Siesta, MVP, and Starter profile decking via surface screws method using capped composite decking screw fasteners or the Cortex Hidden Fastener System:

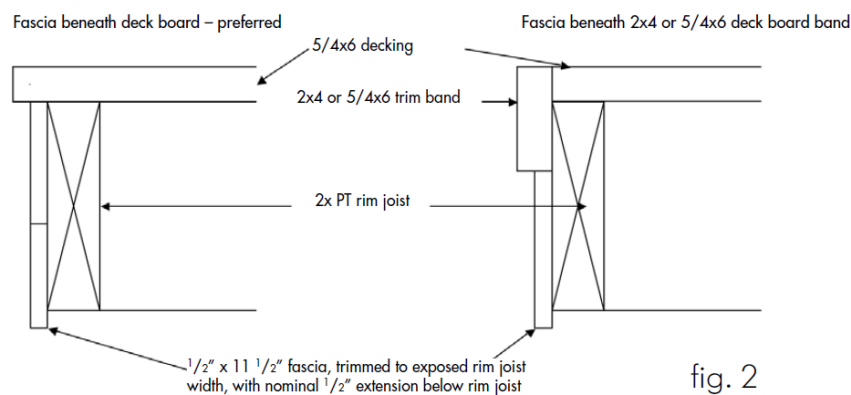
- a. Use #10 x 2-3/4" capped composite deck screws when installing DuraLife™ Siesta™ Collection or MVP™ profile decking. (Similar to Starborn® Deckfast Cap-Tor xd or FastenMaster® TrapEase 3 color matched capped composite deck screws. Both are available at local building product retailers.
- b. When using non-capped composite decking fasteners (as outlined above), pre-drill and countersink for the screw size (#8 x 2-1/2" typical.)
- c. Two fasteners are required at each joist, one on each side of the board, regardless of the joist spacing.
- d. Drive fasteners straight and directly through the deck boards at a 90° angle to the decking surface. Do not "toe nail" or drill at an angle.
- e. Never place fasteners closer than 5/8" (16 mm) from the edge or ends of the board.
- f. For the best appearance, use a white chalk line to ensure straight fastener lines. Colored chalk can stain the decking and can be very difficult to remove.
- g. When using the Cortex® Hidden Fastening System (for Siesta & Stater profiles only) with surface screws and plugs, please refer to the instructions on the container to ensure the most up-to-date installation method.

#### Helpful Hints:

- In the case of a low joist, shim the deck board as necessary before securing the deck board.
- Take a measurement of the total width of the installed boards to make sure they are parallel every 3-4 courses
- Walking along joists and non-secured deck boards can be dangerous and is therefore not recommended.

#### Fascia and Riser Board Installation

1. Fasten fascia and riser boards using #8 x 2" stainless steel capped composite deck screws or #9 x 1-7/8" fascia screws (similar to the Starborn Deckfast Fascia System). Use three fasteners equally spaced across the width of the fascia board at the top, middle and bottom locations of the board (2 fasteners for riser board) and spaced approximately every 12" (305mm) along the length of the board. Never place fasteners closer than 5/8" (16 mm) from the edge or ends of the board.
2. When decking boards are installed picture framing the deck, fasten the fascia board to the rim joist, leaving a 1/8" (3.2 mm) gap between the top of the fascia and the bottom of the deck boards. Decking boards should not overhang the outer rim joists by more than 2" (51 mm).
3. When decking boards are installed without picture framing the deck trim the deck boards so they run past the outer rim joists by less than 2" (51 mm). Fasten the fascia board to the rim joist, leaving a 1/8" (3.2 mm) gap between the top of the fascia and the bottom of the deck boards.



Note: When using fascia to cover joists wider than 11 ½" (292 mm), either stack multiple layers of fascia or use a combination of fascia boards, deck boards and 2x4s as accents to create a unique look. (fig. 2)

### Deck Spacing (Chart #1)

DuraLife capped composite decking will expand and contract slightly due to temperature change. Use the chart below to determine the spacing between board ends. A gap of at least 1/4" (6.4mm) is recommended between deck boards and fixed elements like foundations, walls, pool edges, etc. If the deck is located near or around a tree, be sure to allow for future growth of the tree.

Temperature at Install (°F)				
<b>40-55</b>	<b>56-70</b>	<b>71-95</b>	<b>96-110</b>	<b>Over 110</b>
1/4"	3/16"	1/8"	1/16"	1/32"
Temperature at Install (°C)				
<b>4-13</b>	<b>14-21</b>	<b>22-35</b>	<b>36-43</b>	<b>Over 43</b>
6.4mm	4.8mm	3.2mm	1.6mm	0.8mm

### Care & Maintenance

1. To maintain the appearance of your DuraLife™ decking... sweep periodically and clean spills with soap and water. Additional care and cleaning instructions are available online at [duralifedecking.com/resources/care](http://duralifedecking.com/resources/care).
2. The use of pressure washers is not recommended unless using for low pressure (1500 psi or less with fan tip) wetting and rinsing. High pressure washing may damage the surface of the decking. Always test all cleaning products on an inconspicuous area before using on the entire deck surface.
3. The appearance of minor surface scratches or scuffs should diminish after a few months of exposure to the weather and elements. For larger scratches or scuffs, a heat gun (available at most building product or hardware stores) may be used to carefully heat and blend the blemished portion of the polypropylene cap material into the adjacent deck surface area. Note: The tip of the heat gun should never be placed closer than 2" (51 mm) from the deck surface and should be in continuous motion so as not to permanently damage the surface of the deck board. Do not lay the heat gun on the decking after use.

**Video animations of DuraLife™ decking installation methods are provided for your convenience at:**

**[DuraLifeDecking.com/resources/installation](http://DuraLifeDecking.com/resources/installation)**