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Joint Appendix JA15

Section 140.4(r) makes references to JA15. JA15 has headings for JA15 but numbering for JA14. The contents currently in JA15 seem completely unrelated to Section 140.4(r)

Additional submitted attachment is included below.

Joint Appendix JA15

Appendix JA15 – Qualification Requirements for Central Heat Pump Water Heater Ready

JA14.1 Purpose and Scope

Joint Appendix JA15 provides sizing requirements, for electric ready infrastructure installed with gas or propane water heating systems to meet the requirement for electric readiness specified in Title 24, Part 6, Section 160.9(e)

JA14.2 Electric Ready Requirements

JA14.2.1 Heat Pump Space Requirements

Space shall be reserved for future installation of central heat pump water heaters. The space reserved shall meet the following requirements:

- (a) If the gas water heating system has an input capacity less than 200,000 Btu per hour, the minimum space reserved for the heat pump shall be 2.0 square feet per 10,000 Btu per hour input of the gas or propane water heating system, and the minimum linear dimension of the space reserved shall be 48 linear inches.
- (b) If the gas water heating system has an input capacity greater than or equal to 200,000 Btu per hour, the minimum space reserved for the heat pump shall be 3.6 square feet per 10,000 Btu per hour input of the gas or propane water heating system, and the minimum linear dimension of the space reserved shall be 84 linear inches.

JA14.2.2 Storage Tank Space Requirements

Space shall be reserved for future installation of hot water storage tanks. The space reserved shall meet the following requirements:

- (a) If the input capacity of the gas water heating system is less than 200,000 Btu per hour, the minimum space reserved for the storage and temperature maintenance tanks shall be 4.4 square feet per 10,000 Btu per hour input of the gas or propane water heating system.
- (b) If the input capacity of the gas water heating system is greater than or equal to 200,000 Btu per hour, the minimum physical space reserved for the storage and temperature maintenance tanks shall be 3.1 square feet per 10,000 Btu per hour input of the gas or propane water heating system.

JA14.2.3 Ventilation Requirements

The reserved pathway and penetrations through the building envelope shall meet the following requirements:

- (a) If the input capacity of the gas water heating system is less than 200,000 Btu per hour, the minimum air flow rate shall be 70 CFM per 10,000 Btu per hour input of the gas or propane water heating system and the total external static pressure drop of ductwork and louvers shall not exceed 0.17 inch when the future heat pump water heater is installed.
- (b) If the input capacity of the gas water heating system is greater than or equal to 200,000 Btu per hour, the minimum air flow rate shall be 420 CFM per 10,000 Btu per hour input of the gas or propane water heating system and the total external static pressure drop of ductwork and louvers shall not exceed 0.17 inch when the future heat pump water heater is installed.

JA14.2.4 Condensate Drainage Piping Requirements

The condensate drainage piping shall meet the following requirements:

- (a) If the input capacity of the gas water heating system is less than 200,000 Btu per hour, condensate drainage shall be sized for 0.2 tons of refrigeration capacity per 10,000 Btu per hour input.
- (b) If the input capacity of the gas water heating system is greater than or equal to 200,000 Btu per hour, condensate drainage shall be sized for 0.7 tons of refrigeration capacity per 10,000 Btu per hour input.

JA14.2.5 Electrical Requirements

The electrical system serving the heat pump shall meet the following requirements:

- (a) If the input capacity of the gas water heating system is less than 200,000 Btu per hour, provide 0.1 kVA per 10,000 Btu per hour input.
- (b) If the input capacity of the gas water heating system is greater than or equal to 200,000 Btu per hour, provide 1.1 kVA per 10,000 Btu per hour input.

The electrical system serving the temperature maintenance tank shall meet the following requirements:

- (c) If the input capacity of the gas water heating system is less than 200,000 Btu per hour, provide 1.0 kVA per 10,000 Btu per hour input.

- (d) If the input capacity of the gas water heating system is greater than or equal to 200,000 Btu per hour, provide 0.6 kVA per 10,000 Btu per hour input.