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LT. GOVERNOR SHEILA Y. OLIVER Commissioner

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Subject: Sizing of Gas Piping

Reference: N.J.A.C. 5:23-3.22, Fuel Gas Subcode, Section 402.3; N.J.A.C. 5:23-3.21, One- and Two-Family Dwelling Subcode, Section G2413.3

Natural Gas: There are several charts in the Fuel Gas Subcode and One- and Two-Family Dwelling Subcode for sizing gas piping systems. The tables list the maximum capacity of the system based on the piping system characteristics (such as the length of the piping system, the diameter of the pipe, and the system material -- e.g., piping or semi-rigid tubing) and the delivery conditions of the gas (such as the specific gravity, delivery pressure, and pressure drop of the gas). Before determining pipe sizes, the local gas utility supplier should be contacted for specific delivery conditions.

Liquefied Petroleum Gas: It should be noted that the natural gas tables should not be used for sizing Liquefied Petroleum Gas (LPG) systems (i.e., specific gravity is different). Unlike natural gas, where design conditions for low-pressure systems are typically standardized by the utilities, LPG systems are designed and installed by a number of different suppliers, so no such standardization exists. Supply pressures in many cases will be higher for LPG systems, resulting in smaller pipe sizing than is required if the natural gas tables are used. Since no uniform supply conditions are available, it is important that information concerning specific gravity, pressure, and pressure drop are obtained from the supplier, and that the appropriate table from the Fuel Gas Subcode is used. (Note: There are no LPG tables in the One- and Two-Family Dwelling Subcode; therefore, the LPG tables of the Fuel Gas Subcode should be applied to buildings subject to the One- and Two-Family Dwelling Subcode.)