

Endura-Stone® COLUMN SPECIFICATIONS

MATERIALS:

Endura-Stone and DuraStone column shafts are manufactured of one-piece rotocast fiberglass reinforced polymer (FRP) with marble dust. Our proprietary method of manufacturing our column shafts is patented, with patents applied for on the DuraStone pre-colored, textured column process and materials. This one-piece construction, combined with the inherent strength of FRP (pound for pound, FRP is stronger than concrete, steel, or aluminum), provides an exceptionally high load-bearing capacity, and a column that is impervious to rot, decay and insect damage. Unlike wood columns, the non-porous, waterproof shafts can be used as channels for downspouts, wiring, and plumbing.

Pacific Columns FRP and DuraStone columns include Flame Guard™, and were the first in the industry to pass the ASTM E 84-01 Class 1 Flame-Spread Classification tests, achieving a Flame Spread index of 15, and Smoke Developed Index of 335, well below the allowable SDI index of 450.



Six-inch through twelve-inch diameter (up to twelve foot in height) standard FRP shafts are factory sanded. Larger shafts (and square shafts) may require field-sanding prior to installation. All shafts are shipped unfinished, and we recommend finishing with a high quality 100% acrylic latex primer and paint.

DuraStone pre-colored columns do not require finishing. The shaft material is colored throughout, utilizing UV inhibitors that will minimize color fading. The surfaces of DuraStone columns, caps and bases are textured to imitate rough-hewn stone. (Bases for 18" and larger DuraStone columns are split in half and will require reassembly at time of installation.)

ROUND COLUMN SIZES:

Round tapered and non-tapered shafts are available fluted and unfluted in a wide range of sizes. Flutes in most 8", 10" and 12" diameter tapered shafts are molded right into the shaft, providing consistent Ionic fluting. All sizes can also be custom-fluted for specific opening heights, and adjusted for the cap and base chosen. When shafts are custom fluted, typically the flutes end 1" above the base. (See our Endura-Glass specifications for information on 30" diameter columns.)

Tapered shafts have a modified architectural entasis, with a Tuscan style astragal for authentic styling. Since these are molded products, some sizes may vary from the 1/3 straight to 2/3 tapered ratio. Please see the tables on the following pages for exact information on the shaft tapers, and top and bottom net diameters, fluting, etc. Non-tapered shafts have no astragal, providing a more contemporary look.

Column Bottom Diameter*	Tapered Round Shafts											
	5'	6'	8'	9'	10'	12'	14'	16'	18'	20'	22'	24'
6"	✓	✓	✓									
8"	✓	✓	✓ •	✓ •	✓ •							
10"	✓	✓	✓ •	✓ •	✓ •	✓ •						
12"	✓	✓	✓ •	✓ •	✓ •	✓ •	✓	✓ •				
14"			✓	✓	✓	✓	✓	✓	✓	✓		
16"	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
18"			✓		✓	✓	✓	✓	✓	✓	✓	✓
20"		✓	✓		✓	✓	✓	✓	✓	✓		
24"			✓		✓	✓	✓	✓	✓	✓	✓	✓

*Actual shaft net diameter is 3/8" to 5/8" smaller than nominal size shown.

✓ Available unfluted; • Available with standard flutes.

Column Bottom Diameter*	Non-tapered Round Shafts					
	8'	10'	11'	12'	14'	15'
8"	✓	✓				
10"	✓	✓				
12"	✓	✓		✓		
14"	✓	✓		✓	✓	
16"	✓	✓				
18"	✓	✓	✓			
20"	✓	✓	✓			
24"	✓	✓		✓	✓	✓

SQUARE FRP COLUMN SIZES:

Square non-tapered shafts are available unfluted, fluted, with a double raised panel, or recessed panels. In addition, custom fluting is available. The astragal is molded into the shaft for consistent spacing and simplified installation. (See our DuraGlass specification pages for information on square tapered and non-tapered light-weight columns.)

Column Bottom Width*	Non-tapered Square Shafts					
	8'	9'	10'	12'	14'	16'
6"	✓		✓			
8"	✓ • ▴ ▴	✓ • ▴ ▴	✓ • ▴ ▴			
10"	✓ ▴	✓ ▴	✓ ▴	✓		
12"	✓	✓	✓	✓	✓	✓
14"	✓	✓	✓	✓	✓	✓

* Net shaft width is 1/8" less than nominal size shown.

✓ Available unfluted. • Available with standard flutes.

▴ Available paneled. ▴ Available with recessed panels.

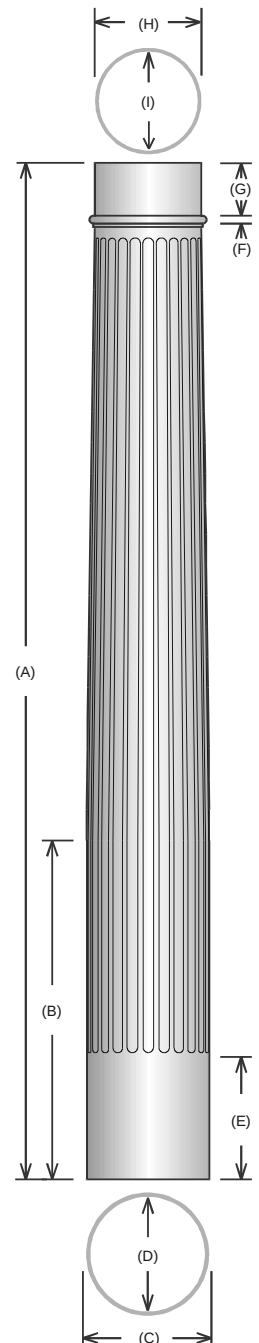
Endura-Stone ROUND SHAFT SPECIFICATIONS

ROUND TAPERED SHAFTS:

Standard FRP column shafts are the same height as the listed size. Tuscan and Roman Doric caps and bases, and Attic bases go around the shaft, and do not affect the overall height. Ornamental capitals are set on top of the shaft (after the shaft is trimmed to the astragal), and do affect the overall height: see the *Ornamental Capitals for Round Columns* specifications for more information. On custom fluted shafts, the flutes start 1" from the astragal, and typically end 1" from the base. Fluting can be adjusted for the customer's requirements.

Since the Tuscan caps for DuraStone columns install on TOP of the shaft, rather than around it, the shaft itself is reduced in overall height by the height of the Tuscan cap. The height of the shaft plus the height of the cap will achieve the overall stated column height.

