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EnduraStone Column Installation With Poly Cap and FRP Base (Plan A):

1. Measure the total height of the opening from the floor to the beam/ceiling/soffit. Mark around the bottom of the shaft using the column base or cardboard as a guide, then trim the shaft to the height of the opening using a circular saw with a diamond tipped blade. Cut from bottom of shaft only. If load bearing, be sure edges are level, as uneven ends alter load bearing capacities. Use rasp as needed.
2. Determine the top centerline and mark it on the beam/ceiling/soffit. Hang plumb bob from top centerline to determine bottom centerline, then mark bottom centerline. Mark edges where base will be installed, ensuring base will be parallel with edge of porch/soffit/deck by drawing a perpendicular line from edge to center point, then draw a line parallel with the edge (figure 2).
3. Mark and drill holes for bolts at bottom of shaft, then slide base over bottom of column approximately 2-3 feet from bottom so base does not obstruct installation. Attach L brackets with nuts, bolts, and washers (figure 3). Finger-tighten only.
4. Repeat step three for top of column (figure 4).

FIGURE 1

Measure opening height, then mark and trim from bottom of shaft.

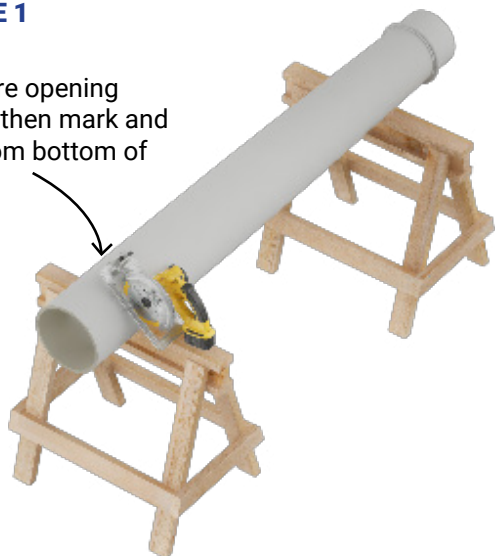


FIGURE 2

Determine centerline using plumb bob. Mark floor parallel with edge for base placement.

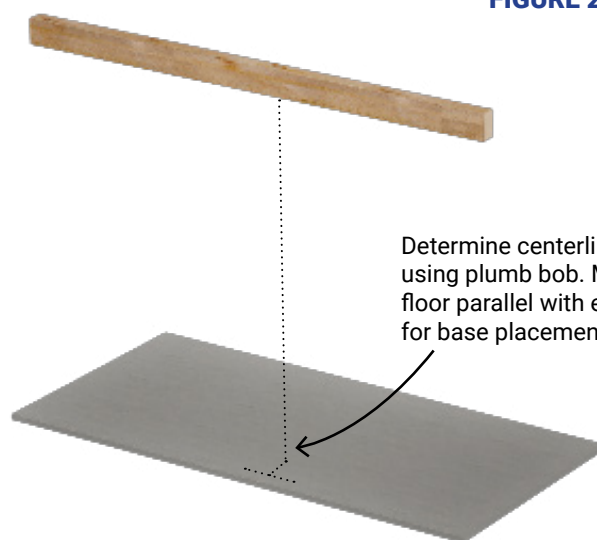


FIGURE 3

Pre-drill holes for L brackets, then fasten L brackets with through bolts, nuts, and washers (finger-tighten only).

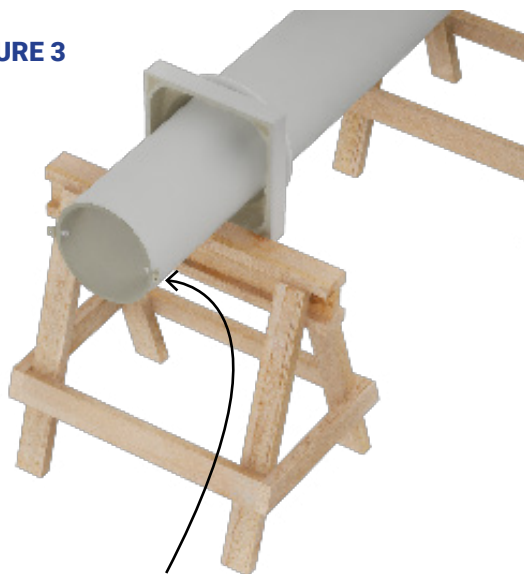


FIGURE 4

Pre-drill holes for L brackets, then slide cap over top of column until cap contacts neck ring. Attach L brackets (finger-tighten only).



EnduraStone Column Installation With Poly Cap and FRP Base (Plan A):

5. Raise the beam by ¼" if applicable, then tip the column into place with capital resting on the neck ring. Then, lower beam onto shaft. Tap into place until plumb, then fasten L brackets with appropriate screws (figure 5). NOTE: smaller column capitals have less working room and require screws to be driven at an angle.
6. Fasten L brackets at bottom of column to floor. Apply construction adhesive around bottom perimeter of base, then slide base down to floor.
7. Apply construction adhesive to top of capital where applicable, then push capital in place. Fasten capital with pin nails or trim screws. NOTE: Some installations, or larger column capitals may require trim screws instead of pin nails to secure capital. Installer to use discretion.
8. Thoroughly wipe down column. Prime and paint with 100% acrylic. Caulk any gaps.

FIGURE 5



FIGURE 6

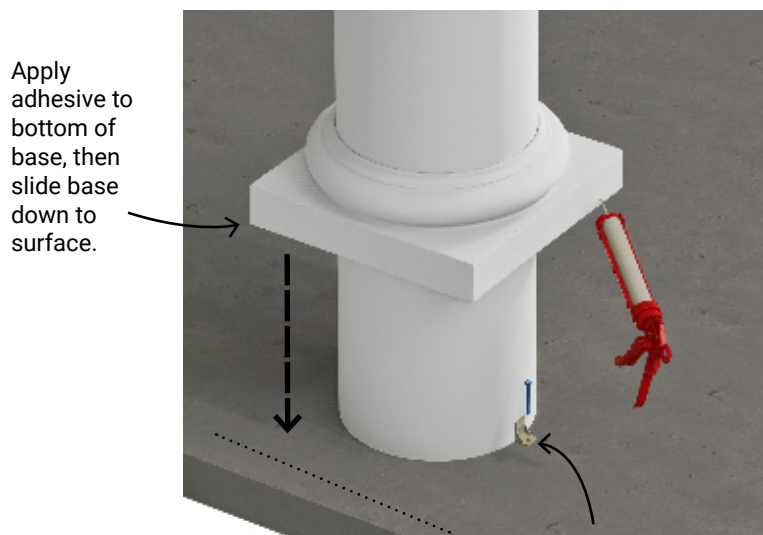
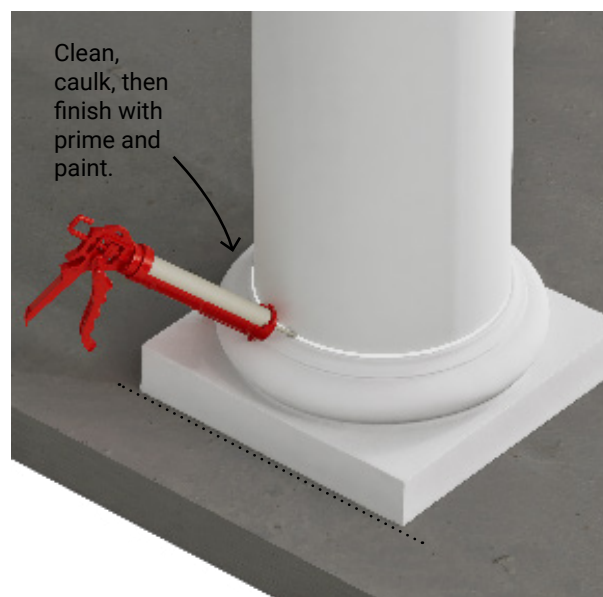


