



NAIMA
NORTH AMERICAN INSULATION
MANUFACTURERS ASSOCIATION

**WORKING SMART
WITH FIBER GLASS,
ROCK WOOL AND SLAG
WOOL PRODUCTS**

*Recommended Work Practices
for the Installation of
Synthetic Vitreous Fibers (SVF)*

HEALTH & SAFETY PARTNERSHIP

The manufacture and use of fiber glass, rock wool (SVF) is an important component of the national insulation products that not only make homes more energy efficient, but also help to reduce pollution, protect the environment and improve the health of workers. Manufacture, install and use when recommended.

NAIMA, the trade association of North American rock wool insulation products (SVF), is implementing a health and safety practice partnership with the U.S. Occupational Safety and Health Administration. This brochure is one component of the Health and Safety Practice Partnership initiative that promotes safe handling and use of SVF through education and training for the manufacture, fabrication and installation.

Working with the industry, trade associations and regulatory agencies, NAIMA is incorporating the industry's existing work practices into the formal HSP document. The work practice recommendations listed in this brochure are a formal HSP document provided by NAIMA. These recommendations have been endorsed by OSHA.

wool and slag wool (Synthetic Vitreous Fibers) improve a nation's economy, providing energy-saving insulation for homes and buildings more comfortable, but also help to promote energy efficiency. SVF are safe to handle when proper work practices are followed.

NAIMA is a coalition of manufacturers of fiber glass, slag wool and rock wool, creating a comprehensive, voluntary work practice program in consultation with the Occupational Safety and Health Administration (OSHA). This program, the Hazardous Substance Partnership Program (HSPP), an initiative of OSHA, focuses on the production of insulation materials and incorporates safety practices for the fabrication and installation of SVF.

Through cooperation with OSHA and labor, NAIMA has consolidated the following comprehensive recommendations. The recommendations below appear exactly as presented in the report submitted to OSHA. As part of the HSPP, these recommendations are being submitted to OSHA.

GENERAL WORK PRACTICES

Applicable to all work involving fiber glass, rock wool and slag wool products

These recommended work practices are in addition to all applicable OSHA requirements.

Minimize Dust Generation:

- Keep the material in its packaging as long as practical and if possible.
- Tools that generate the least amount of dust should be used. If power tools are to be used, they should be equipped with appropriate dust collection systems as necessary.
- Keep work areas clean and free of scrap SVF material.
- Do not use compressed air for clean up unless there is no other effective method. If compressed air must be used proper procedures and control measures must be implemented. Other workers in the immediate area must be removed or similarly protected.
- Where repair or maintenance of equipment that is either insulated with SVF or covered with settled SVF dust is necessary, clean the equipment first with HEPA vacuum or equivalent (where possible) or wipe the surface clean with a wet rag to remove excess dust and loose fibers. If compressed air must be used proper procedures and control measures must be implemented. Other workers in the immediate area must be removed or similarly protected.
- Avoid unnecessary handling of scrap materials by placing them in waste disposal containers and keep equipment as close to working areas as possible to prevent the release of fibers.

Maintain Adequate Ventilation:

- Unless other proper procedures and control measures have been implemented, dust collection systems should be used in manufacturing and fabrication settings where appropriate and feasible.

- Exhausted air containing SVFs should be filtered prior to recirculation into interior workspaces.
- If ventilation systems are used to capture SVFs, they should be regularly checked and maintained.

Wear Appropriate Clothing:

- Loose-fitting, long-sleeved and long-legged clothing is recommended to prevent irritation. A head cover is also recommended, especially when working with material overhead. Gloves are also recommended. Skin irritation cannot occur if there is no contact with the skin. Do not tape sleeves or pants at wrists or ankles.
- Remove SVF dust from the work clothes before leaving work to reduce potential for skin irritation.

Wear Appropriate Personal Protective Equipment:

- To minimize upper respiratory tract irritation, measures should be taken to control the exposure. Such measures will be dictated by the work environment and many include appropriate respiratory protective equipment. See OSHA's Respiratory Protection Standard.
- When appropriate, eye protection should be worn whenever SVF Products are being handled.
- Personal protective equipment should be properly fitted and worn when required.