Column Nominal Diameter	Shaft Height	Shaft Bottom*		Shaft Top*		Space Available Inside Shaft:		Shaft Neck		Flute Width (24 ea.)	Straight Portion of Shaft (unfluted columns)	Straight Portion of Shaft (fluted columns)	Smooth shaft before flutes
		Outside Diameter	Inside Diameter	Outside Diameter	Inside Diameter	For Round Post	For Square Post	Neck Height†	Astragal Ring‡		(B)	(B)	(E)
		(C)	(D)	(H)	(I)			(G)	(F)		(B)	(B)	(E)
6"	5'	5 11/16"	4 3/4"	4 13/16"	3 3/4"	3 3/8"	2 1/2"	3"	1/2"	1/2"	23 1/16"	n/a	n/a
	6'										35 1/16"		
	8'										59 1/16"		
8"	5'	7 5/8"	6 3/4"	6 19/32"	5 1/2"	5 1/8"	3 1/2"	4 1/4"	1/2"	1 1/16"	14 1/16"	n/a	n/a
	6'										26 1/16"	n/a	n/a
	8'										50 1/16"	50"	10 1/2"
	9'										62 1/16"	54"	10 1/2"
	10'										72 1/16"	65"	10 1/2"
10"	4'	9 11/16"	8 3/8"	8 9/16"	7 3/4"	7 3/8"	4 15/16"	5 1/8"	3/4"	7/8"	0"	n/a	n/a
	5'										0"	n/a	n/a
	6'										10 11/16"	n/a	n/a
	8'										34 11/16"	39"	11"
	9'										46 11/16"	56"	11"
	10'										58 11/16"	65"	11 1/4"
	12'										82 11/16"	89"	11 1/4"
12"	5'	11 5/8"	10 3/4"	10 1/16"	9 1/4"	8 7/8"	6"	4 3/4"	3/4"	1"	0"	n/a	n/a
	6'										8 3/4"	n/a	n/a
	8'										32 3/4"	42 3/4"	12"
	9'										44 3/4"	49"	12"
	10'										56 3/4"	53"	12"
	12'										80 3/4"	60"	12 1/8"
	14'										62"	n/a	n/a
14"	16'	13 1/2"	11 1/2"	11 9/16"	10 1/2"	10 1/8"	6 3/8"	6 3/4"	1"	1 1/4"	86"	87"	12 1/8"
	8'										33 1/4"		
	9'										45 1/4"		
	10'										57 1/4"		
	12'										81 1/4"		
	14'										57 1/4"		
	16'										81 1/4"		
	18'										105 1/4"		
16"	20'	15 7/16"	13 1/2"	13 1/8"	12"	11 5/8"	7 7/16"	7 3/8"	1"	1 7/16"	129 1/4"		
	5'										16 1/4"		
	6'										28 1/4"		
	8'										18 1/2"		
	9'										30 1/2"		
	10'										42 1/2"		
	12'										66 1/2"		
	14'										27 1/4"		
	16'										51 1/4"		
	18'										75 1/4"		
	20'										99 11/4"		



* Diameters may vary $\pm 1/8"$

† Neck Height is the distance from the top of the shaft to the top of the astragal ring, $\pm 1/8"$.

‡ Astragal ring is only the ring portion, and does not include the fillet and cove.

Endura-Stone ROUND SHAFT SPECIFICATIONS

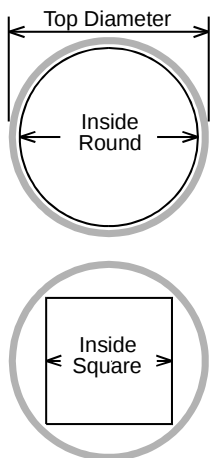
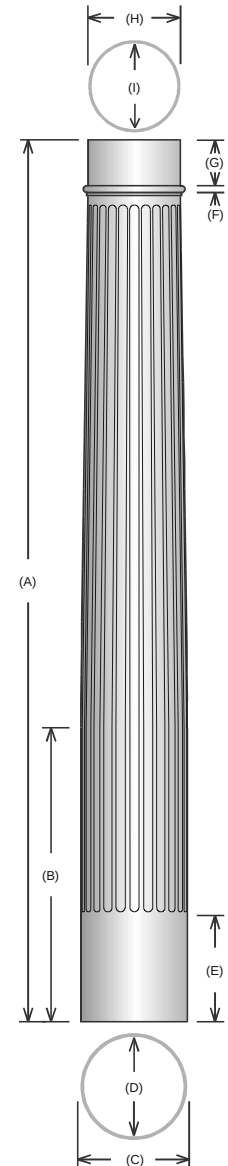
ROUND TAPERED SHAFTS (CONT'D):

Column Nominal Diameter	Shaft Height	Shaft Bottom*		Shaft Top*		Space Available Inside Shaft:		Shaft Neck		Flute Width (24 ea.)	Straight Portion of Shaft
		Outside Diameter	Inside Diameter	Outside Diameter	Inside Diameter	For Round Post	For Square Post	Neck Height†	Astragal Ring‡		
	(A)	(C)	(D)	(H)	(I)			(G)	(F)		(B)
18"	8'	17 3/8"	15"	14 5/16"	12 3/4"	12 3/8"	8 5/16"	7 7/8"	1"	1 1/2"	13 3/8"
	9'										25 3/8"
	10'										37 3/8"
	12'										61 3/8"
	14'										85 3/8"
	16'										26 1/8"
	18'										50 1/8"
	20'										74 1/8"
	22'										98 1/8"
	24'										122 1/8"
20"	6'	19 3/8"	18"	16 5/16"	14 7/8"	14 1/2"	10"	9 3/16"	1 3/8"	1 11/16"	0"
	8'										22 1/4"
	10'										46 1/4"
	12'										70 1/4"
	14'										40 3/8"
	16'										64 3/8"
	18'										88 3/8"
	20'										112 3/8"
24"	8'	23 3/8"	22"	19 5/16"	18"	17 5/8"	12 3/16"	12"	1 5/8"	2 1/8"	8"
	10'										32"
	12'										56"
	14'										24 13/16"
	16'										48 13/16"
	18'										72 13/16"
	20'										96 13/16"
	22'										120 13/16"
	24'										144 13/16"

* Diameters may vary $\pm 1/8"$

† Neck Height is the distance from the top of the shaft to the top of the astragal ring, $\pm 1/8"$.

‡ Astragal ring is only the ring portion, and does not include the fillet and cove.



The "Space Available Inside Shaft" measurements are calculated at the top inside diameter (with $\pm 3/8"$ tolerance), when using Tuscan or Roman Doric caps. (Fluted columns may have reduced tolerances.)

When structural or composite Ornamental Capitals are used, the neck sleeve or plug will reduce the inside available space significantly. If the column will not be required to carry a load, it may be possible for the installer to modify or remove the neck sleeve or plug to allow more interior space. Please contact Turncraft Customer Service for more information.

These measurements are provided to assist in determining the correct column diameter to go around a load bearing post or lally column, or for clearance for water downspouts, conduits, etc. If a larger diameter is required, it may be possible to specify the Non-tapered Round columns instead.

LOAD CAPACITIES:

Round Tapered Column Shafts

Column Diameter	Concentric Load	Eccentric Load*
6"	6,000 lb.	6,000 lb.
8"	10,000 lb.	6,600 lb.
10"	14,000 lb.	10,720 lb.
12"	18,000 lb.	13,200 lb.
14"	20,000 lb.	11,520 lb.
16"	20,000 lb.	13,200 lb.
18"	20,000 lb.	9,040 lb.
20"	20,000 lb.	18,960 lb.
24"	20,000 lb.	13,200 lb.

