



Fiberglass Safe Work Practices

Fiberglass is used throughout the campus HVAC system for the following purposes:

- Acoustical control – lowers unwanted noise levels from equipment airflow
- Condensation control – inhibits unwanted condensation and moisture damage
- Energy Conservation – improves efficiency by inhibiting heat loss and gain
- Temperature control – maintains consistent airflow temperatures

Exposure Hazards – fine fiberglass fibers represent a greater health risk than larger fiberglass fibers. Finer fibers are generally found in older campus buildings and generated during cutting, grinding, and sanding procedures.

- Inhalation – may irritate the upper respiratory tract
- Eye Contact – may cause mechanical irritation
- Skin Contact – may produce temporary irritation
- Ingestion – may irritate the digestive tract

Personal Protection

Respiratory Protection – When exposed to airborne fibers, employees may choose to wear a NIOSH approved N95 respirator. Use of half face-piece or full face-piece respirators requires an exposure assessment from EHIS to determine whether the employee should be enrolled in Respiratory Protection Program which involves medical surveillance, fit-testing, & training.

Eye Protection – Wear approved safety glasses or tight fitting safety goggles.

Skin & Foot Protection – Wear professionally laundered work uniforms to prevent transport of contaminants home, clothing that resists the penetration of fibers, and the following for additional protection, except where it poses a hazard near moving parts or machinery:

- A. leather or comparable gloves to prevent penetration of fiberglass fibers
- B. protective coveralls and hat or hood to minimize skin and hair contact
- C. long sleeve shirt or sweater that will also cover the base of the neck
- D. long pants and safety shoes

Ventilation – Saw, cut or grind fiberglass in a well ventilated area to maintain inhalation exposure below the OSHA PEL. Contact EHIS for exposure assessments.

Eye wash and Safety Shower – locations should be noted prior to conducting work.

Lockers, Showers, and Hand Wash Sinks – should be provided to wash away fibers.

General Safe Work Practices

1. Clean fiberglass dust with a HEPA vacuum or wet wipe before starting work.
2. Keep all materials in its packaging until it is used.
3. Handle fiberglass as little as possible to minimize exposure and the spread of fibers.
4. Use correct cutting tools such as a sharp utility knife and a straight edge.
5. Install only clean and dry insulation to minimize bacterial and mold contamination.
6. Avoid installation of paper and foil coverings near heat and electricity to prevent fires.
7. Use tools and wet methods that minimize dispersal of dust when possible.
8. Install protective covering or facing over exposed insulation to minimize exposures.
9. Immediately dispose of excess or unused fiberglass to minimize exposures.
10. Avoid using compressed air for clean up. If used, wear respiratory protection.
11. Change work clothes after a fiberglass installation or servicing project.
12. Wash work clothes separately and wipe washer basket after cycle is complete.
13. Clean fiberglass dust with a HEPA vacuum or wet wipe after installation.

Specific Safe Work Practices

Batt or Roll insulation - Cut with a sharp utility knife and avoid tearing and ripping it.

Duct Board – Seal all cut joints with mastic duct seal; Join the material together and staple; Seal the joint with proper foil aluminum tape, and Make sure that all cut ends of the fiberglass is sealed to maintain its integrity.

Rigid Fabricated Materials and Compromised Fibrous Materials - Use local exhaust ventilation and a respirator, goggles, and coveralls when cutting, sanding, or grinding.

Plastic exterior duct wrap – is highly prone to failure and should be replaced immediately upon detection. These flex ducts fail due to defects found in the plastic lining, tearing and cracking, exposing the insulated fiberglass into the open airspace.

Identify the Manufacturer of Fiberglass Insulation using the various colors, especially yellow, pink, green, and white. The resin binder used by the manufacturer determines the color.

- Yellow: Most insulation manufacturers produce yellow fiberglass insulation.
- Pink Insulation: Owens Corning trademark is known to be Pink Fiberglass
- Green Insulation: John Mansville has produced green fiberglass insulation.
- White Insulation: John Mansville produces white insulation