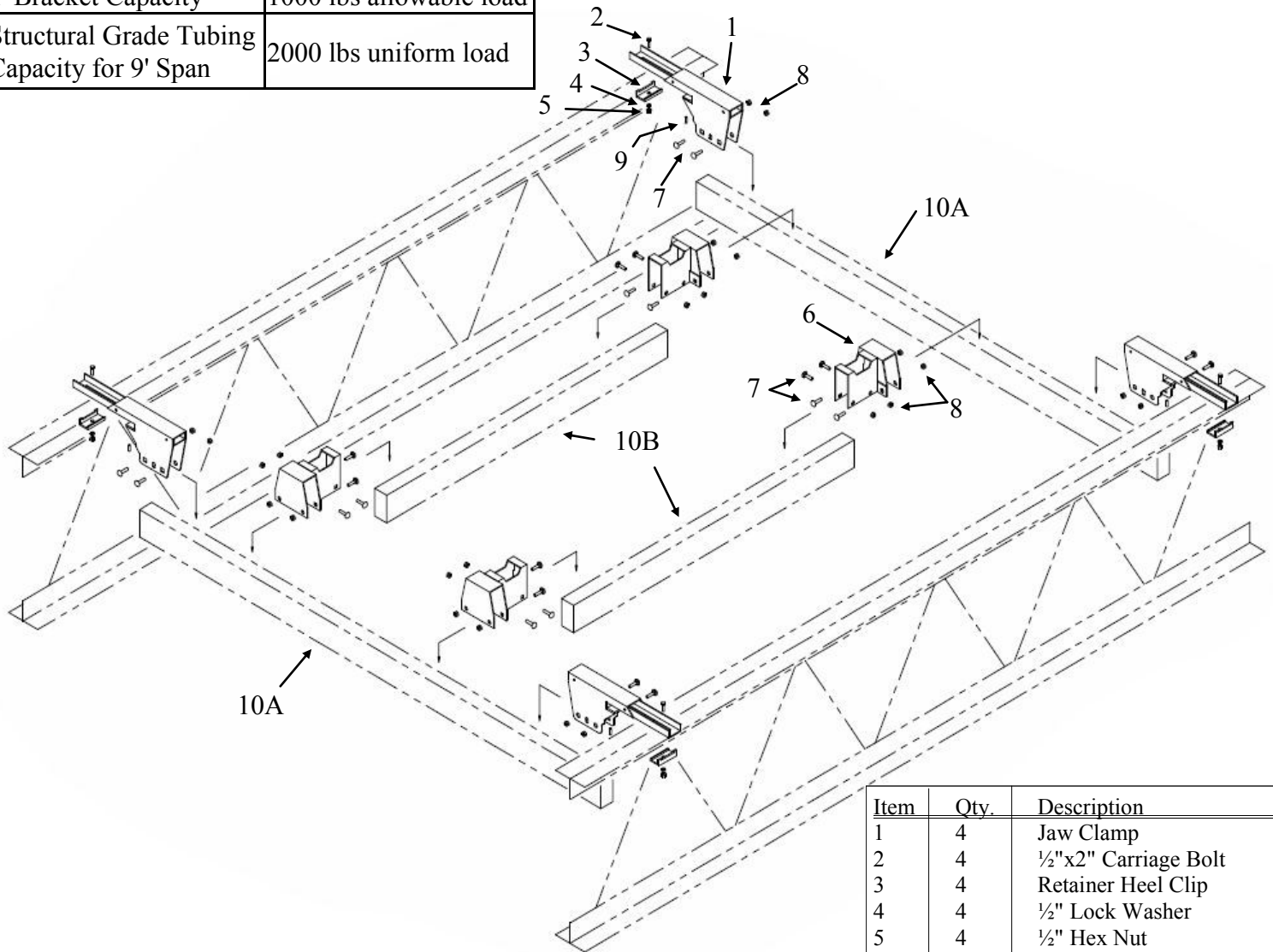


# Joist Grip Framing Clamp System Installation Guide

For use with Joists and Corrugated Roofs

Jaw Clamp Capacity	1000 lbs allowable load
T-Bracket Capacity	1000 lbs allowable load
Structural Grade Tubing Capacity for 9' Span	2000 lbs uniform load



