STATE BUILDING CODE INTERPRETATION NO. 1-37-99

July 21, 1999

Question: "Does the 1996 International Mechanical Code allow copper tube joints used in refrigeration systems that contain group A1 refrigerants, as defined in Table 1103.1 of the above-mentioned code, to be soldered?"

Answer: Yes, The 1996 International Mechanical Code portion of the 1999 State Building Code, Section 1107.4.4, prohibits the use of solder joints for copper tubing for refrigeration systems that contain group A2, A3, B2 or B3 refrigerants as defined in Table 1103.1.

The code requires brazed joints on those types of refrigerants because of the higher risk associated with them. Commonly used solders melt at temperatures less than 500 degrees F. and will fail early in a fire and release refrigerant into the building possibly endangering the occupants and fire fighters.