

# A History of Architectural Excellence

So many architects and builders select Turncraft Architectural Columns because they feature thoughtful product design, fine workmanship, superior assembly, precision turning and fluting, and artful finishing.

Round columns may be ordered with true architectural entasis in sizes consistent with the classic proportions of the Greek Doric, Tuscan, Roman Doric, Ionic, and Corinthian Orders, or in custom shaft diameters up to 36" and lengths to 30'. They can be smooth surfaced or given dramatic deep fluting (with increased stave thickness) as desired. Greek Doric Columns feature classic edge-to-edge fluting. Square columns and pilasters may be ordered to match (available in tapered or non-tapered and in various plan styles—see page 14). Non-tapered cylinders are available for use in casework, radius wall corners, and contemporary applications.

The making of Turncraft columns is an exacting process. Finger-jointed or solid staves are milled to the required dimensions, assembled using the

strongest Type-I waterproof glue, and then are metal-banded for curing. In the computer-controlled lathe, the assembled shaft is turned to the precise taper desired, complete with true architectural entasis. The top of each column is profiled according to the style specified, and the entire column is machine sanded to ensure a smooth finish. Flutes are milled at precisely determined intervals and depths, always ending in full half-rounds at the top and bottom (except on Greek Doric). Each column, regardless of size, is visually inspected, any defects are corrected, and then it is finish sanded.



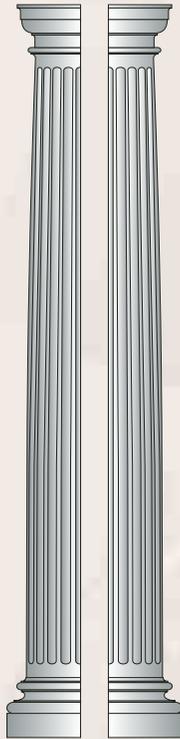
Turncraft exterior columns and paint-grade interior columns are fashioned from select, kiln-dried Western Pine staves (or clear, all-heart Redwood or Western Red Cedar by custom order). Use of finger-jointed pieces conserves valuable wood resources, reduces potential for warping and bow, and helps prevent checking or cracking of finished surfaces. (Solid-stave assembly available by custom order.)

Stain-grade interior columns are fashioned primarily from solid-stave Red Oak, Poplar, Hard Maple, Pine, Cherry, Redwood, Mahogany, and Black Walnut lumber and feature matching wood Caps & Bases.

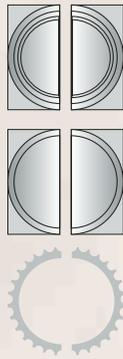


All paint-grade wood shafts and Caps & Bases are fully immersed in Woodtreat® MB wood preservative, formulated to protect against mold, mildew, and staining and decaying fungi; to control shrinking, swelling, end checking, splitting, grain raising, and warping; and for maximum compatibility with paint primers and topcoats. (Conforms to Industrial Standard IS4-00, is approved by the N.W.W.D.A., and meets all current and proposed government standards.)

## Column Splitting

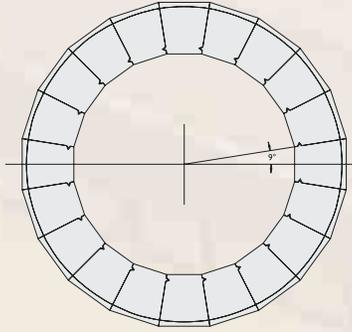


Top Views:



Using a precision splitting template machine, columns can be divided in halves to be used as pilasters or to be reassembled around existing structural members. Columns designed for reassembly come with realignment splines and installation instructions.

