

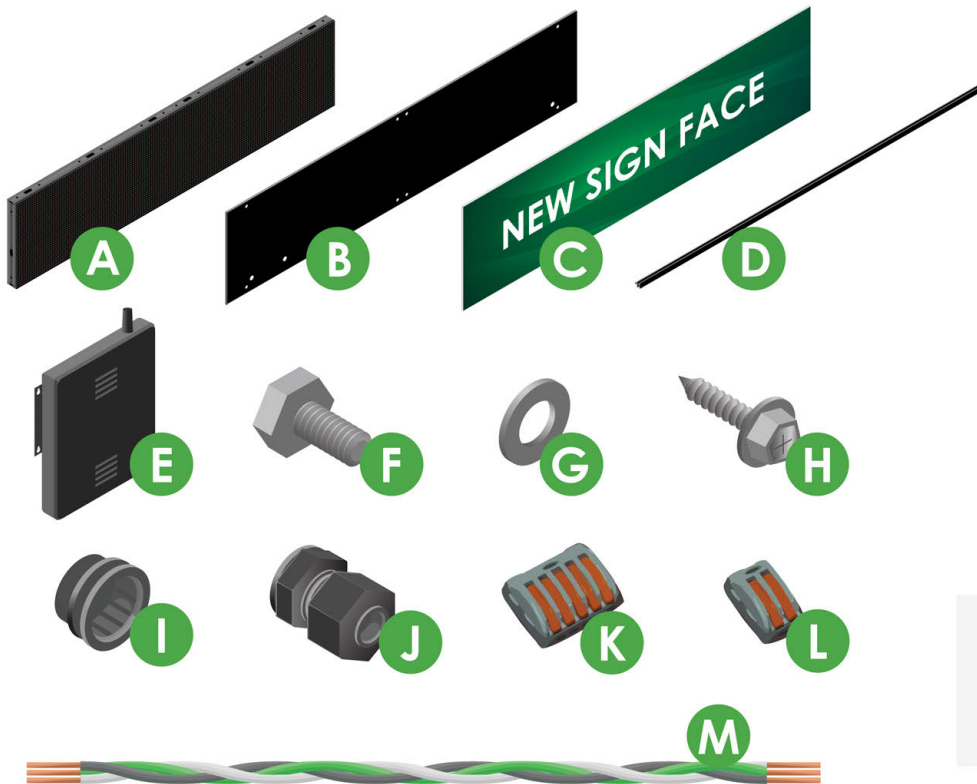
ATLAS LED CONVERSION KIT INSTALLATION GUIDE

CAUTION

Stewart Signs requires a licensed electrician for all electrical work.
 Each conversion kit is designed to work with either 120V or 240V electrical service.
 You must confirm your electrical service at the sign site matches your conversion kit before proceeding.
 Note that these modifications to your sign will void any existing UL Listed status.

You Should Have Received the Following Items

STEWART SIGNS PROVIDED



- A:** LED display(s)
- B:** Back panel(s)
- C:** Flat sign face(s)
- D:** Divider bar(s)
- E:** Control box
- F:** Bolts
- G:** Washers
- H:** Self-tapping screws
- I:** Cable grommets
- J:** Cable strain relief
- K:** Wire connectors (5 lever)
- L:** Wire connectors (2 lever)
- M:** Electrical wire(s)