FIGURE 7



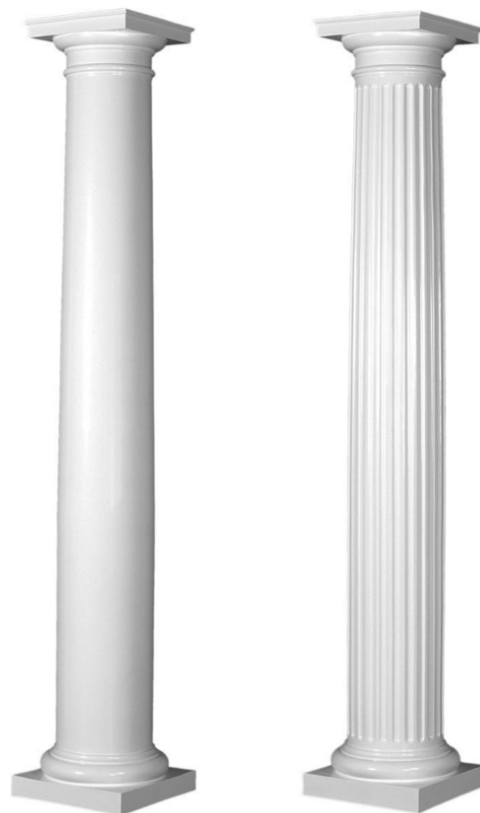
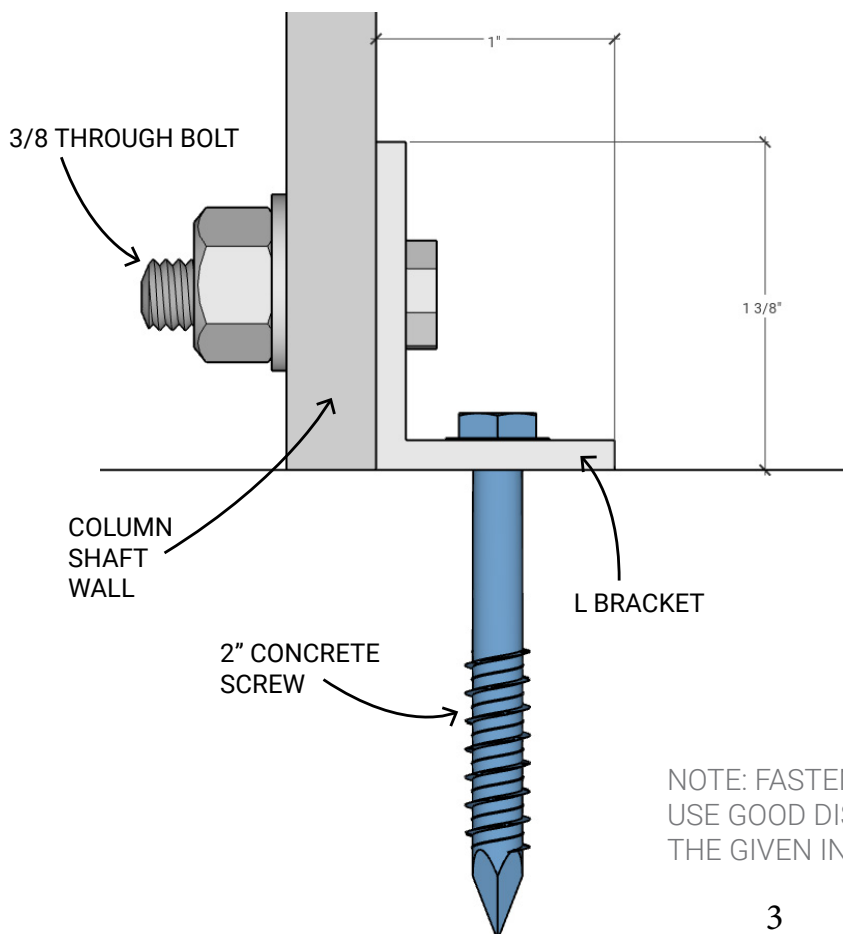
FIGURE 8



IMPORTANT INSTALLATION AND PRODUCT NOTES:

- 8", 10", and 12" diameter columns are factory sanded, but may require minor spot sanding prior to prime and paint.
- Always take appropriate safety precautions including use of protective eye-wear, footwear, gloves, etc.
- If cutting columns to length, cut in a well ventilated area. Use appropriate mask to prevent dust inhalation.
- Handle with care when installing.
- Recommended adhesives include heavy duty Liquid Nails or PL Premium construction adhesive. Always follow adhesive manufacturer's recommendations.
- Poly caps are light in weight compared to alternate materials and are ideal for capital installations susceptible to the effects of gravity. Poly caps are durable, weather resistant, and are painted with same 100% acrylic paint as column and base.
- Minor damages can be repaired with automotive body filler or other filler of choice.
- EnduraStone columns are load bearing. However, installers should always consult with local building codes to ensure adequacy for the given installation.
- If columns are fluted, trimming the shaft to length may interfere with flutes. In this case, flutes may be filled with caulking, or if more pristine finish is preferred, bondo may be used to fill and re-shape flute round ends.
- EnduraStone columns are not intended for free-standing installations. An internal support is generally required for free standing applications such as a pergola or gazebo.
- If top of column and/or capital is exposed, flashing must be installed to close the opening so water and debris may not collect inside of the column and/or capital. Cut flashing slightly larger than cap, then fold edges down over cap.
- **DO NOT fill the inside of the column with sand, concrete, foam, gravel, or any other material.**
- GENERAL DISCLAIMER: Consistent with decorative building product/industry norms, EnduraStone columns may require alterations to product and/or methods depending on site and other conditions. Installation instructions are intended to be general in nature. Installers should always use good discretion.

TYPICAL L BRACKET INSTALLATION DETAIL



NOTE: FASTENING REQUIREMENTS MAY VARY. INSTALLER SHOULD USE GOOD DISCRETION AND USE BEST MEANS AND METHODS FOR THE GIVEN INSTALLATION

EnduraStone Column Installation With Timesaver Cap and Base:

1. Measure the total height of the opening from the floor to the beam/ceiling/soffit. Mark around the bottom of the shaft using the column base or cardboard as a guide, then trim the shaft to the height of the opening using a circular saw with a diamond tipped blade. Cut from bottom of shaft only (figure 1). If load bearing, be sure edges are level, as uneven ends alter load bearing capacities. Use rasp as needed.
2. Determine the top centerline and mark it on the beam/ceiling/soffit. Hang plumb bob from top centerline to determine bottom centerline, then mark bottom centerline. Mark edges where base will be installed, ensuring base will be parallel with edge of porch/soffit/deck by drawing a perpendicular line from edge to center point, then draw a line parallel with the edge (figure 2).
3. Mark and drill holes for bolts at bottom of shaft, then slide base over bottom of column approximately 2-3 feet from bottom so base does not obstruct installation. Attach L brackets with nuts, bolts, and washers (figure 3). Finger-tighten only.
4. Slide cap over the top of the column to neck ring (figure 4).