Item	Qty.	Description
1	4	Jaw Clamp
2	4	½"x2" Carriage Bolt
3	4	Retainer Heel Clip
4	4	½" Lock Washer
5	4	½" Hex Nut
6	4	T-Bracket Clamp
7	24	½"x3" Bolt Grade 5 (yellow)
8	24	½" Locknut
9	4	¾" Self Locking Hex Bolt
10A	2	Tube – Main
10B	2	Tube – Cross

## WARNING:

Any modification to or additional loading of a joist must be reviewed by a structural engineer. Each Chicago Clamp System® application must be selected under the supervision of a structural engineer. Chicago Clamp Systems® do NOT increase the load capacity of any structure. Chicago Clamp Company takes no responsibility for the load capacity of any existing structure.



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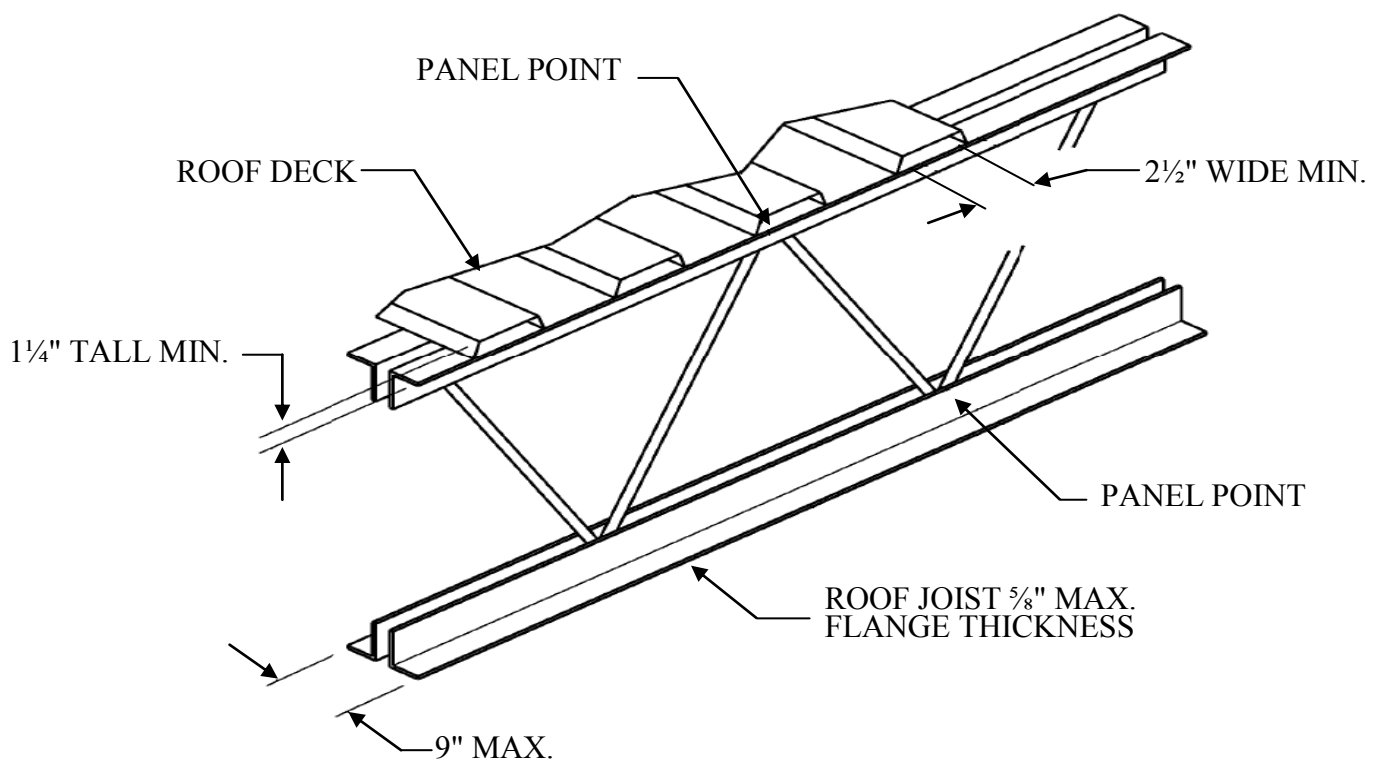
# Joist Grip Framing Clamp System Installation Guide Continued