If double-sided:
N: Ethernet coupler
O: Zip tie and sticky pad

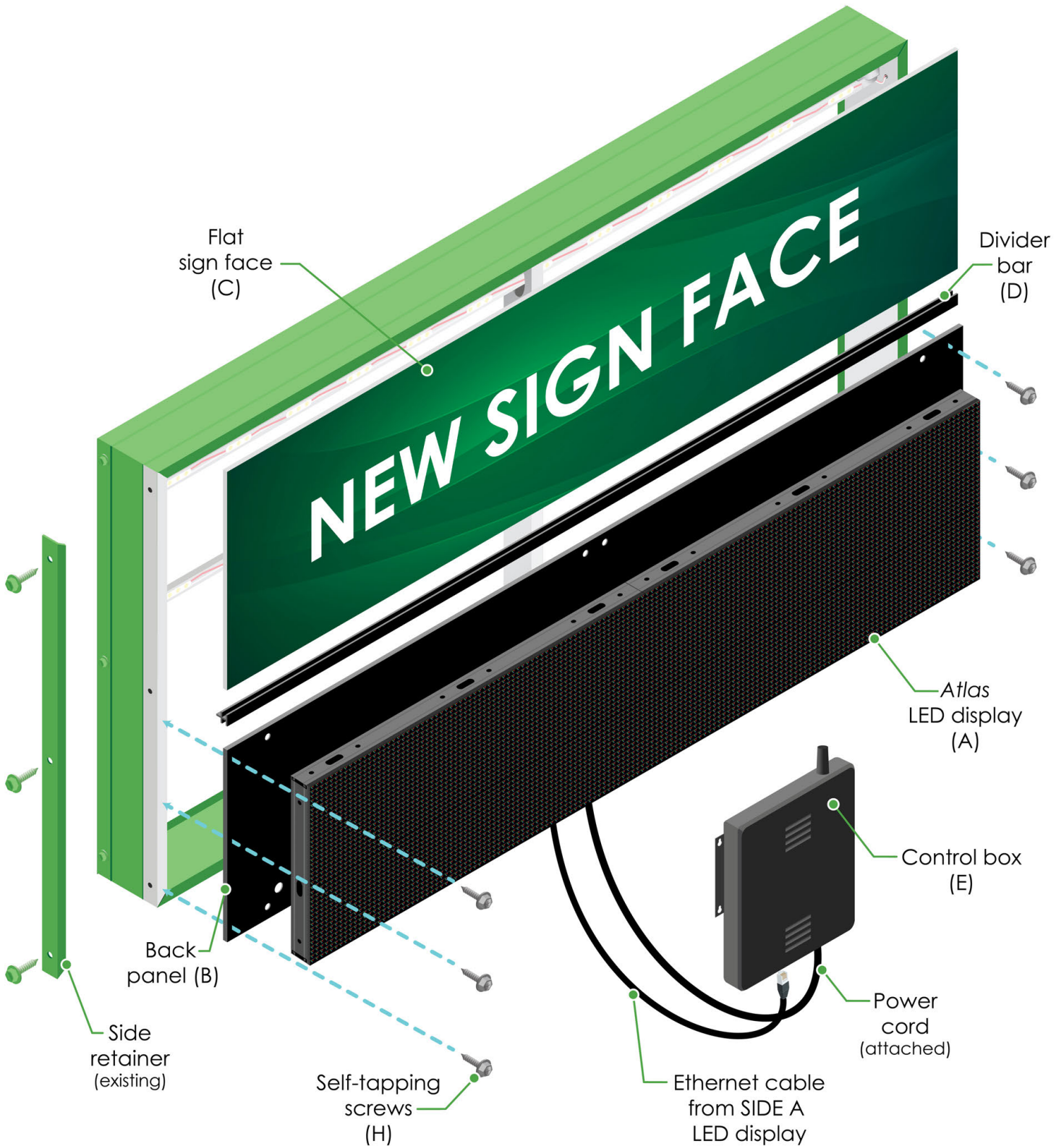
You Will Need the Following Items

CUSTOMER OR INSTALLER PROVIDED

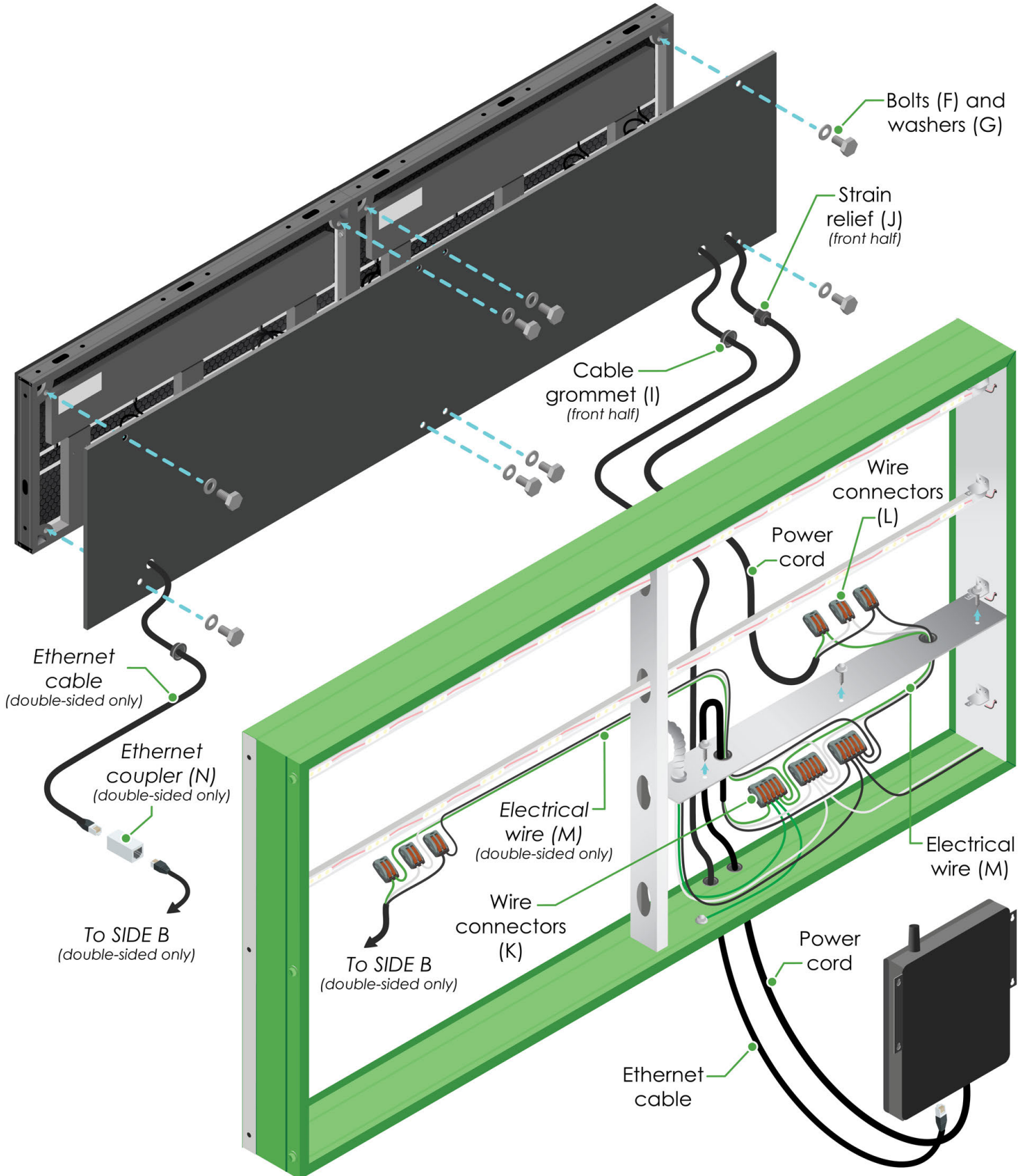


- P:** Socket wrench and sockets
- Q:** Drill/driver
- R:** Step drill bit or 7/8" hole saw for metal
- S:** Electrical wire stripper

