

**NC Department of Insurance
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Determining Attic Storage and Use of Spray Foam Insulation with Ignition or Thermal Barriers

Code: NC Residential Code
Section: R316.5.3

Date: May 13, 2022

Question:

Does the presence of flooring (plywood, OSB, etc.) in an attic indicate the space is intended for storage or other activity, therefore not meeting the requirement in R316.5.3 that “The space is entered only for purposes of repairs or maintenance”?

Answer:

Yes, with one exception.

In the definitions of Chapter 2, the attic is defined as *attic storage* when there is a floored area, regardless of size, that is served by an attic access. The exception to this is when there is only a floored walkway to service utilities or equipment.

The following is a reprint from Chapter 2 of the 2018 edition of the NC Residential Code:

ATTIC STORAGE. A floored area, regardless of size, within an attic space that is served by an attic access.

Exception: A floor walkway not less than 24 inches (610 mm) wide or greater than 48 inches (1219 mm) wide that serves as an access for the service of utilities or equipment, and a level service space not less than 30 inches (762 mm) deep or greater than 48 inches (1219 mm) deep and not less than 30 inches (762 mm) wide or greater than 48 inches (1219 mm) wide at the front or service side of the appliance, shall not be considered as attic storage. Such floored area shall be labeled at the attic access opening, “NOT FOR STORAGE.” The lettering shall be a minimum of 2 inches (51 mm) in height.

Therefore, the presence of flooring in the attic, except for the narrowly defined exception for service walkways and platforms, would negate the allowance for using an ignition barrier in lieu of the thermal barrier required in R316.4. Likewise, if the attic is finished¹, as defined in the definitions, to the point of being habitable, that use would also negate the allowance for using an ignition barrier in lieu of the thermal barrier in R316.4.

International Code Council Evaluation Services Reports, (ICC-ESR) commonly used by many spray-foam manufacturers as an alternate method to a prescriptive ignition barrier, are consistent with this requirement of storage being a condition that negates the allowance for using the ignition barrier in lieu of a thermal barrier.

This interpretation does not negate the allowance of R316.5, which references R316.6 Specific Approval, but where the specific approval indicates the requirements of “no storage allowed” or

they mimic the language of R316.5.3 of the International Residential Code, this interpretation applies, meaning the presence of flooring is indicative of storage.

Keywords:

Styrofoam, plastic

File Name:

R316.5.3 – Determining Attic Storage and Use of Spray Foam Insulation with Ignition or Thermal Barriers.doc

ⁱ[RB] ATTIC, HABITABLE. A finished attic area meeting the definition of habitable space and complying with all of the following requirements:

1. The occupiable floor area is not less than 70 square feet, in accordance with Section R304.
2. The occupiable floor area has a ceiling height in accordance with Section R305.
3. The occupiable space is enclosed by the roof assembly above, knee walls (if applicable) on the sides and the floor-ceiling assembly below.