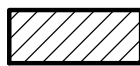




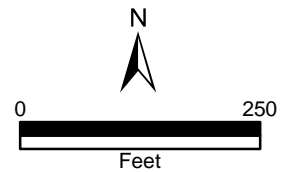
9-E-23-HZ
APPLICATION FOR CERTIFICATE OF APPROPRIATENESS



219 W. Glenwood Ave. 37917
Old North Knoxville H

Original Print Date: 9/12/2023
 Knoxville/Knox County Planning -- Historic Zoning Commission

Petitioner: Daniel Orr





Staff Report

Knoxville Historic Zoning Commission

File Number: 9-E-23-HZ

Meeting: 9/21/2023
Applicant: Daniel Orr
Owner: Jennie McCoy

Property Information

Location: 219 W. Glenwood Ave. **Parcel ID** 81 L F 028
District: Old North Knoxville H
Zoning: RN-2 (Single-Family Residential Neighborhood)
Description: Queen Anne with Neoclassical influence, c.1915

Two-story frame residence with a hipped roof clad in asphalt shingles, brick veneer cladding on the first story, and wood shingles on the second story, and a brick foundation.

Description of Work

Level II Major Repair or Replacement

Request for alternative materials: applicant received approval in June 2023 to replace existing fluted wood columns, non-original capitals, and bases on front and side porch, which were extremely deteriorated from wood rot. June 2023 COA approved replacement columns in wood ["new 12-inch (before taper) fluted wood columns with square bases, capitals, and detailing to match the existing dimensions and placement (including two sets of three adjoining columns on the façade)"]. Applicant is proposing new round, fluted, fiberglass columns (PermaCast brand).

Applicable Design Guidelines

Old North Knoxville Design Guidelines, adopted by the Knoxville City Council on November 25, 2004.

Porches:

1. Historic porches on houses in Old North Knoxville should be repaired, or may replicate the original porch if documentation of its size and design can be discovered

Wood:

6. Wood features that are important in defining the original historic character of the building shall not be removed.
 7. Replace only deteriorated wood. Reconstructing in order to achieve a uniform or "improved," "new" appearance is inappropriate because of the loss of good historic materials.
 8. An entire wooden feature that is too deteriorated to repair or is completely missing shall be replaced in kind. If features are replaced, the materials they are made from shall be compatible with the original in size, scale, and material.
-

Comments

N/A

Staff Findings

1. 219 W. Glenwood Ave is a contributing resource to the ONK National Register Historic District and local overlay.
 2. Fiberglass (or fiber-reinforced polymer composite) columns have been approved in Old North Knoxville and Fourth & Gill in 2012, 2013, 2014 and 2020. The 2012 approval at 230 E. Oklahoma states that while no substitute material can adequately replicate the unique texture of wood, the "painted surface of a composite column is more difficult to discern from the painted surface of a new wood column," and new wood columns lack the patina of sanding, layers of paint, etc. The 2012 approval notes that "new wood or new composite columns would be equally devoid of texture and 'new' in appearance." The 2013 approval at 229. E. Scott (for columns on a new garage) notes that "fiberglass column, capitals, and bases do not significantly differ in appearance from that of wood."
 3. The applicant has submitted specs for "10-inch, Round-No Taper PermaCast Columns" but describes a tapered column on the application form. The final columns should match the originals, as 12-inch, tapered, fluted round columns; applicant should submit final spec sheet to confirm.
 4. The current square wood capitals are not original to the building; the National Register nomination describes Ionic capitals and photos from the overlay's creation (approximately c.1990) show the curved Ionic columns. HB&G, the manufacturer of PermaCast columns, has multiple options for decorative capitals, including the Scamozzi capital which better matches the design of the original. The applicant should utilize the "Scamozzi" capital option.
-

Staff Recommendation

Staff recommends approval of Certificate 9-E-23-HZ, subject to the following conditions: 1) replacement columns to be 12-inch, tapered, round, and fluted, with a final specification sheet submitted to staff for approval; 2) capitals to reflect the Scamozzi design option, to better reflect the original capital design.

REQUEST

DOWNTOWN DESIGN

Level 1:

- Signs Alteration of an existing building/structure

Level 2:

- Addition to an existing building/structure

Level 3:

- Construction of new building/structure Site design, parking, plazas, landscape

See required Downtown Design attachment for more details.

Brief description of work: _____

HISTORIC ZONING

Level 1:

- Signs Routine repair of siding, windows, roof, or other features, in-kind; Installation of gutters, storm windows/doors

Level 2:

- Major repair, removal, or replacement of architectural elements or materials Additions and accessory structures

Level 3:

- Construction of a new primary building

Level 4:

- Relocation of a contributing structure Demolition of a contributing structure

See required Historic Zoning attachment for more details.

Brief description of work: Change Columns from wood to Perma cast.
remain fluted, tapered + painted white

INFILL HOUSING

Level 1:

- Driveways, parking pads, access point, garages or similar facilities Subdivisions

Level 2:

- Additions visible from the primary street Changes to porches visible from the primary street

Level 3:

- New primary structure
 Site built Modular Multi-Sectional

See required Infill Housing attachment for more details.

