

# INTRODUCTION OF REFRIGERANT COUPLING SYSTEMS, INC.

# **OVERVIEW**

Refrigerant Coupling Systems, Inc. (RCS) promotes and furnishes a complete System approach to VRF/VRV piping systems, utilizing Mechanically Attached Fittings and Bendable Quality Copper Tubing. RCS interprets the manufacturers piping schematics and furnishes all the fittings and straight length copper tube to complete the project.

COPPER:	C12200 Type L, H55, ASTM B280 Straight Lengths (field bendable).
FITTINGS:	Brass body, with Zinc Plated Steel Collars, rated for 1,167 psi (80 bar).
TOOLS:	Cordless Handheld Press Tool, Digital Bending Machine, Batteries and Chargers.
KITTING:	Customization of the copper tube, fittings, and Y-branches per Manufacturer
	Requirements and project piping schematics.

## COPPER TUBE

The copper tube available from RCS eliminates a significant number of joints and fittings for VRF/VRV projects. All changes of direction, offsets, etc. can be made by field bending thereby eliminating not only the cost of fittings, but greatly reducing the number of potential leak points. When used with mechanically attached fittings (no brazing), the tube working pressure does not require de-rating based on the annealed strength. The copper is furnished in 19 feet (5.8 meter) lengths and complies with ASTM B280, Type L copper tube. Straight lengths are available in 1/4" O.D. thru 1-5/8" O.D.

### FITTINGS

RCS mechanically attached fittings are rated for 1,167 psi (80 bar) working pressure and are compatible with soft annealed (O60), Light Drawn (H55), and General Purpose Drawn (H58) copper tube. Soft annealed (O60) is not supported in sizes above 5/8" O.D. Fittings available include: Couplings, Reducers, Caps, Test Caps, Factory Flares, Refrigeration Service Valves, and Y-Branches. This allows RCS to provide all necessary fittings to complete Outdoor Unit connections, Multi-Unit connections, Y-Branch combinations, Branch Selector Box connections, and Indoor Unit connections for a variety of manufacturers. Conventional Refrigeration piping including pumped refrigerant systems are also supported.

Using mechanically attached fittings (no heat) eliminates the need for nitrogen purge during installation. The result is a CLEAN refrigeration piping installation.

### TOOLS

RCS furnishes battery operated handheld tools for installation of RCS fittings. These tools are available individually or as kits. RCS also provides a portable tube bender for H55 temper (bendable quality) copper in tube sizes 5/8" O.D. thru 1-3/8" O.D. Tube smaller than 5/8" O.D. can be field bent with a hand bender as recommended by RCS. RCS mechanically attached fittings can also be installed with legacy Reflok® Tools or Lokring® Tools. This reduces the initial investment for contractors who already own these brands.