

pipe, then pulling the compression-sleeve or reinforcing ring over the PEX pipe and fitting, compressing the pipe between the compression-sleeve and the fitting.

Mechanical cold flare compression fittings shall be joined to PEX tubing in accordance with ASTM F1961, CSA B137.5 or equivalent International Standard(s) approved by the Authority Having Jurisdiction. The proper cone assembly (female fitting) shall be placed onto the assembly tool. PEX tubing shall be placed into the tool, so that the cut end abuts the cone union. Close the locking handle of the tool until the tool locks. The compression lever shall press the grip ring of the cone union assembly onto the PEX tubing which flares the end of the PEX tubing. Open the compression lever and tighten the cone union nut onto the male end of the desired fitting and apply torque.

Crimp insert fittings shall be joined to PEX tubing in accordance with ASTM F1807, ASTM F2098, ASTM F2159, ASTM F2434, CSA B 137.5 or equivalent International Standard(s) approved by the Authority Having Jurisdiction by placing the copper crimp ring around the outer circumference of the pipe, forcing the pipe material into the space formed by the ribs on the fitting until the pipe contacts the shoulder of the fitting. The crimp ring shall then be positioned on the pipe so the edge of the crimp ring is 3mm to 6mm (0.125 - 0.25 in.) from the end of the pipe. The jaws of the crimping tool shall be centered over the crimp ring and tool perpendicular to the barb. The jaws shall be closed around the crimp ring and shall not be crimped more than once.

Removable and non-removable push-fit fittings that employ a quick assembly push-fit connector shall comply with ASSE 1061 or equivalent International Standard(s) approved by the Authority Having Jurisdiction.

Mechanical joints shall be installed in accordance with the manufacturer's instructions.

605.6 PEX-AL-HDPE Plastic Tubing and Joints. PEX-AL-HDPE plastic pipe/tubing and fittings joining methods shall comply with the following:

Compression joints between PEX-AL-HDPE tubing and fittings shall comply with ASTM F1986 or equivalent International Standard(s) approved by the Authority Having Jurisdiction and shall include threaded or solder adapters that are utilized to connect the compression fittings and joints. Compression fittings shall be made from cast bronze, brass or plastic. Such fittings shall be approved for the intended application and be free from defects. The snap-ring, a part of threaded or solder adapters utilized in the assembly between fittings and threaded

or solder adapters shall be made from injection molded PVDF. Such joints shall be installed in accordance with the manufacturer's instructions.

605.7 PEX-AL-PEX Plastic Tubing and Joints. PEX-AL-PEX plastic pipe/tubing and fittings joining methods shall comply with the following:

Mechanical joints between PEX-AL-PEX tubing and fittings shall include mechanical and compression-type fittings and insert fittings with a copper crimping ring. Such joining methods shall comply with ASTM F1974, ASTM F2434, CSA B137.10 or equivalent International Standard(s) approved by the Authority Having Jurisdiction. Crimp joints for crimp insert fittings shall be joined to PEX-AL-PEX pipe by the compression of a copper crimp ring around the outer circumference of the pipe, forcing the pipe material into annular spaces formed by ribs on the fitting.

Compression joints shall include compression insert fittings and shall be joined to PEX-AL-PEX pipe through the compression of a split ring or compression nut around the outer circumference of the pipe, forcing the pipe material into the annular space formed by the ribs on the fitting.

Mechanical joints shall be installed in accordance with the manufacturer's instructions.

605.8 Polypropylene Plastic Pipe and Joints. Polypropylene plastic pipe and fittings joining methods shall comply with the following:

- (1) Heat-fusion joints between polypropylene pipe and fittings shall comply with ASTM D2389, CSA B137.11 or equivalent International Standard(s) approved by the Authority Having Jurisdiction and shall be assembled using butt-, socket- and electro-fusion heat methods.

Butt-fusion joints shall be made by heating the squared ends of two pipes, pipe and fitting, or two fittings by holding ends against a heated element. The heated element shall be removed where the proper melt is obtained and joined ends shall be placed together with applied force. Butt-fusion joints shall be installed in accordance with the manufacturer's instructions.

Socket-fusion joints shall be made by simultaneously heating the outside surface of a pipe end and the inside of a fitting socket. Where the proper melt is obtained, the pipe and fitting shall be joined by inserting one into the other with applied force. The joint shall fuse together and remain undisturbed until cool. Socket-fusion joints shall be installed in accordance with the manufacturer's instructions.

Electro-fusion joints shall be made by embedding the resistance wire in the fitting and supplying with an electric source. Pipe shall be