

# CHADSWORTH COLUMNS

## WOOD BASES LOAD-BEARING – INSTALLATION

### AUTHENTIC REPLICATION

#### General Information

- 
- A. Storage of columns must be in a dry and well ventilated area.
  - B. Before installation, on columns primed at the factory, paint all wooden parts with 2 coats of oil-based exterior paint. We do not recommend storing wood columns. If they must be stored, however, they must be painted first and stored in a dry, well-ventilated area to protect against moisture.
  - C. If a furniture finish is desired, additional sanding and priming will be required.

*Columns not primed should be primed with an oil-based exterior primer and painted with 2 coats of an oil-based exterior paint.*

**DO NOT USE LATEX PAINT!**

*Columns must be completely protected from moisture before and after installation. Priming of the column does not protect the column from moisture.*

A

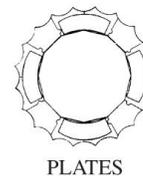
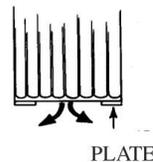
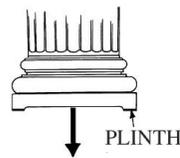
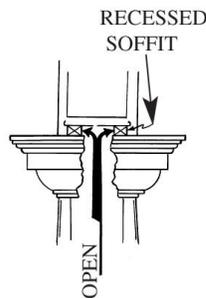
#### Ventilation For Exterior Columns

Ventilation must be provided at the top of the columns by a recessed soffit and at the bottom of the column by the plinth or plates. This ventilation must be maintained at all times.

#### Plates For Greek Doric Columns

Columns without ventilation plinths have 1/4" thick plates which are positioned beneath the column shaft to provide ventilation. Dowels are placed in deck/floor so they will go through the plates.

*Ventilation is imperative for the longevity of your column. If column is not properly vented, the paint may peel and the column may crack. Your warranty would be voided if not properly vented.*



B

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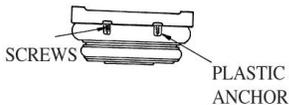
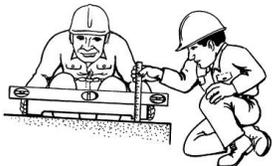
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## AUTHENTIC REPLICATION

### Cast Aluminum Plinth Assembly

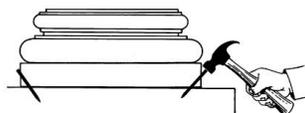
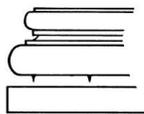
- Install corrosion resistant dowels into the floor. These dowels should fit in opposite corners of the plinth and will prevent the plinth from moving laterally.
- Level the plinth to the floor, if necessary, by scribing the plinth to the floor. Make sure that the original ventilation area is maintained...this may necessitate enlarging the opening. It is very important that the plinth is level before proceeding to the next step.
- The base molding should be attached to the plinth by:
  - Turning the plinth and base molding upside down.
  - Centering the plinth over the base molding.
  - Locating the pre-drilled holes in the plinth. Using these holes as a guide, drill 3/16" holes into the base molding.
  - Insert the anchor flush with the bottom of the base molding.
  - Using the 1 1/4" screws and washers, screw through the plinth into the anchor.
- Place the base assembly over the corrosion resistant dowels. Proceed to shaft assembly.

A



### Wooden Plinth Assembly

- Place headless nails (blunt side to the base) into the bottom of the pre-drilled holes located in the bottom side of the base molding.
- Center the base molding over the plinth.
- Press them together (nails will set into the plinth.)
- Screw or nail the base assembly to the floor.
- Proceed to shaft assembly.



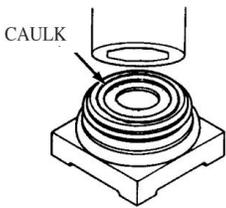
B

# WOOD BASES LOAD-BEARING – INSTALLATION



## Shaft Assembly

If the column shafts are trimmed to different lengths, the bottom end grain must be sealed and painted with a waterproofer or wood preservative and painted with an exterior oil-based paint to help prevent moisture related cracks and premature decay or rot.



