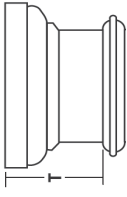


Round or Square Fiberglass (FRP) Installation Instructions

INSTALLATION TIPS

Note 1: Ornamental Capitals

When installing a round Fiberglass column with an ornamental capital, subtract the cut at bead ("T") dimension (distance from top of ornament to top of neck mould) an add the height of the ornamental capital, this can lengthen or shorten the height of the column. You can find the cut at bead ("T") dimension in the products brochure.



Note 2: Required Loading

Ensure concentric loading of the column. 100% of bottom must contact substrate and 75% of top must contact soffit.

Note 3: Hand Rail

When attaching hand rails or corner irons to round or square fiberglass columns, holes must be pre-drilled.

Note 4: Cap and Base

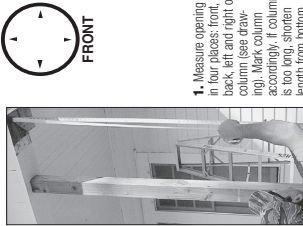
Light sanding may be needed for correct fitting of base.

Note 5: Do not install columns below grade or fill with concrete.

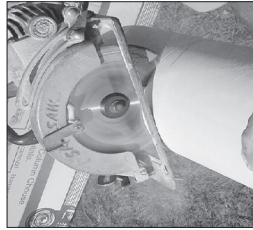
Note 6: If used in free standing applications, structural posts may be used.

PAINT TIPS:

- Make sure all surfaces are clean. Prime with a bonding primer.
- Follow paint manufacturer's instructions for priming and finishing of fiberglass composite column and polyurethane cap and base.
- 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).



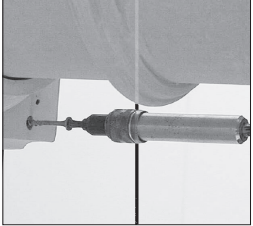
1. Measure opening in four pieces: front, back, left and right of column (see drawing). Mark column soffit with column's length from bottom.



2. Use an abrasive saw (masonry or carbide blade). Press neck mould into place. Firmly and evenly with rasp to ensure flat surface contact.



4. Apply construction adhesive* to top and bottom surfaces of column.



7. Apply construction adhesive* to top of cap, press against structure, and screw or nail into place.

Installing neck moulding to Square Fiberglass Columns



9. Mark location for supplied neck moulding. Measure and cut neck moulding to a 45° angle. Apply construction adhesive* and put neck mould in place.

*Use a non-acetone based exterior grade construction adhesive.



10. Pre-drill holes through neck mould into column. Screw neck mould in place or pre-drill and use finish nails.

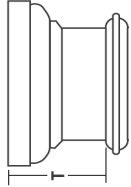


11. Set screws or nails and use caulk to cover holes.

CONCEJOS PARA LA INSTALACIÓN

NOTA 1: CAPITALES ORNAMENTALES

Cuando instale una columna redonda de Fibra de Vidrio con Capital ornamental dedusca la medida corte en la cuenta ("T") (Distancia desde la parte superior del ornamento hasta la parte superior del anillo decorativo) y añada la altura del Capital, esto puede alargar o acortar la altura total de la columna. Ud puede encontrar la medida corte en la cuenta ("T") en nuestro catalogo.



NOTA 2: CARGA REQUERIDO

Asegúrese de tener una carga concéntrica en la columna. 100% de la parte inferior necesita tener contacto directo con el sustrato y 75% de la parte superior debe hacer contacto con la viga.

NOTA 3: PASAMANOS

Cuando deba asegurar un pasamanos o soportes a columnas cuadradas o redondas de Fibra de Vidrio, se deben hacer agujeros guía.

NOTA 4: CAPITAL Y BASE

Lijada superficial puede ser requerida para lograr un posicionamiento correcto.

NOTA 5: NO INSTALE COLUMNA DERAJO DE GRADO O DE RELLENO CON HORMIGÓN.

NOTA 6: SI SE UTILIZA EN APLICACIONES DE PÉ, PUEDEN UTILIZARSE POSTES ESTRUCTURALES.