Removal of Fibers From the Skin and Eyes:

- If fibers accumulate on the skin, do not rub or scratch. Never remove fibers from the skin by blowing with compressed air.
- If fibers are seen penetrating the skin, they may be removed by applying and then removing adhesive tape so that the fibers adhere to the tape and are pulled out of the skin.
- SVF may be deposited in the eye. If this should happen, do not rub the eyes. Flush them with water or eyewash solution (if available). Consult a physician if the irritation persists.

SPECIFIC APPLICATION WORK PRACTICES

SVF insulation products are applied in many different ways, such as blown-in SVF for attics, wall cavity insulation, batts, blankets and rolls, ceiling tiles and more. Specific work practice recommendations as outlined below should be followed in accordance with specific work tasks.

Blown SVF in Attics:

- The installer blowing insulation in the attic must always wear a NIOSH certified dust respirator (certified N95 or greater). See OSHA's Respiratory Protection Standard.
- No workers, unless they are wearing a NIOSH certified dust respirator (certified N95 or greater), should be permitted in the attic during or immediately after the SVF application.
- The blower should not use a bare hand to direct the insulation stream as it emerges from the blowing hose. A gloved hand or deflector should be used instead.

Cavity Fill Insulation:

- The blower in this operation must always wear a NIOSH approved dust respirator (certified N95 or greater). See OSHA's Respiratory Protection Standard.
- Other exposed workers who are in the immediate area when SVF is being applied to a cavity should wear a NIOSH approved respirator.

Batt, Blanket and Roll Insulation:

- Where possible, avoid tearing or ripping the product by hand. The materials should be cut with a sharp knife.
- Workers installing batts overhead should wear appropriate personal protection equipment.

Pipe, Board and Other Fabricated Products:

- In locations which power saw, rout, sand, grind or employ other operations that generate dusty conditions, local exhaust ventilation should be used.

Ceiling Tiles:

- Cut or trim ceiling tile with a razor knife or a keyhole saw. Operations such as power cutting, power kerfing or using compressed air to remove dust are not recommended. The use of power tools with a dust collection system to cut ceiling tiles is acceptable.
- Surfaces where SVF dust collects should be appropriately cleaned.
- Workers should wear appropriate eye and head personal protection.

Spray Applied Fireproofing:

- Practice good housekeeping procedures.
- When the PEL of 1 f/cc on an eight hour TWA is exceeded, use a NIOSH certified dust respirator (certified N95 or greater).
- When spraying mineral fiber fireproofing, wear appropriate personal protection equipment.

Bulk Unbonded Products (Manufacturing):

- Workers dumping or pouring unbonded, bulk, specialty filtration fiber products where engineering controls are absent should wear a NIOSH certified dust respirator (certified N95 or greater). See OSHA's Respiratory Protection Standard.

PRODUCT REMOVAL WORK PRACTICES

These recommended work practices are applicable for workers removing SVF products during significant repair or demolition activity. Additional precautions may be required if workers are also exposed to other products or substances. In such circumstances, more stringent recommendations may apply to those products.

- Workers should wear a NIOSH certified dust respirator (certified N95 or greater) when removing SVF products as described above. See OSHA's Respiratory Protection Standard.

- Practice good housekeeping procedures.
- Where appropriate (i.e. in situations where an appreciable amount of dust is generated), dust collection systems may reduce the exposure to dust. If a dust collection system is used, follow the recommended work practices for ventilation.
- Follow recommended work practices for selecting work clothing and appropriate personal protective equipment to be used during removal activity.
- Use a light water mist on the SVF to minimize airborne dust during product removal and disposal.

For additional information about the Health and Safety Partnership Program, the voluntary partnership between OSHA and NAIMA to promote safe work practices, please contact NAIMA:



NAIMA
NORTH AMERICAN INSULATION
MANUFACTURERS ASSOCIATION

44 Canal Center Plaza, Suite 310
Alexandria, VA 22314
Phone: 703-684-0084
Fax: 703-684-0427
Website: www.naima.org