OVERVIEW - FRONT



OVERVIEW - BACK



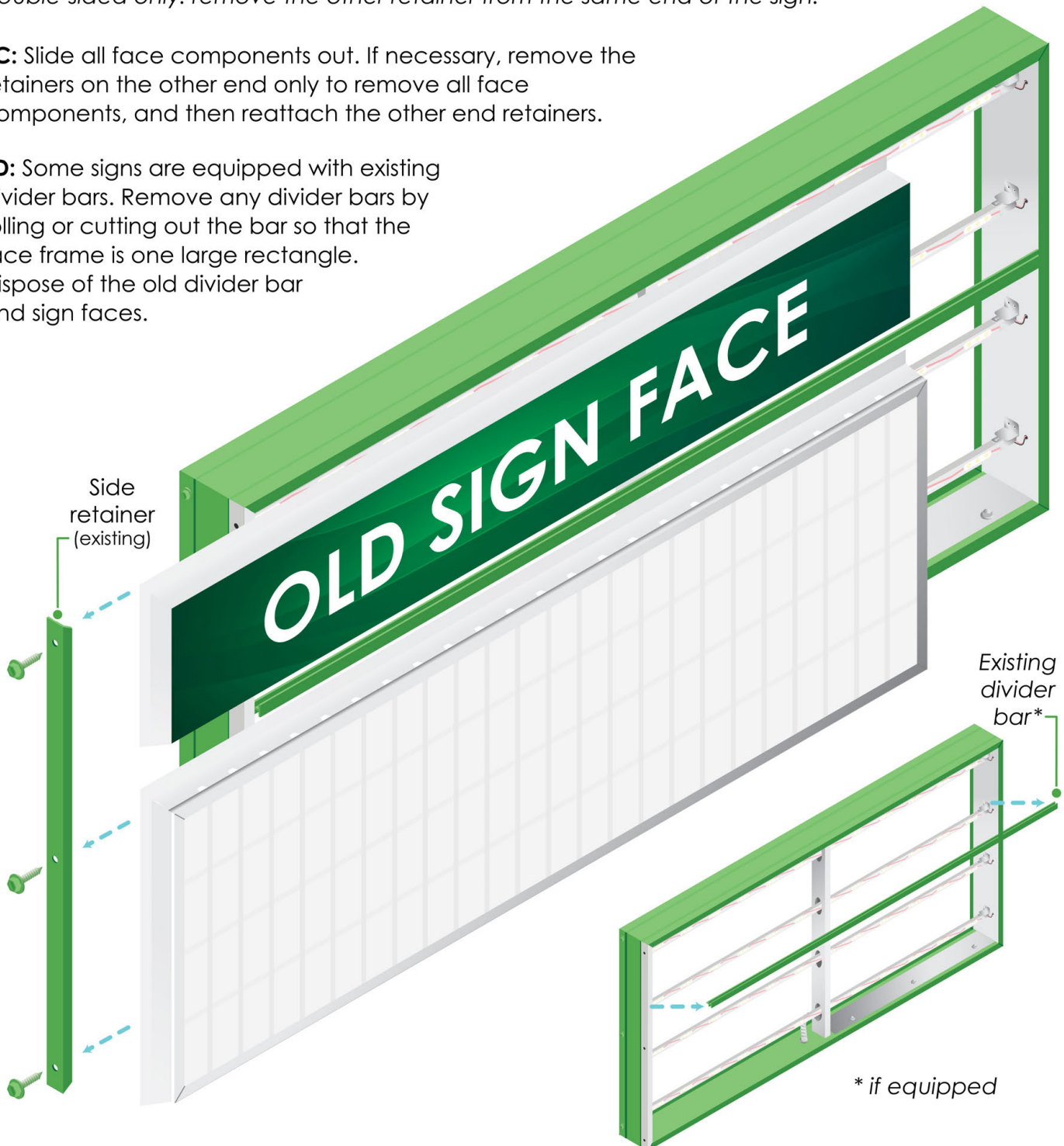
STEP 1: Remove Sign Faces and Divider Bars

1A: Turn electric service off to the sign site by turning the circuit breaker to the off position in your electrical service panel. Check that the sign is not energized before proceeding.

1B: Remove side retainer screws from ONE END of the sign. Remove the side retainer.
Double-sided only: remove the other retainer from the same end of the sign.

1C: Slide all face components out. If necessary, remove the retainers on the other end only to remove all face components, and then reattach the other end retainers.

1D: Some signs are equipped with existing divider bars. Remove any divider bars by rolling or cutting out the bar so that the face frame is one large rectangle. Dispose of the old divider bar and sign faces.



STEP 2: Remove Lower Internal Lighting

NOTE: If your sign is equipped with internal fluorescent lamps, you may choose to upgrade your internal lighting to LED at this time with a separately purchased LED illumination kit, or leave your fluorescent lamps in place. Because fluorescent lamps are wired in a series, removal of one or more will result in all lamps going out. Future replacement of the lower fluorescent lamps after this LED conversion kit is installed will require partial removal of the LED display.