Brief description of work: _____

STAFF USE ONLY

ATTACHMENTS

- Downtown Design Checklist
 Historic Zoning Design Checklist
 Infill Housing Design Checklist

ADDITIONAL REQUIREMENTS

- Property Owners / Option Holders

Level 1: \$50 • **Level 2:** \$100 • **Level 3:** \$250 • **Level 4:** \$500

FEE 1:	100.00	TOTAL: 100.00
FEE 2:		
FEE 3:		



Columns to be replicated

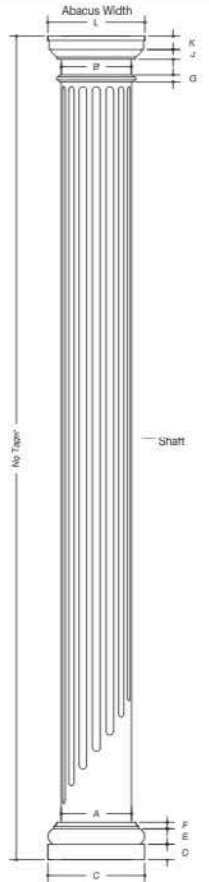


Column condition

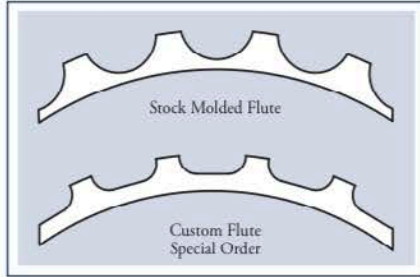


Survey photos c.1990

Fluted Round Tapered **PERMA**Cast® Columns



PermaCast® No-Taper Column with Poly Tuscan Cap and Base

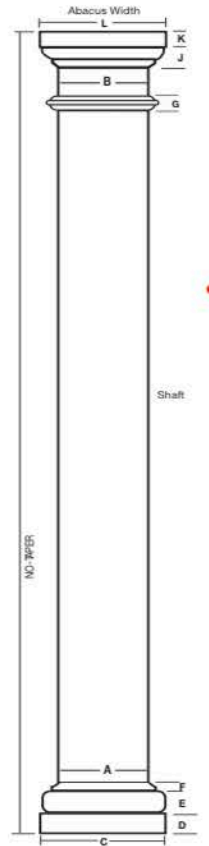


HB&G OFFERS TWO DISTINCTIVE TYPES OF FLUTES.

Stock Molded Flute: Available in diameters of 8" x 8' – 16" x 12' columns (See price guide for specific lengths available.) The stock molded flute is part of the manufacturing process and cannot be altered.

Custom Flute: The custom flute is milled after the column is manufactured and can be modified to your specific length. All round PermaCast® columns, 6" x 4' – 30" x 30', are available with an optional custom flute. (Call a customer service representative for pricing and lead times.) Adjusted Flutes available.

*Inside dimension may vary from "Stock" Flutes



PermaCast® Plain No-Taper Column with Poly Tuscan Cap and Base

Round No-Taper **PERMA**Cast® Columns

ROUND NO-TAPER PERMACAST® COLUMN DIMENSIONS (IN INCHES)

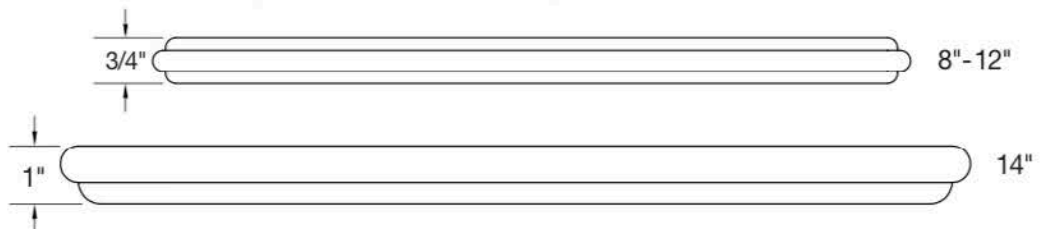
Col. Size	A	B	C	D	E	F	G	J	K	L	Lengths Available (ft)
8"	7-5/8"	7-5/8"	10-1/2"	1-7/8"	1-3/4"	3/4"	3/4"	1-1/4"	1-1/2"	10-5/8"	6, 8, 9, 10
10"	9-5/8"	9-5/8"	13-1/8"	2-3/8"	2-1/8"	3/4"	3/4"	1-1/4"	2"	12-13/16"	6, 8, 9, 10, 12
12"	11-5/8"	11-5/8"	16-1/2"	2-3/4"	2-3/8"	7/8"	3/4"	1-3/4"	2"	15-7/8"	6, 8, 9, 10, 12
14"	13-5/8"	13-5/8"	19-1/2"	3-3/8"	3-1/8"	1-1/8"	1"	2-1/4"	3"	19-1/8"	6, 8, 9, 10, 12, 14
16"	15-3/4"	15-3/4"	22"	3-7/8"	3-1/2"	1-1/4"	1"	2-1/4"	2-3/4"	22"	6, 8, 9, 10, 12, 14, 16, 18, 20
18"	17-1/2"	17-1/2"	24-5/8"	4"	4"	1-5/8"	1-3/16"	2-3/4"	3-1/8"	24-5/8"	6, 8, 9, 10, 12, 14, 16, 18, 20
24"	24"	24"	33-1/2"	5-3/4"	5-1/4"	2-3/16"	2-1/8"	3-1/2"	4-1/8"	33-3/8"	8, 9, 10, 12, 14, 16, 18, 24 26, 28, 30

Neck mould not included.

Flashing and Installation Kit not available with No-Taper Tuscan cap and base sets.

- Split columns are not load bearing.