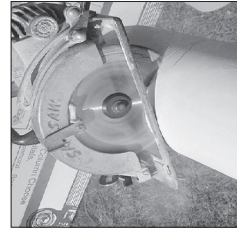
CONSEJOS DE PINTAR:

- Asegúrese de que todas las superficies estén limpias. Primero con una imprimación de unión.
- Siga las instrucciones del fabricante para el aplicado de la capa base y la capa final de pintura en las columnas de Fibra de Vidrio y en las molduras fabricadas en Polyuretano.
- No utilice colores oscuros (colores oscuros son aquellos clasificados con el valor L entre 50 y 0) L es la medida de brillantez de un objeto, y oscila entre 0 (negro) y 100 (blanco).

Instrucciones para Instalar Las Columnas Fibra de Vidrio Redondos o Cuadrados



1. Mida la apertura en cuatro puntos: Adelante, atrás, derecha e izquierda. Ver ilustración. La medida de la columna es muy larga acortada cortando en la parte inferior.



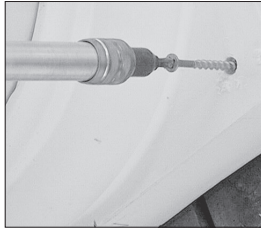
2. Use una sierra abrasiva (para mamposte- ria o de hoja de Carburo) para empujar la moldura superior e inferior y asegurar un buen contacto con la superficie.



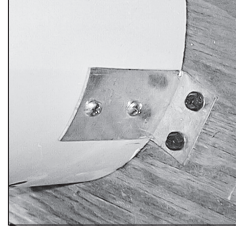
4. Aplique el pegamento a la superficie superior- o e inferior de la columna.



5. Apriete la columna. Asegúrese que la carga este distribuida y centrada uniformemente alrededor de la superficie portante.

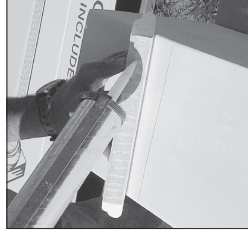


7. Aplique el pegamento a la parte superior del Capital presionando hacia arriba. Asegure con tornillos o clavos.



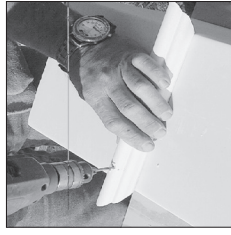
6. Marque y perforo agujeros en piso y columna para la instalación de la platina (no incluido) - (Luego de instalación disponible #17040)

Instalación del anillo decorativo en columnas cuadradas de Fibra de Vidrio



9. Marque el lugar donde se instalará el anillo decorativo. Mida y corte en ángulo de 45 grados. Aplique pegamento.

* Use pegamento para exteriores que no contenga Acetona.



10. Perfore agujeros de paso através del anillo hasta alcanzar la columna. Atornille el anillo decorativo o use clavos para terminado fino.



