

# Rotted Column Base Replacement Instructions

*By Royal Corinthian*

Most wood columns that are exposed to the elements will rot and the first thing to go tends to be the column base. If you don't want to replace your entire porch column with our composite alternatives, we have the most diverse offering of replacement bases for you to choose from. We offer every architectural column base in the market as well as modern ones for round and square columns: Tuscan, Doric, Attic, Ogee, Flat Stock, Box, Craftsman, and more. Like our columns, our column bases are made from composite materials that will last forever. We can make load-bearing as well as vented bases so that your wood columns can "breathe". We offer fiberglass, FRP, PVC, and synthetic stone bases. All of our standard column bases can be adjusted in height (taller or shorter), certain parts can be removed, vents can be added, the hole openings can be shortened or widened, and the bases can be made solid by eliminating the hole altogether. In addition to our standard offering, we have some options that aren't listed as well as the ability to replicate existing or create custom bases.



Rotted Column Base



Fiberglass Replacement Column Base

## **Tools and Materials**

*Not all of the items listed below are needed for every repair/replacement. Please read the installation instructions in its entirety prior to beginning the replacement to determine what tools and materials are needed for a particular repair.*

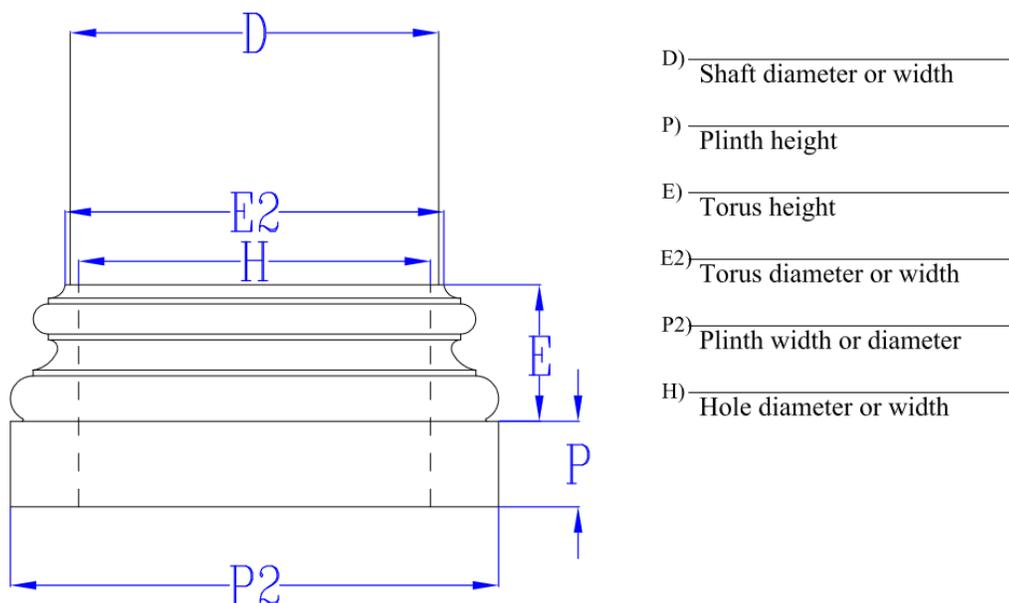
<ul style="list-style-type: none"><li>• Safety Glasses and Gloves</li><li>• Pencil</li><li>• Measuring Tape and String</li><li>• Drill / Screw Gun</li><li>• Level</li><li>• Caulk Gun</li><li>• Jig Saw/Handsaw/Circular Saw</li><li>• Hammer</li><li>• Crowbar</li><li>• <b>Replacement Column Base(s)</b></li></ul>	<ul style="list-style-type: none"><li>• Ceiling Jack</li><li>• Corrosion Resistant Screws</li><li>• Bondo</li><li>• Adhesive</li><li>• Colored or Paintable Caulk/Sealant</li><li>• Rag or Tack Cloth</li><li>• Sandpaper</li><li>• Ladder or Scaffolding</li><li>• Primer and Paint</li><li>• Wood Column Sealer</li></ul>
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## Important Considerations

Read the entire instructions prior to beginning the repair and/or replacement. These instructions are guidelines only and modified procedures might be required in order to meet unique situations/applications. Be sure to wear appropriate safety gear and suitable protective clothing.