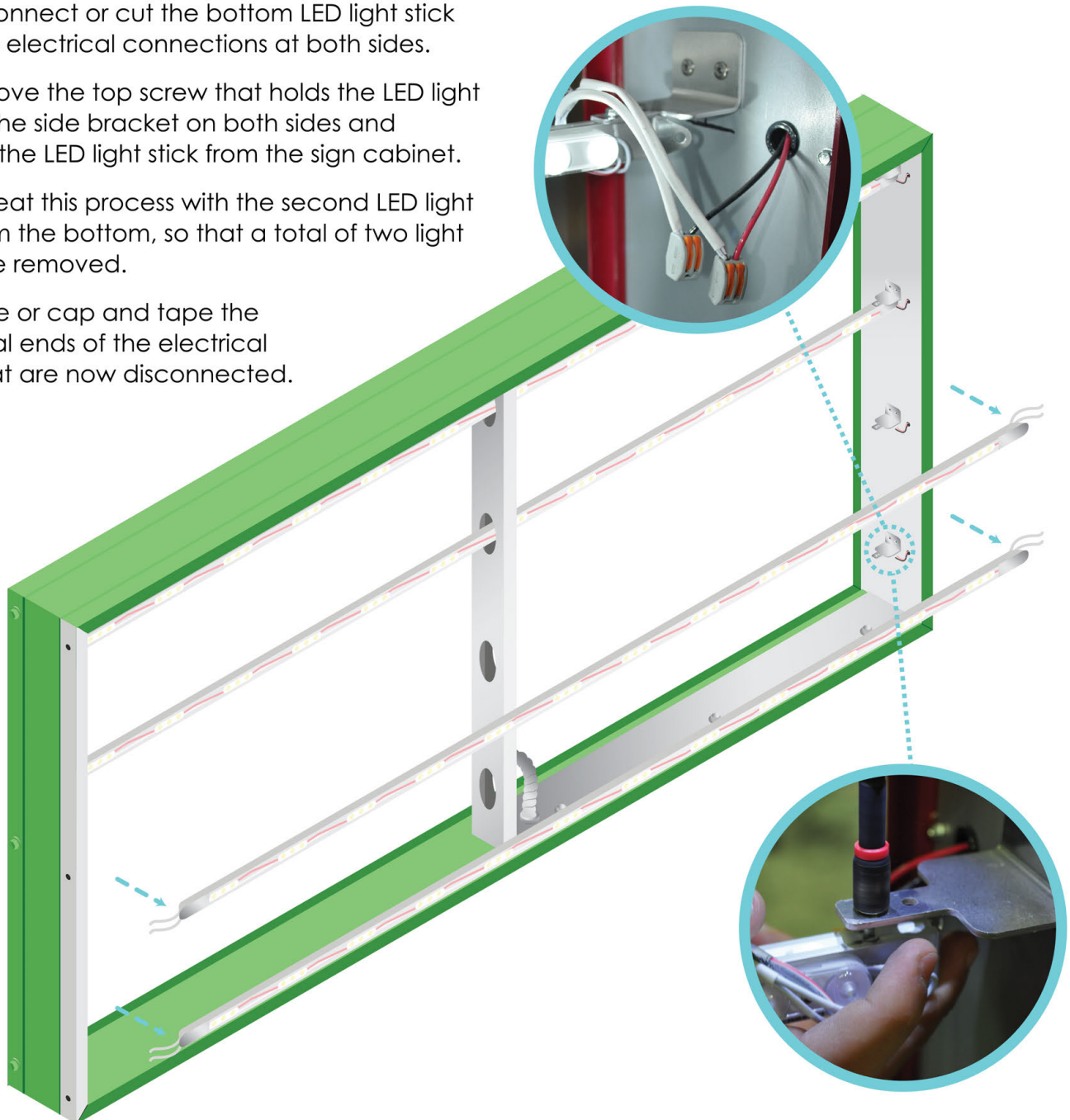
If your sign is equipped with internal LED lighting, follow the procedure below.

2A: Disconnect or cut the bottom LED light stick from the electrical connections at both sides.

2B: Remove the top screw that holds the LED light stick to the side bracket on both sides and remove the LED light stick from the sign cabinet.

2C: Repeat this process with the second LED light stick from the bottom, so that a total of two light sticks are removed.

2D: Close or cap and tape the individual ends of the electrical wires that are now disconnected.

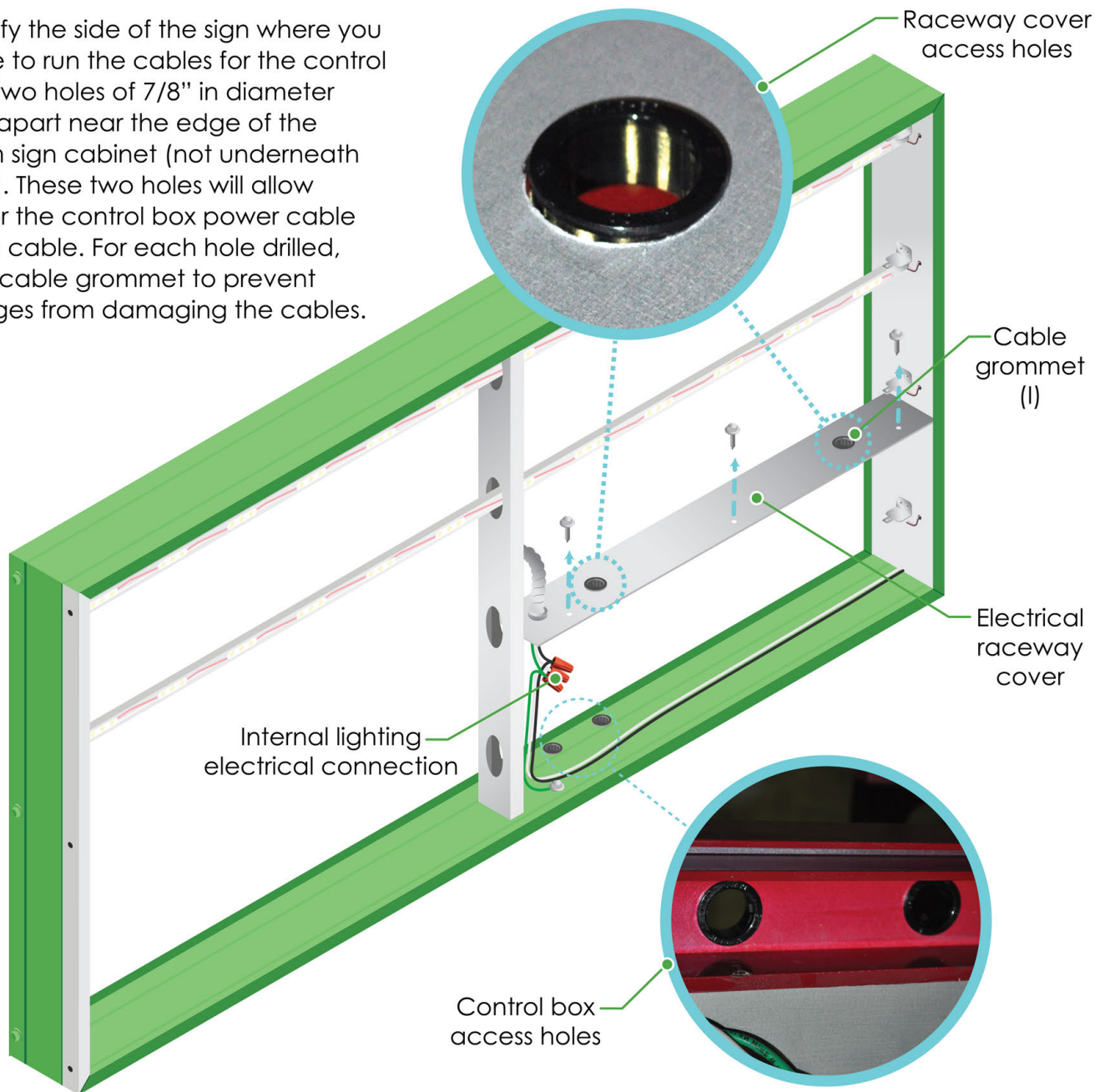


STEP 3: Drill Cable Access Holes

3A: Remove the screws holding down the bottom electrical raceway and lift raceway cover. Locate where the lighting connects to the electrical wires and grounding wire under the raceway. Disconnect or cut these wires, ensuring that there is enough wire to connect back together.