## FIRST STEPS:

**Check** with a Structural Engineer for: additional joist loading or relocation of existing loads.

**Check** the roof deck pocket and joists for clamp clearance:

1 ¼" Min. Height, 2 ½" Min. Width, 9" Max. Chord Width, ⅝" Max. Joist Flange Thickness



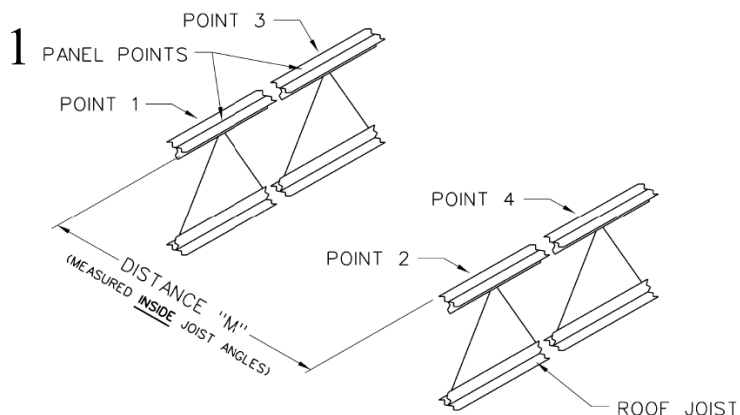
**Check** that the area is clear for the Joist Grip Framing Clamp System.

Example: Ensure area is free from utility piping.

## WARNING:

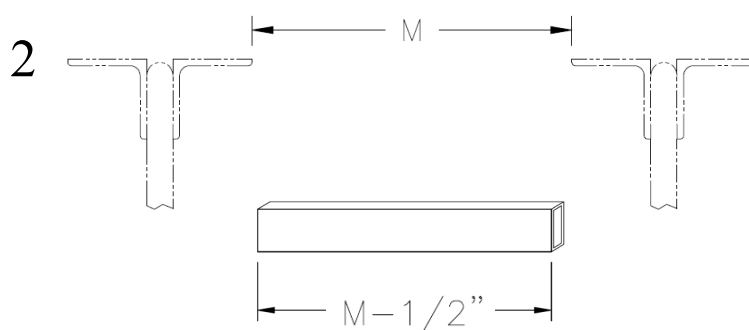
Use only tubing that is HSS 4"x 2"x ⅛", A500, Grade B or better. Use only hardware supplied with Joist Grip Framing Clamp System kit. ½" x 3" Carriage Bolts supplied are Grade 5 and dyed yellow for easy identification. Always install the square head of carriage bolt into square slot. The use of tubing or carriage bolts less than the specified grades will drastically reduce capacity of Framing Clamp System.

# Joist Grip Framing Clamp System Installation Guide Cont'd



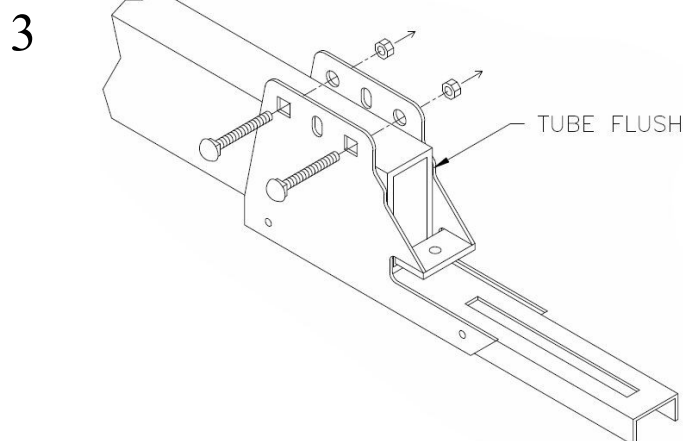
Identify four points in roof deck pockets on two parallel Bar Joists that form a rectangle. Check with Structural Engineer to determine if Jaw Clamps must be over Panel Points.

