

# Model TLC

# Installation Instructions

Sheet  
**S-5**

## Insulated Tee, Wall Support, Insulated Elbow & Interior Resupport

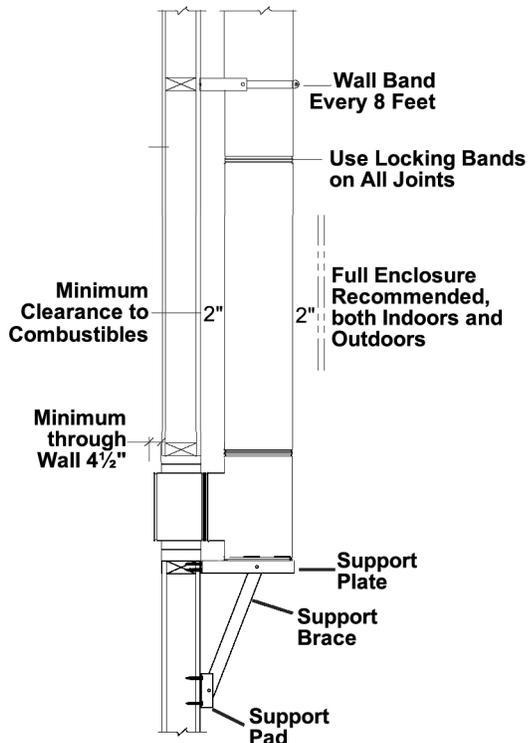
Read Sheet GS for important clearance and safety precautions before installing any of the parts described in this sheet. Sheet GS is packaged with supports.

For longer installation life, all nonstainless steel exterior metal parts should be painted.

### WALL SUPPORT INSULATED TEE FRAMING

The insulated tee may be supported along an exterior or interior wall of any kind using the wall support. The wall support is a nonadjustable version that comes with support braces and provides a 2" clearance when properly installed. Maximum support height is 40 feet (see Figure 1).

If supported along an interior wall in a nonattic area, the chimney must be fully enclosed with a minimum of 2" of airspace clearance. In the attic area, the chimney may be fully enclosed, or an attic insulation shield may be used. Full enclosure is preferable for better chimney operation. See the appropriate instructions for firestops and attic insulation shields (Sheet S-2) and the general instructions on installation for installing chimney above tee (Sheet GS).



Locking bands must be used on all joints between chimney sections (See Sheet GS).

Figure 1 Wall Support for 10" through 14" Chimneys

**IMPORTANT: 10" to 14" are non-HT.**

### ⚠ WARNING

Failure to follow these Installation Instructions could cause FIRE, CARBON MONOXIDE POISONING, OR DEATH. If you are unsure of installation requirements, call the phone number listed on the back of these instructions.

If supported along an exterior or interior wall, wall bands must be installed every 8 feet to ensure chimney stability and maintenance of 2" airspace clearance. In any chimney installation, two points of stabilization are necessary, hence at least one wall band must be installed. It is desirable to fully enclose an exterior chimney with a minimum of 2" airspace clearance to reduce creosote buildup and to promote draft.

To penetrate a wall, one section of the chimney may be attached to the branch as illustrated in Figure 1. The end of the added branch must extend a minimum of 4 1/2" beyond the face of the wall. A wall thimble fits over the added horizontal section, and if the tee section and vertical portion of chimney are not fully enclosed, a wall spacer or sheet metal flashing should be used as illustrated in Figure 1. Two inches airspace clearance must be maintained through the wall. The framing dimensions for wall support are illustrated in Figure 2 and given in Table 1.

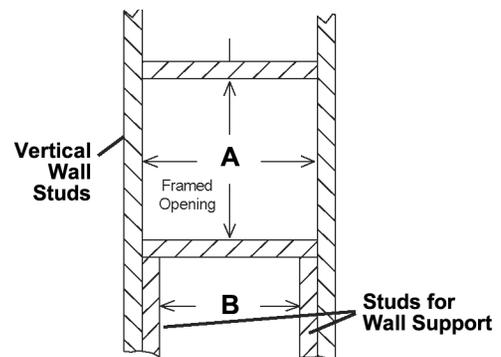
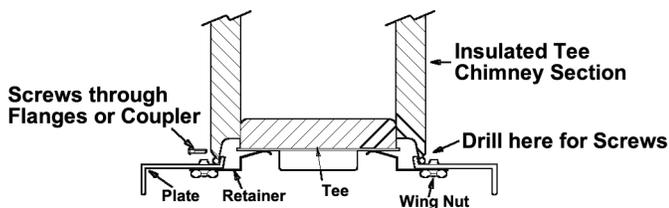


Figure 2 Framing for Wall Support

| Wall Support Size | Dimension A | Dimension B |
|-------------------|-------------|-------------|
| 10"               | 16"         | 13 1/4"     |
| 12"               | 18"         | 15 1/4"     |
| 14"               | 20"         | 17 1/4"     |

Follow these simple steps for a wall-supported chimney installation.

