

Portland Columns Provide Rock Solid Support

### **BUILT FOR DEPENDABILITY.** SIMPLY DESIGNED. TRUSTED FOR STRENGTH.

### **Portland Columns:**

| COLUMN<br>DIAMETER | LENGTHS<br>AVAILABLE                               |
|--------------------|--|
| 3 1/2" 16 gauge    | 6' to 12'<br>See ICC-ES Legacy Report No. 93-36.02 |
| 4" 16 gauge        | 6' to 14'<br>See ICC-ES Legacy Report No. 93-36.02 |
| 4" 11 gauge        | 6' to 18'  |
| 6" 11 gauge        | 6' to 14'  |





Everyone needs support in their lives. Most homes in the northeast are built with columns (aka: lally columns). Installed for structural support and usually found in basements, the distinctive red poles are 16 or 11 gauge steel tubes filled with premium concrete. Portland Columns are used as structural members to transfer axial compressive loads, from steel or wood beams, to footings.



## **Bollards:** Bollards are used to protect and take impact.

Common placement of bollards are in commercial/industrial settings, used to protect parking lots as well as utility equipment.



# Plates: Your choice for securing a column to the beam



**Standard Plate** 

Standard Plates are 5" x 5" with small tabs for the top or base of columns. These can be ordered pre-welded to an end of a column.



**Secure Plate** 

Secured to the column, fixed to the beam. The Secure Plate is 6" x 6" with 1 1/4" tabs for optional screws. This plate can be used on both ends of a column and welding is not needed.



**Springfield Plate** 

Springfield Plates have either a ring or large tabs that overlay the top or the base of a column.

**Springfield Plate** 

with Tabs



Single U Cap

U Caps securely saddle larger support beams to a column. **Length:** 8" or 10"

> Inside width of saddle: 35/8", 53/8", or 71/8"

**Ring:** 3½" or 4"



Double U Cap

Double U Caps securely saddle larger support beams to two columns for unique circumstances.

Length: 10" Inside width of saddle: 35/8", 53/8", or 71/8"

Ring: 3½" or 4"



**T-Lock Plate** 

T-Lock Plates have a T on the center of the plate that gets inserted into a special column which has a hole designed to lock in the plate with a simple counterclockwise twist.



E-Z Adjustable Base

E-Z Adjustable Plates allow you to twist a special column up to a snug fit.

Portland Columns comply with ICC and BOCA regulations and are tested regularly by third party agencies.

Columns are inspected & certified annually by an independent auditor for ICC Evaluation Services. Portland Columns have been ICC-ES code compliant for more than 23 years.

See ICC-ES Legacy Report No. 93-36.02 for complete information and specifications on Portland Columns on our Portland Column web page.

**Custom Columns:** Portland Stone Ware offers the ability to customize any column required for a project.

We use the same concrete used in our stock 16 gauge column required for a project, but we can customize the steel gauge for any application per the specifications. Schedule 40 and 80 are available upon request (please provide nominal size). If a plate needs to be welded to a column, we have the ability to weld in-house.

Please note Portland Columns strength is listed below in Table 1 from our ICC-ES Legacy Report No. 93-36.02. The unit of measure is in kips which is a unit of force used by architects and engineers to measure engineering loads.

One kip is about 1000 pounds.

### TABLE 1 (from ICC-ES Legacy Report No. 93-36.02)

3 1/2-INCH and 4-INCH PORTLAND COLUMN DESIGN COMPRESSIVE STRENGTH1

| COLUMN LENGTH<br>(IN FEET) | <b>DESIGN COMPRESSIVE</b> 3 1/2-INCH COLUMN <sup>2</sup> | STRENGTH (IN KIPS)<br>4-INCH COLUMNM |
|----------------------------|--|--------------------------------------|
| 6.0                        | 25.1   | 33.3                                 |
| 6.5                        | 23.6   | 31.8                                 |
| 7.0                        | 22.2   | 30.3                                 |
| 7.5                        | 20.7   | 28.8                                 |
| 8.0                        | 19.3   | 27.2                                 |
| 8.5                        | 17.8   | 25.7                                 |
| 9.0                        | 16.4   | 24.1                                 |
| 9.5                        | 15.1   | 22.6                                 |
| 10.0                       | 13.8   | 21.0                                 |
| 11.0                       | 11.3   | 18.1                                 |
| 12.0                       | 9.1  | 15.3                                 |
| 13.0                       | N.D.   | 12.8                                 |
| 14.0                       | N.D.   | 10.6                                 |

### Notes to Table 1:

- 1. The compressive strength of the columns given above are based on factored load design. These values shall be used to determine the columns ability to resist the design loads given in the BOCA National Building Code/1999, when multiplied by the factors given in the AISC Load and Resistance Factor Design Specifications for Structural Steel Buildings, 1998 edition.
- 2. N.D. = Not Determined.





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Portland Stone Ware is a wholesale distributor, servicing the lumber and masonry industry since 1847.



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