DURACAST^{IM} AND DURALITE^{IM} FIBERGLASS COLUMNS

Plumb Line (Plumb-Bob)

Tape Measure



Saw with Abrasive Blade

Tools Required For Installation:



Sander







Personal Protective Equipment

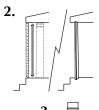
Column Installation Instructions

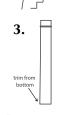
- 1. Determine the position of the plinth by dropping a plumb line from the center of the soffit beam to the floor. Mark this point on the floor with an "X". This mark is where you will center the plinth so that the top of the shaft will align with the soffit. (Illustration 1)
- 2. Measure the overall height. Raise the soffit or porch slightly with brace for easy installation of the column. (Illustration 2)
- 3. Trim column shaft on the bottom end only. Trim with a circular saw with an abrasive blade. (Be sure to wear personal protective equipment). Finish both the top and bottom of shaft with a rasp or sander to ensure an even load distribution around the entire circumference. (Illustration 3)
- 4. Slide cap over top of column shaft. Let cap slide down to rest on the neck mold temporarily until shaft is correctly positioned. (If installing a $DuraCast^TM$ Round Non-Tapered, DuraCast™ Square Tapered or a DuraLite $^{\text{TM}}$ Square Fiberglass Column, slide the neck mold over top of shaft to desired location before sliding capital over. Fasten neck mold to shaft using construction adhesive and non-corrosive screws. Caulk between neck mold and shaft.) (Illustration 4) 5. Slide base/plinth onto column shaft from bottom. (Illustration 5)
- 6. Place column in a vertical position with load centered over column shaft with even distribution around bearing surfaces. (Illustration 6)
- 7. If installation requires that column be secured in place prior to bearing load, use small L brackets or the optional Dixie-Pacific™ Fiberglass Column Installation Kit (sold separately). Be careful to ensure that the L brackets do not interfere with the seating of the cap and base/plinth. Note: To secure bracket to column, drill hole into shaft making sure to pre-drill. Do not over tighten. (Illustration 7)
- 8. Remove brace to allow load to bear on column shaft. (Illustration 8)
- 9. POLYURETHANE Cap and Base/Plinth: Slide cap up to soffit and attach to soffit using non-corrosive screws. Attach base/plinth to floor and bottom of shaft using non-corrosive screws or appropriate fasteners. Light sanding may be required for correct fitting of base. (Illustration 9)

SYNTHETIC INJECTION MOLDED (SIM) Cap and Base/ Plinth: Attach using non-corrosive screws in the holes pre-molded in the cap and base/plinth. Fill holes with exterior caulk or filler.

10. Caulk between cap and soffit, the cap and shaft, and the base and shaft for a finished appearance. (Illustration 10)

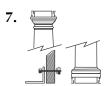




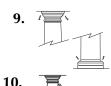














A. SPECIAL NOTES AND EXCEPTIONS

- Be certain the load is evenly distributed over the bearing surface of the shaft. 100% of the bottom must contact substrate and 75% of the top must contact sofit. (Split columns are non-load bearing).
- If building code requires uplift connection, contact Dixie-Pacific™ or your distributor for recommendations.
- To preserve and protect the column it is necessary to paint with one coat of high quality exterior primer followed by two coats of an exterior paint.
- When attaching handrails to DuraCast™ or DuraLite™ Fiberglass Columns holes must be pre-drilled.
- Spray painting is not recommended. Paint should always be applied with a brush.
- Second floor balconies should NOT be attached directly to the side of any DuraLite™ Square Fiberglass Column. Please contact Dixie-Pacific™ for recommendations.
- Water should not be allowed to collect inside Fiberglass Columns. Flashing may be required to channel water away from the inside of the column. A drainage hole can be drilled in the bottom of the shaft and plinth if necessary.
- Columns should never be pressure washed or sprayed with water prior to installation.
- Columns are not designed to be used in freestanding applications. A structural support inside the column must be used.
- · Columns are not designed to be set in masonry.
- Concrete should never be used to fill Fiberglass Columns. This will void the warranty. Concrete can be used with a barrier such as a Sonatube. Leave minimum 1/2" gap to allow for expansion and contracting of the concrete.

