



Mueller Streamline Co.
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To Our Valued Customers,

Mueller Streamline Co. has recently seen an increase in the promotion of on-site copper tube expansion within the HVAC/R market. The process is being positioned as an economical means of creating joints without the use of recognized copper tube fittings (solder, flare, threaded, grooved, push and press connections are all recognized by the Copper Development Association (CDA) and the model building codes). As a service to our customers and as a company with specific expertise in copper material properties, we would like to caution customers to the following points:

- On-site copper tube expansion requires that the tube be at a precise temper. This requires using a torch to manually heat the tube. Lacking a factory controlled environment, this heat treatment may anneal the copper unpredictably and leave the user with an unknown hardness and grain structure. This can be further compounded by the differences in metal properties between rigid straight lengths and soft pliable coils.
- Fabricating joint cups by on-site copper tube expansion can lead to variability in physical characteristics such as cup diameter, cup depth, concentricity and eccentricity. This inconsistency and the inherent thinning of the walls may take the product out of standards specifications, violate national or local codes, and jeopardize warranties in some applications.
- Limited field controls and resulting variability of site-fabricated joint cups may lead the copper tube to weakening, splitting or premature failure. To increase strength and help counter against these risks and variables, braze methods/materials, not solder, should be used.

Streamline® copper tube and copper fitting products are made to all applicable ASTM/ASME standards in ISO certified facilities. Each is a high quality item compliant with all local and model building codes in the USA. As new technologies emerge, Mueller Streamline Co. is committed to being a resource to our customers and ensuring that our products are safe and reliable. If you have any questions, please contact your local sales representative.

Sincerely,

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