

**NC Department of Insurance  
Office of the State Fire Marshal - Engineering Division  
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**Garage Heating and Cooling for a Dwelling**

**Code:** 2002 Energy Code and 2002 Residential Code      **Date:** December 27, 2005  
**Section:** 601.1 of 2002 Energy Code and  
N1101.1 of 2002 Residential Code

**Question:**

Can a garage for a one- or two-family dwelling or townhouse be provided with heating and/or cooling without requiring compliance with the thermal envelope provisions of Chapter 11 of the 2002 One- and Two-Family Dwelling Code or Chapter 6 of the 2002 Energy Code?

**Answer:**

Yes possibly, but the answer is entirely dependent on the compliance path taken with respect to the two codes. If the 2002 NC Energy Code is selected for the compliance path, any permanent heating and /or cooling appliance installed for the purpose of heating and/or cooling the garage would invoke the thermal envelope provisions. However, if Chapter 11 of the 2002 NC Residential Code is selected for the compliance path, the thermal envelope provisions are not invoked if the installed appliance is not capable of maintaining a design space temperature of 50 degrees Fahrenheit or above when heating or 85 degrees Fahrenheit or below when cooling. This difference is due to different definitions of “conditioned space” in the two codes. Consequently, it is possible to provide a limited amount of heating and/or cooling to a garage space or other accessory building without invoking the thermal envelope provisions of the code when using Chapter 11 of the 2002 One- and Two-Family Dwelling Code.

**Keywords:**

Residential garage, heating a residential garage, cooling a residential garage