



Washington State Building Code Council

Improving the built environment by promoting health, safety and welfare

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STATE BUILDING CODE OPINION NO. 24-06

CODE: 2021 Washington State Energy Code

SECTION: R406 Supplemental heating for air source heat pumps

QUESTION 1: Is the alternative heating source referenced in footnote a of Table R406.3 addressing:

1. Electric resistant heaters, fireplaces, and other systems installed as individual heating sources (as a secondary heat source)?
or
2. All of the above and supplemental heating that is installed in a system commonly referred to as back up (intended to work with the primary heat source)?

ANSWER 1: **The limitations in footnote a would apply to all heating sources not included as part of the integral function of the primary heat source.**

QUESTION 2: If footnote a allows supplemental heat, at what temperature should the system “lock out” the supplemental heat activation?

ANSWER 2: **Section R403.1.2 requires controls that prevent supplemental heat system operation above 40°F and that the controls are set at 35°F or less at final inspection. For System Type 2 (heat pump with supplemental electric resistance or gas furnace), footnote b to Table R406.2 allows the lockout to be set to 38°F. For cold climate heat pumps, the lockout should be set at the design temperature specified in Appendix RC.**

QUESTION 3: How does footnote a apply to the ductless heat pump system in Option 3.7? What if the supplemental heat source is not in the unit?

ANSWER 3: **The table indicates that footnote a is applicable to Option 3.7, so supplemental heating within the limitations of footnote a would be allowed. The supplemental heat does not need to be within the unit.**

SUPERSEDES: None

REQUESTED BY: City of West Richland