

TECH TIP # 17

Jobsite Ventilation, Re-occupancy and Re-entry Times for Open- and Closed-Cell Spray Foams

Spray Polyurethane Foam's (SPF) superior thermal performance and air-sealing capabilities can be attributed to being manufactured on site by professional insulation installers. As part of BASF's commitment to Responsible Care, continued guidance on how to use our chemicals safely is a top priority. This document provides guidance on ventilation rates for worker re-entry for BASF's spray foam products that are typically used in interior applications.

Personnel on the SPF crew, such as the installers and helpers, are trained on the health and safety procedures to properly use SPF products to ensure a proper installation and will take into account health and safety measures during the application of SPF to ensure other trades or occupants are outside of the defined SPF work zone. In addition to mechanically ventilating the work zone as a best practice, disposable chemical-resistant clothing, appropriate gloves and respiratory protection shall be worn by all personnel in the work zone during the application of open- or closed-cell SPF. Additional information on safe-use guidelines, handling, and exposure control when installing SPF can be found in the resources section below.

BASF Corporation has worked closely with the American Chemistry Council's (ACC) Center for the Polyurethane Industry (CPI) and Spray Foam Coalition (SFC) to develop consensus guidance documents based on industry research for ventilation recommendations during spray foam application. The spray polyurethane foam industry recognizes a standardized timeframe of 24 hours after spraying has stopped as a valid re-occupancy/re-entry guideline for high pressure processed SPF, unless otherwise suggested by the. Re-entry is defined by other trades on the job site while re-occupancy refers to inhabitants of the building. The below table is based off jobsite analysis of emissions during application and various laboratory tests, such as ASTM D8445, on various BASF foam systems. As site conditions can vary, a job specific safety plan should be utilized for each site and include a ventilation strategy. It is recommended that the SPF work zone be isolated from building inhabitants and ventilated for 24 hours before re-occupancy.

Table 1: Recommended Re-entry Guidelines for Unprotected Trades Based on Ventilation Rates

BASF Product	Re-entry @ 20 ACH*	Re-entry with minimal ventilation	Re-occupancy
ENERTITE Series open-cell SPF	2 hours	4 hours	24 hours
WALLTITE Series closed-cell SPF	2 hours	8 hours	24 hours

*Ventilation rates based upon ventilation used DURING the time of application and for the time frame listed.

Resources

BASF suggests that the Spray Foam Coalition, *Ventilation Considerations for Spray Polyurethane Foam* be followed when processing and applying BASF liquid spray foam compounds:

<https://www.americanchemistry.com/content/download/5195/file/Ventilation-Considerations-For-Spray-Polyurethane-Foam-Guidance-On-Ventilation-During-Installation-Of-Interior-Applications-Of-High-Pressure-Spray-Polyurethane-Foam.pdf>

The Safety Data Sheets for the BASF liquid compounds and information on our products can be found at <https://spf.basf.com> and should be understood and followed. Risk management for specific jobs as outlined or suggested by OSHA should be planned out and documented by the professional and experienced applicator selected for the project.

Any technical advice furnished or recommendation made by the authors concerning any use or application of any product is believed to be reliable, but the authors make no warranty, either express or implied, as to its accuracy or completeness or of the results to be obtained. With regard to any handling of any BASF product, the end user assumes full responsibility for quality control, testing and determination of suitability of product for its intended application or use.

For any additional information about BASF spray foam systems, please visit www.spf.basf.com.

For a referral to an applicator in your area or to speak with a technical sales representative, please call 800-706-0712 x2.

BASF Corporation- Inside Technical Sales
1703 Crosspoint Avenue
Houston, TX 77054
Tel: (Toll Free) 800-706-0712 – Option 2
www.spf.basf.com

TECH TIP # 17

Jobsite Ventilation, Re-occupancy and Re-entry Times for Open- and Closed-Cell Spray Foams

Safe-use Guidelines, Handling, Exposure and Re-occupancy Data, and much more can be found at:

- American Chemistry Council
 - Products, Resources, and Document Library (also available in [Spanish](#))
<https://polyurethane.americanchemistry.com/Products-Resources-and-Document-Library/>
 - Center for the Polyurethanes Industry (CPI) - Guidance on Best Practices for the Installation of SPF
<https://polyurethane.americanchemistry.com/Spray-Foam-Coalition/Guidance-on-Best-Practices-for-the-Installation-of-Spray-Polyurethane-Foam.pdf>
 - High-Pressure SPF Chemical Health and Safety Training <https://www.spraypolyurethane.org/training/>
- NIOSH Respirator Selection Logic:
 - <https://www.cdc.gov/niosh/docs/2005-100/pdfs/2005-100.pdf?id=10.26616/NIOSH PUB2005100>
- OSHA standards:
 - Hazard Communication: 29 CFR 1910.1200 and 1926.59
 - Respiratory Protection: 29 CFR 1910 Part 134
 - Personal Protective Equipment: 29 CFR 1910 Part 132-138 and 1926.95
 - Ventilation: 29 CFR 1910.94 and 1926.57
- Spraypolyurethane.org
 - Health & Safety Guidelines for SPF Professionals <https://www.spraypolyurethane.org/professional-contractors/health-and-safety-guidelines/>
- Spray Polyurethane Foam Alliance
 - Health & Safety https://www.sprayfoam.org/health_and_safety
- U.S. Environmental Protection Agency
 - Best practices for the use of containment and ventilation techniques “Ventilation Guidance for Spray Polyurethane Foam Application”: <https://www.epa.gov/sites/default/files/2015-08/documents/spf-ventilation.pdf>

For more detailed training and application guidelines, please contact BASF Technical and Applications teams at the contact information below, or visit our [Resource Center](#).

Any technical advice furnished or recommendation made by the authors concerning any use or application of any product is believed to be reliable, but the authors make no warranty, either express or implied, as to its accuracy or completeness or of the results to be obtained. With regard to any handling of any BASF product, the end user assumes full responsibility for quality control, testing and determination of suitability of product for its intended application or use.

For any additional information about BASF spray foam systems, please visit www.spf.basf.com.

For a referral to an applicator in your area or to speak with a technical sales representative, please call 800-706-0712 x2.

BASF Corporation- Inside Technical Sales
1703 Crosspoint Avenue
Houston, TX 77054
Tel: (Toll Free) 800-706-0712 – Option 2
www.spf.basf.com