*See testing documentation for full information on eccentric loading values.

Endura-Stone ROUND SHAFT SPECIFICATIONS

ROUND NON-TAPERED SHAFTS:

Standard FRP column shafts are the same height as the listed size. Tuscan caps and bases, and Attic bases go around the shaft, and do not affect the overall height. Ornamental capitals are not typically available for non-tapered round shafts.

Column Nominal Diameter	Shaft Height	Shaft Diameters*		Space Available Inside Shaft:		Flute Width (24 ea.)
		Outside Diameter	Inside Diameter	For Round Post	For Square Post	
		(A)	(C)			
8"	8'	7 5/8"	6 3/4"	6 3/8"	4 1/2"	11/16"
	10'					
10"	8'	9 11/16"	8 3/8"	8"	5 5/8"	7/8"
	10'					
12"	8'	11 5/8"	10 3/4"	10 3/8"	7 5/16"	1"
	10'					
	12'					
14"	8'	13 1/2"	11 1/2"	11 1/8"	7 7/8"	1 5/16"
	10'					
	12'					
	14'					
16"	8'	15 7/16"	13 1/2"	13 1/8"	9 1/4"	1 1/2"
	10'					
18"	8'	17 3/8"	15"	14 5/8"	10 3/8"	1 11/16"
	10'					
	11'					
20"	8'	19 3/8"	18"	17 5/8"	12 1/2"	1 7/8"
	10'					
	11'					
24"	8'	23 3/8"	21 1/4" (top ID)	20 7/8"	14 3/4"	2 5/16"
	10'					
	12'					
	14'					
	15'					

* Diameters may vary $\pm 1/8"$

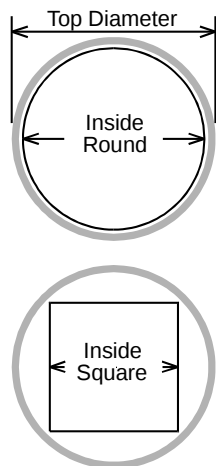
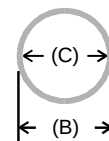
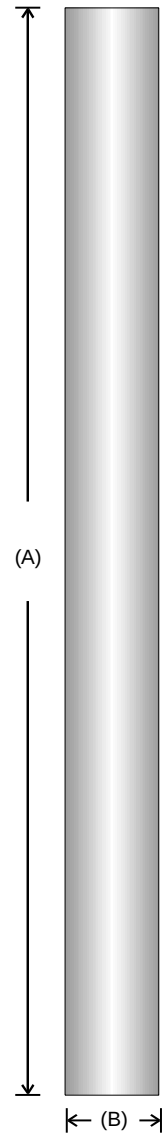
† Neck Height is the distance from the top of the shaft to the top of the astragal, $\pm 1/8"$.

‡ Astragal height is only the ring portion, and does not include the fillet and cove.

Since the Tuscan caps for Dura-Stone columns install on TOP of the shaft, rather than around it, the shaft itself is reduced in overall height by the height of the Tuscan cap. The height of the shaft plus the height of the cap will achieve the overall stated column height.

While all sizes of the non-tapered shafts are considered straight, there may be a small amount of residual taper on the larger columns. Rather than creating new molds for the manufacturing process, the 16" and larger diameter columns are made using the straight portion of our tapered molds. (If the shaft is installed with the residual taper at the bottom, the base will almost completely cover that taper.)

All non-tapered shafts may be ordered fluted. Flutes typically end 1" from the cap and 1" from the base. Fluting can be adjusted for the customers requirements.



The "Space Available Inside Shaft" measurements are calculated at the top inside diameter (with $\pm 3/8"$ tolerance), when using Tuscan or Roman Doric caps. (Inside diameters may be reduced for fluted columns.)

These measurements are provided to assist in determining the correct column diameter to go around a load bearing post or lally column, or for clearance for water downspouts, conduits, etc.

LOAD CAPACITIES:

Round Non-tapered Column Shafts

Column Diameter	Concentric Load	Eccentric Load*
8"	10,000 lb.	6,600 lb.
10"	14,000 lb.	10,720 lb.
12"	18,000 lb.	13,200 lb.
14"	20,000 lb.	11,520 lb.
16"	20,000 lb.	13,200 lb.
18"	20,000 lb.	9,040 lb.
20"	20,000 lb.	18,960 lb.
24"	20,000 lb.	13,200 lb.

*See testing documentation for full information on eccentric loading values.

Endura-Stone SQUARE SHAFT SPECIFICATIONS

SQUARE NON-TAPERED SHAFTS :

Standard FRP column shafts are the same height as the listed size. Tuscan caps and bases, and the pedestal base go around the shaft, and do not affect the overall height. Ornamental capitals are set on top of the shaft (after the shaft is trimmed to the astragal), and will affect the overall height: see the *Ornamental Capitals for Square Columns* specifications for more information.

Since the Tuscan caps for DuraStone columns install on TOP of the shaft, rather than around it, the shaft itself is reduced in overall height by the height of the Tuscan cap. The height of the shaft plus the height of the cap will achieve the overall stated column height.

All square non-tapered shafts may be ordered custom fluted. Flutes typically end 1" from the cap and 1" from the base. Fluting can be adjusted for the customers requirements.

Column Nominal Width	Column Shaft		Shaft Neck		Flute Width (20 each)	Space Available Inside Shaft* (Round or Square Post)
	Outside Width	Inside Width*	Neck Height†	Astragal Ring‡		
	(B)	(C)	(E)	(D)		
6"	5 7/8"	4 3/4"	3 5/8"	3/4"	1/2"	4 1/2"
8"	7 7/8"	5 3/4"	4 1/2"	3/4"	11/16"	5 1/2"
10"	9 7/8"	8 3/4"	5 1/16"	3/4"	7/8"	8 1/2"
12"	11 7/8"	10 3/4"	4 1/2"	3/4"	1"	10 1/2"
14"	13 7/8"	12 3/4"	7"	1"	1 1/4"	12 1/2"

* For 8" size, stock fluted shaft value is shown. Paneled and plain shafts are typically 1/2" to 1" greater.