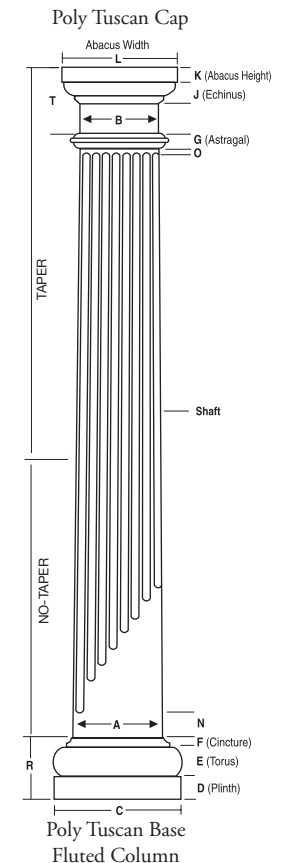
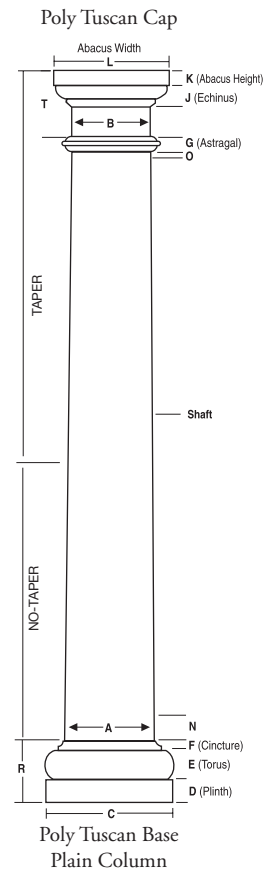
NECK MOULD FOR NO-TAPER COLUMN – SOLD SEPARATELY



Round Tapered **PERMA**Cast® Columns

COL. SIZE	A	B	C	D	E	F	G	J	K	L	O	N	R	T	LENGTHS AVAIL. (ft.)
6"	5 5/8"	4 3/4"	9"	1 1/8"	1 1/4"	3/8"	3/4"	1 1/4"	1 1/8"	8"	1"	6 1/4"	3 1/8"	4 7/16"	4,6,8
8"	7 7/8"	6 1/4"	10 1/2"	1 7/8"	1 3/4"	3/4"	1 1/8"	1 1/2"	1 1/2"	9 1/4"	1 1/2"	2 1/4"	4 3/8"	4 1/2"	5,6,8,10,12
10"	9 3/8"	8 1/8"	13 3/8"	2 1/8"	2 1/4"	3/4"	1 3/16"	1 1/4"	1 1/4"	11 1/4"	3/8"	2 1/4"	5 1/4"	5"	6,8,10,12,14
12"	11 1/8"	9 3/8"	16 1/2"	2 3/8"	2 3/4"	7/8"	1 3/16"	1 3/4"	2 1/4"	13 3/4"	3/4"	2 3/8"	6 1/8"	5 3/4"	6,8,10,12,14,16,18
14"	13 3/8"	11 1/8"	19 1/2"	3 3/8"	3 3/8"	1 1/8"	1"	2"	2 1/8"	17"	7/8"	2 3/8"	7 3/4"	7"	8,9,10,12,14,16,18
16"	15 3/4"	13 3/8"	22"	3 7/8"	3 7/8"	1 1/8"	1 1/16"	2 1/4"	2 1/8"	19 3/8"	1"	3"	8 3/8"	8"	8,10,12,14,16,18,20
18"	17 1/2"	15 3/8"	24 3/8"	4"	4"	1 1/8"	1 1/16"	2 3/4"	3 3/8"	22 3/8"	1 1/2"	10 3/4"	9 3/8"	8 3/8"	8,10,12,14,16,18,20,22,24,26
20"	19 1/2"	17 3/16"	27"	4 3/4"	4 1/2"	2"	1 1/16"	2 7/8"	3 3/8"	24 3/16"	1 1/2"	10 3/4"	11 1/4"	9"	10,12,14,16,18,20,22,24
22"	21 1/8"	19 1/4"	30 1/4"	5"	5"	2"	1 1/8"	3"	3 3/4"	27 1/2"	1 1/2"	10 3/4"	12"	10 1/4"	16,18,20,22,24,26
24"	23 3/8"	21 1/4"	33 1/2"	6"	5 3/4"	2 1/4"	2"	3 1/2"	4"	30 3/8"	1 1/2"	10 3/4"	13 1/2"	11 1/8"	12,14,16,18,20,22,24,26,28,30
28"	28"	24 3/4"	38"	6 3/4"	6 1/2"	2 3/4"	2 1/4"	3 3/4"	4 3/4"	33 3/8"	1 1/2"	10 3/4"	15 1/2"	11 3/4"	20,22,24,26,28
30"	29 3/8"	26 1/2"	41 1/8"	6 1/2"	5 7/8"	2 1/2"	3"	4"	4 3/4"	38 3/4"	1 1/2"	10 3/4"	14 7/8"	14 7/8"	20,22,24,26,28,30

*There may be a variance of up to 1/4" in all dimensions. Fluted columns available in all diameters. See page 16 for Parallel dimensions. See page 18 for Decorative Capital dimensions. Standard Fluted Column (Fluted in mold)
 • Split columns are not load bearing.



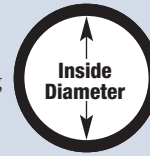
COLUMN-LOC®

Column-Loc® creates a continuous connection from floor to beam/header without the expense of splitting and reattaching the column. This labor saving product is easy to install and delivers wind uplift resistance especially important in coastal and high wind areas. Currently available for 8" and 10" round (tapered and no-taper) and square PermaCast® columns. Kits are available with and without threaded rod in lengths up to 12'*



ROUND PERMACAST® INSIDE DIMENSIONS

Inside dimension may vary up to 1/8". Splitting a column will decrease inside dimension 1/8".



COLUMN SIZE	TOP I.D.	BOT I.D.
6"	3 7/8"	4 1/8"
8"	5 1/2"	6 1/8"
10"	7 3/8"	8 1/8"
12"	8 7/8"	10 1/8"
14"	10 7/8"	12 1/8"
16"	12 7/8"	15"
18"	14 1/2"	16 3/8"
20"	16 3/16"	18 3/8"
22"	18 3/8"	20 3/16"
24"	20"	22 3/8"
28"	22 7/8"	26 1/4"
30"	25 1/4"	28 3/8"

*Plain columns only

PLUMB-FIT®

To make installation even easier our 6"-12" round and square poly Tuscan Cap and Base Sets with flashing cap come with the Plumb-Fit® patented (Patent 9689674) installation system included.

