TRIMMING SHAFT TO EXACT HEIGHT

1. Measure the entire height of the overhang opening from the soffit to the deck. Subtract the space taken up by the base and plinth assembly and the capital assembly. A good technique is to set the cap and base on the deck (Fig. 1) and then measure up to the soffit or beam (Fig. 2). Be especially careful to account for the height of ornamental capitals.

2. Trim top of shaft for the type of capital you will be installing. For fiberglass or poly caps, trim to the fillet (top molding) (Fig. 3). For Temple of Winds and Roman Corinthian capitals, trim column at the top of the neck ring molding (Fig. 4). For Ionic type capitals, trim column immediately below neck ring (Fig. 5).

3. Then measure carefully from the top of the trimmed shaft, along with the edge of at least three staves, around the circumference of the shaft to determine the bottom trim line (Fig. 6). Using cardboard or other flexible material, draw a trim line completely around the shaft. By carefully following this procedure, you will ensure that the shaft top and bottom cuts remain square to the centerline of the shaft.
ASSEMBLING SPLIT PARTS

GENERAL:
• Materials must be stored in a dry place of even and moderate temperature until wood and composites are sealed with oil or acrylic-latex primer and paint. Don't use alcohol-base sealers or primers. **Sealing end grain is a must.**
• Keep surfaces to be glued clean. Follow glue manufacturer's directions. Use polyurethane, two part epoxy, or Titebond adhesive. Wood components must be acclimated before gluing; store them in a room temperature location (70°) for at least 10 hours to avoid joint failure.
• Notch caps and bases to wrap around load-bearing post without making contact that could cause cracking during expansion and contraction. Seal cut surfaces to prevent checking and cracking.
• Top and bottom venting is critical. Do not cover, block or fill vents in base and/or cap. If using ornamental capitals, they should be vented through the soffit.
• Do not attach column shaft to anything except caps and bases. Fastening to interior blocking will cause cracking with expansion and contraction.

BASES:
1. Assemble halves using screws and polyurethane adhesive on wood or polyurethane parts. Use a web/band clamp for a minimum of 24 hours (Fig. 7).
2. Fill wood or polyurethane bases with putty and sand smooth.

SHAFTS:
1. Because shaft halves may become slightly out of round as they absorb or lose moisture, it is important to preassemble before gluing. The seams should join together smoothly when clamped, with no more than a 1/32” variance (Fig. 8).
2. Cut blocks to use under band clamp opposite any areas that have expanded out of round (Fig. 9).
3. Caulk the area where the shaft and base meet. Then position halves of shaft on the base so that seams are oriented at a 90-degree angle to the primary view (Fig. 10), leaving a gap between them for gluing.
4. Thoroughly coat all four joining surfaces of the shaft with polyurethane adhesive (Fig. 11).
5. Position band clamps 12”-16” apart along the full height of the shaft. Use carpet strips under clamps to prevent damage and use blocks opposite areas of expansion to pull shaft into round (Fig. 12). Tighten clamps to 80 pounds per square inch (psi). Use a rubber mallet where necessary to get the two sides of the seam to line up.
6. Make sure there is full contact from the top to bottom in both seams. Then remove the excess glue. Let stand for a minimum of 24 hours.

CAPITALS:
1. Predrill holes for screws on opposing sides of the shaft seams and at an angle for attachment to shaft. Caulk the area where the capital and the shaft meet.
2. Thoroughly coat all four joining surfaces of the capital with polyurethane adhesive. Position capital halves atop the shaft, push the halves together and clamp with a rope clamp. Then secure the joined halves with screws and attach to the shaft.