

# Enhancing Party Wall Performance with Spray Foam Insulation

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BY:

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I live in Nashville, Tennessee and primarily deal with SPF applications in commercial and residential construction in the U.S. market. I have been in the building products industry for 10+ years, and with Huntsman Building Solutions for the last 3.5 years. I respond frequently to technical questions related to product applications, building science, and building code compliance.

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# SPFA Antitrust Policy

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*"Our policy is to comply with all federal, state and local laws, including the antitrust laws. It is expected that all company member representatives involved in SPFA activities and SPFA staff will be sensitive to the unique legal issues involving trade associations and, accordingly, will take all measures necessary to comply with U.S. antitrust laws and similar foreign competition laws."*

*It is a per se violation of the federal antitrust laws for competitors to agree on prices, limitation of supplies, allocation of customers or territory, or boycotts. "Per se" means that no legal defense can be used to mitigate this automatic violation.*

*Even an agreement by competitors that is for the good of society and our industry may be a violation of the antitrust laws if it could affect competition.*

*If a topic of antitrust concern is raised at any time during a meeting, note your objection for the record. If the topic continues to be discussed, you should leave the room immediately and contact SPFA's general counsel and your company's attorney for further guidance.*

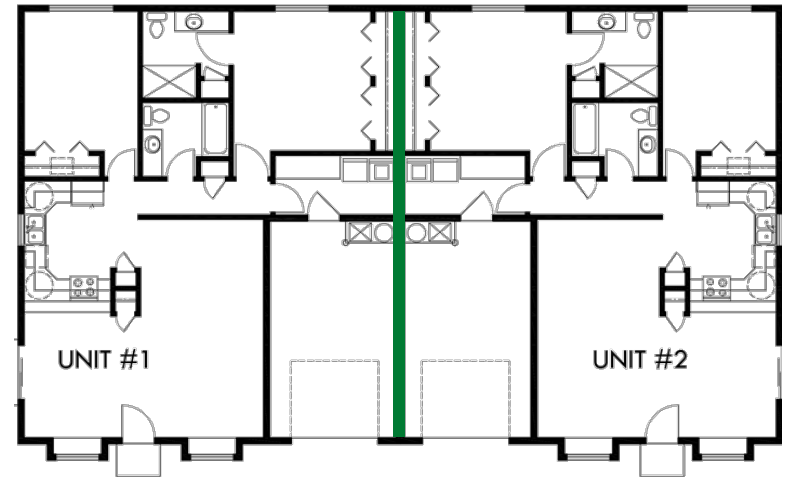
*Ensure that every SPFA meeting, where members are present, has an agenda, the agenda is followed, and minutes are kept by SPFA staff of the proceedings.*

*Understanding and acting on the requirements of U.S. and foreign antitrust and competition laws sometimes can be difficult. If you have a question about the propriety of activities or discussions in SPFA, you are encouraged immediately to contact your company's legal counsel and SPFA management.*

# What is a Party Wall?

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- **IBC Section 706.1.1 Party walls** - Any wall located on a lot line between adjacent buildings, which is used or adapted for joint service between the two buildings shall be constructed as a fire wall...
  
- **IRC Section R302.2 Townhouses** - Common walls separating townhouses shall be assigned a fire-resistance rating in accordance with Section R302.2, Item 1 or 2....



# What are They Designed For?

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- Fire Protection Between Units
  - Habitable or Living Spaces
- Required Fire-Resistance Rating
  - Typically, 1 or 2 hour rating based on construction type
- Must be a Tested Assembly
  - ASTM E119 or UL 263
- Sound Barrier Between Units
  - Minimum required STC ratings



# Fire Testing Requirements

- Assembly Tested in Accordance with ASTM E119 or UL 263
- 3<sup>rd</sup> Party Verified



# Why Use Spray Foam?

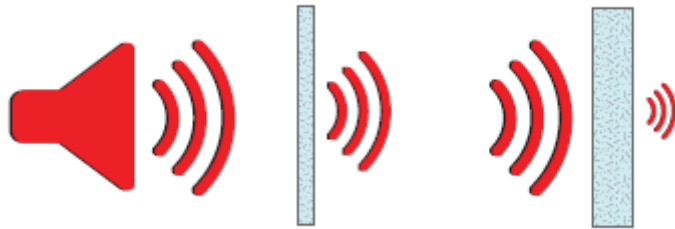
## Open-Cell Spray Foam

- Air Sealing
  - Blower Doors
  - Odors from Adjacent Units
  - Acoustical Performance
- No Settling over Time
  - Consistent Performance
- Can Open Possibilities to Greater use of SPF