B. FINISHING AND PAINTING INSTRUCTIONS

- 1. Make sure all surfaces are clean prior to painting. Use mineral spirits if oil or alkyd products are used. Warm soapy water should be used if latex products are utilized. Synthetic cap and base/plinth: A non-oil based cleaner should be used to clean the cap/base/plinth. Note: Columns should never be sprayed with water prior to installation.
- 2. Alkyd or oil base primer and paint are recommended. Latex products can be used, but additional sanding is required. Synthetic cap and base/plinth: Use a good high-quality exterior paint. At least one coat of primer and two coats of final paint should be used. Suggested primer for Synthetic Injection Molded (SIM) cap and base/plinth: XIM Primer 400 White, or any primer made for use on fiberglass or plastics.
- 3. Use a good, high-quality exterior paint. At least one coat of primer and two coats of a final paint should be used. Note: Do not paint using dark colors (dark colors are considered any color that falls within the L values of 56 to 0). L is a measure of the lightness of an object, and ranges from 0 (black) to 100 (white). Note: Spray painting is not recommended. Paint should be applied with a brush.
- 4. Follow paint manufacturer's instructions concerning use within temperature ranges for best results. 5. Do not use paint or solvents containing acetone.

C. ALTERING COLUMNS

1.) CUTTING TO OVERALL LENGTH:

Columns can be field trimmed to a specified length. When trimming a Round Fiberglass Column shaft to length, make sure to always trim from the bottom end only. A circular saw with an abrasive blade can be used to make this cut. (Be sure to wear personal protective equipment). It is important to never trim more than the bottom 1/3 of any Round tapered Fiberglass Column shaft. The Round tapered Fiberglass Column has a true architectural taper. (The bottom 1/3 is non-tapered; the top 2/3 is tapered). If more than the bottom ¹/₃ is trimmed, the base will not fit properly. DuraLite™ Square Fiberglass Columns can be trimmed to any length because they are non-tapered.

2.) ALTERING FLUTES:

Flutes can be altered only on the adjustable fluted columns if ordered as a special order from the factory. Flutes normally need to be altered if the column will be trimmed in order to avoid cutting into the flutes. Or, it may be desired to stop the flutes closer to the top of the base. Standard adjustable fluted columns have a $10^3/4$ " space from the bottom of the flute to the top of the Tuscan base/plinth.

3.) CUTTING COLUMN AT BEAD:

All DuraCast™Round Fiberglass Columns used with Decorative Capitals should be trimmed flush above the bead/astragal. The capital should rest on top of the bead/astragal and will allow for a proper fit. Columns can be ordered from the factory cut at the bead, or this can be trimmed in the field. A circular saw with an abrasive blade can be used to trim a column at the bead/astragal. (Be sure to wear personal protective equipment).



There are several considerations to be made when ordering Fiberglass Columns used with Decorative Capitals. The cut at bead loss and the Decorative Capital height must always be taken into consideration (See Cut at Bead Loss Chart). In addition, a Fiberglass Column used with a short Decorative Capital may require that a longer shaft be ordered.

D. JOINING SPLIT FIBERGLASS COLUMNS

needed to install a split column. Columns that are split to surround structural supports should be installed similarly to un-split columns. However, the following procedures should be followed when putting the split halves back together:

1. Split columns are shipped from the factory with matching halves together. Factory splits stop short at each end of column. Note: DuraLite™ Square Fiberglass Columns are split diagonally (corner to corner) from the factory. Keep the column halves together and mark the column halves by set numbers so that they cannot be mismatched. It is important to reassemble split halves as soon as possible after shipping. It is not recommended storing for an extended amount of time. Make sure column halves match before applying bonding adhesive. Level and check

The Dixie-Pacific™ Reassembly Split Kit (sold separately) includes everything

Rejoin the shaft using a high quality, exterior, waterproof construction adhesive suitable for Fiberglass Columns. Surfaces must be clean and dry prior to applying adhesive. Follow adhesive manufacturer's instructions concerning use within temperature ranges and working time for best results.

your measurements, and then install split halves around the structural support.

- 3. Align halves around the post or structural support and join together. Clamp and tighten uniformly until adhesive sets. (Alternatively, nylon reinforced tape wrapped very tightly around the column can be used). The compression should be applied approximately every 16" 24" along the length of the shaft.
- 4. Place aluminum plates across split at top and bottom of shaft. Mark and pre-drill holes using a $^{7/64}$ " bit.
- 5. Screw down one side of aluminum plate and then the other side of the plate. The aluminum plates will bend around the shaft. This step should be done for all plates.6. After adhesive cures, remove the clamps, straps or tape. Rough sand with 80 grit and finish sand with 120 grit or finer sandpaper.
- 7. Rejoin and attach the caps and base/plinths with the same adhesive.
- 8. A fiberglass boat repair kit or "Bondo" may be used as a filler. Follow the instructions on the package.

