

## Removal of Non-Friable Asbestos-Containing Floor Tile

Non-friable asbestos vinyl floor tile and adhesive (mastic) floor tile may be removed by anyone, providing notification is made to the Nebraska Department of Health & Human Services, Asbestos Program, and the tile/mastic remain non-friable during the removal process. This means that each piece of floor tile must be removed in one piece with minimal breakage. Allowable minimal breakage means that some corners may become separated from the main part of the tile, and an occasional tile may be broken in half. Mastic must be removed using wet methods when it contains asbestos fibers. This can be done by dissolving the mastic with a suitable solvent, then using a HEPA-filter equipped vacuuming device to remove and pick-up the resulting slurry. Mastic cannot be ground, sanded or abraded to accomplish removal. Any process that crushes, crumbles or produces a powder makes a non-friable material friable. The Nebraska Asbestos Program Regulations state that material containing more than one percent of asbestos is considered to be asbestos-containing. Asbestos material that is to be disturbed in excess of three square or linear feet can only be performed by certified individuals and licensed companies.

Some of the methods for breaking the adhesive bond that holds the tiles to the floor are:

- Flood the floor tile with water (preferably warm) for a day or two, or longer, if required. Rags or pieces of burlap placed over the flooded area may be used to hold the water and slow evaporation. Many times, this breaks the bond or at least allows for an easier separation with a wide blade tool, such as a carpenter saw.
- Heat sources, such as an electric infra-red heater, a propane torch, weed burner, or blow torch, when used with a wide blade tool, will allow the tile to be scooped up and flipped over, like turning pancakes over on a griddle. Make sure that the room where the work is performed is well ventilated to avoid the accumulation of carbon dioxide, carbon monoxide, and other fumes and gases released from the wax on the floor tile as it is heated.
- Extreme cold such as dry ice combined with a wide blade tool will also break the adhesive bond. The dry ice can be broken up, spread around on the floor so the floor is covered, then covered with an insulating blanket to reduce evaporation. Or, the dry ice may be sliced into slabs, moved around on the floor, and covered with an insulating blanket. Sliding the wide blade tool under the tile will pop the tile up when the dry ice has done its job.
- The use of solvents suitable for indoor use may also be used. Do not use flammable solvents because of the spontaneous ignition and fire hazard. When solvents are used, another environmental hazard is created and proper disposal may be a problem.

Since asbestos floor tile and mastic removed by non-friable methods is not regulated, disposal does not have to be made in licensed asbestos landfills. You must contact the landfill operator to find out if they will accept the material and how they would want it packaged.

However, it is the recommendation of the Asbestos Program that you:

- Wet the tiles, place them in boxes, then place in 6-mil thick plastic bags or another type of container that can be sealed so that it is air tight; and asbestos fibers cannot escape into the atmosphere. Dispose of the asbestos waste in an appropriate licensed landfill.
- At all times, workers who are engaged in the removal of floor tile need to protect themselves from the asbestos fibers in the air. Although a properly fitted respirator with HEPA-filter cartridges is recommended; we encourage a disposable dust mask (3M, for example) be worn at a minimum. A disposable-type, complete body covering should be worn and thrown away with the asbestos waste when the work is completed; so that asbestos fibers are not carried on dirty clothing to other parts of the building, where other building occupants may be exposed to asbestos fibers.
- Wash or shower completely to cleanse the areas of the body not covered by the disposable protective covering.
- Wipe down the walls and surfaces in the room where asbestos fibers may have become attached during the removal process. Use rags, rinsed frequently in water, to accomplish this effective fiber-control method, called wet cleaning.

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### **For More Information**

Please refer to the Asbestos Program's Index Page, [http://dhhs.ne.gov/publichealth/Pages/enh\\_asbestos\\_index.aspx](http://dhhs.ne.gov/publichealth/Pages/enh_asbestos_index.aspx), or contact us using the information provided below:

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