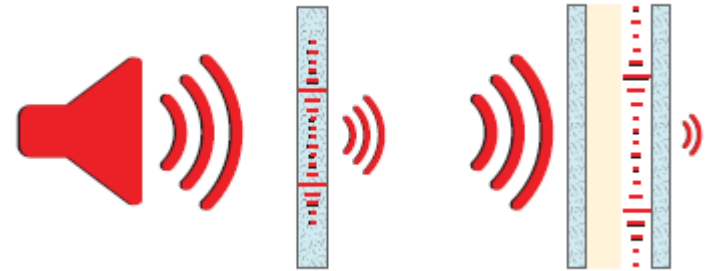


# Acoustical Performance

**Increasing the Mass**



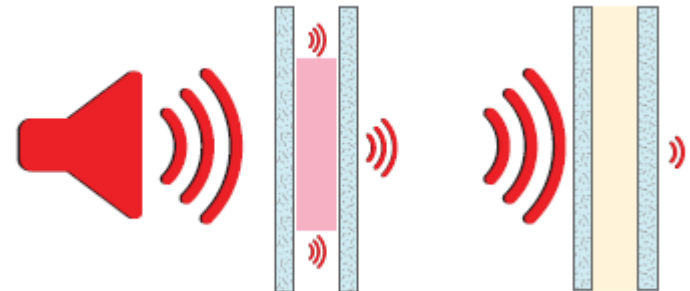
**Decouple the System**



**Absorptive Material**

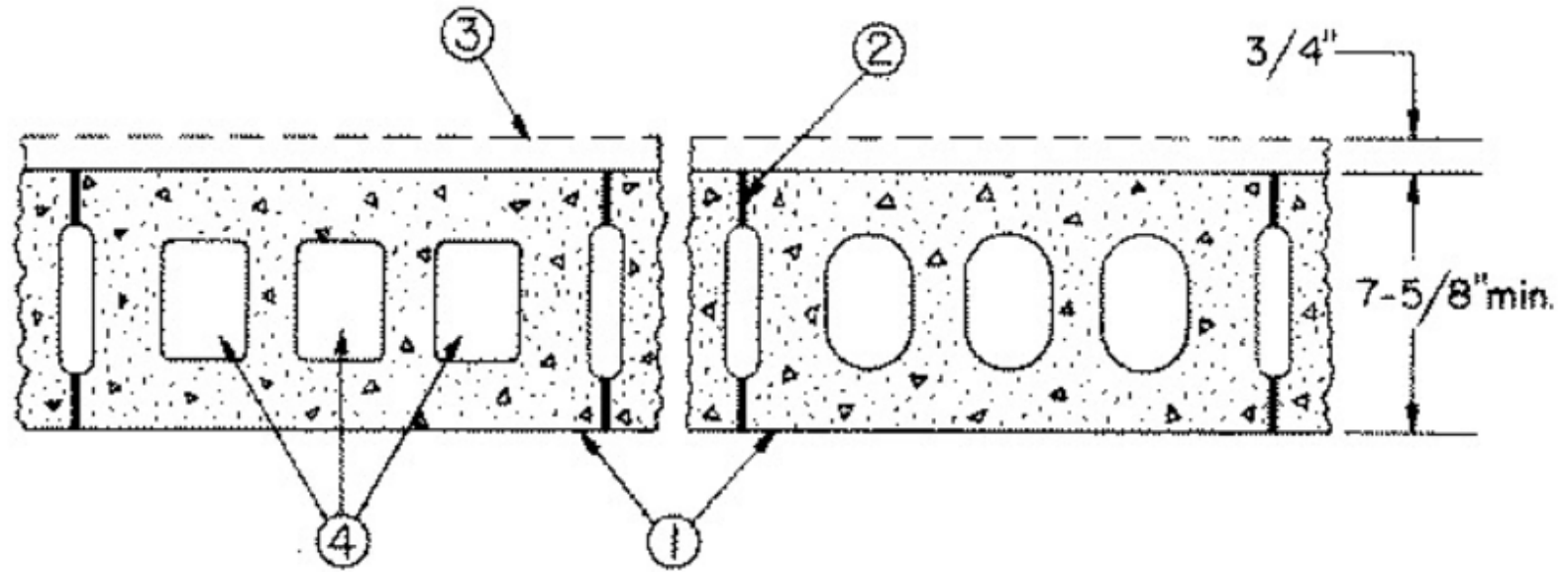


**Air Sealing the Wall**

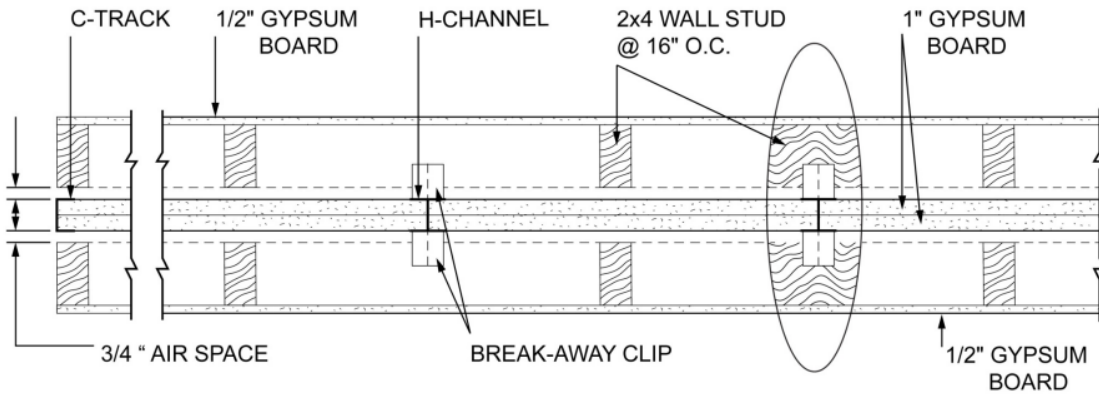




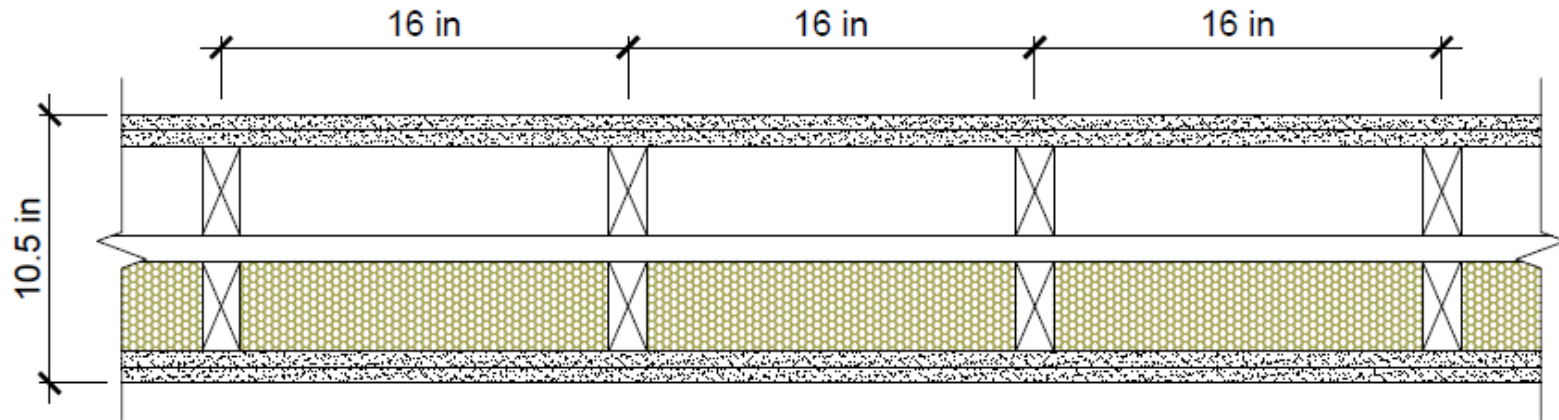
# Different Assemblies



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# Different Assemblies



## ASSEMBLY:

- TWO LAYERS OF 5/8 IN. THICK GYPSUM BOARD APPLIED VERTICALLY
- MIN. 2 IN. X 4 IN. WOOD STUDS SPACED MAX. 16 IN. O.C.
- MIN. 1 IN. THICK AIR SPACE
- MIN. 2 IN. X 4 IN. WOOD STUDS SPACED MAX. 16 IN. O.C.
- 3-1/2 IN. THICK HBS SPRAY FOAM INSULATION
- TWO LAYERS OF 5/8 IN. THICK GYPSUM BOARD APPLIED VERTICALLY

# Questions?

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Thank You