

WORTHINGTONWOOD™ PAINT GRADE COLUMNS

PAINT GRADE STOCK WOOD COLUMN INSTALLATION INSTRUCTIONS

PAINT GRADE STOCK WOOD COLUMNS INSTALLATION

A. STORAGE, PAINTING and VENTILATION FOR PAINT GRADE STOCK WOOD COLUMNS

1. Storage of columns must be in a cool, dry and well-ventilated area. Storage on a porch or under plastic outdoors will void the warranty.

Note: Interior applications can use latex paint.

2. Before exterior installations, wood columns must be primed with a minimum of one coat of ONLY oil or alkyd primer followed by two coats of ONLY oil or alkyd paint. After installation, a final coat of oil or alkyd paint should be applied. Make sure to prime and paint the ends of the wood column shaft.

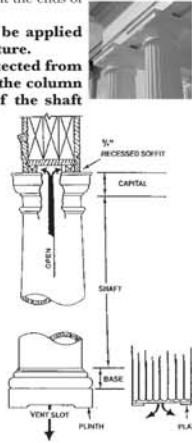
Note: Spray painting is not recommended. Paint should be applied with a brush to adequately protect the column from moisture. It is extremely important that the wood is completely protected from moisture before and after installation. Priming alone of the column does not protect the column from moisture. The ends of the shaft should be primed and painted before installation.

Note: Interior applications do not require the below ventilation technique.

3. VENTILATION MUST BE PROVIDED FOR AT THE TOP OF THE COLUMN BY A RECESSED SOFFIT.

Ventilation is provided for at the bottom of the column by the ventilation openings in the plinth or UHMW plates. This ventilation must be maintained at all times.

Ventilation is imperative for the longevity of your column, and must be provided by the installing contractor. If the column is not properly vented, the paint may peel and the column may crack. The use of midjet louvers, venting directly into the soffit, or venting under the porch are NOT adequate for proper ventilation. Water drainage pipes should not be channeled to run through the columns. Failure to follow these instructions will void the warranty.



B. INSTALLATION INSTRUCTIONS FOR PAINT GRADE COLUMNS

1. Determine the position of the plinth by dropping a plumb line from the center of the beam to the floor. This point on the floor will be the center of the plinth so that the top of the shaft will align with the soffit.

2. 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 require enlarging the opening. It is very important that the plinth is level before proceeding with the installation. (Fig. 1)

3. Polyurethane base/plinths can be attached to the floor using rust proof screws. Pre-drill for a toenailing type attachment. Make sure to putty over the countersunk screws. Or, countersink (2) lag bolts through opposite corners of the base/plinth to the floor. Putty over the countersunk lag bolts. (Fig. 2)

4. Measure the overall opening height. Raise the soffit or porch slightly with a brace for easy installation of column and cap and base/plinth. Trim wood column, if necessary, from the bottom end only using a circular saw with a carbide blade. (Be sure to use personal protective wear)

Note: For exterior applications, if the wood column is trimmed to length, the bottom end grain must be sealed with a water sealer or wood preservative and primed and painted with oil or alkyd exterior paint to prevent moisture related cracks and decay. Follow the painting instructions.

5. Apply waterproof paintable caulk to the top of the base before placing the shaft on top of the base. Make sure to center the shaft on the base. (Fig. 3)

6. Attach the column to the base, the column to the capital and the capital to the soffit using rust proof screws. Pre-drill and countersink holes angled for a toenailing type attachment. Putty over the countersunk screws. (Fig. 4)

7. Caulk around the top and bottom of the column where it is attached to the base and capital. For exterior applications do NOT caulk the ventilation openings in the plinth, cap or recessed soffit. These are important for ventilation and must remain open for proper ventilation.

8. For exterior applications, apply final coat of oil or alkyd based paint to column. For interior applications, latex paint can be used.

C. CUTTING TO OVERALL LENGTH, ALTERING FLUTES & SPECIAL NOTES & EXCEPTIONS

SPECIAL NOTES & EXCEPTIONS:

- For exterior applications, be sure to follow ALL storage, painting & ventilation instructions.
- Be certain that the load is evenly distributed over the load bearing surface of the shaft. (Split columns are non-load bearing).
- If building codes require uplift protection, contact your supplier for recommendations.
- 2nd story balconies should not be attached directly to the side of any wood column.
- Water sprinklers should NOT be allowed to spray on wood columns. This will create a constant moisture problem and will void the warranty.
- Water drainage pipes should NOT be channeled to run through wood columns. This will void the warranty.
- Wood columns should NOT be used for pergola or open top applications. This will void the warranty.
- If installing wood columns with decorative capitals.