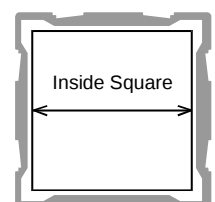
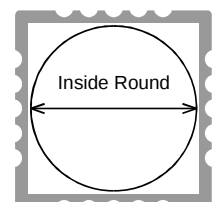
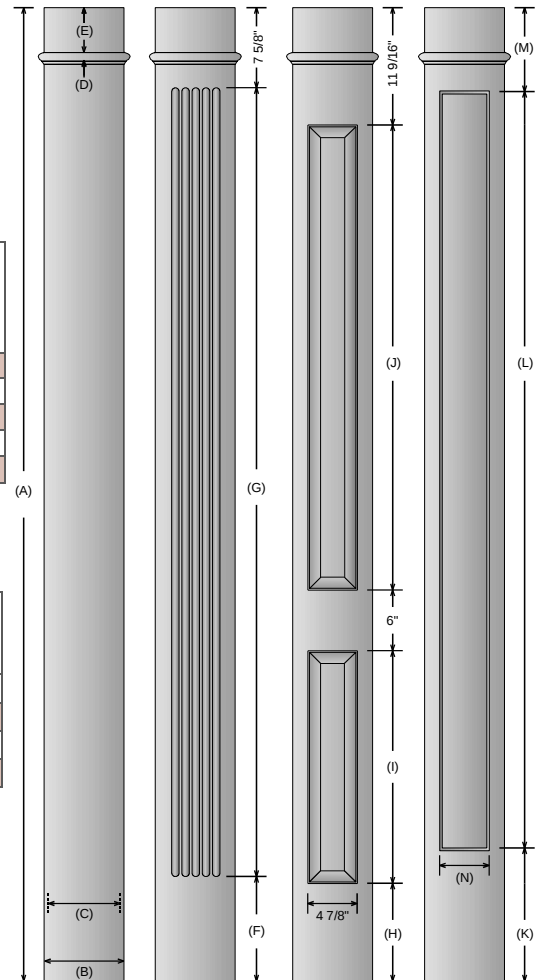
† Neck Height is the distance from the top of the shaft to the top of the astragal ring, ± 1/8".

‡ Astragal ring is only the ring portion, and does not include the fillet and cove.

8" Fluted Columns (Stock)	Bottom of Shaft Before Flutes	Flute Length
	(F)	(G)
8'	10 15/16"	77 13/16"
9'	10 15/16"	89 13/16"
10'	22 15/16"	89 13/16"

8" Raised Panel Columns	Bottom of Shaft Before Panel	Bottom Panel Height	Top Panel Height
	(H)	(I)	(J)
8'	9 5/8"	22 15/16"	45 7/8"
9'	9 5/8"	26 15/16"	53 7/8"
10'	21 5/8"	26 15/16"	53 7/8"

Recessed Panel Columns	Bottom of Shaft Before Panel	Panel Height	Top of Panel to Top of Column	Panel Width
	(K)	(L)	(M)	(N)
8" x 8'	12"	76 3/4"	7 5/8"	4 7/8"
8" x 9'	12"	88 3/4"	7 5/8"	4 7/8"
8" x 10'	12"	100 3/4"	7 5/8"	4 7/8"
10" x 8'	14 1/2"	73 11/16"	8 3/16"	6 7/8"
10" x 9'	14 1/2"	85 11/16"	8 3/16"	6 7/8"
10" x 10'	14 1/2"	97 11/16"	8 3/16"	6 7/8"



LOAD CAPACITIES:

Square Non-tapered Column Shafts

Column Diameter	Concentric Load	Eccentric Load*
6"	6,000 lb.	6,000 lb.
8"	10,000 lb.	6,600 lb.
10"	12,800 lb.	10,720 lb.
12"	18,000 lb.	17,320 lb.
14"	20,000 lb.	17,320 lb.

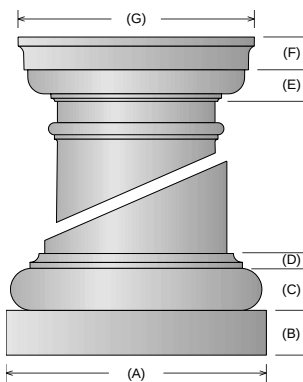
*See testing documentation for full information on eccentric loading values.

The "Space Available Inside Shaft" measurements are calculated at the top inside width (with ± 1/4" tolerance). Inside widths may vary. Ornamental capitals will reduce the inside widths.

These measurements are provided to assist in determining the correct column diameter to go around a load bearing post or lally column, or for clearance for water downspouts, conduits, etc.

Endura-Stone CAP AND BASE SPECIFICATIONS

All caps, bases and ornamental capitals are manufactured of low-maintenance materials. Materials for caps and bases will vary based on size and style. Standard Tuscan cap and base for our 8", 10" and 12" diameter round tapered columns are our new TimeSaver™ ABS (recycled ABS with fiberglass reinforcement). Since these are molded products, specifications shown are ±1/8", and subject to change without notice.



TUSCAN CAP AND BASE FOR ROUND TAPERED COLUMNS:

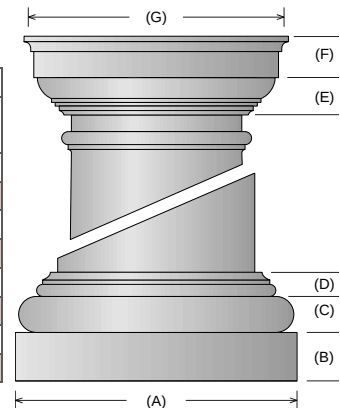
Column Diameter	Tuscan Base						Tuscan Cap					
	Plinth		Torus		Total Height	Materials Available†	Echinus	Abacus		Total Height	Materials Available†	
	(A)	(B)	(C)	(D)	(B-D)		(E)	(F)	(G)	(E-F)		
6"	8"	1 1/2"	1 1/4"	1/2"	3 1/4"	F, D	1"	1 1/16"	7 1/2"	2 1/16"	P, D	
8"	10 7/8"	1 7/8"	1 3/4"	5/8"	4 1/4"	A, F, D, P, FF	1 5/16"	1 3/8"	9 7/8"	2 11/16"	A, F, D, P, FF	
10"	13 1/2"	2 3/8"	2 1/8"	3/4"	5 1/4"	A, F, D, P, FF	1 13/16"	1 3/4"	12 1/8"	3 9/16"	A, F, D, P, FF	
12"	16 1/4"	2 3/4"	2 3/8"	7/8"	6"	A, F, D, P, FF	1 7/8"	2"	14 5/8"	3 7/8"	A, F, D, P, FF	
14"	18 5/8"	3 5/16"	3"	1"	7 5/16"	F, D	2 1/2"	2 5/16"	17"	4 15/16"	P, D	
16"	21 5/16"	3 7/8"	3 3/8"	1 1/8"	8 5/16"	F, D	2 3/4"	2 11/16"	19 1/8"	5 7/16"	P, D	
18"	24"	4 3/16"	4"	1 3/8"	9 9/16"	F, D	3"	2 15/16"	21 5/16"	5 15/16"	P, D	
20"	27"	4 3/4"	4 1/16"	1 3/4"	10 9/16"	F, D	3 1/8"	3 7/16"	24 1/4"	6 9/16"	P, D	
24"	32 1/2"	5 3/4"	5 1/4"	2 1/4"	13 1/4"	F, D	3 5/16"	4 1/8"	28 3/4"	7 7/16"	P, D	

† A—ABS, F—FRP, D—DuraStone, P—Polyurethane, FF—Foam-Filled Polystyrene; standard material is highlighted in boldface.