FIGURE 1

Measure opening height, then mark and trim from bottom of shaft.



FIGURE 2

Determine centerline using plumb bob. Mark floor parallel with edge for base placement.

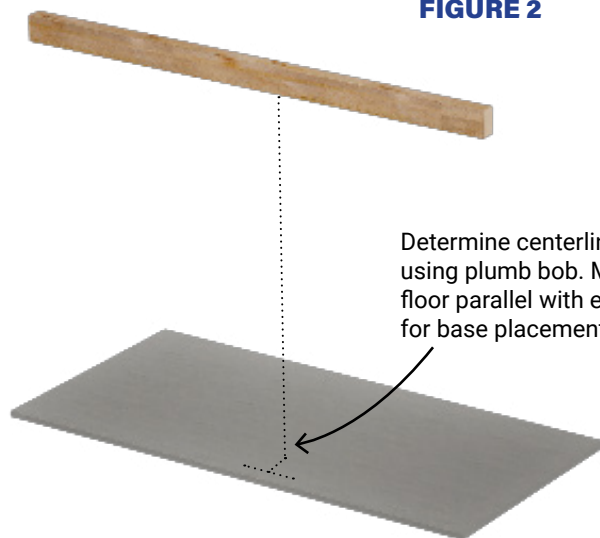


FIGURE 3

Pre-drill holes for L brackets, then fasten L brackets with through bolts, nuts, and washers (finger-tighten only).

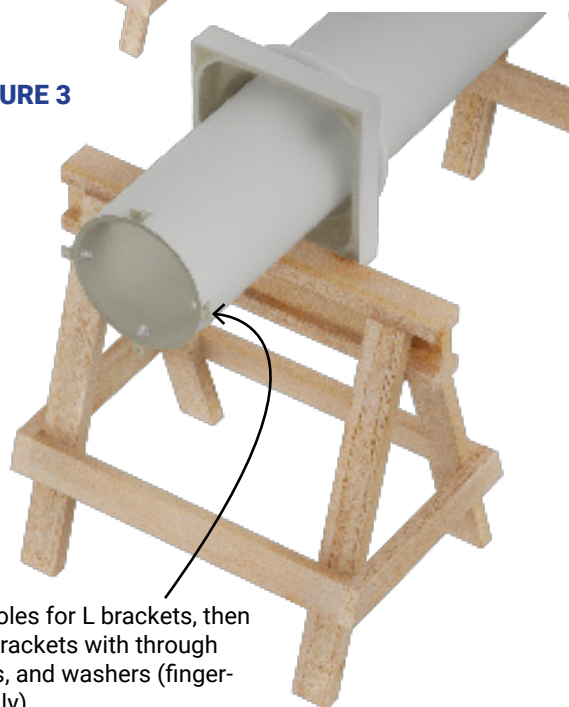


FIGURE 4

Slide cap over top of column until cap contacts neck ring.



EnduraStone Column Installation With Timesaver Cap and Base (Continued):

5. Fasten the Timesaver installation bracket to the beam/ceiling/soffit (figure 5). Ensure bracket is square with beam.
6. With column cap remaining on column, slide top of column shaft into the Timesaver bracket ring (figure 6). Apply adhesive as necessary on top of capital, then slide capital up, contacting beam. NOTE: Beam typically needs to be raised by 1/4" to insert column into Timesaver bracket, then beam is lowered back onto the column.
7. Fasten bottom of column shaft to floor using appropriate fasteners. Apply construction adhesive to bottom edge of base and slide base down to conceal installation brackets.
8. Wipe down columns with a damp rag to remove dust and debris prior to prime and paint. Caulk any gaps (figure 8), then apply a high quality acrylic latex primer and paint.

FIGURE 5



FIGURE 6

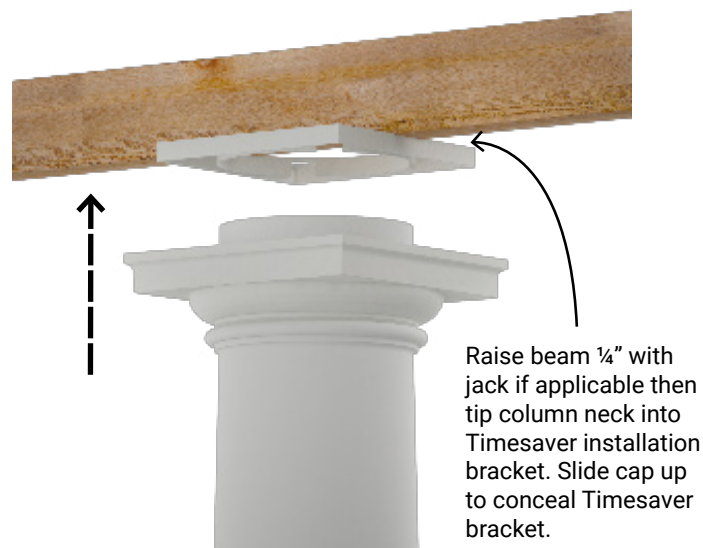


FIGURE 7

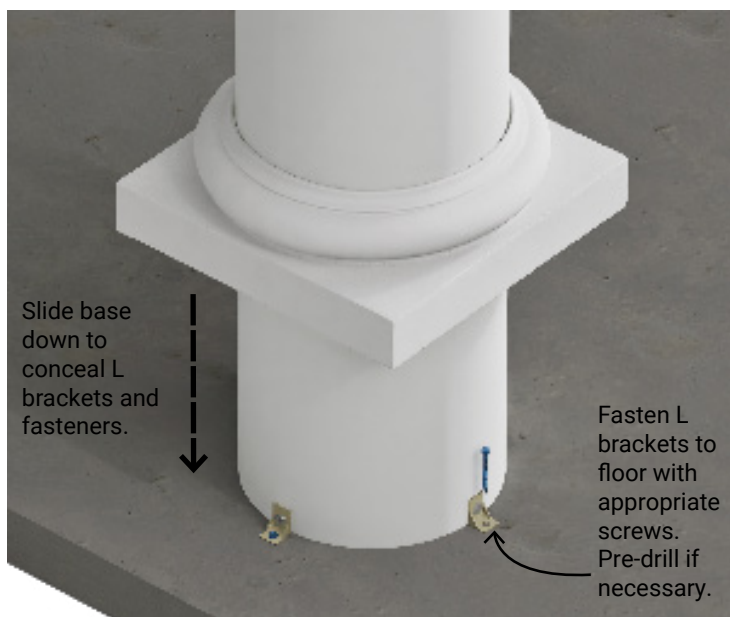
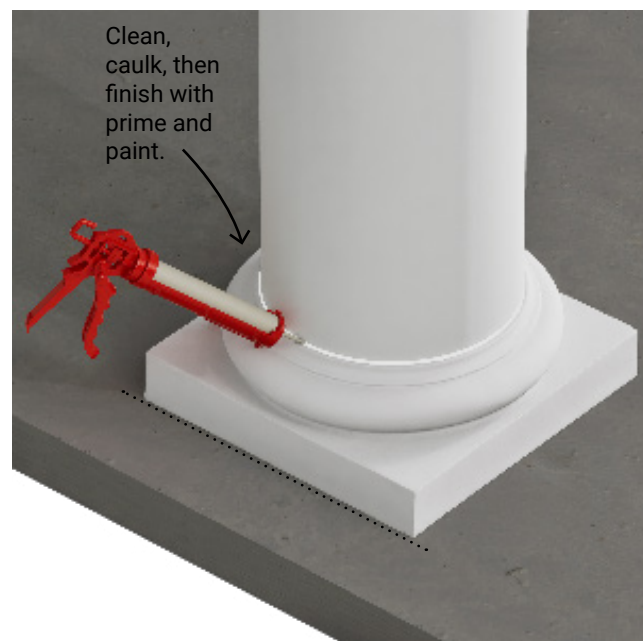