## Stave Thicknesses



Shaft Diameter	Unfluted	Fluted
6"	1-1/2"	1-1/2"
8"	1-1/2"	1-1/2"
10"	1-1/2"	2"
12"	1-1/2"	2"
14"	2"	2"
16"	2"	2"
18"	2"	2"
20"	2"	2"
22"	2"	3"
24"	2"	3"
26"	2"	3"
28"	2"	3"
30"	2"	3"
32"	3"	3-1/2"
34"	3"	3-1/2"
36"	3"	3-1/2"

## Architectural Specifications

### 1.0 GENERAL

#### 1.1 PRODUCT DESCRIPTION

- A. Column shaft shall be standard tongue-n-groove construction by Turncraft according to Design No. \_\_\_\_\_ (400) (600) (800) (900) (1000)
- B. Column will have the correct proportions based on orders of classical architecture.
- C. Lumber species shall be \_\_\_\_\_ (Clear) (Western Red Cedar) (Redwood) (Red Oak) (Poplar) (Hard Maple) (Western Pine) (Cherry) (Mahogany) (Black Walnut) (Other—Specify)

#### 1.2 SUBMITTALS

- A. Submit Turncraft literature and shop drawings for customer approval.
- B. Submit samples of \_\_\_\_\_ (Cap) (Base) (Column Shaft)

#### 1.3 DELIVERY, STORAGE, AND INSTALLATION

- A. Storage and installation of shafts and Caps & Bases shall be according to manufacturer-supplied instructions.
- B. Columns must be stored in a dry, well-ventilated area that is not exposed to heat or sunlight.

#### 1.4 WARRANTY

- A. Manufacturer shall furnish a 10-year limited warranty that its clear, Western Red Cedar columns with fiberglass Caps & Bases will be free of manufacturing defects, joint separation, and rotting.
- B. Manufacturer shall furnish a one-year limited warranty on all other wood species against manufacturing defects.

### 2.0 PRODUCTS

#### 2.1 ACCEPTABLE MANUFACTURER:

- A. Turncraft, P.O. Box 2429, White City, OR 97503 (541) 826-2911, (800) 423-3311

#### 2.2 MATERIALS

- A. All glue joints are pressure-glued using Type-I waterproof glue and torque bands no more than 18" apart, with 90 to 100 pounds-per-square-inch pressure for a minimum of 24 hours.
- B. Redwood/Cedar columns shall be factory primed with two coats of acrylic primer and hand sanded between coats. Redwood/Cedar columns for exterior use are to be coated internally with asphalt paint. Exterior Western Pine columns shall be treated with Woodtreat MB wood preservative.
- C. Capitals shall be flashed with sheet lead or equivalent.
- D. Ornamental Capitals shall be manufactured of composition plaster and fiberglass fibers. Capitals shall be sealed with an acrylic vinyl waterproofer.
- E. Plinths shall be made of \_\_\_\_\_ (Aluminum) (High-Density Fiberglass) for exterior use or \_\_\_\_\_ (Wood) for interior.
- F. Square columns shall match specifications of round columns as stated in these architectural specifications.
- G. Column shafts shall be made of \_\_\_\_\_-inch nominal thickness finger-jointed stock.

### 3.0 EXECUTION

#### 3.1 INSTALLATION

- A. Follow manufacturer's detailed installation guidelines.

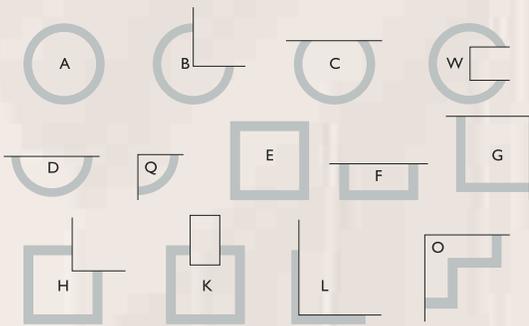
## Project Planning

Turncraft has become the country's leading supplier of wood columns for residential and commercial applications, shipping columns to job sites daily from its East and West Coast warehouses. Architectural Columns can usually be shipped in four to six weeks from receipt of design specifications.