Panel Points—where Diagonal Truss members are attached to top or bottom angles (chord).

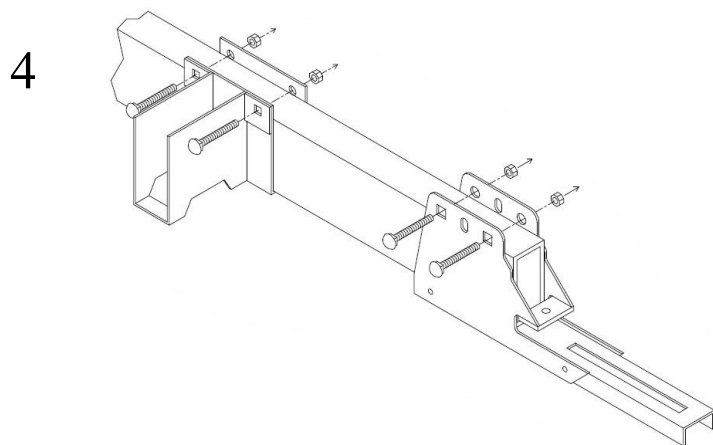


Measure the distance “M” inside joist angles as shown. Take measurement “M” and subtract ½”. Cut Main Tubes to this length.

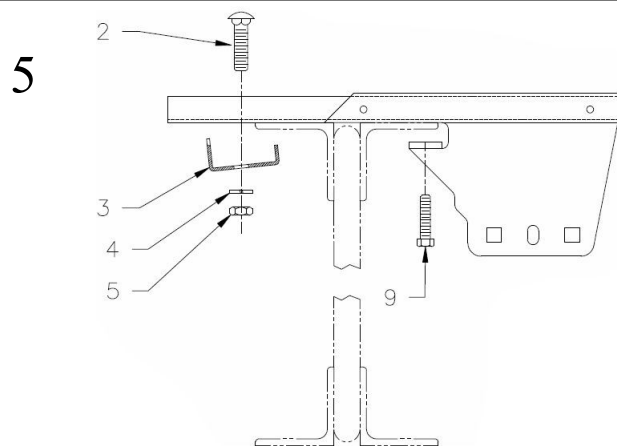
$$M - \frac{1}{2} = \text{length of Main Tubes}$$



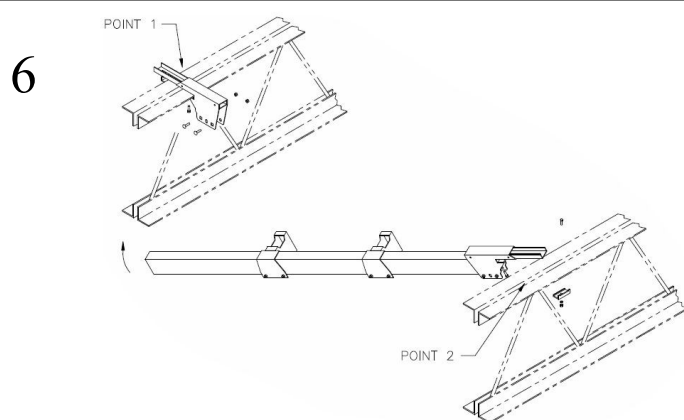
Insert Main Tube (10A) into Jaw Clamp (1) so that tubing is flush with the noted flush point as shown above and in step 7. Secure bolts (7) with locknuts (8) and tighten.