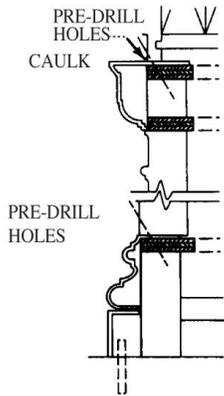
## Fiberglass Base Molding

After caulking top of base, lift shaft with capital in place onto the base and tilt into position under recessed soffit. Shaft should be centered on base.

A. Pre-drill holes through soffit into wood cap plug. Fasten soffit to capital with 2 1/2" long brass screws.

B. Pre-drill holes through shaft into base plug. Fasten shaft to base by driving 2 1/2" long brass screws through shaft.

C. All joints should be sealed with a paintable silicone caulk.



C



## Cast Marble Base Molding

Pre-drill holes at top of base molding. Place headless nails (blunt side down) into holes. If additional holes are desired, use a steel cutting drill bit. Headless nails can be made by cutting off galvanized nails.

Place shaft onto base. The weight of the shaft should set nails into the shaft.

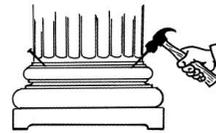
## Wooden Base Molding

Place shaft onto base. Nail or screw shaft to base.

Use a paintable silicone sealant to seal the joint between the shaft and the base molding.

*For split columns see Special Instructions on page 6.*

Proceed to Capital Installation.



D

Authentic Replication Instructions are used for Stock Classic & Colonial Columns with bottom diameters over 20".

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# WOOD BASES LOAD-BEARING – INSTALLATION

## INHERENT CHARACTERISTICS OF WOOD

This advisory concerns prevention of dimensional problems in architectural woodwork products as the result of uncontrolled relative humidity. It is further intended as a reminder of the natural dimensional properties of wood and wood-based products and of the routine and necessary care and responsibilities which must be assumed by those involved.

For centuries, wood has served as a successful material for architectural woodwork, and as history has shown wood products perform with complete satisfaction when correctly designed and used. Problems directly or indirectly attributed to dimensional change of the wood are usually, in fact, the result of faulty design, or improper humidity conditions during site storage, installation, or use.

Wood is a hygroscopic material, and under normal use conditions all wood products contain some moisture. Wood readily exchanges this molecular moisture with the water vapor in the surrounding atmosphere according to the existing relative humidity. In high humidity, wood picks up moisture and swells; in low humidity wood releases moisture and shrinks. As normal minor fluctuations in humidity occur, the resulting dimensional response in properly designed construction will be insignificant. To avoid problems, it is recommended that relative humidity be maintained with the range of 25%-55%. Uncontrolled extremes (below 20% or above 80% relative humidity) can likely cause problems.

Together with proper design, fabrication, and installation, humidity control is obviously the important factor in preventing dimensional change problems.

Architectural woodwork products are manufactured as designed from wood that has been kiln dried to an appropriate average moisture content and maintained at this condition up to the time of delivery. Subsequent dimensional change in wood is and always has been an inherent natural property of wood. These changes cannot be the responsibility of the manufacturer or products made from it. Specifically:

- Responsibility for dimensional change problems in wood products resulting from improper design rests with the designer/architect/specifier.
- Responsibility for dimensional change problems in wood products resulting from improper relative humidity exposure during site storage and installation rests with the contractor.
- Responsibility for dimensional change problems in wood products resulting from humidity extremes after occupancy rests with engineering and maintenance.

It is normal for wood to expand or contract with changes in atmospheric conditions. Wood will adjust to climate. Checking may occur.

## VARIATIONS IN NATURAL WOOD PRODUCTS

Wood is a natural material, with variations in color, texture and figure. These variations are influenced by the natural growing process and are uncontrollable by the woodworker. The color of wood within a tree varies between the “sapwood” (the outer layers of the tree which continue to transport sap), which is usually lighter in color than the “heartwood” (the inner layers in which the cells have become filled with natural deposits). Various species produce different grain patterns (figures), which will influence the selection process. There will be variations of grain patterns with any selected species. The architectural woodworker cannot select solid lumber cuttings within a species by grain and color in the same manner in which the veneers may be selected. Color, texture, and grain variations will occur in the finest architectural woodworking.