E. HOW TO SPLIT FIBERGLASS COLUMNS

- Secure column to sawhorse or table using braces (scotches). Braces (scotches) should be wrapped with cloth material to provide cushion and to avoid scratching column.
- 2. Place the braces (scotches) snugly against the column ensuring that the column will remain in place while being cut.
- 3. After column is secured, a chalk line should be applied to the column. To lay the chalk line, place a string over the base end diameter of the column to the center of the string ensuring that the string is centered. Mark the column on the top where the string is centered. Run the chalk line from the mark on the top end of the column to the mark on the base end and snap the chalk line.
- 4. To make the bottom line, use a circumference measuring tape and measure the circumference distance from the top mark and place a mark on the bottom of the column.
- 5. Once both chalk lines have been applied to the column, set the saw blade at the appropriate depth ensuring that it will pass cleanly through the bead/astragal.
- 6. Use a circular saw with an abrasive blade. (Be sure to wear personal protective

Cut At Bead Loss for DuraCastTM Round Tapered Fiberglass Columns Measurement in inches unless otherwise noted.

unless otherwise noted.	
Column	Cut at Bead
Size	Loss
6"	31/2
8"	4
10"	5
12"	5 ³ / ₄
14"	7
16"	8
18"	8 ⁷ / ₈
20"	9
22"	10 ¹ / ₄
24"	11 ⁵ / ₁₆
26"	11 ⁷ /8
28"	113/4
30"	14 ⁷ / ₈
36"	13 ⁵ / ₈

equipment). Begin sawing from the base end moving to the bead/astragal end. Rotate column and repeat sawing on the bottom.

F. HOW TO ATTACH A SPLIT FIBERGLASS COLUMN TO A WALL AS A PILASTER

(If you are installing Decorative Capitals, see 'Decorative Capital' section for a detailed drawing of the capital attachment.)

- 1. Select desired location and trace short lines at the top, midpoint, and bottom on both sides of the split column.
- 2. Gage the thickness of the column wall and trace lines to show where the inside wall will be at the top, midpoint, and bottom.

Note: Wall thickness on DuraCast $^{\text{TM}}$ Fiberglass Columns at the top is widest because of the flare just above the bead.

- 3. Attach six wood blocks (two screws per block) to the building wall just inside the traced lines you marked in step two. The block dimensions should be approximately $^{3}/_{4}$ " x $^{1}/_{2}$ " x 3 ". Make sure that the top and bottom blocks are placed within the heights of the cap and base so that finishing will not be required with the countersunk holes.
- 4. Drill six holes in the column wall at the points where the screws will line up with the blocks installed in step three. Holes should be countersunk so that the head of the screw will be slightly below the surface of the column wall.
- 5. Place the split column in position and fasten it to the wood blocks. Screws should be snug. Do not over tighten because the column wall can be damaged.
- 6. Attach split cap and base/plinths using dry wall screws. Make sure to pre-drill holes. Fasten cap and base/plinth to wall, ceiling or floor.
- 7. Caulk joints and seam where the column edge meets the wall.
- 8. Patch over the countersunk screws at the midpoint of the column using a two-part filler (i.e. "Bondo", Fiberglass Boat Repair Kit). The cap and base/plinth will cover the countersunk screws at the bottom and the top.

G. DURALITETM SQUARE RECESSED PANEL INSTALLATION INSTRUCTIONS

ATTACHING PANEL INSERT KITS and PANEL DIVIDER KITS:

- 1. Before installation, apply the panel insert pieces to the top and bottom of each side of the column shaft (Field trimming shaft to desired length prior to attaching insert pieces). Each column will include (4) top panel insert pieces and (4) bottom panel insert pieces. The pieces can be attached to the shaft using a construction adhesive and non-corrosive screws (screws must be countersunk and filled with "Bondo").
- 2. If using panel divider pieces to achieve a two-panel or three-panel design column, they are attached in the same manner as the panel insert pieces. First measure and determine the placement of each of the panel divider pieces and attach to each side of the column shaft using a construction adhesive and non-corrosive screws.
- 3. Fill the seams where the panel insert pieces and panel divider pieces meet the shaft and the countersunk screws with a fiberglass boat repair kit or "Bondo".
- 4. Follow Column Installation Instruction Steps 1-10. (See page 58).

H. DURALITE™ SQUARE FLUTED INSTALLATION INSTRUCTIONS ATTACHING FLUTE INSERT KITS:

- 1. Before installation, apply the flute insert pieces to the top and bottom of each side of the column shaft (Field trimming shaft to desired length prior to attaching insert pieces). Each column will include (4) top flute insert pieces and (4) bottom flute insert pieces. The pieces can be attached to the shaft using a construction adhesive and non-corrosive screws (screws must be countersunk and filled with "Bondo").
- 2. Fill the seams where the flute insert pieces meet the shaft with a fiberglass boat repair kit or "Bondo"
- 3. Follow Column Installation Instruction Steps 1-10. (See page 58).

Warranty is void if installation instructions are not followed.