- For exterior applications, ONLY use oil or alkyd exterior paint on wood columns.
- For interior applications, latex paint can be used.

CUTTING TO OVERALL LENGTH:

Columns can be field trimmed or ordered from the factory trimmed to a specified length. When trimming a wood column shaft to length, make sure to always trim from the bottom end only. A circular saw with a carbide blade can be used to make this cut. (Make sure to always wear personal protective equipment.) It is not recommended to trim more than the bottom 1/2 of any Colonial tapered column and no more than 1/3 on any Classical tapered column. The Classical wood columns have a true architectural taper. (The bottom 1/3 is non-tapered, the top 2/3 is tapered.)

ALTERING FLUTES:

Flutes can be altered only if ordered as a special order from the factory. Flutes normally need to be altered if the column will be trimmed in order to avoid cutting into the flutes. Or, it may be desired to stop the flutes closer to the top of the base. Standard stock wood columns have a 10 3/4" space from the bottom flute to the end of the shaft.

D. HOW TO SPLIT WOOD COLUMNS

1. Secure column to sawhorse or table using clamps. Clamps should be wrapped with cloth material to provide cushion and to avoid scratching column.

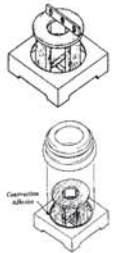
2. Place the clamps snugly against the column ensuring that the column will remain in place while being cut.

3. After column is secured, a chalk line should be applied to the column. To lay the chalk line, place a string over the base end diameter of the column to the center of the string ensuring that the string is centered. Mark the column on the top where the string is centered. Run the chalk line from the mark on the top end of the column to the mark on the base end and snap the chalk line.

4. To make the bottom line, use a circumference measuring tape and measure the circumference distance from the top mark and place a mark on the bottom of the column.

5. Once both chalk lines have been applied to the column, set the saw blade at the appropriate depth ensuring that it will pass cleanly through the bead/astrolag end.

6. Use a circular saw with a carbide blade. (Make sure to use personal protective equipment.) Begin sawing from the base end moving to the bead/astrolag end.



E. JOINING SPLIT WOOD COLUMNS

Columns that are split to surround a structural beam should be installed similarly to un-split columns. However, the following procedure should be followed when putting the split halves back together:

1. Keep column halves together and mark the column halves by set numbers so that they cannot be mismatched. We do not recommend storing split columns for an extended amount of time. Make sure column halves match before applying wood glue. Be certain that the surfaces to be glued are free of dust and debris. Also, areas to be glued should be left unpainted. Level and check your measurements, and then install split halves around the structural support.

2. The shaft should be glued using exterior waterproof wood glue. Follow glue manufacturer's instructions for applying glue. Do a trial fit before applying glue to the wood. Place nylon clamps or steel strapping 12 inches apart along the length of the shaft. To prevent damage to the shaft use protective material beneath the clamps and use blocking where necessary to pull column into round. Make sure not to over tighten. It may also be necessary to tap along seam with a rubber mallet. Check and be certain there is a complete contact all along the joint, then remove excess glue.

3. Polyurethane caps and bases can be joined with a two-part epoxy. (Make sure to apply flashing to the top of any split capital, and make sure that the ventilation is maintained for exterior applications.)

4. Fill any gaps along seam with wood filler and sand smooth with 100 grit sandpaper. Immediately prime and paint with an exterior alkyd or oil based primer and paint for exterior applications.

Note: Interior applications can use latex paint.

F. COMPONENT ASSEMBLY INSTRUCTIONS

FIBERGLASS CAP/BASE/PLINTH ASSEMBLY WITH WOOD PLUGS

1. Determine the position of the plinth by dropping a plumb line from the center of the soffit beam to the floor. Mark this point on the floor with an "x". This mark is where you will center the plinth so that the top of the shaft will align with the soffit.

