

The following instructions are used for installing **IronPro Level Kits**. All steps are to be performed in sequence following the steps below. Please read these entire instructions before beginning. For interior use only.

Tools Required (all may not be needed depending on whether it is new construction and/or the type of wooden balusters being removed):

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|---|------------------------------------|
| Power Drill | Sandpaper |
| #2 Square Driver Bit and Extension | Tape Measure |
| "L-shaped" 2.5mm Allen Wrench | 2' Level |
| Construction Adhesive and Dispenser | Adjustable Wrench |
| Hammer | Hand Saw or Hand-Held Circular Saw |
| 8d Nail or Punch | Pliers |
| Hack Saw, Miter Saw w/metal cutting blade, or Portable Band Saw | Masking Tape |
| w/metal cutting blade | Pencil |
| Box-cutter Knife | Light Oil |
| 1/8" Drill Bit | |

Building Codes and other building requirements vary by location. Accordingly, L.J. Smith, Inc. makes no warranty, express or implied that this product nor any of its installation suggestions shall comply with your local building codes or requirements and, therefore, bears no liability for any such compliance. Therefore, it is vitally important for you to ensure compliance prior to the installation. See Warranty Exclusions and Limitation of Liability at www.LJSmith.com.

Before beginning, check local building codes to be certain that your newly designed stair balustrade will pass your local building code, especially as it relates to baluster spacing.

Note: For ease of installation, it might be simpler to begin with the 1st Baluster (which is the one at the bottom of the stairway) and work towards the top of the stairway. A low handrail height may require trimming the round top pin off of the iron balusters, making installation more difficult using IronPro.

Additional Note: Coating each Attachment Screw with Paraffin Wax or Candle Wax will allow it to drive into the wood more easily. It is highly recommended to drill a pilot hole for each Attachment Screw using a 1/8" drill bit.

Very Important Note: Measure the vertical thickness of the handrail, in place; to be certain that the 2 1/2" Attachment Screw will not penetrate the top of the handrail. Purchase (shorter) replacement screws if the screw is long enough to protrude through the top surface of the handrail.



A If replacing square top balusters, mark the center of each on a strip of masking tape along the edge of the handrail. Also mark the center within the plowed portion of the handrail. If replacing pin top balusters move to Step D. (Skip step A for new stairway construction)



B Gently "punch" a divot at each baluster centerpoint on the handrail.



C For plowed handrail, or if replacing square top balusters, coat the round end of the Ball Adaptor with a light oil to prevent marring the finish during installation. Assemble the Ball Adaptor, Rectangular Socket and 2 1/2" Attachment Screw, and install into the plowed portion of the handrail at the divot mark. See "Very Important Note" above. Wipe oil from finish.



D If replacing pin top balusters, place the centering plug into the hole (not necessary for new stairway construction).

Coat the round end of the Ball Adaptor with a light oil to prevent marring the finish during installation. Assemble the Ball Adaptor, Round Socket or Rectangular Socket, and the 2 1/2" Attachment Screw, and attach it to the underside of the handrail. See "Very Important Note" above. Wipe oil from finish.





E If replacing wood balusters, squeeze a small amount of construction adhesive into the hole in the tread, if desired. Place the proper centering plug into the hole. Place the threaded disc over the hole and install the shoulder into the hole using the 1 1/2" Attachment Screw.



(For new stairway construction, place the threaded disc over the baluster centerpoint and install into the tread using the 1 1/2" Attachment Screw)



F Measure from the surface of the Threaded Disc to the bottom of the Ball Adaptor and subtract 1/8". Using this measurement and measuring from the pin shoulder down the baluster, mark and cut the baluster.



G Tilt the Ball Adaptor to the side and insert the pin top end of the baluster.



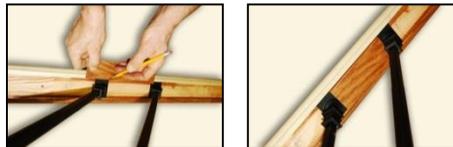
H Slide the Base Collar onto the bottom of the baluster. Swing the baluster with Base Collar over the Threaded Disc. Tighten the Base Collar onto the Threaded Disc by hand and finish with an adjustable wrench. When properly aligned, these tighten easily together. Do not force.



I Tighten the set screw in the Ball Adaptor under the handrail and in the Base Collar on the tread.



J If square top balusters were removed, fillet will need to be installed between the replacement iron balusters. It might be necessary to purchase more fillet from your supplier. Measure the distance between each baluster. Mark and cut the wooden fillet. Install the fillet using construction adhesive.



For more detailed IronPro installation instructions, visit www.LJSmith.com



35280 Scio-Bowerston Road • Bowerston, OH 44695
Phone (740) 269-2221 • Fax (740) 269-9047
www.LJSmith.com