



NIH Division of the Fire Marshal

Administrative Interpretation 16-4

Sound Dampening Foam Policy

Code reference: NFPA 101, Life Safety Code, para. 10.2.4.3 (2015) and IBC Article 2603 (2015)

Background: During a survey of NIH-RML, several laboratories were found with some or all of the walls/ceilings covered in sound dampening foam. Researchers stated that the foam is necessary to dampen vibrations from sound for lab experiments such as delicate microscopes.

Sound insulating foam is generally not allowed to be installed unexposed on laboratory walls or ceilings. It is composed of foam plastic, which is not allowed to be used as interior finish/trim except under very limited circumstances as governed by NFPA 101 para. 10.2.4.3. However, para. A.1.2 explains that the code should not interfere with the normal use of the building. Additionally, para. 4.6.1.3 allows modification of code provisions where a reasonable degree of safety is provided.

Interpretation: Where sound insulating foam is needed for NIH laboratory requirements, the following requirements shall apply:

- 1) The Institute shall write a brief letter indicating why sound insulating foam is required for laboratory requirements, and other materials/methods have been investigated and found incompatible.
- 2) The building shall be fully sprinklered.
- 3) Material used for insulation shall have a Flame Spread Index no greater than 200, and a Smoke-developed Index no greater than 450.
- 4) Material shall be securely attached to the building wall, ceiling, or structure.
- 5) The Division of the Fire Marshal will consult with the IC to ensure the lowest feasible amount of flammable liquids are stored in the room, and that no activities involve heat producing appliances.

The IC will annually certify that the laboratory procedure still requires sound insulating foam and is still securely attached. NIH Division of Occupational Health and Safety will help enforce this policy between DFM annual inspections. The DFM will maintain a database of all NIH laboratories (by building and room number) where sound insulating foam has been approved for installation.

Supersedes: N/A

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