

## How to Remove Nonfriable Vinyl Asbestos Floor Tiles

### A Guide for Meeting DEQ Rules

#### Purpose

The Department of Environmental Quality (DEQ) regulates the removal, handling and disposal of asbestos-containing materials during construction, remodeling, and demolition. This document provides guidance for removing nonfriable vinyl asbestos floor tiles (VAT).

#### Before you start

Contact one of the DEQ regional offices (see contact information below) for information on complying with Oregon's asbestos program regulations.

If the project is taking place in a school (K-12), you must comply with the Asbestos Hazard Emergency Response Act (AHERA) rules from the U.S. Environmental Protection Agency (EPA). Contact the EPA's regional office at 800-424-4372 for current rule and policy information.

Oregon Occupational Safety and Health Administration (OR-OSHA) also has rules for working with asbestos-containing materials. Contact OR-OSHA at 503-378-3272 for current rule and policy information.

#### How to determine if a material contains asbestos

The only way to determine if a material contains asbestos is to take a sample and have it analyzed by an accredited laboratory.

#### What are vinyl asbestos floor tiles?

Vinyl floor tiles manufactured in the 1950s through 1980 may contain asbestos. The vinyl acts as a binder that holds the asbestos fibers within a solid matrix. This will prevent asbestos fibers from being released easily, unless mishandled, damaged, or in badly weathered condition. In most cases, vinyl floor tiles are considered nonfriable.

Vinyl flooring tiles should not be confused with sheet vinyl flooring that at times may have an asbestos backing. The sheet product is always considered friable and must follow the regulations for removing friable asbestos-containing materials outlined below.

#### Removing nonfriable asbestos-containing materials

The removal of nonfriable asbestos-containing materials in good condition is exempt from some DEQ rules. You **do not** need to be a DEQ licensed asbestos contractor or a DEQ certified asbestos worker to do nonfriable asbestos removal. If you remove vinyl asbestos floor tiles following this guide, they should remain in a nonfriable condition.



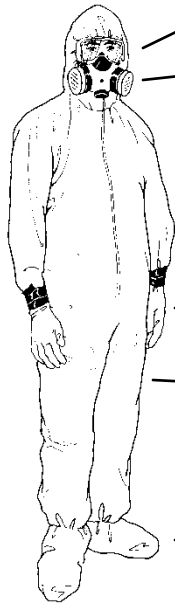
State of Oregon  
Department of  
Environmental  
Quality

#### Air Quality Asbestos

811 SW 6<sup>th</sup> Avenue  
Portland, OR 97204  
Phone: 503-229-5696  
800-452-4011  
Fax: 503-229-6762  
Contact: Cory Ann Wind  
[www.oregon.gov/DEQ](http://www.oregon.gov/DEQ)

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restoring, maintaining and  
enhancing the quality of  
Oregon's air, land and  
water.*

## Suggested safety equipment



**Eye Protection:** Each person should wear non-fogging goggles or safety glasses.

**Respirator:** Each person should wear a dual cartridge respirator equipped with two HEPA (high efficiency particulate air) filters. The HEPA cartridges are color-coded purple or magenta. Make sure that your respirator fits properly.

**Gloves:** Each person should wear gloves.

**Coverall:** Each person should wear a Tyvek coverall to keep dust off your clothing and then dispose of it (with the asbestos-containing material) after the project is complete.

**Boots:** Use a lace-less, pull-on type of rubber boot to protect your feet from sharp edges and nails and then wash to remove asbestos contamination.

### Tools needed

- Water sprayer, garden type or spray bottle, or a garden hose with spray nozzle
- Liquid detergent mixed with water
- 3 to 6-mil thick plastic sheeting
- Wide putty knives, paint scraper or flat floor scraper
- Leak-tight containers, such as plastic bags, barrels or plastic wrapping
- Burlap bags, paper sacks or cardboard boxes

## The work will be difficult

Even under the best conditions these projects are physically demanding and potentially dangerous. The following are some of the problems you will be faced with:

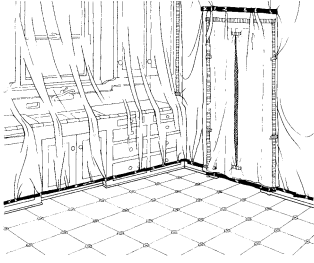
- Breathing through a respirator is difficult and places extra stress on the heart and lungs.
- Coveralls can be hot and hard to move around in.
- Work is done mostly on your hands and knees, or while bent over.
- Goggles and safety glasses reduce visibility and field of vision.
- Care must be taken around electric wires because water is being used to keep the asbestos wet.
- The work area will be slick from wetting and become a slipping hazard.

