

DECOR INNOVATIONS **DISTINCTIVE RAIL**



DISTINCTIVE • INNOVATIVE • SOLUTIONS



SQUARE DURALITE



**RECESSED PANEL
DURALITE**



ROUND DURALITE



**ROUND TAPERED
DURACAST**

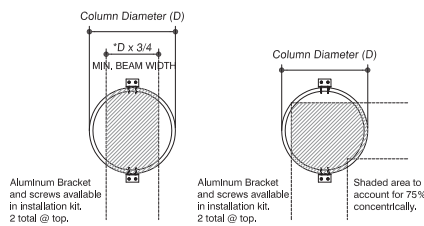
Fibreglass Column Installation

Building Code Compliance

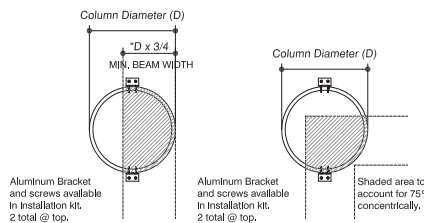
HB&G has updated our product testing to comply with changes to the Building Codes (IBC/IRC) and to the Acceptance Criteria for Fiberglass Columns. The 2 major changes that impacted PermaCast® and PermaLite® were:

- Eccentric Axial Loading – the new maximum allowable load values are based on eccentric (offset) axial load as opposed to concentric (centered) axial loading.
- Increased Safety Factor – the safety factor on the allowable load was increased from 2.5 times to 5 times

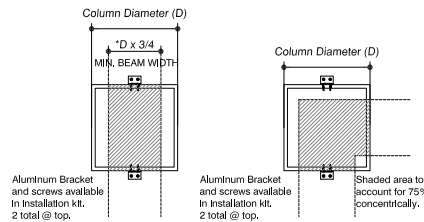
Eccentric loading of columns is not recommended by HB&G.



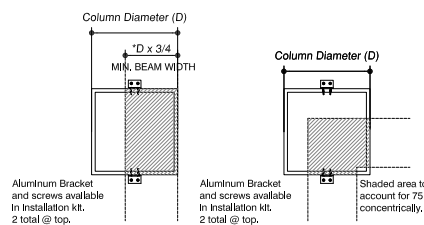
Acceptable Applications



Unacceptable Applications



Acceptable Applications



Unacceptable Applications

HB&G recommends following the installation instructions included with the product purchased. HB&G structural products conform to 2018, 2015, 2012, and 2009 IBC/IRC.

Round Tapered PermaCast® Plain and Fluted

Bottom Diameter	Eccentric Loading		Concentric Load (Lbs.)
	Avg. Allowable Load (Lbs.)	Avg. Ultimate Load (Lbs.)	
6"	4580	22900	8000
8"*	4600	23000	10000
10"*	4690	23450	14000
12"*	4800	24000	18000
14"	7800	39000	20000
16"	8250	41250	20000
18"	10000	50000	20000
20"	10000	50000	20000
22"	10000	50000	20000
24"	10000	50000	20000
28"	10000	50000	20000
30"	10000	50000	20000

Square PermaCast® Plain, Fluted, RoughSawn®, and Recessed Panel

6"*	5100	25500	8000
8"*	5150	25750	10000
10"*	5640	28200	14000
12"*	5900	29500	18000
14"	8500	42500	20000
16"	9500	47500	20000

Round No-Taper PermaCast® Plain and Fluted

6"	4580	22900	8000
8"	4590	22950	10000
10"	4670	23350	14000
12"	4750	23750	18000
14"	7000	35000	20000
16"	7000	35000	20000
18"	7000	35000	20000
24"	9000	45000	20000

Craftsman Plain and RoughSawn® PermaCast®

10" x 6" x 66"	9000	45000	10000
10" x 8" x 66"	9000	45000	10000
10.25" x 7.5" x 7'	7000	35000	10000
12" x 8" x 5'	8000	40000	14000
12" x 8" x 6'	8000	40000	14000
12" x 8" x 66"	8000	40000	14000
12" x 10" x 6'	8000	40000	14000
12" x 10" x 10'	8000	40000	14000
14" x 12" x 9'	8000	40000	14000
16" x 9" x 6'	9000	45000	14000
16" x 9" x 8'	9000	45000	14000
16" x 12" x 58"	9000	45000	14000
16" x 12" x 6'	9000	45000	14000
16" x 12" x 8'	9000	45000	14000

Round No-Taper PermaLite®

8"	4000	20000	8000
10"	4000	20000	10000

Square PermaLite® Plain and Recessed Panel

6"	3000	15000	5000
8"	3000	15000	6500
10"	3000	15000	7000
12"	3000	15000	7500

*Covered under ICC ESR-1361 / FL# 3102

Conforms with 2018, 2015, 2012 and 2009 IBC/IRC

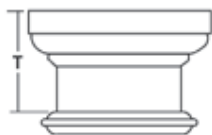
Note- Eccentric (off-center) loading has a 5 times safety factor.

- Eccentric (off-center) loading of columns is not covered by the warranty.

INSTALLATION TIPS

Note 1: Decorative Capitals

When installing a round Fiberglass column with an decorative capital, subtract the cut at bead ("T") dimension (distance from top of decorative capital to top of neck mould) and add the height of the decorative 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: Handrail

When attaching handrails or rail mounting hardware 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 must be used inside column shafts.

PAINT TIPS:

- Make sure all surfaces are clean. Prime with an exterior-grade bonding primer (XIM primer 400 white or made for use with fiberglass or plastics) and 2 coats of high quality exterior grade acrylic latex paint.
- 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).

09/19

Round or Square Fiberglass (FRP) Installation Instructions



1. Measure opening in four places front, back, left, and right of column (see drawing). Mark column accordingly. If column is too long, shorten length from bottom.



2. Use an abrasive saw (masonry or carbide tip blade). Fine trim top and bottom with rasp to ensure flat surface contact.



3. Slip base over top of column shaft and allow to slide to base of shaft. Slip cap over shaft and allow to rest on neck mould. Some sanding may be required.



4. Put assembly in place and plumb. Make sure load is centered over column shaft and evenly distributed around the bearing surface.



5. Apply construction adhesive in the way you would apply a caulk, around the column shaft where it contacts the floor and beam. Use your finger to press/squish the bead of adhesive into contact with those surfaces.



6. Mark and drill holes in floor and column shaft for corner/ angle brackets (not included).



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



8. Apply construction adhesive* to bottom of base and nail or screw to floor.

Installing Neck Moulding to Square Fiberglass Columns (If included)



9. Mark location for supplied neck moulding. Apply construction adhesive* and put neck mould in place.



10. Pre-drill holes through neck moulding 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.

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

WARRANTY IS VOID IF INSTALLATION INSTRUCTIONS ARE NOT FOLLOWED

