

**NC Department of Insurance  
Office of the State Fire Marshal - Engineering Division  
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**Smoke and Heat Vents in S-1 Warehouse**

**Code:** 2002 Fire Prevention Code  
**Section:** 910.1

**Date:** December 2005

**Question:**

Are smoke and heat vents required within a Group S-1 warehouse that is greater than 50,000 square feet when it is equipped with an Early Suppression, Fast Response (ESFR) sprinkler system?

**Answer:**

Yes, while Footnote j of Table 2306.2 exempts smoke and heat vents when triggered by high-piled storage thresholds, Section 910.2 continues to require smoke and heat vents based on the overall open area of the Group S-1 occupancy. Section 910 of the fire code contains multiple triggers for smoke and heat vents, where in this case one is for high-piled storage identified in Section 910.2.3 and one is for storage area addressed in Section 910.2.1.

The 2006 North Carolina Fire Prevention Code will contain a blanket exemption for smoke and heat vents for all buildings equipped with an ESFR sprinkler system. Use of this section before the adoption of the 2006 code would be subject to the approval of the code official in accordance with Section 205.1 of the North Carolina Administration and Enforcement Code.