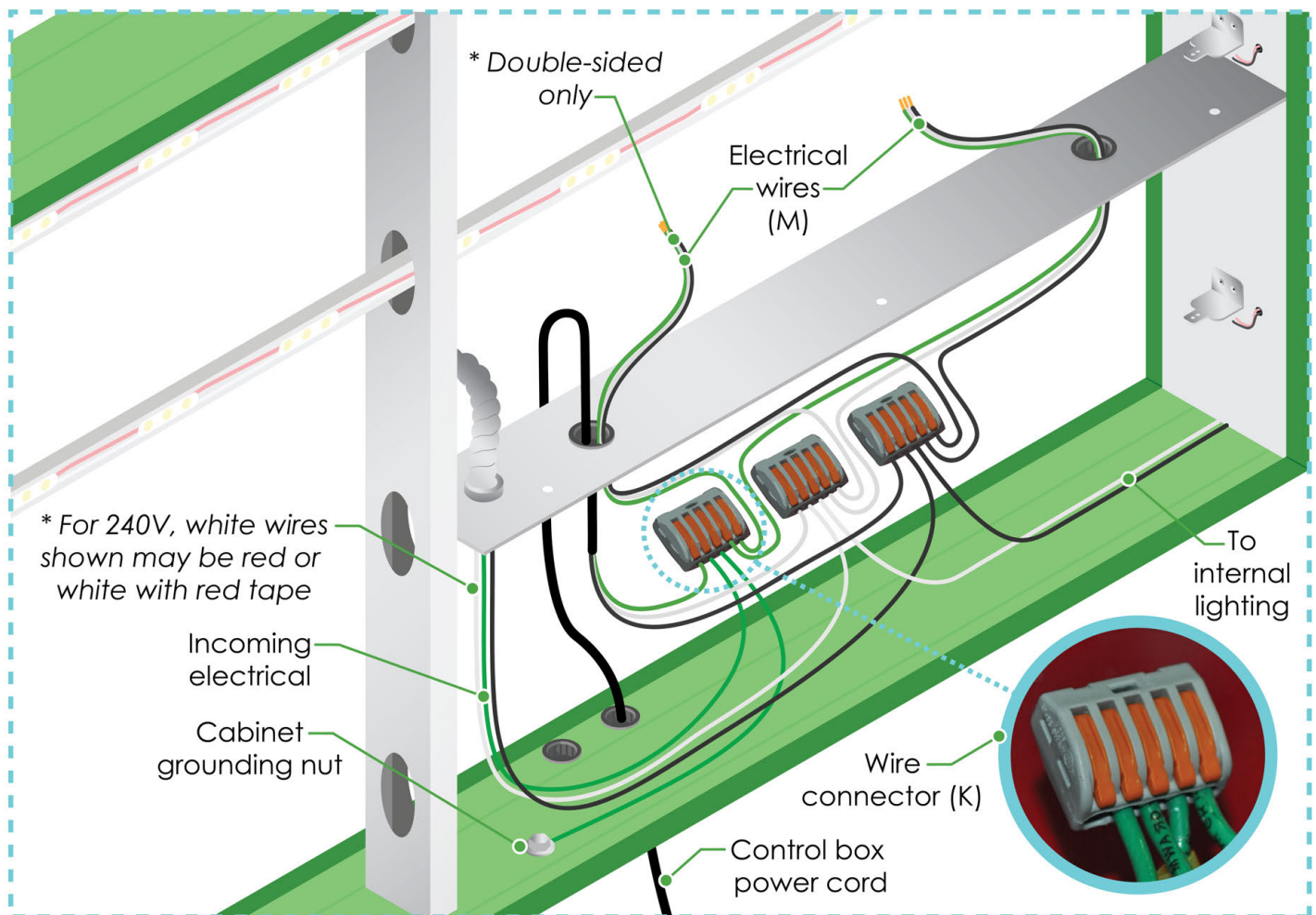
3B: Using a step drill bit or hole saw, drill a hole of 7/8" in diameter in the center of the raceway cover about 1' away from each end of the raceway. For each hole drilled, attach a cable grommet to prevent sharp edges from damaging the cables. Attach the cable grommet so that the longer side will be underneath the raceway cover once installed.

3C: Identify the side of the sign where you would like to run the cables for the control box. Drill two holes of 7/8" in diameter about 1' apart near the edge of the aluminum sign cabinet (not underneath raceway). These two holes will allow access for the control box power cable and data cable. For each hole drilled, attach a cable grommet to prevent sharp edges from damaging the cables.



STEP 4: Run and Connect Electrical Wires

- 4A:** Run the control box power cord up through one of the access holes in the bottom of the sign cabinet, and then down through the top of the raceway access hole closest to the center of the sign.
- 4B:** Run an electrical wire through the other access hole in the raceway. *For double-sided signs only: Run the other electrical wire through the same access hole as the control box power cord.*
- 4C:** Using a 5-lever wire connector, connect all of the green (ground) electrical wires together under the raceway. There will be four green wires for a single-sided sign (incoming electrical, grounding to cabinet, control box and electrical wire), and five for a double-sided sign (other electrical wire).
- 4D:** Perform the same with all of the black (hot) and white (neutral) electrical wires. There will be four wires for a single-sided sign (incoming electrical, internal lighting, control box and electrical wire), and five for a double-sided sign (other electrical wire). *For 240V signs only: instead of white wires, there will be red wires or white wires with red tape to indicate a secondary hot. Connect these wires as shown.*
- 4E:** Carefully reattach the raceway cover by pulling up the wire and screwing it back into place.