2. Install non-corroding dowels into the floor. These dowels should fit in opposite corners of the plinth and will prevent the plinth from moving laterally.

3. 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 require enlarging the opening.) It is very important that the plinth is level before proceeding to the next step.

4. Position wood plug within plinth and check the plug for level. If the plug is not level, remove the plastic attached to the bottom of the legs as necessary to level the top of the plug. Make sure to paint the wood plug.

5. Do a trial fit with the base over the plinth and plug. Be certain that the fiberglass will be under no pressure when the weight of the shaft is on the base. The plug must carry the shaft load.

6. Run a bead of construction adhesive around the top of the plinth. Place the fiberglass base moulding over the wood plug and press onto the plinth.

FIBERGLASS CAP ASSEMBLY WITH WOOD PLUGS:

1. Center the wood plug on top of the shaft and secure in place with galvanized rustproof screws. Make sure to paint the plug.

2. Caulk where the capital will meet the shaft. Place capital over the plug.

FLASHING INSTRUCTIONS

1. Flashing (synthetic or copper) is required for exterior applications on wood columns with all deco-

Paint Grade Columns

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- native capitals or any split polyurethane or fiberglass capital.
- 2. Flashing should be installed over the top of the capital by bending the material over the edge.
- 3. Ventilation should never be blocked by the flashing. The large opening in the center of the column is designed for ventilation and should not be blocked.
- 4. Silicone caulk should be applied to any seam where the flashing meets the soffit.

WOOD BASE ASSEMBLY

- 1. Place shaft onto base. Nail or screw shaft to base.
- 2. Caulk where the shaft meets the base.

Note: Wood components are only recommended and warranted for interior use.

ALUMINUM PLINTH ASSEMBLY

- 1. Determine the position of the plinth by dropping a plumb line from the center of the soffit beam to the floor. Mark this point on the floor with an "x". This mark is where you will center the plinth so that the top of the shaft will align with the soffit.
- 2. If an aluminum plinth is used, install non-corroding dowels into the floor. These dowels should fit

- in opposite corners of the plinth and will prevent the plinth from moving laterally.
- 3. 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 require enlarging the opening.) It is very important that the plinth is level before proceeding to the next step.
- 4. The base mould should be attached to the plinth as follows:
 - a. Turn the plinth and base mould upside down.
 - b. Center the plinth over the base mould.
 - c. Locate the pre-drilled holes in the plinth. Using these holes as a guide, drill 3/16" holes into the base mould.
 - d. Insert the anchor flush with the bottom of the base mould.
 - e. Using the 1 1/4" screws and washers, screw through the plinth into the anchor.
- 5. Place the base and plinth over the non-corroding dowels.
- 6. Caulk where necessary.



STAIN GRADE STOCK WOOD COLUMNS INSTALLATION

A. STORAGE & FINISHING FOR STAIN GRADE STOCK WOOD COLUMNS

Storage: Storage of columns must be in a cool, dry and well-ventilated area. Storage on a porch or under plastic outdoors will void the warranty.

Finishing: Columns made from hardwoods should be sanded prior to staining. Columns need to be finish sanded in the field to the desired texture for proper stain appearance. Stain grade columns are sanded at the factory with a 120 grit sandpaper. This should remove all scratches and knife marks from the turning process. (This does not mean that the column is finish sanded and ready for the application of stain.)

Note: There may be small imperfections in wood surfaces such as small knots and mineral streaks. When the lumber is selected for stain grade columns, the outside surface is clear. Once the column shaft and components are turned, there may be hidden imperfections. If these imperfections are severe, the columns are rejected, but if they are minor the columns are determined to be acceptable.

