

DECLARATION OF CONFORMITY

SUBJECT: Operating Pressure Ratings for Brazed Copper Fittings

Mueller Streamline Co. proudly offers copper tube and fittings in compliance with the applicable ASTM and ASME product specifications and third-party recognized by UL for refrigeration and air-conditioning applications (HVACR). We believe HVACR connections should be made by brazing (using filler metals that melt above 425°C), which is primarily because solder alloys may not be suitable to high vibration and aggressive thermal-cycling environments.

Brazing is commonly done at 480°C to 700°C, which involves sufficient heat to anneal copper. Therefore, the working pressure ratings for all Streamline copper tube and wrought fittings are based on performance in the annealed state - either through actual brazing or in an annealing furnace. Following years of testing, the company is able to offer copper products rated according to Table A below. All of these values have already been de-rated for brazing.

TABLE A: CONTINUOUS OPERATING PRESSURES for WROT COPPER FITTINGS

Diameter	Bar @ up to 20°C	Bar @ 82°C	Bar @ 121°C
1/8" to 5/8"	94.5	91.0	80.6
7/8"	77.2	74.4	66.5
1-1/8"	66.5	64.1	57.2
1-3/8"	60.7	58.2	52.0
1-5/8"	60.0	57.2	51.0
2-1/8"	50.5	48.6	48.3
2-5/8"	50.5	48.6	48.3
3-1/8"	34.5	34.5	34.5
4-1/8"	31.0	31.0	31.0

Per UL 207-2013, *Refrigeration-Containing Components and Accessories*, these products are - at a bare minimum - all tested (as brazed or furnace-annealed assemblies) to a burst pressure of 5X operating OR to a combination of burst pressure 3X operating + 250,000 fatigue cycles. Performance capabilities have further been validated through accelerated life testing in R-410A heat pump systems.

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