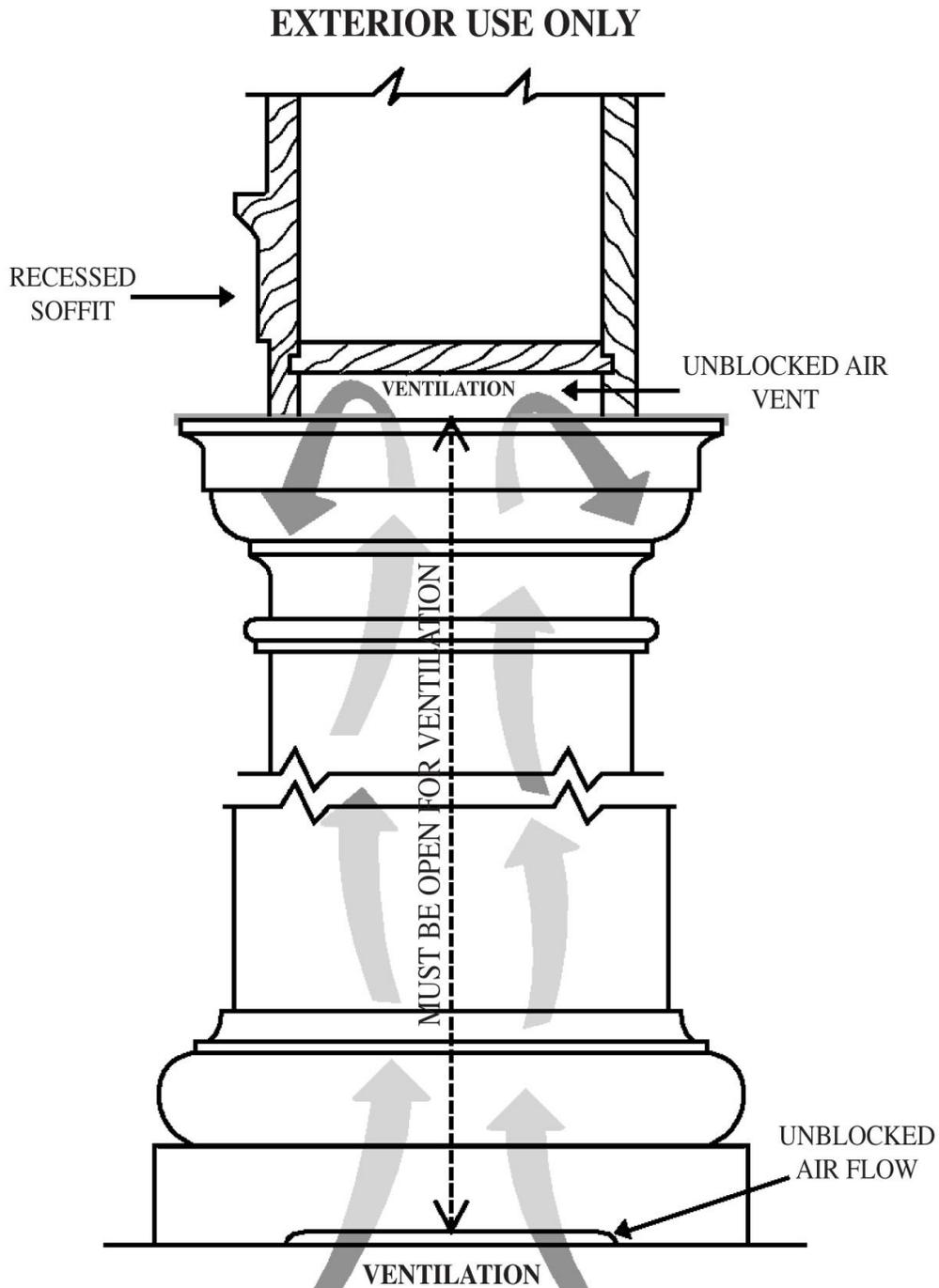
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## VENTILATION INSTRUCTIONS



*Ventilation must be provided at the top and bottom of the columns. Air flow must move through the center of the column, capital and flashing into a recessed soffit and through the base and plinth.*

*The installing contractor must provide this ventilation with a recessed soffit and open plinth for the warranty of the column.*

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