## Replacement Steps

1. **Good Practices:** Make sure to use safety goggles, common sense, good construction practices, and follow paint and power tools manufacturers' instructions for safe and proper use. Consult with licensed experts as needed to ensure code compliance and safe and proper installation.
2. **Measure Existing Base(s):** Measure and note all of the pertinent dimensions of your column and base using the diagram and form below. An Attic Base is pictured but we have many styles to choose from as well as custom. Use a rigid rope or similar to measure circular parts and convert the circumferences to diameters using this formula:  $D = \frac{C}{\pi}$  (Diameter = Circumference divided by Pi or roughly 3.14159). Indicate whether a measurement is for a round or square part by circling "diameter" or "width" on the form below underneath the relevant dimension line. Dimension "P" on the diagram is the height of the plinth (we can remove this part or increase/decrease the height on our bases), "P2" the width/diameter of the plinth (we can make this part round on any of our bases if desired), "E" the height of the torus, "E2" the topmost diameter/width of the torus where it meets the column shaft, "D" the diameter or width of the column shaft, and "H" the diameter or width of the hole opening if any (we can decrease or increase the hole opening on our bases or make the base completely solid). Another important dimension that is not pictured is the width or diameter of the structural column inside the porch column if such exists and where it is located (usually centered inside the column). The reason that dimension might be important is because you won't be able to use a solid base or might have to notch out the base to go around that structural support (we can do this for you).



- D) \_\_\_\_\_  
Shaft diameter or width
- P) \_\_\_\_\_  
Plinth height
- E) \_\_\_\_\_  
Torus height
- E2) \_\_\_\_\_  
Torus diameter or width
- P2) \_\_\_\_\_  
Plinth width or diameter
- H) \_\_\_\_\_  
Hole diameter or width

3. **Choose a Replacement Base:** Choose a [replacement base](#) from our standard offering that closely matches the rotted column base in style, height, and width or request a quote for a custom base based on your existing or desired dimensions. You may also email [royalcor@royalcorinthian.com](mailto:royalcor@royalcorinthian.com) or fax the completed form above to 888-344-2937 and we can make a recommendation (attaching a photo of your existing base would be helpful). Keep in mind that all of our bases can be made taller or shorter and the plinth (the bottom-most, usually square portion) can be removed or made round. If a matching or similar base isn't important, choose the column base that you desire. The column shaft can always be cut to allow for taller bases to be installed.
4. **Raise the Soffit:** Use a ceiling or floor jack to slightly raise the soffit or ceiling of the porch next to the column. Make sure that the jack can bear all of the overhead weight that the column is currently bearing. Consult an expert if unsure.
5. **Remove Column (optional):** Remove the entire column if desired. Some choose to remove the entire column to cut off and replace or repair any rotted portion of the shaft or to cut off some shaft to make room for a taller than the original replacement base. By removing the entire column, you can treat the inside of the shaft prior to installing the new base in order to prevent the shaft from eventually rotting. If the column base has rotted, the shaft is sure to follow. Obviously, all of the above can be done without removing the entire column.
6. **Remove Base:** If you plan to only remove the rotted base, be ready to place a temporary structure in place of the base so that the rest of the column doesn't fall down. The rotted base can be removed with a combination of some or all of these tools: crow bar, hammer, jigsaw, and/or handsaw. Novices shouldn't use these tools unaccompanied by a professional.
7. **Measure Interior Structures (if applicable):** Measure the structural column inside the porch column, if any, and note the location (usually centered), style (round, square, I-beam, etc), and dimensions of that structural column somewhere on the diagram above. If needed, Royal Corinthian can provide bases that are split in half or you can split them yourself so that they can be installed around the existing structural columns. Some of our bases are made as halves but tend to be decorative not load-bearing.
8. **Order Replacement Bases:** Order the bases if you haven't done so already. Not all columns are installed the same so you might want to repeat the steps above for each column. Split, notch, and/or cut the new bases as needed if not done already by the factory.
9. **Sand Bases:** If not factory sanded, sand RoyalCast™ poly/marble composite bases (also called "cast fiberglass"), our most popular replacement bases, with 80 grit sandpaper. PVC and synthetic stone bases do not need to be sanded or painted. FRP bases can be sanded using a 220 grit sandpaper. Clean off any excess dust with a wet rag or a tack cloth. Do not use acetone if you plan to paint the base(s). Make sure bases are fully dried prior to priming or painting.
10. **Reinstall Column or Base:** Reinstall the entire column if previously removed atop the new base. Use construction adhesive between the bottom of the shaft and the new base. If the column shaft remains installed, have someone hold the column up while you remove the temporary support (the support holding the shaft up NOT the soffit) and slide the replacement base in place. You might have to raise the soffit more in order to accomplish this. Secure the base into place using the appropriate screws for the substrate under the base, preferably those that won't rust. Make sure to predrill and countersink fiberglass, FRP, and synthetic stone column bases. PVC installs like wood.

11. **Remove Ceiling Jack:** Slowly lower the soffit and make sure that the shaft gets centered onto the base as it is lowered. Remove the ceiling jack and secure the shaft into the base.
12. **Caulk, Prime, and Paint:** Caulk between the bottom of the shaft and the top of the base using a paintable latex, silicone, or polyurethane caulk and then prime and paint the column base and column if needed. Caulking can occur after painting as well. RoyalCast™ painting instructions can be found here: <https://royalcorinthian.com/painting-fiberglass-columns/>.