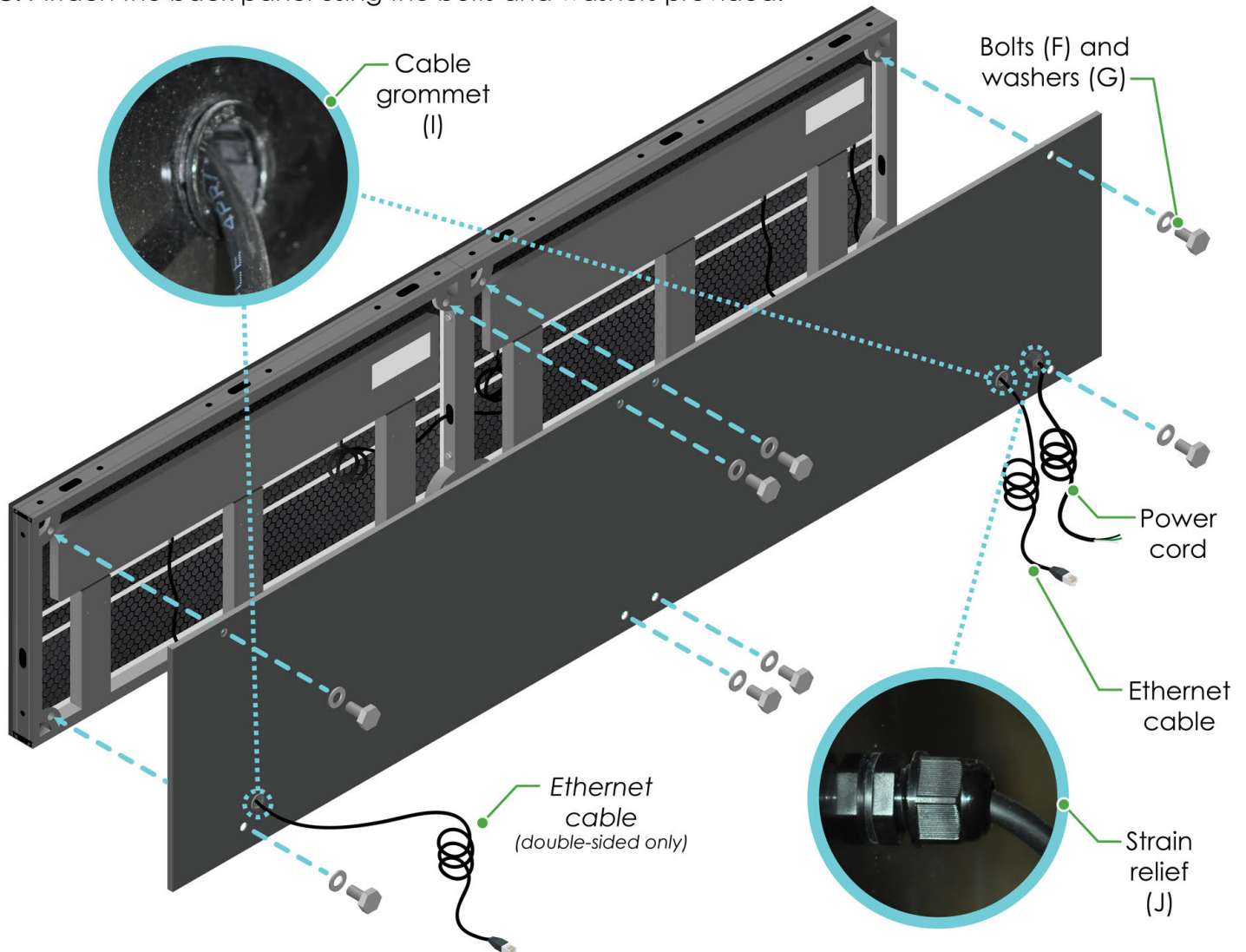
STEP 5: Attach the Back Panel

NOTE: For double-sided signs, one of the displays is **SIDE A** and one is **SIDE B**. The **SIDE A** display has two free Ethernet cables: one near each end on the back of the display. The other display will only have one free Ethernet cable near the power cord. For single-sided signs, the display will have the single free Ethernet cable.

5A: Place the **SIDE A** LED display face-down on a soft surface to prevent damage. For double-sided signs only: identify the back panel for **SIDE A**. This will be the panel with an additional hole on the bottom left.

5B: Run the power cord through one side of the strain-relief grommet, through the back panel hole closest to the edge, and then through the other side of the strain-relief grommet. Run the Ethernet cable(s) through one side of a grommet, other back panel hole(s) and then through the other side of the grommet. Connect the grommet and pull the cords through the back panel as far as they will go.

5C: Attach the back panel using the bolts and washers provided.



