



321 Route 5 West · Elbridge · New York · 13060
315-252-2559 service@dragonplate.com

TELESCOPING TUBE CLAMP ASSEMBLY INSTRUCTIONS

Step 1: Dry Fit and Sanding

Start by preparing tube end and tube clamp by lightly sanding. Dry fit larger diameter end of tube clamp on tube and apply masking tape to protect all but the area to be bonded. Sand both tube end and inside of tube clamp (larger diameter end). After sanding, use a rag to clean tube end and tube clamp.



Step 2: Mix Epoxy and Microspheres

Mix together epoxy adhesive (we recommend 3M Scotch-Weld 2216) according to manufacturer's instructions. Add microspheres to epoxy mix, 10% by weight (i.e. 0.3g microspheres per 3g of epoxy) and mix thoroughly.



Step 3: Apply Epoxy

Evenly apply epoxy to both tube end and inside of larger diameter end of tube clamp and fit clamp over end of tube. Be careful not to get any adhesive on smaller diameter end of clamp as this is the end that will accept sliding tube that is adjustable.

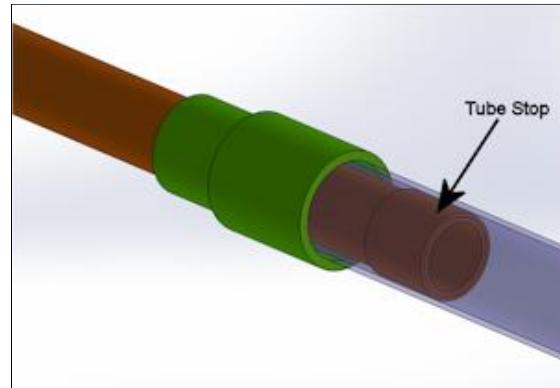
Step 4: Clean Up & Cure

Clean both inside and outside of tube clamp using a rag lightly soaked with isopropyl alcohol, acetone, or MEK. Remove masking tape and apply additional masking tape over end of clamp to securely hold to end of tube.

Allow bond to cure. At room temperature (75 degrees F), adhesive will cure overnight. Faster cures are obtained using elevated temperatures. Refer to the tech sheet for Scotch-weld epoxy 2216B/A Gray for further information.

Step 5: Bond End Stop to Tube (optional)

End stops prevent telescoping tube from coming apart when fully extended. If you have purchased end stops for your tubes, they will need to be bonded to the end of the tubes. Start by lightly sanding end of tube and inside of tube stop. Next, apply adhesive to the inner surface of stop and outside of tube. Slide stop over end of tube and align with end of tube. Remove any excess adhesive with cleaning rag. Allow to fully cure before inserting into tube clamp.



Step 6: Telescoping Tube Assembly

Once bond has cured for tube clamp and optional tube stop, the two tubes can be joined. Slide smaller tube into smaller end of tube clamp. If tube stop was used, tube must be joined through larger diameter tube. For multi-section telescoping tube assemblies where tube stops are used, each sliding tube will need to be joined through largest tube end before next tube clamp is bonded.

Step 7: Adjustments

Tube clamps can be adjusted for smooth operation and maximum clamp holding power. To adjust for best performance, lift lever to maximum position and tighten screw just enough so that sliding tube moves freely. This will ensure maximum holding power when lever is fully lowered.