## Notification

File a DEQ notification form ASN-6 for removal of nonfriable asbestos materials and pay the applicable fee. The notification must be received by the DEQ Business Office at least 5 days prior to starting the removal project. *If you are the owner occupant of a single-family dwelling doing asbestos removal on the home you live in, you do not need to file a notification.*

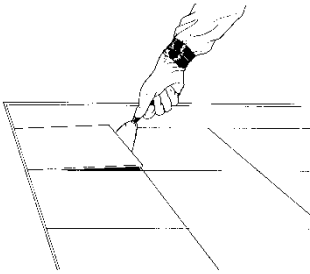
## Procedures for removing nonfriable vinyl asbestos floor tiles

Vinyl asbestos floor tiles must be removed, handled and disposed of in a manner that keeps the material in predominantly whole pieces to be considered nonfriable. Sanding, sawing, grinding, chipping, or the use of power tools is not allowed.



**Prep Work** – Use the plastic sheeting to isolate doorways and cover floor registers, vents, and other surfaces to prevent contamination from asbestos fibers.

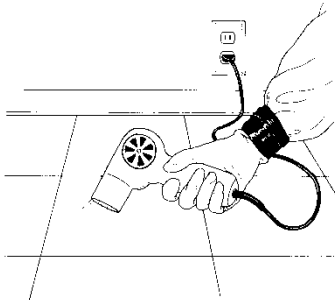
**Wetting Surfaces** - The tiles must be kept wet during removal. The floor area should be soaked for at least two hours before removal; this will help loosen the tiles and make them easier to remove. If there is cement under the tiles, you may want to flood the floor with water the night before you begin removal. Wetting minimizes asbestos fibers from being released. The tiles must remain wet during removal and until waste disposal occurs.



**Tile Removal** - Use a wide putty knife or flat floor scraper and gently pry up the tiles. Keep the tiles in *whole pieces*, do not break material on purpose, do not step on material, and do not drop material. Place the material on the ground in a non-work area or in separate containers to prevent breakage. Once the material has been removed, it may not be broken further.

**Note:** If the material cannot be removed without shattering (broken into more than 4 pieces) it, you must follow the requirements for friable asbestos-containing materials.

**Tile Repair** - For projects involving a very small area or 1 to 3 tiles, you may be able to use a heat gun (not a hair dryer), dry ice, or solvent to assist in the removal of the tiles. If you use solvent, make sure the area is well ventilated.



**Packaging** - Place the vinyl asbestos floor tiles in a leak-tight container and mark it with the warning statement “DANGER ASBESTOS-CONTAINING MATERIAL”. You may use burlap or paper bags or a cardboard box as a liner inside the leak-tight container to minimize rips and tears.

**Disposal** - Locate a landfill that is authorized to accept asbestos waste and be sure to inquire about hours of operation and any special packaging requirements they might have. Fill out a DEQ waste shipment report ASN-4 and give it to the landfill upon arrival.

### If the material becomes friable

If the vinyl asbestos floor tiles become shattered, damaged, or is badly weathered, it is considered friable and may release asbestos fibers. If the tiles become friable, stop work immediately and promptly contact a DEQ licensed asbestos abatement contractor. Friable asbestos materials must be removed by a **DEQ licensed asbestos contractor using DEQ certified workers**.

All asbestos abatement rules under OAR 340-248-0005 through -0280 must be followed. A DEQ notification form ASN-1 for the removal of friable asbestos and the applicable fee must be filed. The notification must be received by the DEQ Business Office at least 10 days prior to starting the removal project. For emergency situations a waiver of the 10-day period may be granted by the DEQ. For more information contact DEQ.

### For more information

Please contact the office nearest to where the project is occurring:

#### **Clackamas, Clatsop, Columbia, Multnomah, Tillamook and Washington Counties:**

Contact Susan Patterson, Gresham office at 503-667-8414 x 55022.

#### **Benton, Lincoln, Linn, Marion, Polk and Yamhill Counties:**

Contact Dottie Boyd, Salem office at 503-378-5086 or 800-349-7677.

**Lane County:**

Contact Tom Freeman, Lane Regional Air Protection Agency at 541-736-1056 x 222.

**Jackson, Josephine and Eastern Douglas Counties:**

Contact Steve Croucher, Medford office at 541-776-6107 or 877-823-3216.

**Coos, Curry and Western Douglas Counties:**

Contact Martin Abts, Coos Bay office at 541-269-2721, extension 222.

**Crook, Deschutes, Harney, Hood River, Jefferson, Klamath, Lake, Sherman, and Wasco Counties:**

Contact Frank Messina, Bend office at 541-633-2019.

**Baker, Gilliam, Grant, Malheur, Morrow, Umatilla, Union, Wallowa, and Wheeler Counties:**

Contact Tom Hack, Pendleton office at 541-278-4626 or 800-304-3513.

**Accessibility information**

DEQ is committed to accommodating people with disabilities. Please notify DEQ of any special physical or language accommodations or if you need information in large print, Braille or another format.

To make these arrangements, contact DEQ Communications and Outreach in Portland at 503-229-5696 or call toll-free in Oregon at 800-452-4011; fax 503-229-6762; email: [deqinfo@deq.state.or.us](mailto:deqinfo@deq.state.or.us).

People with hearing impairments may call 711.