ROUND PERMACAST® PORCH INSTALLATION BRACKET

The HB&G Porch Installation Bracket includes the bracket and all required hardware. The bracket fits 20" - 30" Plain Round PermaCast® Columns and will secure a 2nd story porch to our PermaCast® Columns. Three brackets are required for each column.



PERMA Capitals and Bases

Choosing the right cap and base for your columns is as important as the selection of the column itself. The right cap and base can define the style of the front porch and create an atmosphere that complements your lifestyle. The cap and base options offered by HB&G are shown on page 9. Please refer to the following data that corresponds with your cap and base selection to ensure that you end up with the products that work best for you.

CAPITAL AND BASE OPTIONS

Most capitals and bases for PermaCast® columns are made of polyurethane and are decorative. The shaft fits through the center of the capital and base and does not alter the height of the shaft. Decorative capitals for round PermaCast® columns will alter the height of the shaft.

TUSCAN CAP AND BASES

The Tuscan style is standard and best complements the PermaCast® column. The Tuscan is available for all round and square shafts. For dimension see pages 11-12, 14-15, and 18.

DECORATIVE CAPITAL

Five styles of decorative capitals are available for all round tapered and square shafts. Using a decorative capital with a round PermaCast® shaft will alter the height of the shaft. Decorative capitals do not alter the height of the shaft when used on a square PermaCast® Column.

ATTIC BASE

Attic Bases are used for a more ornate look and come in 1 or 2 pieces depending on their size.

COLONIAL CAP AND BASE

Referred to as our low profile cap and base, the Colonial is designed specifically for use in applications where railing will be attached to the column. Available for PermaCast® round and square shafts 6"-12".

CROWN CAP

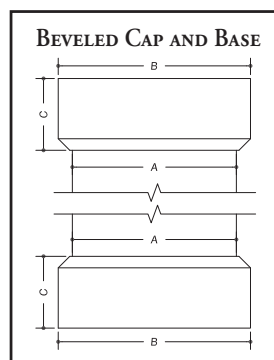
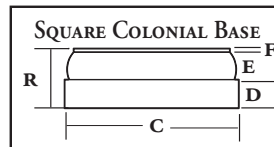
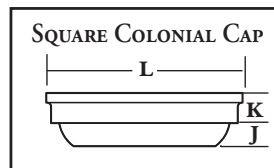
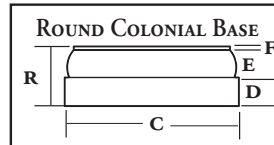
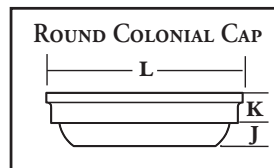
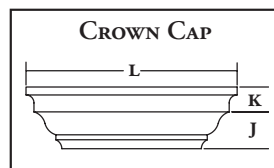
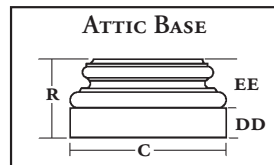
Available for PermaCast® Square shafts 6-12".

PERMA TUFF® BASE AND POLY CAP

A durable hard shell base combined with a poly cap. Designed for high traffic applications. Available for PermaCast® round shafts 8"-12".

BEVELED CAP AND BASE

Designed to deliver a popular, more contemporary appearance, beveled caps and bases are available for PermaCast® Square shafts 6-12".



DIMENSIONS OF ATTIC BASE FOR ROUND AND SQUARE COLUMNS

COLUMN SIZE	ROUND ATTIC				COLUMN SIZE	SQUARE ATTIC			
	C	DD	EE	R		C	DD	EE	R
6"	8 ³ / ₁₆ "	1 ³ / ₈ "	2 ³ / ₄ "	4 ¹ / ₈ "	6"	8 ⁷ / ₁₆ "	1 ³ / ₈ "	2 ⁷ / ₈ "	4 ¹ / ₄ "
8"	10 ¹ / ₈ "	1 ⁷ / ₈ "	3 ³ / ₄ "	5 ¹ / ₈ "	8"	11"	1 ⁷ / ₈ "	3 ³ / ₄ "	5 ¹ / ₈ "
10"	13"	2 ¹ / ₂ "	3 ⁷ / ₈ "	6 ¹ / ₈ "	10"	13 ³ / ₈ "	2 ³ / ₄ "	4"	6 ³ / ₈ "
12"	16 ¹ / ₈ "	3"	4 ¹ / ₂ "	7 ¹ / ₂ "	12"	17"	2 ³ / ₄ "	4 ¹ / ₂ "	7 ¹ / ₄ "
14"	19 ¹ / ₄ "	3 ³ / ₈ "	5 ³ / ₈ "	8 ³ / ₈ "	14"	N/A	N/A	N/A	N/A
16"	21 ¹ / ₄ "	4"	6 ¹ / ₂ "	10 ¹ / ₂ "	16"	22 ¹ / ₄ "	4"	6 ³ / ₈ "	10 ³ / ₈ "
18"	25"	4 ³ / ₈ "	7 ¹ / ₄ "	11 ³ / ₈ "	18"	N/A	N/A	N/A	N/A
20"	27 ¹ / ₁₆ "	4 ⁷ / ₈ "	8 ¹ / ₄ "	13 ³ / ₈ "	20"	N/A	N/A	N/A	N/A
22"	30 ¹ / ₄ "	5 ³ / ₈ "	9 ¹ / ₄ "	14 ³ / ₈ "	22"	N/A	N/A	N/A	N/A
24"	33 ¹ / ₂ "	6"	10 ¹ / ₄ "	16 ¹ / ₄ "	24"	N/A	N/A	N/A	N/A
28"	38"	6 ³ / ₄ "	11 ³ / ₈ "	18 ³ / ₈ "	28"	N/A	N/A	N/A	N/A
30"	41 ¹ / ₄ "	6 ¹ / ₂ "	11 ¹ / ₄ "	17 ¹ / ₄ "	30"	N/A	N/A	N/A	N/A