11. Aplique masilla para cubrir los tornillos o los clavos.

WARRANTY IS VOID IF INSTALLATION INSTRUCTIONS ARE NOT FOLLOWED

Square Fiberglass Column Installation Instructions

1. Determine the position of the column shaft by dropping a plumb line from the center of the beam to the floor. Mark this point on the floor with an "X". This mark is where you will center the column shaft so that the top of the shaft will align with the center of the beam. On the bottom of the beam and on the floor surface, measure a distance out from these center points in 4 directions, that is half the width of the column shaft, and mark those distances. Use a carpenter's square to draw the outline of the column shaft through these marks. When you install the column shaft, you will align the column to these marks.
2. Measure the overall height. Raise the beam slightly with brace for easy installation of the column.
3. Lay column on saw horses, and trim column shaft to length. Column shaft can be trimmed from the top or bottom since the shaft is non-tapered. Cut with a circular saw with an abrasive masonry blade or fine tooth carbide blade. Finish both the top and bottom of the shaft with a rasp or sander to ensure an even load distribution around the bearing surfaces.
4. Slide the neck mould over top of shaft to the desired location (do this before sliding capital over the shaft). Fasten neck mould to shaft using construction adhesive and countersink non-corrosive screws. Slide cap over top of column shaft. Let capital slide down to rest on the neck mould temporarily until shaft is correctly positioned. Caulk between neck mould and shaft and fill countersunk screw holes with caulk or exterior filler.
5. Slide base onto column shaft from bottom. Use masking tape or shims to temporarily hold base approximately 12" up from shaft bottom.
6. Place column in a vertical position with beam load centered over column shaft with an even distribution around the bearing surfaces. Be sure to align the perimeter of the column shaft with the marks you made in Step 1. You can use a 4' or longer level to verify column shaft is plumb.
7. Remove brace to allow load to bear on column shaft.
8. Take small L-brackets included in the cap and base kit, and on opposites sides of the columns shaft, attach 2 of them to the beam, and 2 of them to the floor surface. The vertical legs of the L-brackets should touch the face of the column shaft. Use the holes in the vertical leg of the L-bracket as guides to pre-drill the attachment screw holes into the column shaft. BE SURE TO PRE-DRILL HOLES. Be careful to not over tighten screws.
9. POLYURETHANE Cap and Base: Slide cap up to soffit and attach to soffit using non-corrosive screws. Attach base to floor and bottom of shaft using non-corrosive screws or appropriate fasteners. Countersink holes so screw heads will recess into the cap and base material. Fill holes with exterior "Bondo" or filler. SYNTHETIC INJECTION MOLDED (SIM) Cap and Base: Attach using non-corrosive screws in the holes pre-molded in the cap and base. Fill holes with "Bondo" or filler.
10. Caulk between cap and soffit, the cap and shaft and the base and shaft for a finished appearance.

A. SPECIAL NOTES AND EXCEPTIONS:

- Be certain the load is evenly distributed over the load bearing surface of the shaft. The column should be loaded concentrically with 100% contact on the bottom with the substrate and 75% at the top with the soffit.
- Pernalite® columns are not intended to be split.
- Split columns are non-load bearing.
- If building code requires uplift connection, contact your distributor or dealer for recommendations.

- 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).
- Spray painting is not recommended. Paint should always be applied with a brush.
- 2nd floor balconies should NOT be attached directly to the side of any Square Fiberglass Column.
- 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 set into masonry.
- Concrete should never be used to fill Fiberglass Columns. This will void the warranty.
- Do not install columns below grade. This will void the warranty.

B. FINISHING AND PAINTING INSTRUCTIONS:

1. Make sure all surfaces are clean prior to painting. Use mineral spirits if oil or alkyl products are used. Warm soapy water should be used if acrylic products are utilized. Synthetic cap and base: A non-oil based cleaner should be used to clean the cap/base.
2. Alkyd or oil base primer and paint are recommended. Acrylic products can be used, but additional sanding is required. Synthetic cap and base: Use a good high-quality exterior paint. At least one coat of bonding primer and two coats of final paint should be used. Suggested primer for Synthetic Injection Molded (SIM) cap and base XIM Primer 400 White, or any bonding primer made for use on fiberglass or plastics.
3. Use a good, high-quality exterior paint. At least one coat of bondinh primer and two coats of a final paint should be used.
4. Follow paint manufacturer's instructions concerning use within temperature ranges for best results. Do not use paint or solvents containing acetone.

C. LIGHTWEIGHT SQUARE RECESSED PANEL COLUMNS - ATTACHING TOP AND BOTTOM PANEL INSERT KITS & PANEL DIVIDER KITS PRIOR TO COLUMN INSTALLATION:

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 a fiberglass body filler, such as "Bondo").
 2. If using panel divider pieces to achieve a two-panel or three-panel design column, attach 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 countersunk non-corrosive screws.
 3. Fill the seams where the panel insert pieces and panel divider pieces meet the shaft and the countersunk screw holes with a fiberglass body filler, such as "Bondo".
- ## LIGHTWEIGHT SQUARE RECESSED PANEL COLUMNS – INSTALLATION INSTRUCTIONS:
4. Follow "Square Fiberglass Column Installation Instructions" Steps 1-10 & "Finishing and Painting Instructions" Steps 1-4.