

not less than 3/4". Condensate drain piping (primary and secondary) shall be copper when installed in a plenum rated ceiling cavity or plenum rate room. If in question, contact Design Engineer.

2. Provide secondary drain pan positioned under air handling units, supported by suitable means consistent with standard industry practice or as indicated on plans.
 3. Insulate primary drain line piping in unconditioned spaced within the building.
- F. Complete structural, mechanical, and electrical connections in accordance with manufacturer's installation instructions.
- G. Install outdoor units level on concrete base, location as indicated. Where indicated on plans, install air handlers on concrete base, maintaining adequate clearance for condensate drain trap.
- H. Refrigerant Piping
1. Size and stall all refrigerant piping to complete the system connecting heat pumps/condensers to air handlers in accordance with the equipment manufacturer's instructions based on equipment size, route of piping (length of run and change in elevation), and good refrigeration system practice including reconnecting to existing heat pump/air conditioning units, where indicated. Braze all joints with silver alloy solder.
 2. Refrigerant pipe crossing a passageway in any building shall be not less than 7-1/2 feet above the floor or against the ceiling.
 3. Refrigerant piping installed in or below concrete floors shall be encased in pipe duct. Where piping passes through concrete or masonry walls, ceiling, floors, or beams, such piping shall be provided with metal sleeves or thimbles.
 4. Insulate refrigerant suction piping.
 5. After completion of entire system and before any pipe is covered, test the entire refrigerant circuit to assure that it is absolutely tight. Conduct low-side and high-side test in accordance with the Florida Building Code for minimum test pressure for the refrigerant used.
 6. After completion of leak testing, evacuate and charge the system utilizing a procedure approved by air conditioning unit's manufacturer.
 7. Controls
 - a. Furnish all controls and control wiring to provide for proper performance of equipment. Provide auxiliary contactors as necessary to accomplish control sequences.
 - b. Install all high voltage (120V or above) control wiring in EMT conduit. Install low voltage control wiring in conduit unless concealed in walls or above finished ceilings not used as supply or return air plenums. Do not run low voltage control wiring in the same conduit as high voltage control or power wiring.

3.2 Install gas fired furnaces in accordance with NFPA 54.

- A. Provide vent connections in accordance with NFPA 211.

END OF SECTION