PIKES PEAK REGIONAL BUILDING DEPARTMENT

Residential Air Conditioning Installation Inspection

PIPING

☐ Air Conditioning (AC) suction line and downstream of TXV (if outside of coil cabinet) is to be insulated, refer to Section 1105.9 of the Uniform Mechanical Code (UMC).

☐ Support lines at 15 feet on center maximum, UMC Section 1110.2.

☐ Mechanical connections are to be flared, lapped, swaged, brazed or Sta-Brite, UMC Section 1107 and Regional Building Department Mechanical Committee's authorization in May 2001.

☐ If soft annealed copper, it is protected from damage, UMC Section 1110.3.

☐ Tests- required 230# and R-22 400# for R-410A. Exception: a residential system under 5 tons with exposed joints (not concealed within building construction) and within 5 feet of the coil/condenser. UMC Section 1122.2 Note: This applies to AC preps on new construction.

☐ Underground installation requires refrigeration lines to be installed in conduit. Exception: If less than 5 feet in total developed length and at least 12 inches deep, UMC Section 1110.3.

☐ Joints under ground must be brazed. Sta-Brite is <u>not acceptable</u>. (Regional Building Department Mechanical Committee's decision, August 2001 meeting.)

☐ Provide vibration protection where piping enters cabinet at coil and condenser, UMC Section 1110.1.

CONDENSER

☐ Clearances per Manufacturer's specification, UMC Sections 303.1, 303.2, 1105.2.1 & 302.1.

☐ Support is a minimum of 3 inches above grade, UMC Section 304.8.

☐ Service outlet located within 25 feet, UMC Section 306.3.*

☐ Provide disconnect within 50 feet and in line of sight, UMC Section 306.2.*

COIL

☐ In compliance with UMC Sections 303.1 and 603.8.1, and the decision of the Regional Building Department Mechanical Committee in October 2000, the coil case is to have an area not less than 90% of the furnace outlet collar. **If less than 90%, one of the following options is applied:**
1. Verify acceptance per furnace listing/ installation instructions;
2. Letter provided from furnace manufacturer stating use of specific coil with specific model furnace is acceptable;
3. Provide duct transition from furnace collar to the coil with not more than a 45 degree angle from vertical; or
4. Seek variance from Mechanical committee.

☐ Provide condensate drain and trap if required per manufacturer's installation instructions, UMC Sections 1105.10 and 303.1.

☐ Provide overflow drain if required. Drain must terminate at either floor drain or readily observable location, UMC Section 1105.12.

☐ Duct work to be substantially air tight, UMC Section 601.6.

* Electrical permit required if new installation.