CROWN CAP* FOR SQUARE COLUMN DIMENSIONS

Column Size	K	J	L
6"	1 ⁹ / ₁₆ "	2 ⁵ / ₁₆ "	11 1/4"
8"	1 ⁹ / ₁₆ "	2 ⁵ / ₁₆ "	13 1/4"
10"	1 ⁹ / ₁₆ "	2 ⁵ / ₁₆ "	15 1/4"
12"	1 ⁹ / ₁₆ "	2 ⁵ / ₁₆ "	17 1/4"

*Made from Polyurethane

COLONIAL ROUND CAP AND BASE DIMENSIONS*

Col. Size	C	D	E	F	J	K	L	R
6"	7 ¹ / ₄ "	1 ³ / ₈ "	1 ¹ / ₄ "	1/4"	1"	1 ¹ / ₄ "	7"	2 7/8"
8"	9 ¹ / ₈ "	1 ¹ / ₂ "	1 ⁵ / ₁₆ "	1/4"	1 ¹ / ₁₆ "	1 ³ / ₈ "	9"	3"
10"	11 ¹ / ₈ "	1 ¹ / ₂ "	1 ¹ / ₄ "	1/4"	1 ¹ / ₁₆ "	1 ³ / ₈ "	10 ⁹ / ₁₆ "	3"
12"	13 ¹ / ₈ "	1 ¹ / ₂ "	1 ¹ / ₄ "	1/4"	1 ¹ / ₁₆ "	1 ³ / ₈ "	13 ¹ / ₈ "	3"

*Low profile option.

COLONIAL SQUARE CAP AND BASE DIMENSIONS*

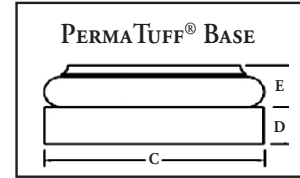
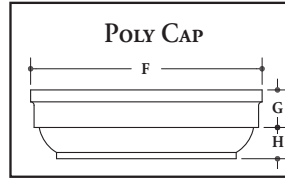
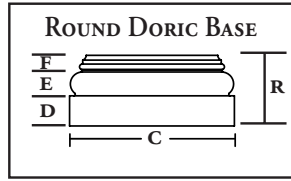
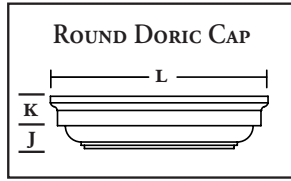
Col. Size	C	D	E	F	J	K	L	R
6"	8 ¹ / ₄ "	1 ³ / ₈ "	1 ⁵ / ₁₆ "	3/16"	1"	1 ³ / ₈ "	8 ¹ / ₄ "	2 ⁷ / ₈ "
8"	10 ³ / ₈ "	1 ¹ / ₄ "	1 ¹ / ₁₆ "	7/16"	1 ⁵ / ₁₆ "	1"	9 ¹⁵ / ₁₆ "	2 ³ / ₄ "
10"	12 ³ / ₈ "	1 ¹ / ₄ "	1 ⁵ / ₁₆ "	3/16"	1"	1 ³ / ₈ "	12 ³ / ₈ "	2 ³ / ₄ "
12"	14 ³ / ₈ "	1 ¹ / ₄ "	1"	1/2"	1"	1 ³ / ₈ "	14 ³ / ₈ "	2 ³ / ₄ "

*Low profile option.

BEVELED CAP & BASE SET*

Size	A	B	C
6"	6"	8-1/4"	3-1/2"
8"	8"	10-1/4"	3-1/2"
10"	10"	12-1/4"	5-1/2"
12"	12"	14-1/4"	5-1/2"

*For Square PermaCast® Columns
See Installation Kit on page 16.



DORIC CAP AND BASE DIMENSIONS

Column Size	C	D	E	F	J	K	L	R
8"	10 ³ / ₈ "	1 ⁷ / ₈ "	1 ³ / ₈ "	7 ⁷ / ₈ "	1"	1 ³ / ₈ "	10"	4 ⁷ / ₁₆ "
10"	12 ¹⁵ / ₁₆ "	2 ³ / ₈ "	2 ¹ / ₁₆ "	1 ¹ / ₈ "	1 ⁵ / ₁₆ "	1 ¹¹ / ₁₆ "	12 ¹ / ₂ "	5 ⁹ / ₁₆ "
12"	15 ¹ / ₂ "	2 ⁷ / ₈ "	2 ¹ / ₂ "	1 ³ / ₈ "	1 ⁹ / ₁₆ "	2"	15"	6 ¹¹ / ₁₆ "
14"	18 ¹ / ₈ "	3 ¹ / ₁₆ "	2 ⁷ / ₈ "	1 ⁹ / ₁₆ "	1 ¹³ / ₁₆ "	2 ³ / ₈ "	17 ¹ / ₂ "	7 ¹³ / ₁₆ "
16"	20 ⁷ / ₈ "	3 ³ / ₄ "	3"	2 ¹ / ₄ "	1 ⁹ / ₁₆ "	2 ¹ / ₄ "	20 ¹ / ₂ "	9"
18"	23 ¹ / ₄ "	4"	3 ¹ / ₂ "	2 ¹ / ₂ "	1 ³ / ₄ "	3"	23 ¹ / ₈ "	10"