Place T-Bracket Clamp(6) over Main Tube(10A), with T-Bracket wing facing the appropriate direction. Insert bolts and secure with locknuts to prevent sliding during installation. Repeat process for each desired cross member.

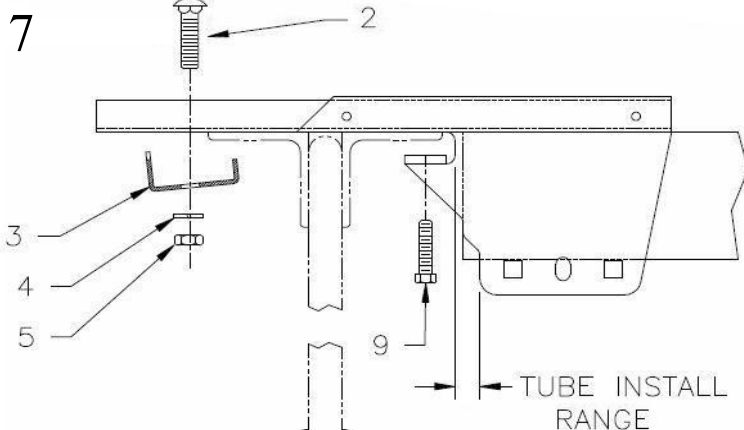


Slide single Jaw Clamp into the deck opening over the joist at Point 1 and center in pocket. Attach with the Heel Clip (3) and tighten. Make sure to set the Jaw Clamp so that the self locking bolt (9) will bite down squarely on the joist flange as shown. Do not tighten the self locking bolt until the Jaw Clamp is in position.



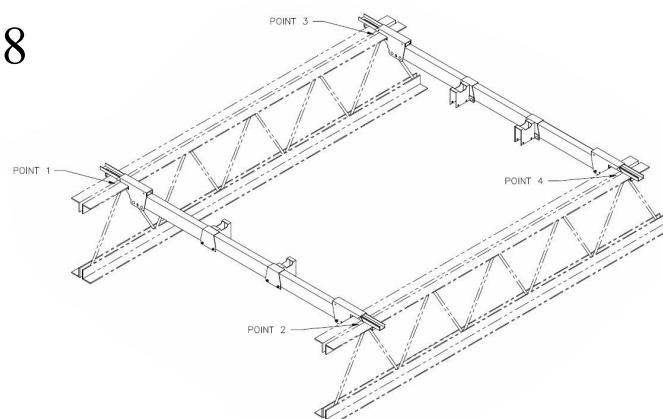
Slide the Jaw Clamp attached to the Main Tube into the deck opening above Point 2. Then, supporting the tube, follow the corrugation across and attach the other end of the tube to the Jaw Clamp at Point 1. Tubing should be fully inserted into the Jaw Clamp and set within the specified range noted in Step 7. **Note:** It may be necessary to install both Jaw Clamps separately and then insert the tube.

# Joist Grip Framing Clamp System Installation Guide Cont'd



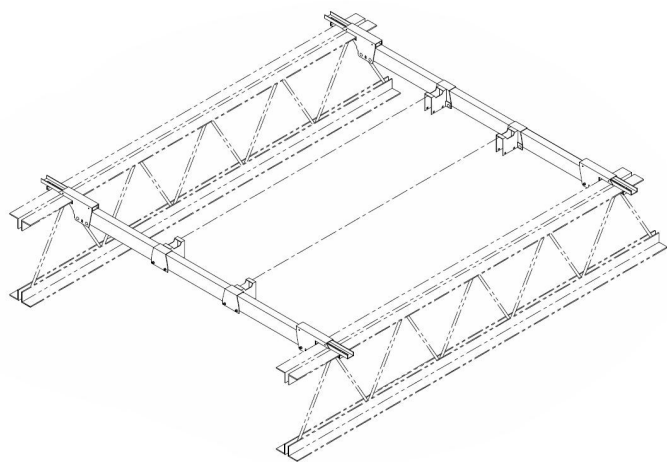
When completely installed, each Jaw Clamp should be attached to the joist with the heel clip (3) as well as the self locking bolt (9). The Main Tube (10A) should be set within the specified range as shown above. **Note:** Be sure to clear the edge when attaching bolts and heel clip to a cold formed joist.

