



10 Step Installation Instructions

1 PLAN AND PREPARE

- a.) Check your local zoning laws for placement restrictions, such as height and distance from sidewalks or roads.
- b.) Contact your local “One Call Before You Dig” number to have a utility employee mark out all utility lines.
- c.) Walk a large piece of cardboard around your proposed placement location. Having a visual cue can aid in selecting where to place the sign for traffic flow and other obstacles such as trees and sprinkler lines.
- d.) For larger signs, determine if a backhoe should be rented to excavate the foundation hole and arrange for rental if necessary. *This should be considered for sign faces five feet by eight feet and larger.*
- e.) Arrange for concrete delivery on the day of your excavation. The amount of concrete needed is listed in your installation kit. It is wise to order extra to provide for spillage or overdigging.
- f.) Arrange for an electrician to illuminate your sign on the day it is installed.
- g.) Have the sign crew watch the ESCO Manufacturing Sign Installation Instruction Video, available through download or your sign representative, if possible.

2 GATHER MATERIALS

- a.) From your sign installation kit:
 1. Complete installation instructions
 2. Foundation detail specific to your sign model.
 3. Mounting pattern template.
 4. 10-Step Checklist
 5. Anchor bolts (if ordered).
 6. Nuts and washers (if ordered).
 7. Vandal cover key (if sign includes a vandal cover).
- b.) Installation tools:
 1. Hammer.
 2. Shovels
 3. Level and Carpenter’s Square.
 4. Drill and Drill bit, specific to the measurement provided on your template.
 5. Adjustable crescent wrench.
 6. Tape measure.
 7. Wheelbarrow.
 8. Concrete finishing tools.
- b.) Installation materials:
 1. Can of brightly colored spray paint.
 2. Wooden stakes.
 3. Precut rebar of the lengths, diameter and quantity noted in your foundation detail.
 4. Nails or screws.
 5. Electrical conduit.
 6. Six two-by-fours of the length specified in your installation instructions.
 7. Plank or piece of strong plywood.
 8. Wire ties.
 9. Duck tape.



3 EXCAVATE YOUR FOUNDATION

- a.) Build a wooden form from the two-by-fours using the foundation detail in your installation kit as a guideline.
- b.) Find the center point of your foundation location and place your foundation form on the ground. Remeasure to make sure your sign location is within zoning restrictions for placement. Square your foundation form to any locations such as a road or driveway that you want your sign aligned with.
- c.) Spray paint the ground along the inside of your foundation frame.
- d.) Remove the wooden frame and dig to the depth specified in your foundation detail. Measure regularly. Do not backfill the hole if you dig too deep or too broad; instead, you will use your extra concrete to compensate.



4 PREPARE YOUR ELECTRICAL ROUTE AND FOUNDATION FOR FILLING

- a.) Locate the wall of the excavation closest to your power source.
- b.) Using a stake or piece of rebar, knock a hole in the wall closest to the power source, approximately six inches deep and eighteen inches down from the lip of the hole.
- c.) Replace the form over the hole, and pound wooden stakes into each corner.
- d.) Using the level, make sure the form is in a level position on all sides.



- e.) Nail or screw the form to the stakes to stabilize it.

5 CONSTRUCT THE ANCHOR BOLT ASSEMBLY

- a.) Tape the mounting pattern template to the plank or plywood as noted on your instruction sheet.
- b.) Using a nail, mark the “X-marks” printed on the template onto the plank for the anchor bolt and electrical conduit locations.
- c.) Remove the nails and template and drill the holes to the width specified on your installation instructions.
- d.) Thread a nut and washer onto each of the anchor bolts, leaving three and one half inches of bolt above the nut and washer. Insert your anchor bolts through the plank template and add the top nut and washer, tightening them with an adjustable wrench.



- e.) Following the foundation instructions, fasten the rebar to the anchor bolts using the wire ties, building a cage-like structure.
- f.) Insert the electrical conduit through its hole in the template and tape the ends closed. Be sure to cement the elbow joints as well.
- g.) Wrap the threads, nuts and washers on the anchor bolts with duct tape to prevent fouling with cement.

6 SECURE THE ANCHOR BOLT ASSEMBLY IN THE FOUNDATION

- a.) Place your anchor bolt assembly in the hole, with the electrical conduit end closest to the power source.
- b.) Add a one and one half inch shim between the wooden template and the foundation form frame to lift the lower nuts out of the concrete that will be poured.
- c.) Be sure your anchor bolts are plumb and level, and nail or screw your template to the foundation form.

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d.) Insert the lower end of the electrical conduit into the hole in the side of the excavation. Pack soil tightly around the conduit, filling its entry hole, to prevent it from becoming encased in concrete.

7 POUR AND FINISH THE CONCRETE

a.) Pour your concrete into the foundation hole, being careful not to move your foundation frame or your anchor bolts in their template.

b.) Use a shovel to stir the cement around the anchor bolts and rebar to prevent air pockets from forming and to create an even fill.

c.) Tap the wooden frame around its edges to release any air pockets.

d.) Smooth and finish concrete edges as 'desired.

e.) The foundation will take between three and five days for the cement to cure, based on the size of the foundation, local weather and soil conditions.



8 RECEIVING THE SIGN

a.) Remove the sign from the delivery truck. Be sure you have enough people on hand for unloading. Be aware your sign may arrive in more than one crate.

b.) Inspect your sign carefully for any damage. In the unlikely event your sign arrives damaged, mark the damage on the delivery receipt and call your sign representative. If the damage is excessive, refuse shipment so a replacement sign can be sent as soon as possible.

c.) Uncrate the sign, being careful not to scratch the paint. If the paint does become scratched, touch-up paint is included in your sign shipment.

d.) Assemble your sign if necessary. If your sign comes in multiple sections, assembly instructions will be included. Most ESCO series signs come pre-assembled.



9 POSITIONING THE SIGN

a.) Remove the protective duck tape and the wooden template from the anchor bolts and electrical conduit. Set the top nuts and washers for each bolt to the side.

b.) Tip the sign up onto the anchor bolts. Use a piece of wood such as a two-by-four under the base plate on the sign to raise it up to the level of the bolts as shown. Your sign should slide easily onto the anchor bolts in the foundation. Remove the two-by-four.

c.) Thread the top nuts and washers back onto the anchor bolts over the base plate. Hand tighten.

d.) Using the nuts under the base plate, level the sign front to back, and left to right.

e.) Once the sign is level, firmly tighten the top nuts. Add the locking nuts and tighten securely.



10 TOUCH-UP AND INSTALLATION COMPLETION

a.) Using the access panel at the bottom of the sign and feed through the electrical wiring.

b.) Using the touch-up paint provided, cover any minor scratches that may have occurred during installation. If your sign came in multiple sections, also cover the assembly bolts with paint for a uniform look.

c.) If your sign has changeable copy-track, insert your lettering for your desired message.

d.) Your licensed electrician will complete the wiring for illumination.