1. Assemble braces and pads to the plate, using 5/16 x 3/4" bolts and nuts with braces down.
2. Nail pads and plate to framing temporarily, making sure that plate is level and in proper position.
3. Mark and drill 5/32" pilot holes in framing for lag screws location.
4. Remove nails, install lag screws in all holes, and tighten all bolts.
5. Place insulated tee on plate. Install tee cap tightly into tee and secure with retainers and wings nuts, as shown in Figure 3.



**WARNING: Tee cap and retainers must be installed. Failure to install retaining clips could cause fire, injury or death.**

**Figure 3 Securing Tee Cap**

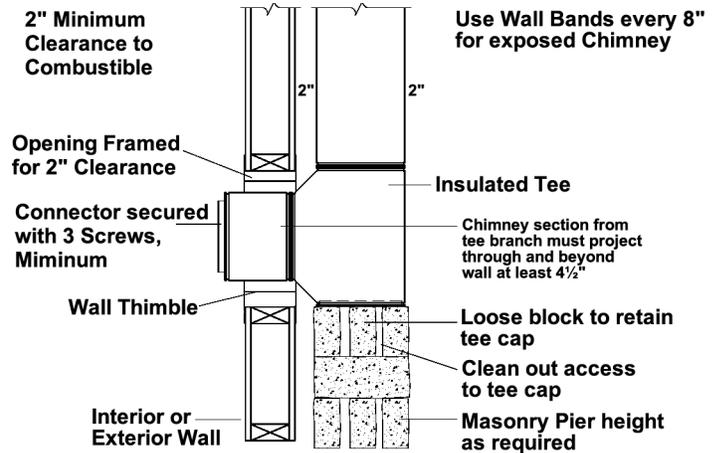
6. Use Model TLC chimney pipe for extension of chimney through combustible wall. The tee extension must extend 4 1/2" through the wall.
7. For support of chimney above supports, a wall band should be used every 8 feet, and at least one wall band must be installed.
8. In earthquake zones, drill through the lower end of the tee and through the flange or coupler on the plate for at least two stainless steel sheet metal screws.

**INSULATED TEE ON MASONRY PIER**

The Model TLC insulated tee may be used to start chimneys indoors or outdoors, using a masonry pier (Figure 4). The pier should be adequate for the weight of the chimney and designed to permit a clear access to the tee cap for cleanout purposes. Observe all indicated framing, clearance and enclosure requirements indicated on Figure 4 and discussed in the **Wall Support Insulated Tee Framing** section.

**15° AND 30° INSULATED ELBOWS**

The Model TLC 15-degree and 30-degree elbows adapt the chimney for installations where the termination cannot be located directly above the initial vertical run of



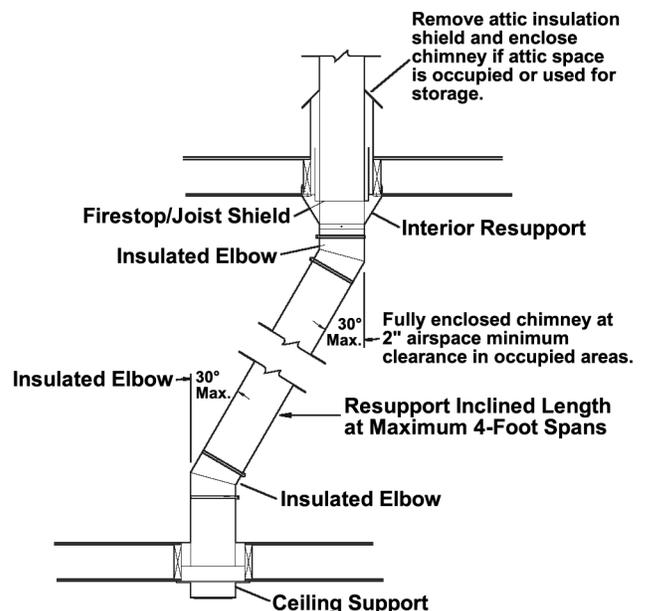
**Figure 4 Insulated Tee on Masonry Pier**

the chimney. The maximum offset is 30 degrees from vertical. The inclined length must be resupported at 4-foot spans (maximum). Adjustment of 0 to 30 degrees is possible by using two 15-degree elbows.

