STATE BUILDING CODE OPINION NO. 21-05

SECTION: C403.1.1, Total System Performance Ratio

QUESTION 1: Since the zone air distribution effectiveness does not appear to be a user-specified input within the TSPR tool, can systems utilizing low-velocity displacement ventilation (meeting footnote e of Table 403.3.1.1.1.2 of the 2018 IMC) with a zone air distribution effectiveness = 1.2 utilize exception #6 of Section C403.1.1?

ANSWER: Yes. Given the similar zone air distribution effectiveness, displacement ventilation can utilize Exception 6.

QUESTION 2: Is TSPR required if the proposed system is listed in Table D601.11.1 but includes a proposed building system parameter in Table D601.11.2 that is not applicable to the proposed system type? Example: DOAS + FCU with airside economizer, which is a system type listed in Table D601.11.1 (Systems #6 & 12) so exception #3 of Section C403.1.1 does not apply. However, System #6 is not noted as being available for simulation with airside economizer per Table D601.11.2.

ANSWER: No. TSPR applies to all systems listed in Table D601.11.1. However, if a proposed system includes a proposed building system parameter in Table D601.11.2 that is not noted as applicable for that system in the “Applicable Systems” column, then that proposed design configuration is exempt from TSPR.

SUPERSEDES: None

REQUESTED BY: City of Bellevue