ROMAN DORIC CAP AND BASE FOR ROUND TAPERED COLUMNS:

Column Diameter	Roman Doric Base†					Roman Doric Cap†			
	Plinth		Torus		Total Height	Echinus	Abacus		Total Height
	(A)	(B)	(C)	(D)	(B-D)	(E)	(F)	(G)	(E-F)
6"	8"	1 1/2"	1"	3/4"	3 1/4"	1"	1 1/4"	7 3/4"	2 1/4"
8"	10 7/8"	1 7/8"	1 7/16"	15/16"	4 1/4"	1 7/16"	1 1/2"	9 7/8"	2 15/16"
10"	13 1/2"	2 3/8"	1 3/4"	1 1/4"	5 3/8"	1 7/8"	1 3/4"	13"	3 5/8"
12"	16 1/4"	2 3/4"	2 1/16"	1 3/8"	6 3/16"	2 1/8"	2 3/8"	15 1/8"	4 1/2"
14"	18 5/8"	3 3/8"	2 3/8"	1 5/8"	7 3/8"	2 11/16"	2 3/4"	17 13/16"	5 9/16"
16"	21 5/16"	3 7/8"	2 7/8"	2"	8 3/4"	3 3/16"	3 1/8"	20 1/4"	6 5/16"
18"	24"	4 1/4"	3 1/4"	2 3/8"	9 7/8"	3 7/16"	3 1/2"	22 1/4"	6 15/16"

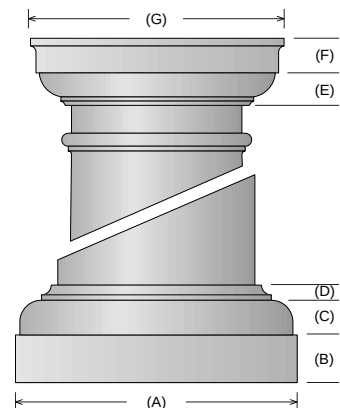
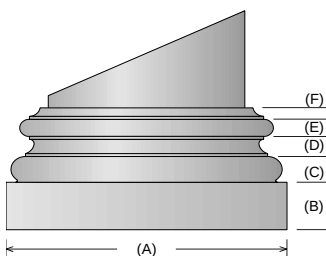
† Bases are FRP, caps are polyurethane. Only the bases are available in DuraStone—not the caps.



ATTIC BASE FOR ROUND COLUMNS:

Column Diameter	Attic Base†						
	Plinth		Torus				Total Height
	(A)	(B)	(C)	(D)	(E)	(F)	(B-F)
6"	8"	1 1/2"	3/4"	3/4"	1/2"	1/2"	3 1/2"
8"	10 7/8"	1 7/8"	1 1/8"	7/8"	3/4"	1/2"	5 1/8"
10"	13 1/2"	2 3/8"	1 1/4"	1 1/8"	7/8"	5/8"	6 1/4"
12"	16 1/8"	2 3/4"	1 1/2"	1 3/8"	1"	5/8"	7 1/4"
14"	18 1/2"	3 5/16"	1 3/4"	1 5/8"	1 1/4"	11/16"	8 5/8"
16"	21 3/16"	3 3/4"	2 1/8"	1 7/8"	1 1/2"	13/16"	10 1/8"
18"	23 15/16"	4 1/4"	2 5/16"	2 1/8"	1 7/16"	1 1/8"	11 1/4"
20"	27 1/16"	4 3/4"	2 11/16"	2 3/8"	1 3/4"	1 7/16"	13"
24"	32 1/2"	5 3/4"	3 5/16"	2 13/16"	2 1/8"	1 3/4"	15 3/4"

† Attic bases are FRP. Also available in DuraStone.



BUILDERS SERIES CAP AND BASE FOR ROUND TAPERED COLUMNS:

Column Diameter	Builders Series Base†					Builders Series Cap†			
	Plinth		Torus		Total Height	Echinus	Abacus		Total Height
	(A)	(B)	(C)	(D)	(B-D)	(E)	(F)	(G)	(E-F)
8"	10 7/8"	1 7/8"	1 1/4"	5/8"	3 3/4"	1 1/4"	1 1/4"	9 7/16"	2 1/2"
10"	13 1/2"	2 3/8"	1 5/8"	9/16"	4 9/16"	1 13/16"	1 3/4"	12 3/16"	3 9/16"
12"	16 1/4"	2 3/4"	2"	7/8"	5 5/8"	1 7/8"	2"	14 5/8"	3 7/8"

† Cap and base are polystyrene (with foam core). Not available in DuraStone.

Endura-Stone CAP AND BASE SPECIFICATIONS

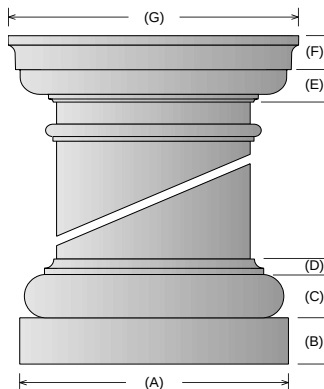
All caps and bases are manufactured of low-maintenance materials. Materials for caps and bases will vary based on size and style. Since these are molded products, specifications shown are $\pm 1/8"$, and subject to change without notice.

Roman Doric base and Attic base specifications are the same as for the round tapered shafts. Roman Doric caps and Ornamental capitals are not available for non-tapered round shafts.

TUSCAN CAP AND BASE FOR ROUND NON-TAPERED COLUMNS:

Column Diameter	Tuscan Base						Tuscan Cap				
	Plinth		Torus		Total Height	Materials Available†	Echinus	Abacus		Total Height	Materials Available†
	(A)	(B)	(C)	(D)	(B-D)		(E)	(F)	(G)	(E-F)	
8"	10 7/8"	1 7/8"	1 3/4"	5/8"	4 1/4"	A, F, D	1 13/16"	1 3/4"	12 1/8"	3 9/16"	P, D
10"	13 1/2"	2 3/8"	2 1/8"	3/4"	5 1/4"	A, F, D	1 7/8"	2"	14 5/8"	3 7/8"	P, D
12"	16 1/4"	2 3/4"	2 3/8"	7/8"	6"	A, F, D	2 1/2"	2 5/16"	17"	4 13/16"	P, D
14"	18 5/8"	3 5/16"	3"	1"	7 5/16"	F, D	2 3/4"	2 11/16"	19 1/8"	5 7/16"	P, D
16"	21 5/16"	3 7/8"	3 3/8"	1 1/8"	8 5/16"	F, D	3"	2 15/16"	21 5/16"	5 15/16"	P, D
18"	24"	4 3/16"	4"	1 3/8"	9 9/16"	F, D	3 1/8"	3 7/16"	24 1/4"	6 9/16"	P, D
20"	27"	4 3/4"	4 1/16"	1 3/4"	10 9/16"	F, D	3 3/16"	4 1/8"	28 3/4"	7 5/16"	P, D
24"	32 1/2"	5 3/4"	5 1/4"	2 1/4"	13 1/4"	F, D	3 5/16"	4 1/8"	32 1/2"	7 7/16"	P, D

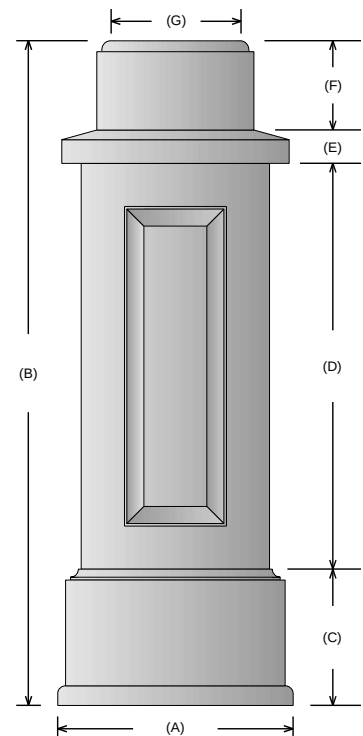
† A—ABS TimeSaver™, F—FRP, D—DuraStone, P—Polyurethane; standard material is highlighted in boldface.



