

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
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Heat Pump Auxiliary Controls for Single Family Dwellings

Code: 2012 Energy Conservation Code

Date: July 3, 2012

Section: 403.1.2

Question:

Does Section 403.1.2 require the use of an outdoor thermostat as a means to prevent supplemental heater operation when the heat pump alone can satisfy the heating load for a single family dwelling?

Answer:

Yes, Section 403.1.2 requires a two-stage thermostat with set points that control supplementary heating on the second stage (lower set point) and compression heating on the first stage (higher set point). Standard heat pump thermostats supplied by heat pump manufacturers meet this requirement. Use of an outside thermostat wired in series with the second stage to lock out the supplemental heating when the heat pump alone can meet the heating load is an additional energy conservation measure and is a new requirement in the 2012 NCECC.