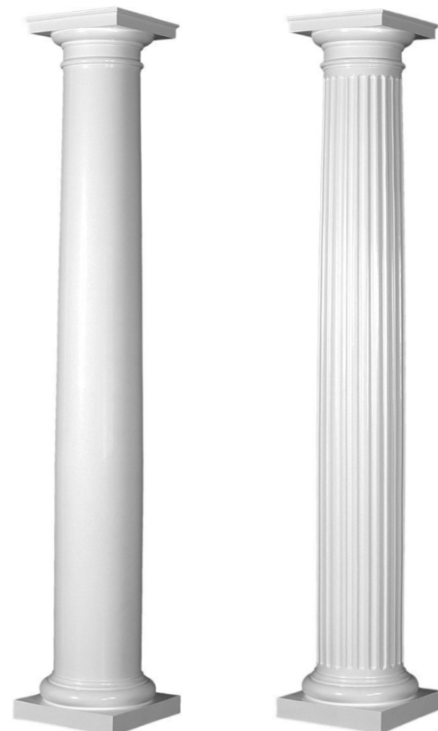
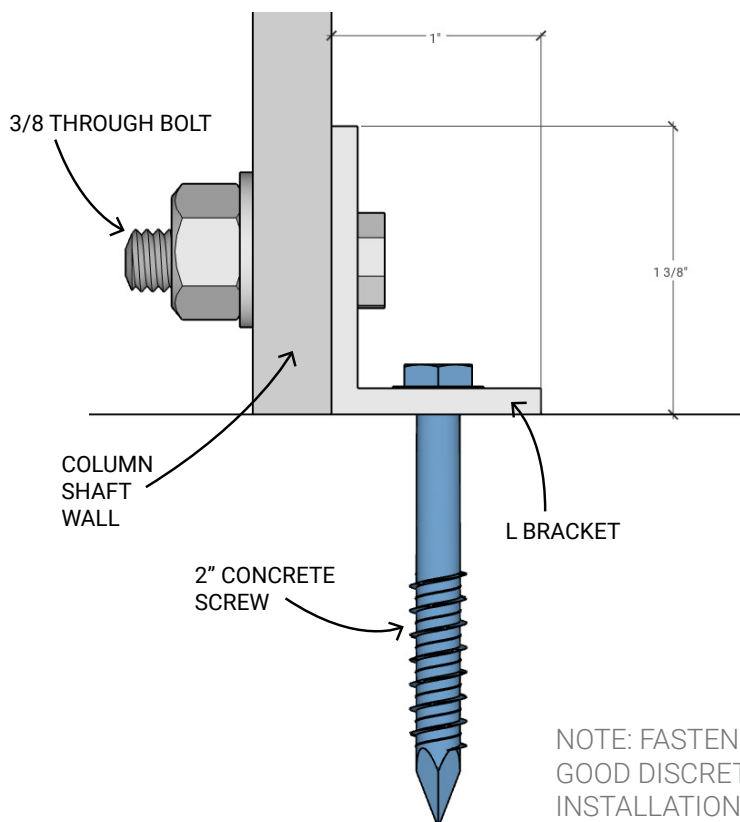
FIGURE 8



IMPORTANT INSTALLATION AND PRODUCT NOTES:

- 8", 10", and 12" diameter columns are factory sanded, but may require minor spot sanding prior to prime and paint.
- Always take appropriate safety precautions including use of protective eyewear, footwear, gloves, etc.
- If cutting columns to length, cut in a well ventilated area. Use appropriate mask to prevent dust inhalation.
- Handle with care when installing.
- Timesaver caps and bases are manufactured from ABS plastic material and are considered the most durable material available, resisting cracking, chipping, denting, and other damages common to column bases. Base and cap are to be primed and painted with same primer and paint as column shaft and will not have visible differences with the column post-finishing.
- Recommended adhesives include heavy duty Liquid Nails or PL Premium construction adhesive. Always follow adhesive manufacturer's recommendations.
- Timesaver bracket may not be suitable for every application. If Timesaver is not suitable, use L brackets at the top of the shaft instead of the Timesaver bracket, and install similarly to recommendations for mounting the bottom of the column.
- Minor damages can be repaired with automotive body filler or other filler of choice.
- EnduraStone columns are load bearing. However, installers should always consult with local building codes to ensure adequacy for the given installation.
- If columns are fluted, trimming the shaft to length may interfere with flutes. In this case, flutes may be filled with caulking, or if more pristine finish is preferred, bondo may be used to fill and re-shape flute round ends.
- EnduraStone columns are not intended for free-standing installations. An internal support is generally required for free standing applications such as a pergola or gazebo.
- If top of column and/or capital is exposed, flashing must be installed to close the opening so water and debris may not collect inside of the column and/or capital. Cut flashing slightly larger than cap, then fold edges down over cap.
- DO NOT fill the inside of the column with sand, foam, gravel, or any other material.
- GENERAL DISCLAIMER: Consistent with decorative building product/industry norms, Endura-Stone columns may require alterations to product and/or methods depending on site and other conditions. Installation instructions are intended to be general in nature. Installers should always use good discretion.

TYPICAL L BRACKET INSTALLATION DETAIL



NOTE: FASTENING REQUIREMENTS MAY VARY. INSTALLER SHOULD USE GOOD DISCRETION AND USE BEST MEANS AND METHODS FOR THE GIVEN INSTALLATION

EnduraStone Column Installation With Ornamental Capitals:

1. Measure the total height of the opening. Remove the top of the column/neck by cutting with a circular saw. Determine overall height after capital is installed by adding the capital height to the shaft height (after removing the columns neck). NOTE: For Roman Corinthian and Temple of Winds capitals, cut to the astragal. For all other ornamental capitals, cut directly below the astraga (figure 1b). Sand top of column until level and smooth.
2. Trim bottom of shaft to height with circular saw, accounting for the height of the capital. The overall height of the shaft, and capital should match the overall height of the opening. Example: Shaft height + capital height = overall height. Base does not add to height and does not need to be factored in when determining overall height. NOTE: If using for decoration only, factor an additional 1/4" for clearance between the capital and the header. See figure 2.
3. Dry-fit capital to the top of the column's astragal and pre-drill four holes through the astragal into the bottom of the capital. Countersink these holes to receive construction screws. Apply a generous amount of heavy-duty construction adhesive to top of astragal before permanently securing capital (figure 3a). Press components together until a tight fit is achieved, and drive screws carefully through the astragal into the bottom of the capital using holes drilled at earlier step (figure 3b).
4. Fasten column to installation surface using L brackets at bottom of shaft (figure 4). Base slides downward to conceal L brackets. Apply adhesive to the top of capital surfaces contacting with header. Pre-drill holes up through abacus of capital into overhead beam/header and countersink to receive screws. Carefully drive screws up through abacus into overhead beam (header) (Figure 3a). See Endura-Stone column install guide for details.