TUSCAN PERMA TUFF® BASE AND POLY CAP DIMENSIONS

Col. Size	C	D	E	F	G	H
8"	10-1/4"	1-7/8"	2-3/8"	9-1/4"	1-1/2"	1-1/4"
10"	12-7/8"	2-3/8"	2-7/8"	11-1/4"	1-3/4"	1-1/4"
12"	15-1/4"	2-3/4"	3-1/4"	13-3/4"	2-1/4"	1-3/4"

*Not Available Split

DECORATIVE CAPITAL DIMENSIONS FOR ROUND TAPERED AND SQUARE COLUMNS (IN INCHES)

Size of Columns (Diameter at bottom of shaft)	6"		8"		10"		12"		14"		16"		18"		20"		22"		24"		28"		30"		
	ROUND	SQUARE	ROUND	SQUARE	ROUND	SQUARE	ROUND	SQUARE	ROUND	SQUARE	ROUND	SQUARE	ROUND	SQUARE	ROUND	SQUARE	ROUND	SQUARE	ROUND	SQUARE	ROUND	SQUARE	ROUND	SQUARE	
Roman Ionic	Height	3 ³ / ₁₆ "	3 ³ / ₁₆ "	4 ¹ / ₈ "	4"	4 ⁷ / ₈ "	4 ³ / ₈ "	6 ¹ / ₄ "	5 ³ / ₈ "	6 ³ / ₄ "	8 ⁷ / ₈ "	9 1/2"	10 ⁵ / ₁₆ "	9 ⁹ / ₁₆ "	9 ⁷ / ₁₆ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Greek Ionic	Abacus	10 ¹ / ₈ "	8 ¹ / ₈ "	11 ¹¹ / ₁₆ "	10 ³ / ₄ "	14 ³ / ₄ "	12 ¹ / ₂ "	16 ⁷ / ₈ "	17 ¹ / ₈ "	19 ¹³ / ₁₆ "	26"	25 ¹ / ₄ "	25 ⁵ / ₁₆ "	26 ⁶ / ₈ "	26 ³ / ₈ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Projection	N/A	3 ¹ / ₄ "	3 ¹ / ₈ "	3"	4 ¹ / ₈ "	4 ¹ / ₄ "	5"	6 ¹ / ₄ "	7 ¹ / ₈ "	8"	8 ¹ / ₂ "	11 ¹ / ₄ "	11 ¹ / ₄ "	10"	9 ⁷ / ₈ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
	O/S to O/S	12 ¹ / ₈ "	10 ¹ / ₂ "	13 ¹⁵ / ₁₆ "	13 ⁹ / ₁₆ "	17 ¹ / ₄ "	16 ¹ / ₂ "	23 ¹ / ₈ "	22 ⁹ / ₁₆ "	24 ³ / ₈ "	32 ¹ / ₈ "	31 ³ / ₄ "	31 ³ / ₄ "	33"	34"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Inside Dia.*	2 ⁷ / ₈ "	4 ¹ / ₂ "	5"	6"	7"	8"	9"	10"	11"	12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"
Temple of the Winds	Height	5 ¹ / ₂ "	4 ¹ / ₈ "	6 ¹ / ₄ "	5 ⁵ / ₈ "	6 ³ / ₄ "	6 ⁹ / ₁₆ "	9 ¹ / ₄ "	6 ³ / ₄ "	10 ³ / ₈ "	11"	10 ⁵ / ₁₆ "	11 ³ / ₈ "	13 ⁷ / ₈ "	13 ⁷ / ₈ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Abacus	11"	7 ¹⁵ / ₁₆ "	12 ⁵ / ₈ "	10 ¹¹ / ₁₆ "	16"	14 ³ / ₈ "	17 ³ / ₄ "	15 ¹ / ₈ "	22 ¹ / ₈ "	26 ³ / ₁₆ "	22 ³ / ₁₆ "	25 ¹ / ₄ "	29"	29"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Projection	N/A	4 ⁵ / ₈ "	3 ⁵ / ₈ "	4 ⁷ / ₈ "	5"	5 ⁷ / ₈ "	7 ¹ / ₂ "	7 ¹ / ₄ "	6 ¹ / ₂ "	10 ¹ / ₄ "	10 ³ / ₄ "	9 1/2"	11 ¹ / ₄ "	15 ¹ / ₂ "	15 1/2"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	O/S to O/S	14 ¹ / ₂ "	11 ⁷ / ₈ "	17 ⁹ / ₁₆ "	14 ¹⁵ / ₁₆ "	20 ⁷ / ₈ "	20 ¹¹ / ₁₆ "	26 ³ / ₈ "	20 ¹¹ / ₁₆ "	29 ¹ / ₄ "	36 ³ / ₁₆ "	29 ⁹ / ₈ "	31 ³ / ₄ "	43 ¹ / ₂ "	43 ¹ / ₂ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Roman Corinthian	Height	8 ¹ / ₁₆ "	8"	11 ¹ / ₂ "	10 ⁵ / ₁₆ "	13 ⁷ / ₈ "	11 ⁵ / ₈ "	20 ¹ / ₂ "	16 ¹ / ₄ "	18 ¹ / ₄ "	21 ¹⁵ / ₁₆ "	21 ⁷ / ₈ "	23"	24 ¹ / ₈ "	27 ⁷ / ₈ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Abacus	12 ¹ / ₈ "	11 ⁷ / ₈ "	15 ¹ / ₂ "	13 ⁷ / ₁₆ "	21 ¹³ / ₁₆ "	16 ⁹ / ₁₆ "	25 ³ / ₄ "	23 ¹ / ₄ "	26"	29 ¹⁵ / ₁₆ "	28 ³ / ₈ "	34 ³ / ₄ "	35 ¹ / ₄ "	37 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
	Projection	N/A	4 ⁵ / ₈ "	5 ¹ / ₂ "	6"	8"	7"	9"	10 ⁷ / ₈ "	11 ¹ / ₈ "	14"	11 ¹ / ₄ "	12"	14 ⁷ / ₈ "	16 ¹ / ₈ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	O/S to O/S	12 ¹ / ₈ "	11 ⁷ / ₈ "	15 ¹ / ₂ "	13 ⁷ / ₁₆ "	21 ¹³ / ₁₆ "	16 ⁹ / ₁₆ "	25 ³ / ₄ "	23 ³ / ₈ "	26"	29 ¹⁵ / ₁₆ "	28 ³ / ₈ "	34 ³ / ₄ "	35 ¹ / ₄ "	37 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Scamozzi	Height	8 ¹ / ₁₆ "	8"	11 ¹ / ₂ "	10 ⁵ / ₁₆ "	13 ⁷ / ₈ "	11 ⁵ / ₈ "	20 ¹ / ₂ "	16 ¹ / ₄ "	18 ¹ / ₄ "	21 ¹⁵ / ₁₆ "	21 ⁷ / ₈ "	23"	24 ¹ / ₈ "	27 ⁷ / ₈ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Abacus	12 ¹ / ₈ "	11 ⁷ / ₈ "	15 ¹ / ₂ "	13 ⁷ / ₁₆ "	21 ¹³ / ₁₆ "	16 ⁹ / ₁₆ "	25 ³ / ₄ "	23 ¹ / ₄ "	26"	29 ¹⁵ / ₁₆ "	28 ³ / ₈ "	34 ³ / ₄ "	35 ¹ / ₄ "	37 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