B. INSTALLATION INSTRUCTIONS FOR STAIN GRADE STOCK WOOD COLUMNS

- 1. Determine the position of the plinth by dropping a plumb line from the center of the beam to the floor. This point on the floor will be the center of the plinth so that the top of the shaft will align

- with the soffit.
- 2. Level the plinth to the floor, if necessary scribe the plinth to the floor. Make sure the plinth is level before proceeding with the installation.
- 3. The plinth can be attached to the floor by pre-drilling holes for a toenailing type attachment with small finishing nails.
- 4. Measure the overall height. Trim column shaft to the desired length. Trim the top of the shaft along the score line provided. Trim remaining length from the bottom of the shaft. A circular saw with a wood cutting blade should be used. (Be sure to use personal protective equipment.)
- 5. Place the shaft on the base and tilt the shaft into position under the soffit. Center the shaft on the base.
- 6. Pre-drill and countersink holes angled through the column wall to the base at the bottom, through the column wall to the cap at the top, and through the cap to the soffit for a toenailing type attachment. Attach using small finishing nails. Putty over countersunk holes.
- 7. All joints and nail holes can be filled with stainable wood putty for appropriate lumber species.
- 8. Apply desired stain and/or clear coat. (Follow stain/clear coating manufacturer's instructions for best results.)

WOOD PORCH POSTS & STAIR PARTS INSTALLATION

A. WOOD PORCH POST INSTALLATION INSTRUCTIONS

- 1. Storage of posts must be in a cool, dry and well-ventilated area. Storage on a porch or under plastic outdoors will void the warranty. Posts must be primed and painted prior to installation for warranty to be valid.
- 2. Before installation, paint the entire porch post with one coat of oil or alkyd based primer, followed by two coats of an oil or alkyd based exterior paint. NOTE: The top and bottom ends of the porch post must be primed and painted.
- 3. Posts may need filling and sanding before painting.
- NOTE: It is extremely important that the wood is completely protected from moisture before and after installation. To properly seal the wood, use only oil or alkyd based finish paint. Priming of the porch post does not protect it from moisture.
- 4. If the porch post is trimmed to length, the ends must be sealed with a wood preservative or water sealer, before following paint instructions. This will help prevent moisture related cracks and premature decay or rot.
- 5. It is required that an aluminum plinth be used at the bottom of the post for added protection. Failure to use an aluminum plinth will void the warranty.
- 6. After installation, paint the porch post with one final coat of oil or alkyd based exterior paint. Note: Deck stains and wood preservatives alone are not sufficient for moisture protection. Failure to prime and paint with oil or alkyd paint will void the warranty.

B. WOOD PORCH POST ALUMINUM PLINTH ASSEMBLY

- 1. Install non-corroding dowels into the floor. These dowels should fit in opposite corners of the plinth and will prevent the plinth from moving laterally.
- 2. The porch post must be attached to the plinth as follows:
 - a. Center the plinth over the end of the porch post.
 - b. Locate the pre-drilled holes in the plinth. Using these holes as a guide, drill pilot holes in the porch posts.
 - c. Attach screws through the plinth into the porch post.

- d. Place the porch post with attached plinth over the non-corroding dowels.
- e. Holes may be pre-drilled through the top of the porch posts for a toenailing type attachment.

C. WOOD LAMP POST INSTALLATION INSTRUCTIONS

- 1. Prime Lamp Post with one coat of oil or alkyd based primer, then paint with two coats of oil or alkyd paint. Make sure to let paint cure.
- 2. The end grain of the lamp post MUST be sealed with a water proof exterior sealer. (Example: Asphaltum, Cuprinol)
- 3. Determine the desired depth for the lamp post placement in the ground. Excavate the hole to the desired length.
- 4. Mix and pour concrete into hole, then place painted post into concrete. Center and level the post. Make sure to brace the post and let it set. Perform routine maintenance as needed.
- Note: Deck stains and wood preservatives alone are not sufficient for moisture protection. Failure to prime and paint with oil or alkyd paint will void the warranty.

D. WOOD STAIR PARTS INSTALLATION INSTRUCTIONS

- (Spindles, newels, hand rail, shoe rail, and ball tops.)
- 1. Storage of stair parts must be in a cool, dry and well-ventilated area. Storage on a porch or under plastic outdoors will void the warranty. Stair parts must be primed and painted prior to installation for warranty to be valid.
- 2. Before installation, paint the entire stair parts with one coat of oil or alkyd based primer, followed by two coats of an oil or alkyd based exterior paint. NOTE: The top and bottom ends of the stair parts must be primed and painted.
- 3. Stair parts may need filling and sanding before painting.
- Note: The fillet must be used on all hand and shoe rail.
- Note: Deck stains and wood preservatives alone are not sufficient for moisture protection. Failure to prime and paint with oil or alkyd paint will void the warranty.



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