



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

November 2012 Motions for Rule Making Actions

Main Motion: Adopt 2012 Energy Code as proposed in WAC 51-11R and 51-11C; repeal WAC 51-11

Amendment to the main motion:

Modify Section C403.4.5 to reinstate and modify Item 4 that was deleted by the TAG.

C403.4.5 Requirements for complex mechanical systems serving multiple zones. Sections C403.4.5.1 through C403.4.5.4 shall apply to complex mechanical systems serving multiple zones. Supply air systems serving multiple zones shall be VAV systems which, during periods of occupancy, are designed and capable of being controlled to reduce primary air supply to each *zone* to one of the following before reheating, recooling or mixing takes place:

1. Thirty percent of the maximum supply air to each *zone*.
2. Three hundred cfm (142 L/s) or less where the maximum flow rate is less than 10 percent of the total fan system supply airflow rate.
3. The minimum ventilation requirements of Chapter 4 of the *International Mechanical Code*.

~~3.4. Minimum flow rates required by applicable codes or standards for occupant health and safety.~~

Exception: The following define where individual *zones* or where entire air distribution systems are exempted from the requirement for VAV control:

1. Reserved.
2. *Zones* or supply air systems where at least 75 percent of the energy for reheating or for providing warm air in mixing systems is provided from a site-recovered or site-solar energy source.
3. *Zones* where special humidity levels are required to satisfy process needs.
4. *Zones* with a peak supply air quantity of 300 cfm (142 L/s) or less and where the flow rate is less than 10 percent of the total fan system supply airflow rate.
5. *Zones* where the volume of air to be reheated, recooling or mixed is no greater than the volume of outside air required to meet the minimum ventilation requirements of Chapter 4 of the *International Mechanical Code*.
6. *Zones* or supply air systems with thermostatic and humidistatic controls capable of operating in sequence the supply of heating and cooling energy to the *zones* and which are capable of preventing reheating, recooling, mixing or simultaneous supply of air that has been previously cooled, either mechanically or through the use of economizer systems, and air that has been previously mechanically heated.

Rationale: Change is needed as the Washington Administrative Code (WAC) as well as Federal Standards contain ventilation rates for certain occupancies that are not covered in the IMC. For example ventilation rates for skilled nursing facilities, ambulatory surgery centers, and hospitals are found in the WAC.