STATE BUILDING CODE INTERPRETATION NO. 14-18


SECTION: C402.4.5.2 Outdoor air intakes and exhausts
C403.2.4.4 Shutoff damper controls

QUESTION 1: Is it the intent of the state energy code to require low leakage return air dampers, which are typically not considered openings in the building envelope?

ANSWER 1: Yes. The 2012 WSEC amendment requires that return motorized dampers meet a maximum leakage rating of 4.0 cfm/ft² at 1.0” w.g., except in unitary packaged equipment as stated in Interpretation No. 14-17. (Note: The 2009 WSEC required a maximum leakage rating of 10.0 cfm/ft² at 1.0” w.g.)

QUESTION 2: Per the section C403.2.4.4, are shut off damper controls required on return air ducts?

ANSWER 2: No. Per Section 403.2.4.4 there is no requirement for shutoff controls on return ducts. The typical configuration of the return air dampers for airside economizers would be open during periods of time when the system is shut down or during building warm up.

QUESTION 3: Would a secondary return air damper external to package unitary HVAC equipment that provides positive low leakage closure when the system is off meet the intent of Section C402.4.5.2?

ANSWER 3: Yes, As long as the secondary return damper can be closed during airside economizer operation and still maintain the airflow path for the relief/exhaust air. See also Interpretation No. 14-17.

SUPERSEDES: None

REQUESTED BY: Pierce County