

The following instructions are designed to be used for the installation of LJ-4091 Box Newels using the L.J. Smith LJ-4091MTG Box Newel Mounting Block. These instructions assume the location of each box newel has already been marked on the stairway and balcony.

IMPORTANT: Please read instructions thoroughly before beginning. For final installation, always use an approved adhesive at every assembly joint.

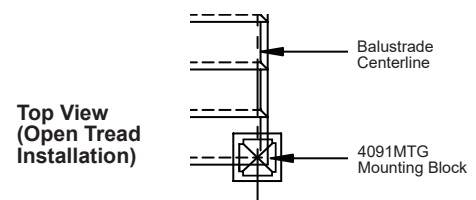
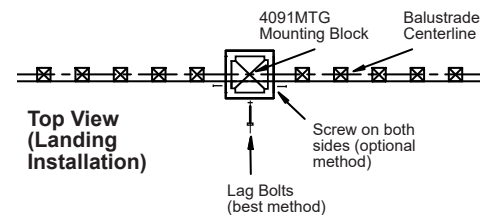
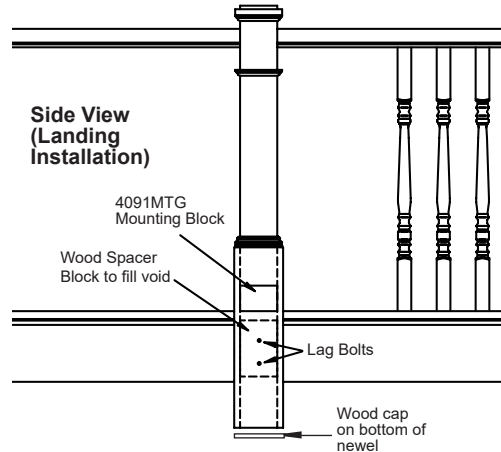
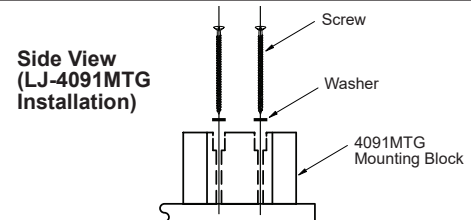
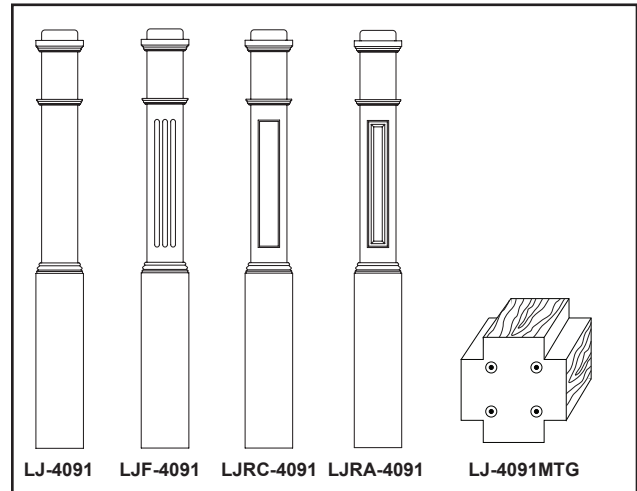
This is an assembled product made up of components that have been kiln-dried to a low moisture content. Extreme variances in temperature and humidity will cause kiln dried and assembled wood products to shrink and/or swell. Caution should be taken to prevent these variances by avoiding exposure to very moist environments such as rain or wet drywall. For obvious reasons, one should never use a treated post attached to or anywhere near a kiln-dried product. L.J. Smith bears no responsibility for product failure when exposure to variances in moisture content has been proven to have occurred.

**Additional hardware needed for installing supplied mounting block:
4 - #10 SAE Flat Washers, 4 - #10 3-3/4" Coarse Thread Drywall Screws.**

Open Tread and Balcony Installation

1. Trim the bottom of the newel to the proper length. If necessary, cut and notch the newel over the edge of the tread/riser or over the edge of the balcony. (For further information on newel notching, see step 107-A in the L.J. Smith Balustrade Installation Guide LJ-0694 INST).
2. Temporarily fit the LJ-4091MTG mounting block inside the bottom of the box newel. Make sure the countersunk holes end (top) of the block enters the newel first.
3. Remove the mounting block from inside the newel. Coat the bottom of the block with construction adhesive and center it at the box newel location on the balustrade centerline. Be sure the countersunk holes end is facing up. Place a washer in each hole and secure the block to the floor using the screws. If the newel is notched to fit over the edge of the balcony, only 2 washers and screws can be used to secure the block to the floor. Proceed to step #5 if the newel is notched.
4. Coat the complete outer surface of the block with construction adhesive. Set the newel over the mounting block and secure the newel to the block using an appropriate mounting method. Conceal all holes and hardware using plugs or putty and sand to finish.
5. For notched newels, fill the void in the notched portion of the newel with a wood block. Glue the block to the back side of the newel. Coat the exposed wood block with construction adhesive.
6. Coat the mounting block with construction adhesive. Set the newel over the mounting block and secure the newel to the block using an appropriate mounting method. Secure the newel to the face of the balcony by using lag bolts installed through the face of the newel. Screws may also be installed through the sides into the face of the plywood spacer block. Plug and sand all holes.

To conceal any end grain, apply a wood cap over the bottom of the newel that protrudes past the face of the balcony or intermediate landing.



Kneewall Installation

1. Trim the bottom of the newel to the proper length.
2. Make a mounting block from 3/4" plywood or a 2"x6" to fit inside of the bottom of the box newel. Using construction adhesive, glue the block to the inside back panel of the newel.
3. Mark and drill two 1" diameter holes in the front panel of the newel.
4. Mark and drill two 3/8" diameter clearance holes in the back panel through the mounting block. These holes should be directly opposite the 1" holes in the newel face.
5. Mark and drill the appropriate pilot hole for a 1/4" or 5/16" x 3 1/2" lag bolt in the end of the kneewall to correspond with the holes previously drilled in the back panel of the box newel.
6. Position the newel and attach with 3 1/2" lag bolts (longer lag bolts may be required if using a 2"x6" mounting block). Use glue or construction adhesive on the final assembly.
7. Conceal all holes and hardware using plugs or putty and sand to finish.