TUSCAN CAP AND BASE FOR SQUARE NON-TAPERED COLUMNS:

Column Width	Tuscan Base†					Tuscan Cap†			
	Plinth		Torus		Total Height	Echinus		Abacus	
	(A)	(B)	(C)	(D)	(B-D)	(E)	(F)	(G)	(E-F)
6"	8"	1 1/2"	1 1/4"	1/2"	3 1/4"	1"	1 1/16"	8 7/16"	2 1/16"
8"	11 3/8"	1 7/8"	1 3/4"	5/8"	4 1/4"	1 5/16"	1 7/16"	11 1/4"	2 3/4"
10"	13 1/2"	2 3/8"	2 1/8"	3/4"	5 1/4"	1 13/16"	1 3/4"	13 1/4"	3 9/16"
12"	17"	2 3/4"	2 3/8"	7/8"	6"	1 7/8"	2"	17 1/4"	3 7/8"
14"	18 13/16"	3 3/8"	2 15/16"	1 1/16"	7 3/8"	2 1/2"	2 5/16"	18 11/16"	4 13/16"

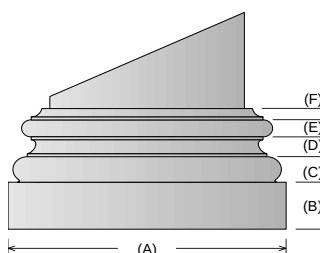
† Square caps and 6" to 12" bases are polyurethane; 14" base is FRP. FRP bases are available as special order. Also available in DuraStone.



PEDESTAL BASE FOR SQUARE NT COLUMNS (AT RIGHT):

Column Width	Pedestal Base†						
	Bottom Width	Total Height	Bottom	Center	Platform	Top	Top Width
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
8"	15"	42 3/8"	8 11/16"	25 7/8"	2 1/8"	5 11/16"	8 1/4"

† Pedestal bases are FRP. Also available in DuraStone. Use with Tuscan cap (above) or Ornamental Capitals.



ATTIC BASE FOR SQUARE COLUMNS:

Column Diameter	Attic Base†						
	Plinth		Torus				Total Height
	(A)	(B)	(C)	(D)	(E)	(F)	(B-F)
6"	8"	1 1/2"	3/4"	3/4"	1/2"	1/2"	3 1/2"
8"	11 3/8"	1 7/8"	1 1/8"	7/8"	3/4"	1/2"	5 1/8"
10"	13 1/2"	2 3/8"	1 1/4"	1 1/8"	7/8"	5/8"	6 1/4"
12"	17"	2 3/4"	1 1/2"	1 3/8"	1"	5/8"	7 1/4"
14"	18 13/16"	3 3/8"	1 3/4"	1 5/8"	1 1/4"	11/16"	8 5/8"

† Attic bases are FRP. Also available in DuraStone.

Endura-Stone ORNAMENTAL CAPITALS

“QUICK-FIT” CAPITALS FOR ROUND TAPERED FRP SHAFTS

The most visually impressive implementations of columns are those with decorative Ornamental Capitals. Designed with crisp, true architectural detail, Ornamental Capitals artfully capture natural themes and images. For example, the volute scrolls of the Ionic, Erechtheum, Scamozzi and Empire styles imitate the helix cross-section of the Nautilus shell. The Acanthus leaves on the Temple of Winds and Roman Corinthian capitals echo the flowering crown of a tree. These Ornamental Capitals are specifically for Endura-Stone *tapered* column shafts only. Each style is proportionally scaled for the diameter of the shaft.

Our specially designed Quick-Fit capitals simplify or eliminate the need to trim the column shaft before installation! Trimming the shaft at the neck ring or at the fillet below the neck ring is a difficult task in the field. Since the Quick-Fit capitals slide over the column neck and set on the neck ring, it is no longer necessary to attempt to trim at the neck ring or fillet. For capitals that are taller than the column shaft neck, no trimming is necessary at all, since the capital is load-bearing. For those capitals which are shorter than the column shaft neck, the shaft will still need to be trimmed, but the point where it needs to be cut is much more easily accomplished since the astragal is not in the way. (The shaft will need to be trimmed to leave the neck 1/8" taller than the capital, since the shorter capitals are not load-bearing. The extra 1/8" shaft neck provides load-bearing support through the capital, and prevents the capital from being compressed by the load.)

Because of the Quick-Fit easier installation method, Turncraft will normally ship the Quick-Fit capitals, unless a preference is indicated for the standard Poly/Resin (see next page). For example, it would be best not to mix Quick-Fit and standard capitals when different size or style columns are used on one jobsite (i.e., if using 12" Scamozzi and 20" Scamozzi capitals, the astragal would be different for Quick-Fit than for standard capitals.)

Quick-Fit capitals are available in paint-grade materials (see table) or DuraStone pre-colored FRP (Ivory, Sand or Slate) to match our DuraStone column line. More sizes will be added to the Quick-Fit line as we are able to create molds.



GREEK ERECTHEUM

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust	Material
6"	3 1/4"	6 9/16"	8 3/8"	+ 3/8"	FRP, DuraStone



ROMAN CORINTHIAN

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust	Material
6"	8 11/16"	11"	N/A	+ 5 11/16"	FRP, DuraStone
8"	11 5/16"	14 5/16"	N/A	+ 7 1/16"	FRP, DuraStone
10"	14 3/16"	18 1/8"	N/A	+ 9 1/16"	FRP, DuraStone
12"	17"	21 3/4"	N/A	+ 12 1/4"	FRP, DuraStone



ROMAN IONIC

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust	Material
6"	2 3/16"	6"	8"	- 11/16"	Poly, DuraStone



SCAMOZZI

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust	Material
6"	2 7/16"	8 5/8"	8 1/2"	- 7 3/16"	Poly, DuraStone
8"	3"	11"	10 13/16"	- 1 1/8"	Poly, DuraStone
10"	4 1/8"	14 1/2"	14 3/8"	- 7/8"	Poly, DuraStone
12"	4 13/16"	17"	16 3/4"	+ 1/16"	Poly, DuraStone

Endura-Stone ORNAMENTAL CAPITALS

CAPITALS FOR ROUND TAPERED COLUMNS

Designed with crisp, true architectural detail, Ornamental Capitals artfully capture natural themes and images. These paint-grade Ornamental Capitals are specifically for Endura-Stone *tapered* column shafts only. Each style is proportionally scaled for the diameter of the shaft. For best fit and correct style, the column shafts are to be trimmed at the architecturally correct location for the selected capital—see the note in each table. The “Height Adjust” value in the tables below indicate how the column trimming and capital height affect the overall maximum height of the column when installed. Capitals from 6” to 24” diameters are all load-bearing poly/resin materials. (Capitals shown as 30” are for DuraGlass resin-infused fiberglass columns. These 30” capitals are composite plaster and are *not* load-bearing. The column will ship with a load bearing solution as needed.)