Resupport chimney at first section above upper offset by using interior resupport .

If the offset sections of chimney are in an interior occupied area, they must be fully enclosed with a minimum of 2" airspace clearance. In nonoccupied areas, the chimney may be fully enclosed, or an attic insulation shield may be used. See the appropriate instructions for firestops and attic insulation shields (Sheet S-2) and the general instructions for installing chimney above offset.

Locking bands must be used to couple an elbow to another elbow/offset or to a threaded chimney section.



**NOTE: Figure 8 represents a single offset. A maximum of two separate offsets are permitted per system.**

**Figure 5 Elbow Installation**

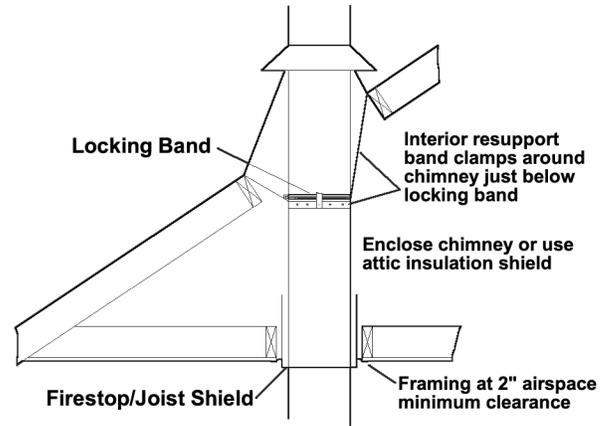
**INTERIOR RESUPPORT**

The interior resupport is comprised of a support band with attached straps. The interior resupport part may be used for all sizes of chimney.

The Model TLC interior resupport allows for two different methods of chimney resupport.

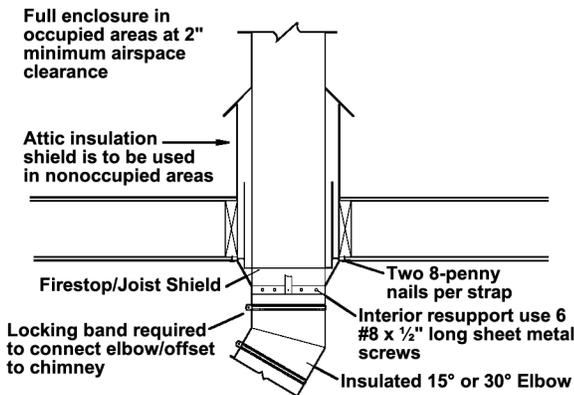
The first method is used when an immediate section of chimney above the upper offset passes through a joist area. With the appropriate firestop/joist shield in place, clamp the interior resupport support band around the chimney, using two 1/4" x 1/2" long carriage bolts and two 1/2" x 2" long carriage bolts and hex nuts. Attach support band to the pipe with six sheet metal screws as shown in Figure 6.

The interior resupport straps are then nailed to the framing joists with at least two 8 penny nails per strap. The maximum length of chimney that may be supported is 18 feet, which includes the offset lengths below, any vertical run to the resupport, and the vertical run above the interior resupport. It does not include the length below the lower elbow/offset, which is supported from below (Figure 6).



Full enclosure at minimum 2" airspace clearance in occupied areas.

**Figure 7 Use of Interior Resupport Assembly for All Sizes**



**Figure 6 Interior Resupport**  
Use when the installation of an interior resupport below a locking band is not possible.

The second means of support is used primarily when the immediate sections of the upper offset do not pass through a joist area and resupport is necessary. The band is clamped around the chimney, using two 1/4" x 1/2" long carriage bolts and two 1/4" x 2" long carriage bolts and hex nuts. Install band immediately below a locking band, and the straps are nailed to the framing with at least two 8 penny nails per strap (see Figure 7). Observe the 2" airspace minimum clearance between the chimney and framing. The same 18-foot limit of supportable chimney length applies to this resupport method.



hartandcooley.com  
(800) 433-6341