STEP 6: Install the LED Displays

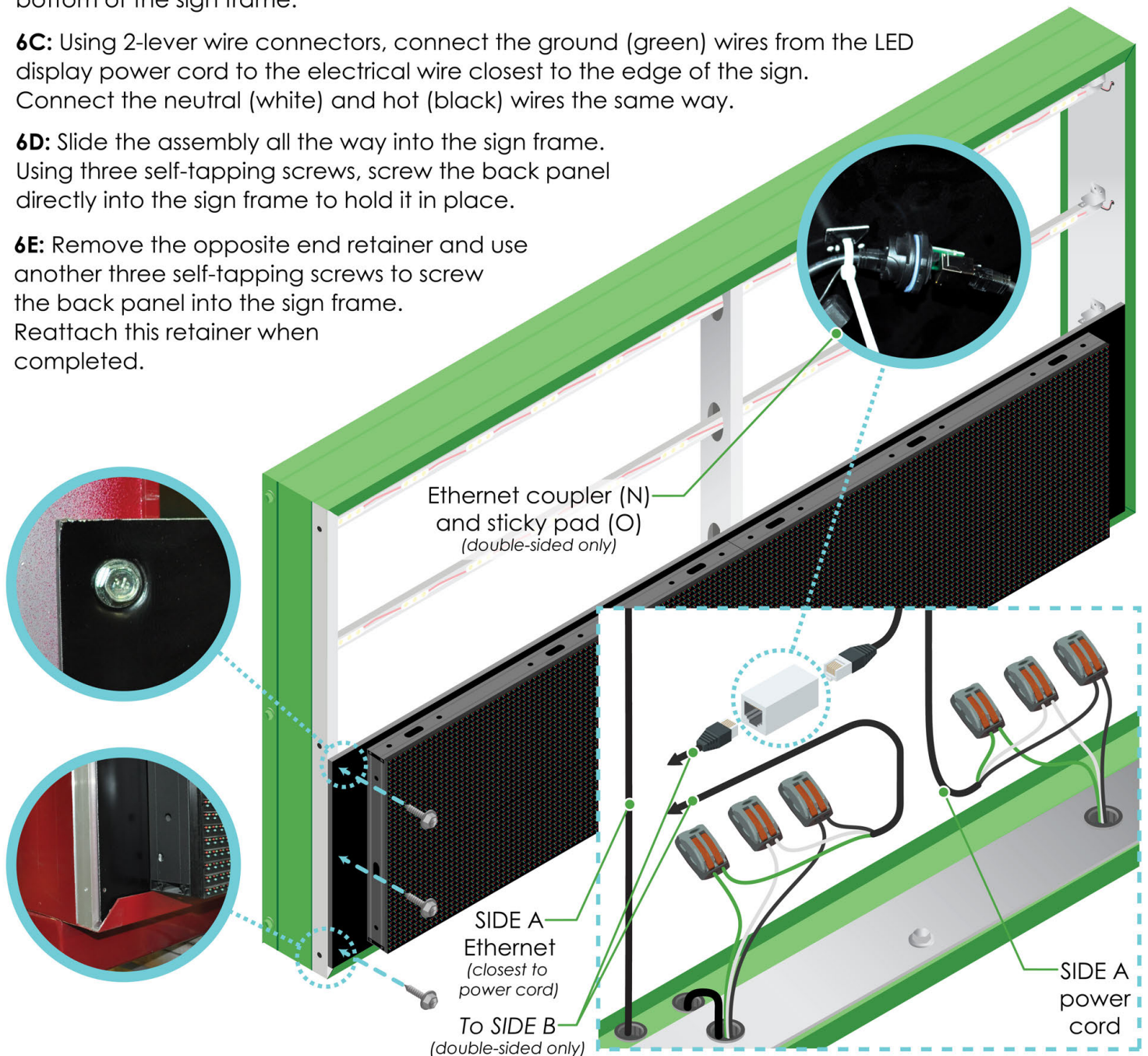
6A: Using two people, lift the LED display assembly. Insert the back panel into the sign frame so that the bottom edge of the panel sits inside the sign frame. Have one person hold the assembly in place.

6B: Run the Ethernet cable next to the power cord down through the empty access hole in the bottom of the sign frame.

6C: Using 2-lever wire connectors, connect the ground (green) wires from the LED display power cord to the electrical wire closest to the edge of the sign. Connect the neutral (white) and hot (black) wires the same way.

6D: Slide the assembly all the way into the sign frame. Using three self-tapping screws, screw the back panel directly into the sign frame to hold it in place.

6E: Remove the opposite end retainer and use another three self-tapping screws to screw the back panel into the sign frame. Reattach this retainer when completed.



6F: For double-sided signs only: Repeat steps 5 and 6 for the second LED display. Before sliding the display into place, use the Ethernet coupler to connect the two free Ethernet cables from each side. Use the zip tie and sticky pad to stick the Ethernet coupler near the top of one of the back panels.

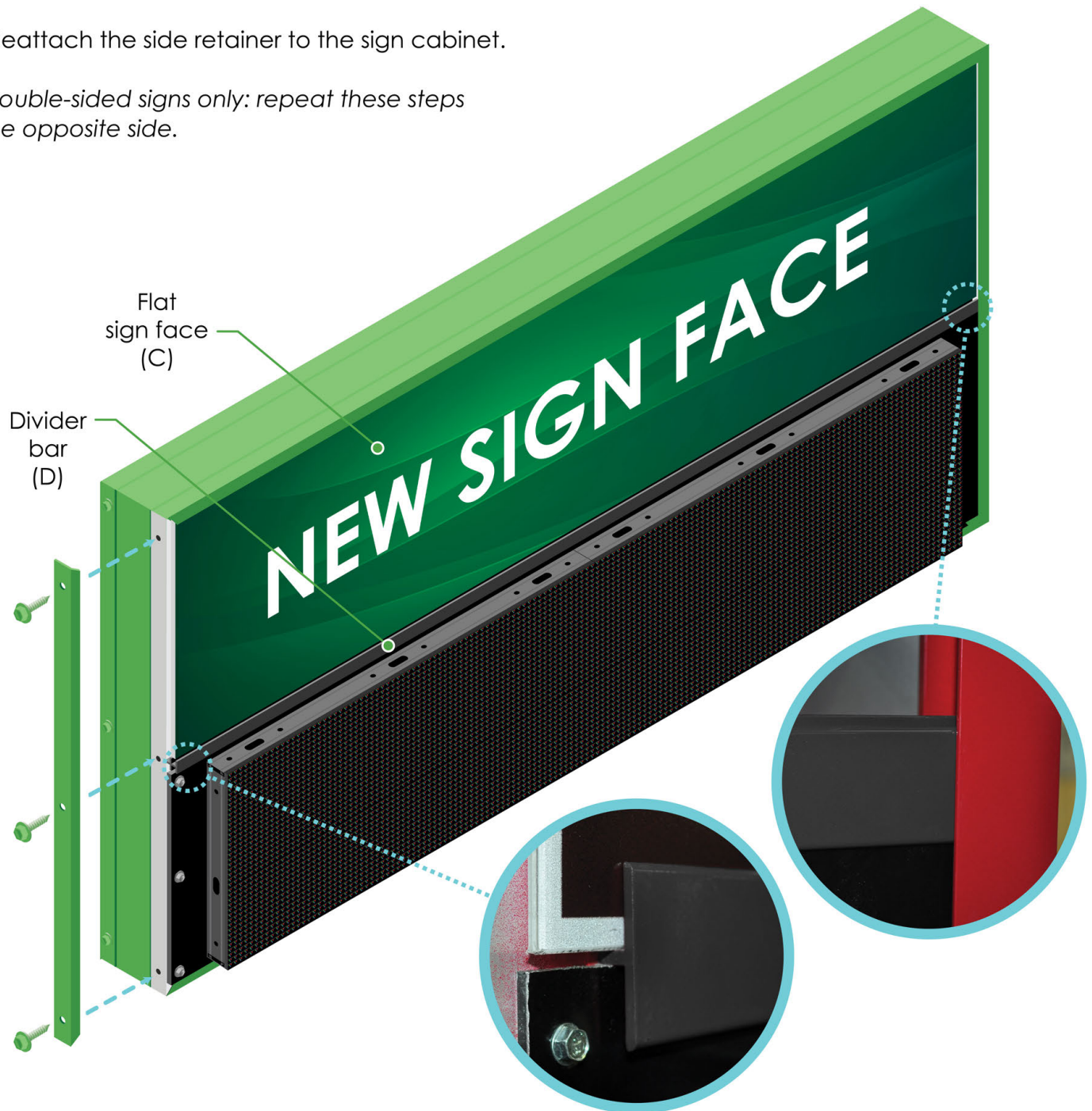
STEP 7: Install the Divider Bars and Sign Faces