8



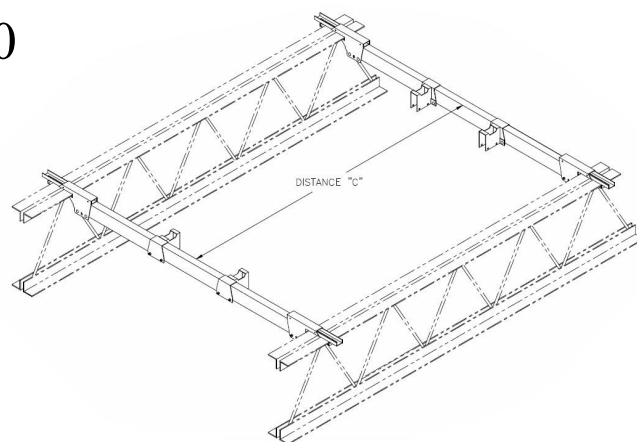
Repeat steps 3-7 for second Main Tube in roof deck opening above Point 3 and Point 4. Make sure Main Tubes and Jaw Clamps are aligned and tight.

9



Identify four points that form a rectangle on the Main Tubes. This is where T-Brackets will be installed. Slide T-Brackets to these points. Be sure T-Bracket wings are directly across from each other. Tighten bolts.

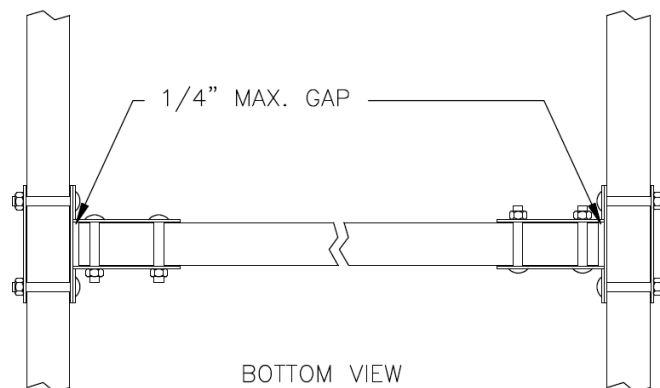
10



Measure the distance "C" between the two Main Tubes. Subtract  $\frac{1}{2}$ " from measurement "C". Cut Cross Tubes to length.

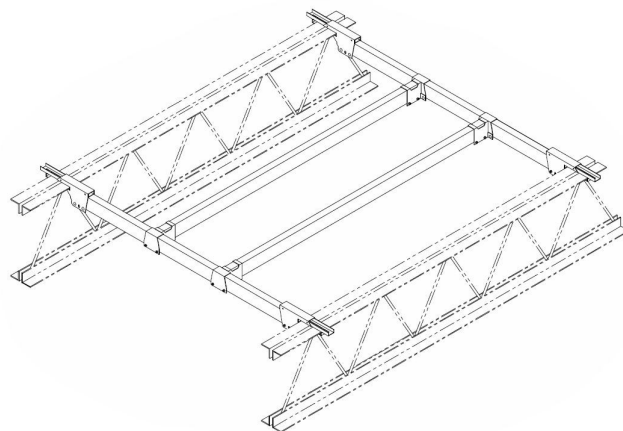
$$\text{Distance C} - \frac{1}{2} = \text{Cross Tube length}$$

11



Insert Cross Tube (10B) into wings of T-Brackets as shown. Be sure tube is within  $\frac{1}{4}$ " of the back of the T-Brackets. Secure with bolts and locknuts. Repeat for second Cross Tube. Be sure to check and tighten all system hardware.

Note: If Structural Engineer calls for additional support,  $1\frac{1}{2}$ " x 3" tubing may be secured to Cross Tubes with Tube Clips.



Assembly is now complete.