

April 8, 2020

**Testimony Summary:** (Please note the inherent shortcomings with summaries. The complete testimonies are posted on the SBCC website.)

- 1) David Baylon 3/2/2020: Proposed changes to the CR-102 are highlighted in yellow.

**M1505.4.1 System design.** The whole house ventilation system shall consist of one or more supply fans, one or more exhaust fans, or an ERV/HRV with integral fans, associated ducts and controls. Whole-house mechanical ventilation system with supply and exhaust fans per Sections M1505.4.1.2, M1505.4.1.3, M1505.4.1.4, and M1505.4.1.5. Local exhaust fans are permitted to serve as part of the whole house ventilation system when provided with the proper controls per Section M1505.4.2. The systems shall be designed and installed to supply and/or exhaust the minimum outdoor airflow rates per Section M1505.4.3 as ~~corrected by the balanced and/or distributed~~ **modified by** whole house ventilation system coefficients per Section ~~M1504.5.3.1~~ **M1505.4.3.1**, where applicable. The whole house ventilation system shall operate continuously at the minimum ventilation rate determined per Section M1505.4.2 unless configured with intermittent off controls per Section M1505.4.3.2.

**M1505.4.1.2 Exhaust fans.** Exhaust fans required shall be ducted directly to the outside. Exhaust air outlets shall be designed to limit the pressure difference to the outside ~~to limiting the outlet free area maximum velocity to 500 ft per min~~ and equipped with backdraft dampers or motorized dampers in accordance with Washington State Energy Code. Exhaust fans shall be tested and rated in accordance with the airflow and sound rating procedures of the Home Ventilating Institute (HVI 915, HVI Loudness Testing and Rating Procedure, HVI 916, HVI Air-flow Test Procedure, and HVI 920, HVI Product Performance Certification Procedure **as applicable**). Exhaust fans required in this section may be used to provide local ventilation. Exhaust fans that are designed for intermittent exhaust airflow rates higher than the continuous exhaust air-flow rates in Table ~~403-8.3~~ **1505.4.3(3)** shall be provided with occupancy sensors or humidity sensors to automatically override the fan to the high-speed airflow rate. The exhaust fans shall be tested, and the testing results shall be submitted and posted in accordance with Section ~~403-8.6.7~~ **1505.4.1.6**.

**M1505.4.1.3 Supply fans.** Supply fans used in meeting the requirements of this section shall supply outdoor air from intake openings in accordance with IMC Sections 401.4 and 401.5. ~~Intake air openings shall be designed to limit the pressure difference to the outside to limiting the inlet free area maximum velocity to 500 ft per min and~~ **When designed for intermittent off operation, supply systems shall be equipped with motorized dampers in accordance with Washington State Energy Code.** Supply fans shall be tested and rated in accordance with the airflow and sound rating procedures of the Home Ventilating Institute (HVI 915, HVI Loudness Testing and Rating Procedure, HVI 916, HVI Airflow Test Procedure, and HVI 920, HVI Product Performance Certification Procedure **as applicable**). **Where outdoor air is provided to each habitable dwelling unit or sleeping unit by supply fan systems the outdoor air shall be filtered.** The filter shall be accessible for regular maintenance and replacement. The filter shall have a Minimum Efficiency Rating Value (MERV) of at least 8.

**M1505.4.1.4 Balanced whole house ventilation system.** A balanced whole house ventilation system shall include both supply and exhaust fans. The supply and exhaust fans shall have airflow that is within 10 percent of each other. The tested and balanced total mechanical exhaust airflow rate is within 10 percent or 5 cfm, whichever is greater, of the total mechanical supply airflow rate. The flow rate test

results shall be submitted and posted in accordance with Section M1505.4.1.7. The exhaust fan shall meet the requirements of Section M1505.4.1.2. The supply fan shall meet the requirements of Section M1505.4.1.3. ~~For dwelling units required by the Washington State Energy Code to have a balanced system, the system is required to have balanced whole house ventilation but is not required to have distributed whole house ventilation where the distributed system coefficient from Table 403.8.2 is utilized to correct the whole house mechanical ventilation rate.~~ Balanced ventilation systems with both supply and exhaust fans in a packaged product, such as an ERV/HRV shall meet the requirements of HVI 920, as applicable. Intermittent dryer exhaust, intermittent range hood exhaust, and intermittent toilet room exhaust airflow rates above the residential dwelling or sleeping unit minimum ventilation rate are exempt from the balanced airflow calculation.

- 2) Mike Moore 3/10/2020: Supports David Baylon's proposed changes and proposed the following change:

M1505.4.1.2 Exhaust fans. Exhaust fans required shall be ducted directly to the outside. Exhaust air outlets shall be designed to limit the pressure difference to the outside to limiting the outlet free area maximum velocity to 500 ft per min and equipped with backdraft dampers or motorized dampers in accordance with Washington State Energy Code. Exhaust fans shall be tested and rated in accordance with the airflow and sound rating procedures of the Home Ventilating Institute (HVI 915, HVI Loudness Testing and Rating Procedure, HVI 916, HVI Air-flow Test Procedure, and HVI 920, HVI Product Performance Certification Procedure). Exhaust fans required in this section may be used to provide local ventilation. Bathroom Exhaust fans that are designed for intermittent exhaust airflow rates higher than the continuous exhaust air-flow rates in Table 403.8.3 shall be provided with occupancy sensors or humidity sensors to automatically override the fan to the high speed airflow rate. The exhaust fans shall be tested and the testing results shall be submitted and posted in accordance with Section 403.8.6.7.

- 3) Chuck Murray 3/13/2020: Supports David Baylon's proposed changes