7A: Attach the divider bar on top of the LED display back panel. The end of the divider bar should fit behind the side retainer. *Note: this new divider bar is free-floating and does not need to be attached to the sign frame.*

7B: Remove any protective film from the new sign face. Insert the sign face between the top of the sign frame and the divider bar, and slide the face all of the way into the sign.

7C: Reattach the side retainer to the sign cabinet.

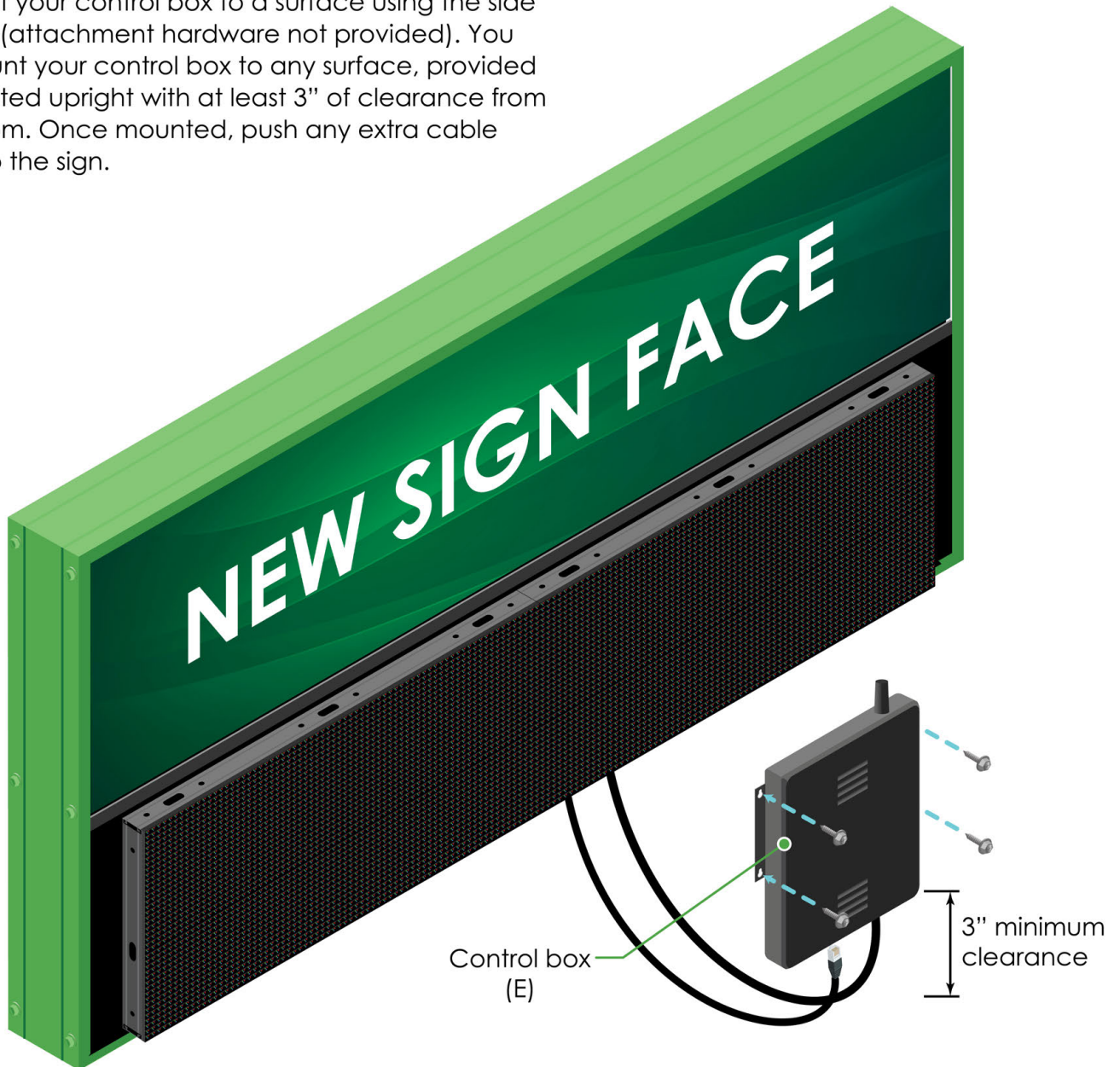
For double-sided signs only: repeat these steps for the opposite side.



STEP 8: Mount the Control Box

8A: Connect the Ethernet cable from the sign to the bottom of the control box.

8B: Mount your control box to a surface using the side brackets (attachment hardware not provided). You may mount your control box to any surface, provided it is mounted upright with at least 3" of clearance from the bottom. Once mounted, push any extra cable back into the sign.



CONGRATULATIONS!

Installation is complete. Once power is restored at the circuit breaker, your new LED sign will be up and running.

If you have not already received your cloud-based software instructions, contact us at:
stewartsigns.com/support