FIGURE 1a

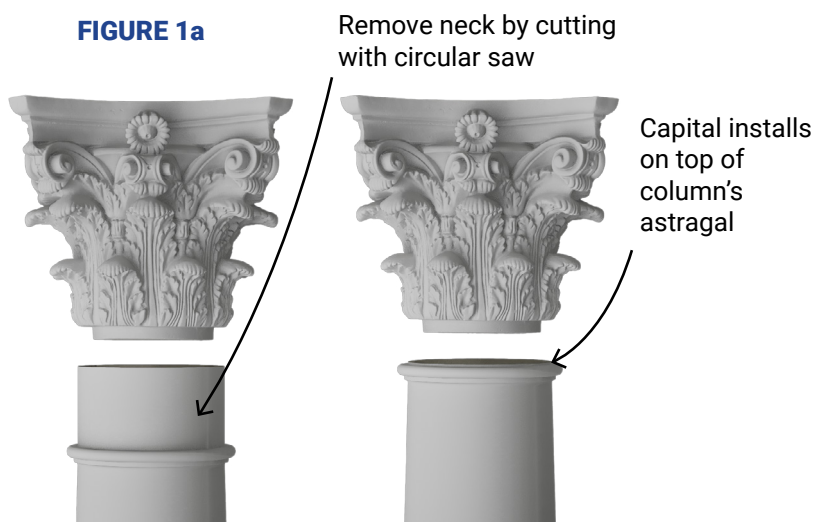
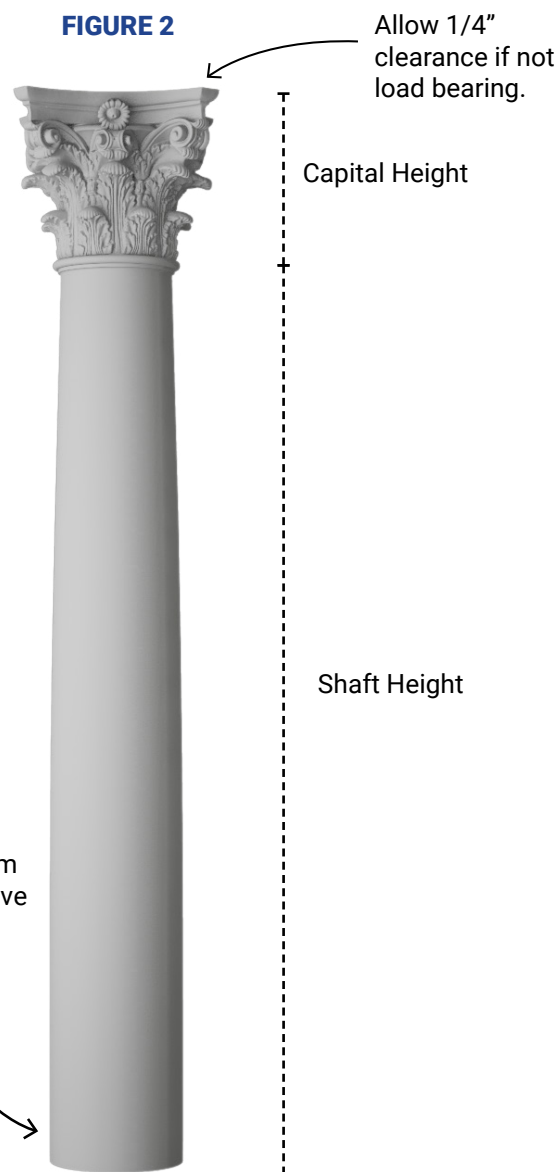
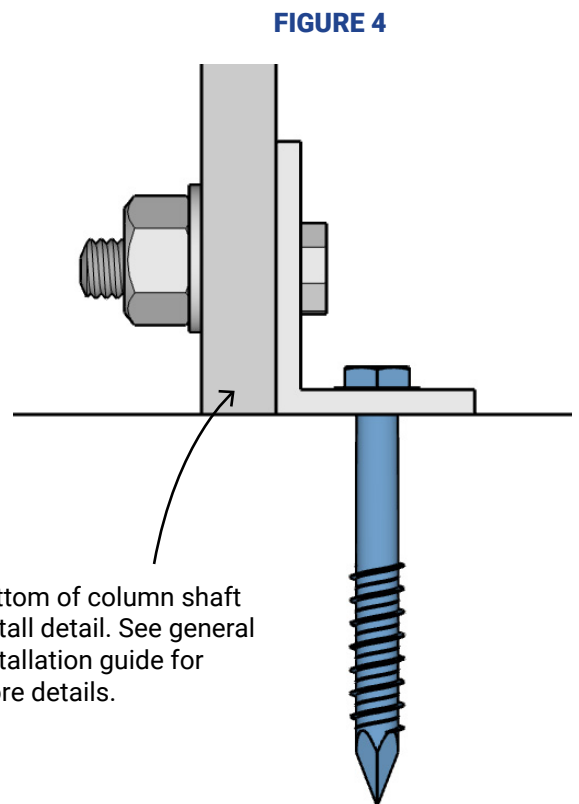
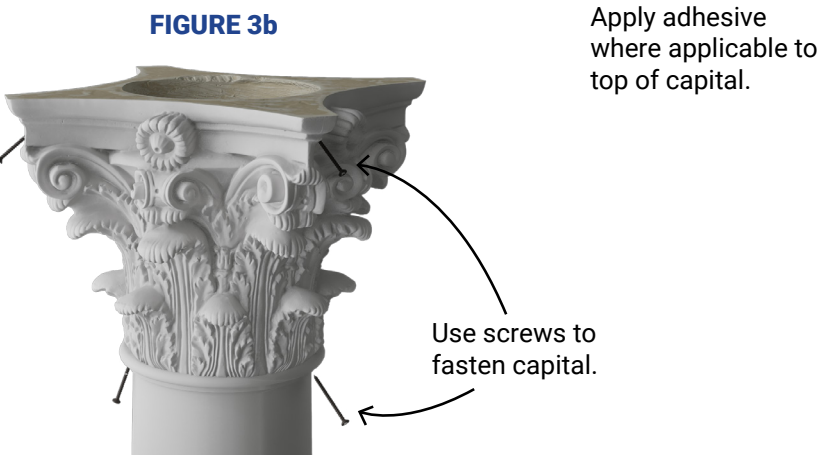
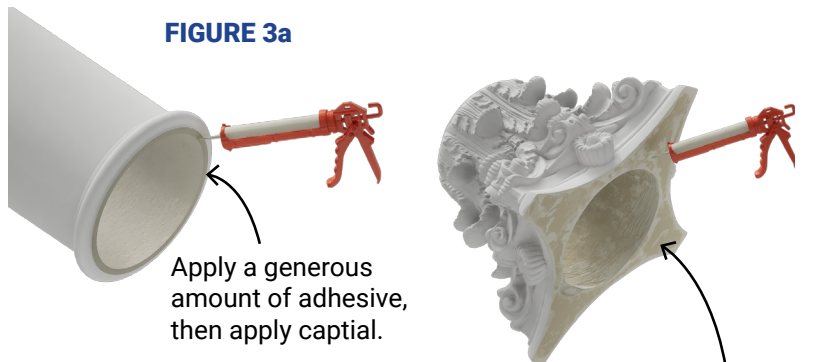