EMPIRE (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	3 1/8"	9"	8 3/4"	- 3/8"
8"	3 3/4"	10"	9"	-1"
10"	5 1/2"	16"	13 1/2"	- 3/8"
12"	6 1/4"	18"	17"	+ 3/4"
14"	7 1/4"	20 1/4"	19 1/2"	- 1/2"

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
16"	8 3/4"	23"	19 1/2"	+ 3/8"
18"	10"	32"	26 1/4"	+ 1 1/8"
20"	11 1/4"	34"	28"	+ 11/16"
24"	12 3/4"	35 1/2"	35"	- 7/8"
30"	N/A			



EMPIRE WITH NECKING (TRIM COLUMN SHAFT TO TOP OF NECK RING)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	6 7/8"	9"	8 3/4"	+ 3 7/8"
8"	7 3/4"	10"	9"	+ 3 1/2"
10"	10"	13 1/2"	12 1/4"	+ 4 7/8"
12"	11"	18"	17"	+ 6 1/4"
14"	14 1/2"	20 1/2"	19 1/2"	+ 7 3/4"

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
16"	17"	23"	19 1/2"	+ 9 5/8"
18"	15"	32"	26 1/4"	+ 7 1/8"
20"	17 1/4"	34"	28"	+ 8 1/16"
24"	19"	35 1/2"	35"	+ 7"
30"	N/A			



GREEK ANGULAR IONIC (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	3 5/8"	9 1/4"	9"	+ 1/8"
8"	3 3/4"	9 1/2"	9"	- 1"
10"	5 3/8"	14 1/4"	13 1/4"	- 1/2"
2"	6"	17 1/4"	17"	+ 1/2"
14"	7 1/4"	20 3/4"	19 1/4"	- 1/2"

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
16"	8 3/8"	20 1/2"	19 1/2"	0"
18"	9 3/4"	24 1/4"	19 3/4"	+ 7/8"
20"	11"	29 3/4"	28"	+ 7/16"
24"	12 3/4"	35"	34 1/2"	- 7/8"
30"	N/A			



GREEK ERETHEUM (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6" *	3 1/4"	6 3/4"	8 1/2"	- 1/4"
8"	3 3/4"	7 3/4"	11 3/4"	- 1"
10"	5 1/2"	12"	17 1/2"	- 3/8"
12"	6 1/4"	14 1/2"	21"	+ 3/4"
14"	7"	15"	21"	- 3/4"

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
16"	9"	17 1/2"	26"	+ 5/8"
18"	10 1/2"	22"	29"	+ 1 5/8"
20"	11"	26"	36"	+ 7/16"
24"	13"	30 1/2"	43"	- 5/8"
30"	15"	31"	45 1/2"	



GREEK ERETHEUM WITH NECKING (TRIM COLUMN SHAFT TO TOP OF NECK RING)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	5 3/4"	7 3/4"	11 3/4"	+ 2 3/4"
8"	7 1/2"	10 1/2"	15"	+ 3 1/4"
10"	8 1/2"	12"	17 1/4"	+ 3 3/8"
12"	9 1/2"	14 1/2"	21"	+ 4 3/4"
14"	11 1/4"	15"	21"	+ 4 1/2"

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
16"	13 1/2"	17 1/2"	26"	+ 6 1/8"
18"	15"	22 1/2"	29"	+ 7 1/8"
20"	17"	26"	36"	+ 7 13/16"
24"	19"	30 1/2"	43"	+ 7"
30"	24 3/4"	31"	45 1/2"	

*Special order—normally this size capital would be our Quick-Fit model, listed after next page.

Endura-Stone ORNAMENTAL CAPITALS (CONT'D)



Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	7"	8"	N/A	+ 4"
8"	8 1/2"	10 3/4"	N/A	+ 4 1/4"
10"	12 1/4"	16 1/2"	N/A	+ 7 1/8"
12"	14 1/2"	19"	N/A	+ 9 3/4"
14"	17"	20"	N/A	+ 10 1/4"

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
16"	N/A			
18"	22 1/2"	25"	N/A	+ 14 5/8"
20"	22 1/2"	25"	N/A	+ 13 5/16"
24"	N/A			
30"	N/A			



ROMAN CORINTHIAN (TRIM COLUMN SHAFT TO TOP OF NECK RING)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6" *	7"	9 1/2"	N/A	4"
8" *	10 1/4"	13 3/4"	N/A	6"
10" *	13 7/8"	17 3/4"	N/A	8 3/4"
12" *	15 1/4"	18 1/2"	N/A	9 1/2"
14"	17"	22"	N/A	10 1/4"

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
16"	20"	27"	N/A	+ 12 5/8"
18"	23"	32 1/2"	N/A	+ 15 1/8"
20"	25 1/2"	39"	N/A	+ 16 5/16"
24"	28 1/2"	42"	N/A	+ 16 1/2"
30"	37 1/2"	16 1/2"	N/A	



ROMAN DORIC ORNAMENTAL (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	4"	8 3/4"	N/A	+ 1/2"
8"	6"	13 1/8"	N/A	+ 1 1/4"
10"	7"	16 1/4"	N/A	+ 1 1/8"
12"	7"	16 1/4"	N/A	+ 1 1/2"
14"	9"	21"	N/A	+ 1 1/4"

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
16"	10 1/2"	24"	N/A	+ 2 1/8"
18"	12 1/2"	28"	N/A	+ 3 3/8"
20"	12 1/2"	28"	N/A	+ 1 15/16"
24"	N/A			
30"	N/A			



ROMAN IONIC (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6" *	2 1/4"	6 1/8"	8 1/16"	- 1 1/4"
8"	3"	8 1/4"	10 1/2"	- 1 3/4"
10"	3 5/8"	11"	13 5/8"	- 2 1/4"
12"	4 1/2"	12 1/2"	16 1/2"	- 1"
14"	5 1/2"	17 1/2"	23"	- 2 1/4"

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
16"	6 1/8"	17 1/2"	22"	- 2 1/4"
18"	6 1/2"	20"	24 1/4"	- 2 3/8"
20"	8 3/4"	25"	31 3/4"	- 1 13/16"
24"	9"	25 1/4"	33"	- 4 5/8"
30"	12 1/2"	32"	40 1/2"	