	Projection	N/A	4 ⁵ / ₈ "	5 ¹ / ₂ "	6"	8"	7"	9"	10 ⁷ / ₈ "	11 ¹ / ₈ "	14"	11 ¹ / ₄ "	12"	14 ⁷ / ₈ "	16 ¹ / ₈ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
	O/S to O/S	12 ¹ / ₈ "	11 ⁷ / ₈ "	15 ¹ / ₂ "	13 ⁷ / ₁₆ "	21 ¹³ / ₁₆ "	16 ⁹ / ₁₆ "	25 ³ / ₄ "	23 ³ / ₈ "	26"	29 ¹⁵ / ₁₆ "	28 ³ / ₈ "	34 ³ / ₄ "	35 ¹ / ₄ "	37 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Scamozzi	Height	3 ¹ / ₄ "	3 ¹ / ₈ "	5"	4 ¹ / ₈ "	5 ⁵ / ₁₆ "	5 ¹ / ₁₆ "	6 ¹ / ₂ "	5 ³ / ₄ "	7 ¹ / ₁₆ "	8 ⁵ / ₁₆ "	8 ³ / ₄ "	8 ⁵ / ₈ "	10 ³ / ₄ "	11 ¹ / ₂ "	12 ¹ / ₄ "	15 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A		
	Abacus	11 ¹ / ₄ "	9 ⁷ / ₈ "	16 ³ / ₁₆ "	14 ¹ / ₄ "	17 ⁷ / ₈ "	16 ³ / ₈ "	20 ⁷ / ₈ "	18 ¹ / ₄ "	23 ³ / ₄ "	26"	28 ³ / ₈ "	28 ¹ / ₂ "	32"	36"	38 ¹ / ₄ "	46 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A		
	Projection	N/A	3 ³ / ₈ "	5 ¹ / ₈ "	5 ³ / ₈ "	5 ⁵ / ₈ "	6"	5 ¹ / ₄ "	6 ³ / ₈ "	8 ³ / ₄ "	5 ¹ / ₄ "	10 ¹ / ₄ "	10 ¹ / ₄ "	10 ¹ / ₈ "	12 ¹ / ₂ "	13 ³ / ₄ "	16 ¹ / ₈ "	N/A	N/A	N/A	N/A	N/A	N/A		
	O/S to O/S	11 ³ / ₈ "	10"	16 ³ / ₁₆ "	14 ¹ / ₄ "	18 ¹ / ₁₆ "	16 ³ / ₈ "	20 ⁷ / ₈ "	18 ¹ / ₈ "	23 ³ / ₄ "	26"	28 ³ / ₈ "	28 ³ / ₈ "	32"	36"	38 ¹ / ₂ "	46 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A		
Scamozzi	Height	3 ¹ / ₄ "	3 ¹ / ₈ "	5"	4 ¹ / ₈ "	5 ⁵ / ₁₆ "	5 ¹ / ₁₆ "	6 ¹ / ₂ "	5 ³ / ₄ "	7 ¹ / ₁₆ "	8 ⁵ / ₁₆ "	8 ³ / ₄ "	8 ⁵ / ₈ "	10 ³ / ₄ "	11 ¹ / ₂ "	12 ¹ / ₄ "	15 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A		
	Abacus	11 ¹ / ₄ "	9 ⁷ / ₈ "	16 ³ / ₁₆ "	14 ¹ / ₄ "	17 ⁷ / ₈ "	16 ³ / ₈ "	20 ⁷ / ₈ "	18 ¹ / ₄ "	23 ³ / ₄ "	26"	28 ³ / ₈ "	28 ¹ / ₂ "	32"	36"	38 ¹ / ₄ "	46 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A		
	Projection	N/A	3 ³ / ₈ "	5 ¹ / ₈ "	5 ³ / ₈ "	5 ⁵ / ₈ "	6"	5 ¹ / ₄ "	6 ³ / ₈ "	8 ³ / ₄ "	5 ¹ / ₄ "	10 ¹ / ₄ "	10 ¹ / ₄ "	10 ¹ / ₈ "	12 ¹ / ₂ "	13 ³ / ₄ "	16 ¹ / ₈ "	N/A	N/A	N/A	N/A	N/A	N/A		
	O/S to O/S	11 ³ / ₈ "	10"	16 ³ / ₁₆ "	14 ¹ / ₄ "	18 ¹ / ₁₆ "	16 ³ / ₈ "	20 ⁷ / ₈ "	18 ¹ / ₈ "	23 ³ / ₄ "	26"	28 ³ / ₈ "	28 ³ / ₈ "	32"	36"	38 ¹ / ₂ "	46 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A		
Scamozzi	Height	3 ¹ / ₄ "	3 ¹ / ₈ "	5"	4 ¹ / ₈ "	5 ⁵ / ₁₆ "	5 ¹ / ₁₆ "	6 ¹ / ₂ "	5 ³ / ₄ "	7 ¹ / ₁₆ "	8 ⁵ / ₁₆ "	8 ³ / ₄ "	8 ⁵ / ₈ "	10 ³ / ₄ "	11 ¹ / ₂ "	12 ¹ / ₄ "	15 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A		
	Abacus	11 ¹ / ₄ "	9 ⁷ / ₈ "	16 ³ / ₁₆ "	14 ¹ / ₄ "	17 ⁷ / ₈ "	16 ³ / ₈ "	20 ⁷ / ₈ "	18 ¹ / ₄ "	23 ³ / ₄ "	26"	28 ³ / ₈ "	28 ¹ / ₂ "	32"	36"	38 ¹ / ₄ "	46 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A		
	Projection	N/A	3 ³ / ₈ "	5 ¹ / ₈ "	5 ³ / ₈ "	5 ⁵ / ₈ "	6"	5 ¹ / ₄ "	6 ³ / ₈ "	8 ³ / ₄ "	5 ¹ / ₄ "	10 ¹ / ₄ "	10 ¹ / ₄ "	10 ¹ / ₈ "	12 ¹ / ₂ "	13 ³ / ₄ "	16 ¹ / ₈ "	N/A	N/A	N/A	N/A	N/A	N/A		
	O/S to O/S	11 ³ / ₈ "	10"	16 ³ / ₁₆ "	14 ¹ / ₄ "	18 ¹ / ₁₆ "	16 ³ / ₈ "	20 ⁷ / ₈ "	18 ¹ / ₈ "	23 ³ / ₄ "	26"	28 ³ / ₈ "	28 ³ / ₈ "	32"	36"	38 ¹ / ₂ "	46 ¹ / ₄ "	N/A	N/A	N/A	N/A	N/A	N/A		
Scamozzi	Height	3 ¹ / ₄ "	3 ¹ / ₈ "	5"	4 ¹ / ₈																				