FIGURE 1B



FIGURE 2





IMPORTANT INSTALLATION AND PRODUCT NOTES:

- Ornamental capitals are supplied unfinished and should be painted with a 100% acrylic paint.
- Some capitals including large sizes 18" and over may include a wooden load bearing plug to be installed inside of the capital. Plug is required to be considered load bearing and will be provided with shipment if necessary.
- GENERAL DISCLAIMER: Load bearing products are to be installed at customer's sole discretion. Always check local building codes prior to installation. Instructions are intended to be general in nature and may require on-site modifications to fit varying applications at installer's discretion.
- Ornamental capitals may be split in two halves for assembly around a post or to be installed as a pilaster. In this case, use heavy duty construction adhesive to glue capitals back together, or up to the installation surface. NOTE: Ornamental capitals have a narrower inside hole than the shaft itself. Capital must be able to clear post if installing in such application. Contact for details. Split capitals are not load bearing.
- Capitals may have minor defects due to the nature of poly-resin molded capital manufacturing and may require sanding and minor touch up prior to installation.
- Flashing may be applied at installer's discretion. Water and other debris should not be allowed to collect inside of column and capital.
- Use caution when driving screws to avoid cracking material; always pre-drill and do not over-tighten.



EnduraStone Split Column Re-Assembly Installation : Method One (Installing With Body Filler Split Kit)

1. Measure the total height of the opening from the floor to the beam/ceiling/soffit. Mark around the bottom of the shaft using the column base or cardboard as a guide, then trim the shaft 1/4" shorter than the opening height (for expansion) using a circular saw with a diamond tipped blade. Cut from bottom of shaft only (figure 1).
2. Mark and drill holes for bolts at top and bottom of shaft. Attach L brackets with nuts, bolts, and washers. Finger-tighten only (figure 2).
3. Erect column halves and place around post. Slide zip ties through spacer slots, then zip tie the column halves together with spacers separating the halves, creating a consistent gap the entire length of the column (figure 3).
4. Fasten L brackets at top and bottom with the appropriate screws for the application. Screw type and anchoring requirements may vary (figure 4).

FIGURE 1

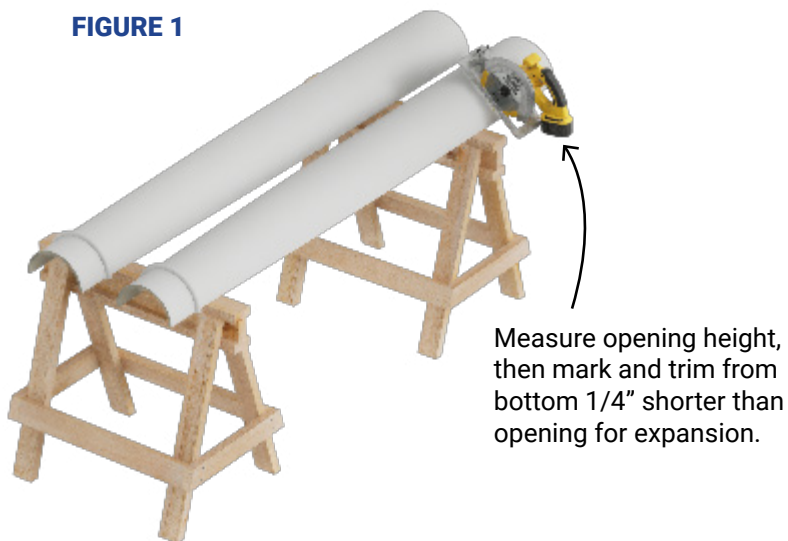


FIGURE 2



Fasten L brackets to top of column (finger tighten). Repeat at bottom of column.

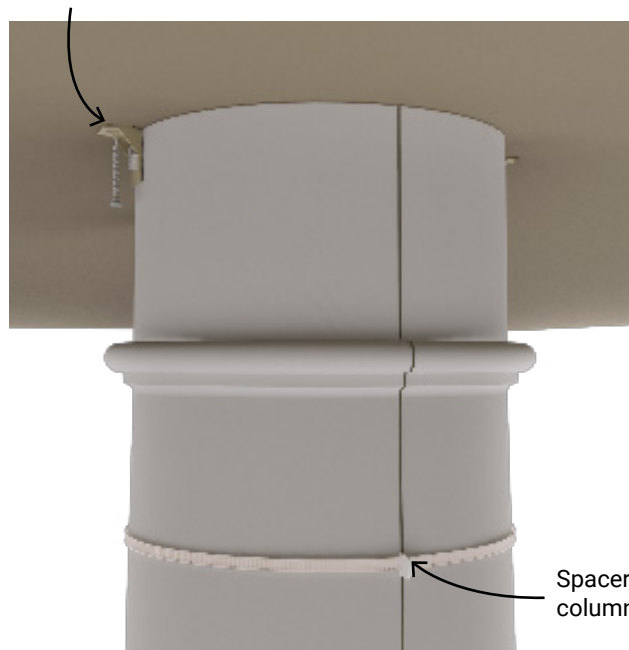
Thread zip ties through spacers and strap halves together with spacers separating the halves.

FIGURE 3



Use appropriate screws to fasten L brackets at top. Repeat on bottom.

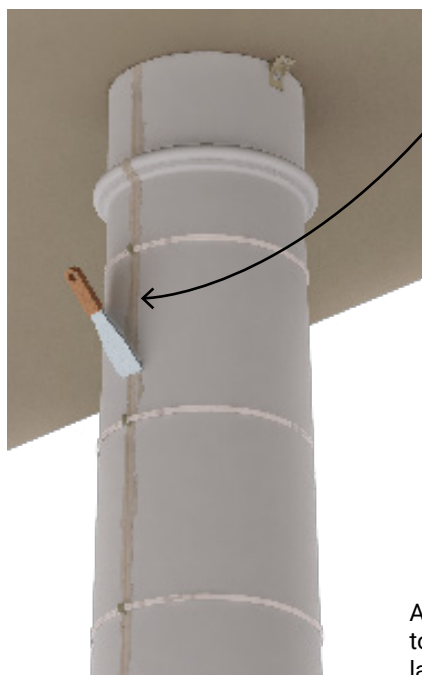
FIGURE 4



EnduraStone Split Column Re-Assembly Installation : Method One (Installing With Body Filler Split Kit)

5. Mix body filler, then fill the gap created by spacers with body filler (figure 5). Continue until complete on both sides of shaft. After all body filler is fully cured, remove spacers, then fill holes left by spacers using same technique. Note: body filler typically hardens in approximately 10-15 minutes. Mix body filler in small batches at a time (approximately golf-ball sized globs). Follow manufacturer's recommendations.
6. Cut or remove straps, then sand shaft seam thoroughly. After sanding shaft, apply adhesive to the ends and bottom perimeter of base, then adhere base around shaft (figure 6a). Apply adhesive to ends and top perimeter of cap and adhere around shaft. With adhesive applied to top of cap's perimeter, use pin nails or screws to secure cap in place (figure 6b). NOTE: Cap may require screws to secure for larger sizes. Installer should use discretion.
7. Thoroughly wipe down column. Prime and paint with 100% acrylic. Caulk any gaps.