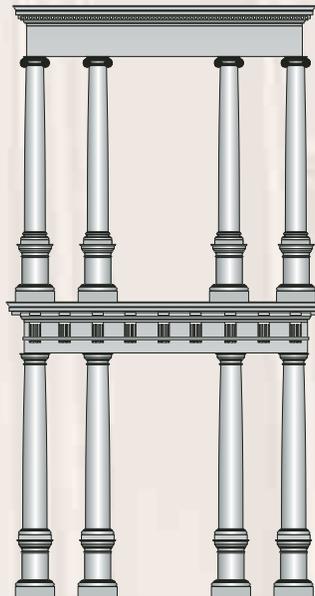
- Quantity Desired: \_\_\_\_\_
- Column Style: \_\_\_\_\_ (Greek Doric) (Tuscan) (Roman Doric) (Ionic) (Corinthian)
- Plan Type: \_\_\_\_\_ (A) (B) (C) (D) (E) (F) (G) (H) (K) (L) (O)
- Shaft Type: \_\_\_\_\_ (Round) (Square)
- Profile: \_\_\_\_\_ (Tapered) (Non-tapered)
- Bottom Shaft Diameter or Width: \_\_\_\_\_
- Overall Length: \_\_\_\_\_
- Fluting: \_\_\_\_\_ (Doric) (Ionic) (None)
- Wood Species: \_\_\_\_\_ (Western Pine) (Redwood) (Poplar) (Red Oak) (Hard Maple) (Cherry) (Black Walnut) (Western Red Cedar) (Mahogany) (Other)
- Stave Construction: \_\_\_\_\_ (Finger-jointed Staves) (Solid Staves)
- Usage: \_\_\_\_\_ (Interior Paint-grade) (Interior Stain-grade) (Exterior Paint-grade)
- Project: \_\_\_\_\_ (New Construction) (Restoration Replacement)
- Splitting: \_\_\_\_\_ (For Pilaster) (For Reassembly)
- Bases: \_\_\_\_\_ (Attic) (Roman Doric) (Tuscan) (Other)
- Capitals/Ornamentals: \_\_\_\_\_ (Roman Corinthian) (Empire) (Greek Angular Ionic) (Temple of Winds) (Greek Erectheum) (Roman Ionic) (Roman Doric Ornamental) (Scamozzi)
- Capitals/Architectural: \_\_\_\_\_ (Greek Doric) (Roman Doric) (Tuscan) (Other)
- Cap & Base Materials: \_\_\_\_\_ (Polyurethane) (Fiberglass) (Aluminum-Plinth Only) (Wood) (Other)
- Other Services: \_\_\_\_\_ (Priming) (Asphalt Priming of Shaft Interior) (Lead Flashing)
- Additional Desired Items/Services: \_\_\_\_\_ (Project Shop Drawings) (Samples—Caps, Bases, Shafts) (Other)

## Plan Types

Turncraft Columns are available in the following plan types. Please specify when you order:



## Superposition



The view of Renaissance authority Scamozzi was that the lower diameter of a top column should equal the upper diameter of the column underneath. The superior order should always be placed over the inferior, that is Corinthian over Ionic, Doric, Tuscan. The more slender and elegant orders should be placed over the stockier and more solidly built if a top-heavy design is not desired. An ancient example of this descending order is the Colosseum in Rome, which has at least four stories of superpositioned orders.

## Calculated Safe-Load Capacities

Shaft Dia.	Pine	Cedar	Shaft Dia.	Pine	Cedar
6"	2,567	5,146	22"	18,426	24,212
8"	4,114	7,646	24"	20,018	26,272
10"	5,497	10,474	26"	22,252	36,870
12"	6,620	12,535	28"	24,001	39,519
14"	11,017	15,282	30"	25,746	42,169
16"	12,307	17,343	32"	42,080	55,317
18"	14,487	19,404	34"	44,567	57,476
20"	16,688	22,151	36"	47,054	61,794

The sample columns tested supported loads at least four times the calculated value above prior to failure. The load was applied concentrically through the axis of the column. Loads shown are valid only if there is uniform contact between the full area of column ends and the Cap & Base units. Loads are provided for your convenience only and are not exact values. Consult a structural engineer for the most-accurate load estimates.