Painting Instructions

Painting instructions for round and square PermaCast® columns:

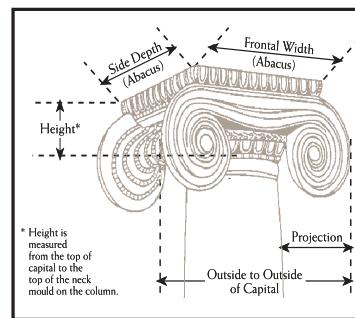
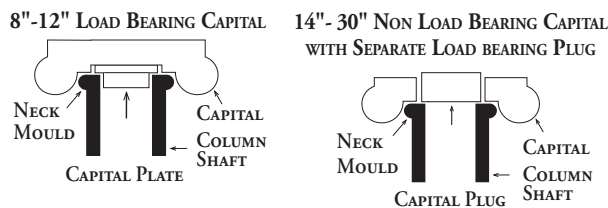
- Rinse and allow to dry completely.
- Prime with high quality exterior latex bonding primer or use an oil-based bonding primer in accordance with paint manufacturer's instructions. A light coat of primer should be applied and allowed to cure fully.
- Paint evenly with several light coats over column with a high quality exterior latex or oil-based paint in accordance with paint manufacturer's instructions.
- Do not paint PermaCast® columns using dark colors (dark colors are considered any color that falls within the L value of 56 to 0). L is a measure of lightness of an object and ranges from 0 (black) to 100 (white).

Tips

- ✓ When ordering a decorative capital order the appropriate base for the column.
- ✓ Decorative capitals for square PermaCast® slide over the shaft and do not use a plug. These decorative capitals will not lengthen or shorten the height of the column.
- ✓ When installing a decorative capital on fluted, recessed panel, or square columns, the capital slides over the shaft. The taller capitals will cover the flutes and require additional caulking to finish.
- ✓ Verify exact opening measurement prior to ordering column length.
- ✓ When installing a PermaCast® column, verify concentric loading of column. 100% of bottom must contact substrate and 75% of top must contact soffit.
- ✓ When attaching hand rails or corner iron to PermaCast® columns, holes must be pre-drilled before applying screws.
- ✓ When ordering panel moulding for square PermaCast® columns, make sure to order enough for four sides of the column.
- ✓ Split columns are left partially intact. Cut with masonry or carbide tip blade.
- ✓ All custom split columns, caps, and bases are nonrefundable.

DECORATIVE CAPITALS FOR ROUND TAPERED PERMACAST® COLUMNS

Adding a load bearing decorative capital to a round PermaCast® column will lengthen or shorten the overall height of the column depending on the height of the capital. Subtract the "T" dimension (from the column dimensions chart) and add the height of the decorative capital +/- 1/4" for overall column height.



NOTE: Decorative Capitals are not designed to fit non-tapered columns.

DECORATIVE CAPITALS FOR SQUARE PERMACAST® COLUMNS

Adding an decorative capital to a square PermaCast® column DOES NOT change the length of the column shaft. The decorative capital simply slides over the shaft. Neck moulding can be applied or not.



NOTE: Decorative Capital Installation Kits Available





Scamozzi capital option