SCAMOZZI (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6" *	2 5/8"	7 3/4"	6 1/4"	- 7/8"
8" *	3"	10 1/4"	9"	- 1 3/4"
10" *	3 7/8"	14 1/2"	12 1/2"	- 2"
12" *	4 7/8"	16 3/4"	14"	- 5/8"
14"	5 1/2"	19"	16 3/4"	- 2 1/4"

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
16"	6 1/4"	22 1/4"	18 1/2"	- 2 1/8"
18"	7"	23 1/2"	23"	- 1 7/8"
20"	8 3/4"	26"	21 1/2"	- 1 13/16"
24"	10 1/4"	34 1/4"	29 1/2"	- 3 3/8"
30"	12 3/4"	39"	33"	



TEMPLE OF WINDS (TRIM COLUMN SHAFT TO TOP OF NECK RING)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	7"	8"	N/A	4"
8"	8"	12"	N/A	3 3/4"
10"	11 1/8"	15 1/4"	N/A	6"
12"	13 3/4"	17"	N/A	9"
14"	14"	21 1/4"	N/A	7 1/4"

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
16"	16"	23"	N/A	8 5/8"
18"	18 1/8"	26 3/4"	N/A	10 1/4"
20"	21 1/4"	28"	N/A	12 1/16"
24"	23 1/4"	34 1/4"	N/A	11 1/4"
30"	30"	39"	N/A	

*Special order—normally this size capital would be our Quick-Fit model. See following page.

Endura-Stone SQUARE ORNAMENTAL CAPITALS

Designed with crisp, true architectural detail, Ornamental Capitals artfully capture natural themes and images. Capitals for square non-tapered Endura-Stone columns are crafted from poly/resin, and are load bearing and waterproof. Each style is proportionally scaled for the width of the shaft when the shaft is trimmed at the astragal for easy installation. Since the shafts will need to be trimmed, the over-all height of the finished column will need to be adjusted by the "Height Adjust" value in the following tables. If an architecturally correct installation will be required, the shaft should be trimmed at the top fillet for Greek Erectheum, Roman Ionic and Scamozzi capitals, and the overall height will be further reduced by the height of the neck ring (see shaft specifications for the astragal neck ring height).



EMPIRE (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
8"	5 1/4"	13 1/2"	12 1/4"	+ 3/8"
10"	6 1/4"	18"	17"	+ 1 3/4"
12"	7 1/4"	20 1/4"	19 1/2"	+ 3/4"
14"	8 3/4"	23"	19 1/2"	+ 1 3/4"
16"	10"	32"	26 1/4"	+ 1 5/16"



EMPIRE WITH NECKING (TRIM COLUMN SHAFT TO TOP OF NECK RING)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	7 3/4"	10"	9"	+ 4 1/8"
8"	10"	13 1/2"	12 1/4"	+ 5 1/2"
10"	11"	18"	17"	+ 5 15/16"
12"	14 1/2"	20 1/2"	19 1/2"	+ 9 3/4"
14"	17"	23"	19 1/2"	+ 10"
16"	17 1/4"	34"	28"	+ 9 5/8"



GREEK ANGULAR IONIC (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
8"	5 1/8"	14 1/4"	13 3/4"	- 3/16"
10"	6"	17 1/4"	17"	+ 1/8"
12"	7 1/4"	20 3/4"	19 1/4"	+ 1 3/4"
14"	8 3/8"	20 1/2"	19 1/2"	+ 3/8"



GREEK ERECTHEUM (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	3 3/4"	7 3/4"	11 3/4"	- 11/16"
8"	5 1/4"	10 1/2"	15"	- 1/16"
10"	6 1/4"	14 1/2"	21"	+ 3/8"
12"	7"	15"	21"	+ 2 1/2"
14"	9"	17 1/2"	26"	+ 1"
16"	10"	22 1/2"	29"	+ 1 5/16"



GREEK ERECTHEUM WITH NECKING (TRIM COLUMN SHAFT TO TOP OF NECK RING)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	5 3/4"	7 3/4"	11 3/4"	+ 2 1/8"
8"	7 1/2"	10 1/2"	15"	+ 3"
10"	9 1/2"	14 1/2"	21"	+ 4 7/16"
12"	11 1/4"	15"	21"	+ 6 3/4"
14"	13 1/2"	17 1/2"	26"	+ 6 1/2"
16"	17"	26"	36"	+ 9 3/8"

Endura-Stone SQUARE ORNAMENTAL CAPITALS (CONT'D)



MODERN COMPOSITE (TRIM COLUMN SHAFT TO TOP OF NECK RING)

Column Size	Capital Height	Abacus Width	Height Adjust
6"	8 1/2"	10 3/4"	+ 4 7/8"
8"	11 1/2"	16 1/2"	+ 7"
10"	14 1/2"	19"	+ 9 7/16"
12"	17"	20"	+ 12 1/2"
14"	22 1/2"	25"	+ 15 1/2"
16"	22 1/2"	25"	+ 14 7/8"



ROMAN CORINTHIAN (TRIM COLUMN SHAFT TO TOP OF NECK RING)

Column Size	Capital Height	Abacus Width	Height Adjust
6"	8 1/2"	12"	+ 4 7/8"
8"	11 1/2"	15"	+ 7"
10"	14 1/2"	18 1/2"	+ 9 7/16"
12"	17"	22"	+ 12 1/2"
14"	20"	27"	+ 13"
16"	23"	32 1/2"	+ 15 3/8"



ROMAN DORIC ORNAMENTAL (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Height Adjust
6"	4 1/2"	10 1/2"	+ 1/16"
8"	6"	14 1/4"	+ 11/16"
12"	9"	21"	+ 3 1/2"
14"	10 1/2"	24"	+ 2 1/2"



ROMAN IONIC (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	3"	8 1/4"	10 1/2"	- 1 7/16"
8"	3 5/8"	10 1/2"	13 1/2"	-1 11/16"
10"	4 1/2"	12 1/2"	16 1/2"	- 1 3/8"
12"	5 1/2"	17 1/2"	23"	0"



SCAMOZZI (TRIM COLUMN SHAFT TO TOP OF FILLET)

Column Size	Capital Height	Abacus Width	Scroll Width	Height Adjust
6"	3"	10 1/4"	9"	-7/8"
8"	3 7/8"	14 1/2"	12 1/2"	-5/8"
10"	4 7/8"	16 3/4"	14"	-7/8"
12"	5 1/2"	19"	16 3/4"	-1/4"
14"	6 1/4"	22 1/4"	18 1/2"	-1 1/2"



TEMPLE OF WINDS (TRIM COLUMN SHAFT TO TOP OF NECK RING)

Column Size	Capital Height	Abacus Width	Height Adjust
6"	7 1/2"	10 1/2"	+ 3 7/8"
8"	10"	13 7/8"	+ 5 1/2"
10"	11 5/8"	16 7/8"	+ 6 9/16"
12"	14"	21 1/4"	+ 9 1/2"
14"	16"	23"	+ 9"
16"	18 1/8"	16 3/4"	+ 10 1/2"