TCC ITEM # 006

2024 UNIFORM PLUMBING CODE

2024 UNIFORM MECHANICAL CODE

ITEM # 212 Comment 01

Item # 074 Comment 01

RECOMMENDATION:

814.0 Condensate Waste and Control.

814.4 Appliance Condensate Drains. Condensate drain lines from individual condensing appliances shall be sized as required by the manufacturer's instructions. Condensate drain lines serving more than one appliance connecting to a common indirect waste pipe shall have the connections to the indirect waste pipe protected by a sanitary waste valve complying with ASME A112.18.8, condensate trap complying with IAPMO IGC 196, or trap with a trap primer.

814.5 Point of Discharge. Air-conditioning condensate waste pipes shall connect indirectly to the drainage system through an air gap or air break to trapped and vented receptors, dry wells, mop sinks, leach pits, or the tailpiece of plumbing fixtures. An individual condensate drain shall be trapped in accordance with the appliance manufacturer's instructions or in accordance with Section 814.4.

310.0 Condensate Wastes and Control.

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X Accept recommendation as submitted.

No action needed.

Substantiation:

The language in UMC Item # 074 Comment 01, Section 310.5 (Point of Discharge) is being revised to add provisions that will allow condensate to discharge to "the tailpiece of plumbing fixtures" to correlate with the language approved by the UPC on Item # 212 Comment 01, Section 814.5 (Point of Discharge).

The following is provided for informational purpose only:

The substantiation provided for Item # 212 Comment 01 of the UPC is as follows: The primary concern with the connection to indirect waste pipe from multiple condensate drains is the free passage of air between spaces. Without a means of preventing the movement of air in the indirect waste pipe, biohazardous airborne materials can easily migrate between building spaces. This can result in a medical emergency from exposure to viruses, germs, or chemicals emanating into a space.

Since the connection of the condensate is indirect, there are no hard piping connections that closes off the piping between different building spaces. There needs to be a means or mechanism that isolates the open piping while still allowing the pipe to serve as an indirect waste pipe. This mechanism would prevent the movement of contaminated air between different spaces in a building. Two currently available devices that would provide the isolation of air movement through an indirect waste pipe are sanitary waste valves and condensate traps. These devices are regulated by ASME A112.18.8 and IAPMO IGC 196 respectively. Both devices will isolate the air movement and are proven by testing and listing to the referenced standards.

To a lesser degree, a water seal trap could provide isolation of air movement. The problem with a trap is that if the trap loses the water seal, the trap provides no protection against air movement. Condensate drains may not operate for months, thus leaving the trap with no source of water for refilling due to evaporation. For that reason, the only possible means of accepting a water seal trap as an alternative to the two devices is to mandate a trap seal primer valve. While the alternative of a trap with trap seal primer is included in the acceptable means of protection from air movement, it is the poorest of the three methods identified.

This public comment is a life safety issue in protecting the public from transmission of airborne contaminants between building spaces. This concern has become more apparent with the current pandemic facing the world. It is imperative that the Plumbing Code and Mechanical Code address the issue with means of preventing a hazardous situation.