

# SELECTFORCE® Plastic Product Installation Guide

## 1. Structural Ability

SELECTFORCE® plastic is not recommended for structural use; therefore, the substructure must be constructed of FIBERFORCE®, or another structural grade material. Due to its increased flexibility (as compared to wood), SELECTFORCE® plastic lumber requires more support. Please refer to span tables to determine support requirements based on live load and ambient temperature.

## 2. Expansion/Contraction

SELECTFORCE® plastic expands and contracts along its length. A 10' (3.048m) length will expand and contract up to 3/8" (1cm). Due to this fact, SELECTFORCE® plastic should be run along the shortest length with the joists running the long direction. **Example:** An 8' x 16' (2.44m X 4.88cm) deck should use 8' (2.44m) SELECTFORCE® plastic over joists running the 16' (4.88M) length. These joists are normally divided into 2 – 8' x 8' (2-2.44m X 2.44m) sections with a header between them. Also, lighter colors do not heat up as much in sunlight and are therefore preferable when installing in a sunny location.

## 3. Fastening

To withstand the expansion and contraction as well as to maintain a long lasting, beautiful looking project, stainless steel screws should be used, preferably #10 x 2 ½" (#10 x 6.5cm) or 3" (7.5cm) long, square drive stainless steel deck screws. Each deck board should be fastened with at least 2 screws per joist. Screws must be pre-drilled and should be counter-sunk. Also, coating the screws with a lubricant, such as a silicone caulk, or soap will ease installation. All screws should be a minimum of ¾" (2cm) from the edge or end of the board.

## 4. Butt Joints

When butting SELECTFORCE® plastic lumber against any wall, fixed surface or other boards (if necessary), they should be securely fastened to the nailer or double joist with a gap allowing for expansion. The size of gap should be determined based on weather conditions at the time of installation – the closer the temperature is to the usual high temperature for the year, the smaller the gap. (See chart below). The project should be designed to minimize the butt joints. However, in the event that joints are required, a double joist underneath the butt joint should be used. Boards should be securely fastened with a row of screws on each side of the joint 1" (2.5cm) from end of the board. Always keep deck boards out 3/8" (1cm) from permanent structure.

Temperature at time of installation	Gap between butt ends
Greater than or equal to 90° F (32° C)	1/16" (1.5mm) or less
70° F (21° C)	1/8" (3mm)
50° F (10° C)	¼" (6mm)
Less than 30° F (-1° C)	3/8" (1cm)

## 5. Rip Cutting

Two cuts must be taken in the event that a board must be ripped down. This is due to the difference in tension between the outer "skin" of the board and board's center. For example, if a 4" (10cm) board is needed, ¾" (2cm) should be ripped off of both sides of a 5-1/2" (14cm) board.

Should there be any questions regarding these instructions, please contact your sales representative for more details. **Failure to follow these instructions will void all warranties.**

\*Note: Information in parenthesis is a metric conversion of the English representation