FIGURE 5



Apply body filler between gap created by spacers on both sides. Cut straps and remove spacers after complete, then apply body filler over spacer holes.

Sand seam/excess body filler thoroughly.

FIGURE 6a



Apply adhesive to ends and bottom of base and adhere. Use straps, or large zip ties to secure while adhesive cures.

Apply adhesive to ends and top of cap, Use straps, or large zip ties to secure while adhesive cures. Use pin nails or screws to secure.

FIGURE 6b



FIGURE 7



Wipe down column thoroughly, removing any dust or debris, then prime and paint. Caulk any gaps if necessary.

EnduraStone Split Column Re-Assembly Installation : Method Two (Installing With Adhesive)

1. Measure the total height of the opening from the floor to the beam/ceiling/soffit. Mark around the bottom of the shaft using the column base or cardboard as a guide, then trim the shaft $\frac{1}{4}$ " shorter than the opening height (for expansion) using a circular saw with a diamond tipped blade. Cut from bottom of shaft only (figure 1).
2. Mark and drill holes for bolts at top and bottom of shaft. Attach L brackets with nuts, bolts, and washers. Finger-tighten only (figure 2).
3. Apply construction adhesive to edges of half columns (figure 3).
4. Assemble column around post (figure 4). Use clamps, straps, or large zip-ties to strap halves together, maintaining pressure for 24 hours or until adhesive is fully cured (follow adhesive manufacturer recommendations).

FIGURE 1

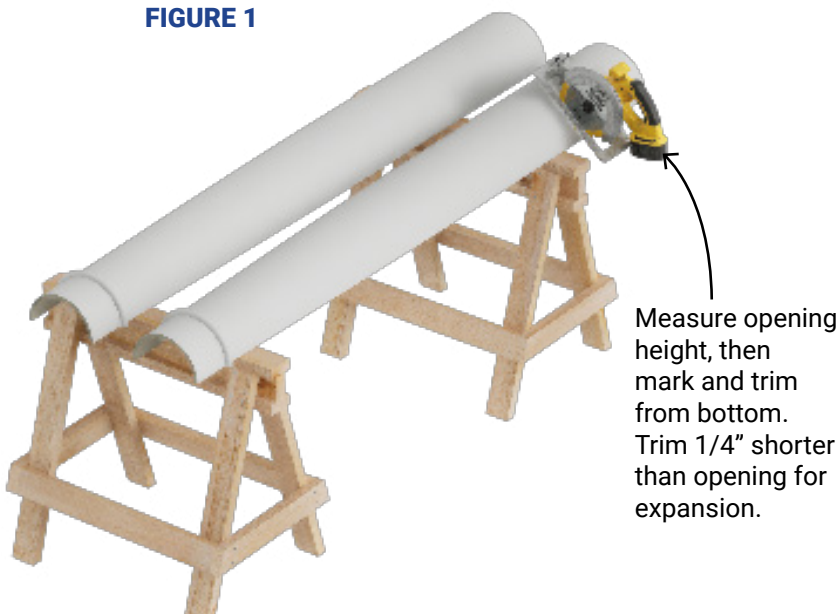


FIGURE 2

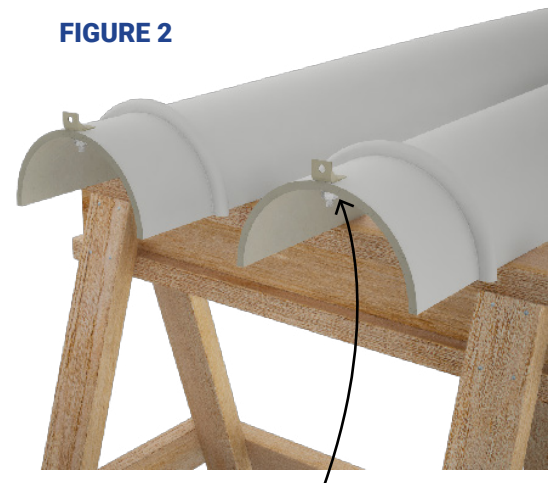


FIGURE 3

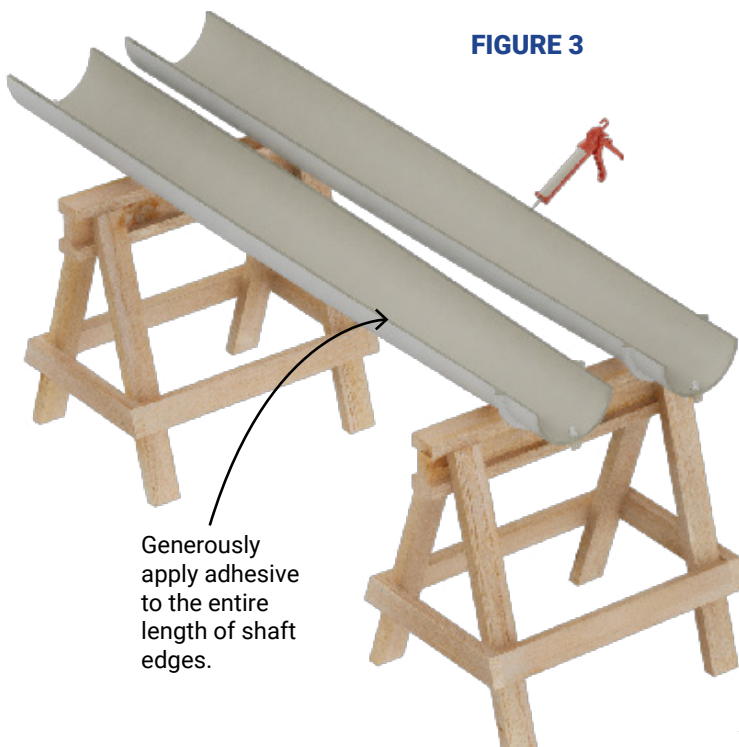
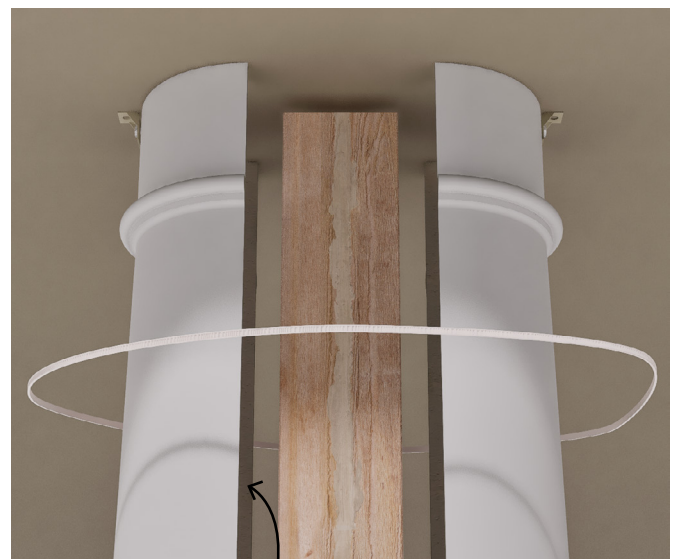


FIGURE 4



EnduraStone Split Column Re-Assembly Installation : Method Two (Installing With Adhesive)

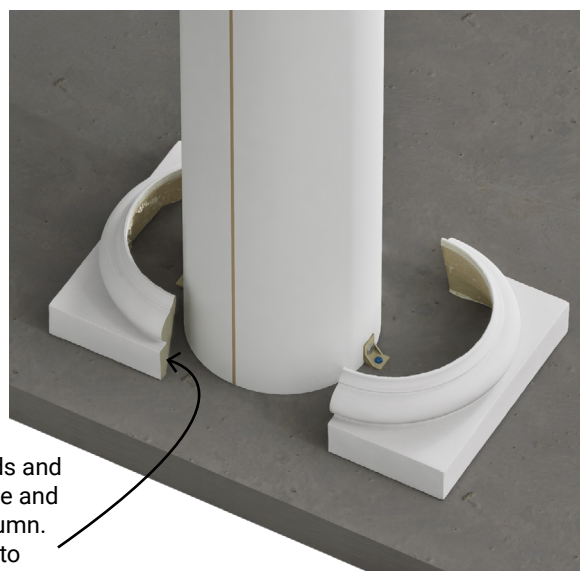
5. Fasten L brackets at top and bottom with the appropriate screws for the application. Screw type and anchoring requirements may vary (figure 5).
6. Apply adhesive adhesive to the ends and top of capital, and ends and bottom of the base, then adhere cap and base around the column shaft. Use clamps, straps, or large zip ties to apply pressure to cap and base halves while adhesive cures. With adhesive applied to top of capital, slide capital up to surface, then pin nail or use trim screws to secure (figure 6a and 6b). NOTE: Some installations, or larger columns may require trim screws instead of pin nails to secure capital. Installer to use discretion.
7. Cut or remove straps. If desired, apply an automotive body filler over the column seam, then sand down prior to priming and painting. This can be done before or after step six. Caulk any gaps, clean, then prime and paint with 100% acrylic.

FIGURE 5



Use appropriate screws to fasten L brackets at top. Repeat on bottom.

FIGURE 6a



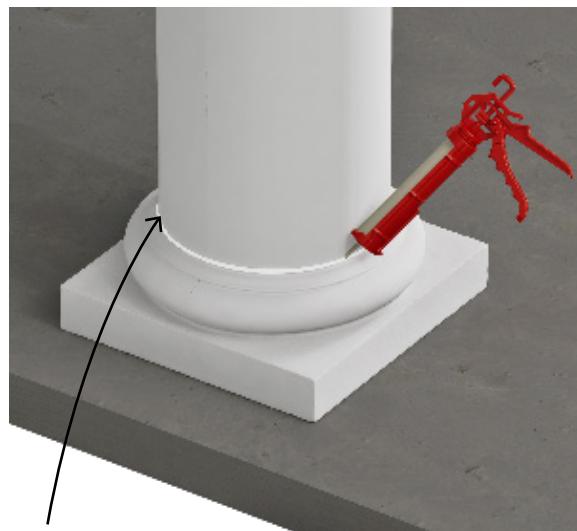
Apply adhesive to ends and the bottom of the base and assemble around column. Use zip ties or straps to secure. Adhesive on bottom of base secures base to floor.

FIGURE 6b



Apply adhesive to ends and top of cap, and assemble around column. Use zip ties or straps to apply pressure to cap halves. Slide cap up to surface and pin nail or screw to secure.

FIGURE 7

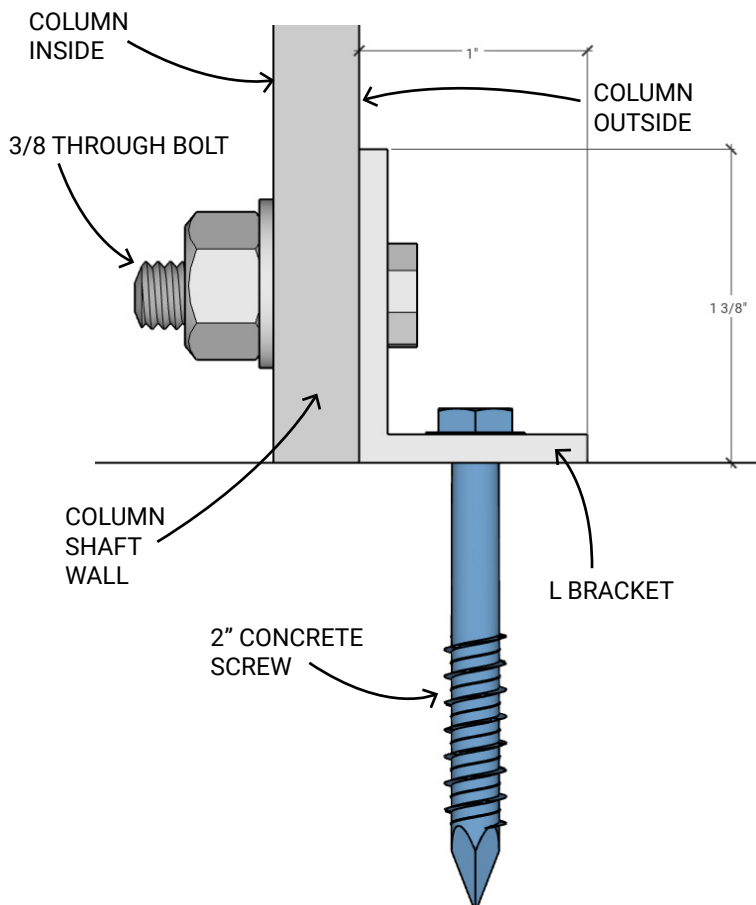


Apply automotive body filler if desired to conceal seam, sand, clean then prime and paint. Caulk any gaps as needed.

IMPORTANT INSTALLATION AND PRODUCT NOTES:

- 8", 10", and 12" diameter columns are factory sanded, but may require minor spot sanding prior to prime and paint.
- Always take appropriate safety precautions including use of protective eyewear, footwear, gloves, etc.
- If cutting columns to length, cut in a well ventilated area. Use appropriate mask to prevent dust inhalation.
- Handle with care when installing.
- Recommended adhesives include heavy duty Liquid Nails or PL Premium construction adhesive. Always follow adhesive manufacturer's recommendations.
- Minor damages can be repaired with automotive body filler or other filler of choice.
- If columns are fluted, trimming the shaft to length may interfere with flutes. In this case, flutes may be filled with caulking, or if more pristine finish is preferred, bondo may be used to fill and re-shape flute round ends.
- If top of column and/or capital is exposed, flashing must be installed to close the opening so water and debris may not collect inside of the column and/or capital. Cut flashing slightly larger than cap, then fold edges down over cap.
- **DO NOT fill the inside of the column with sand, concrete, foam, gravel, or any other material.**
- GENERAL DISCLAIMER: Consistent with decorative building product/industry norms, Endura-Stone columns may require alterations to product and/or methods depending on site and other conditions. Installation instructions are intended to be general in nature. Installers should always use good discretion.

TYPICAL L BRACKET INSTALLATION DETAIL



EXPLODED VIEW



NOTE: FASTENING REQUIREMENTS MAY VARY. INSTALLER SHOULD USE GOOD DISCRETION AND USE BEST MEANS AND METHODS FOR THE GIVEN INSTALLATION.