



GUIDELINES FOR STRIPPING ASBESTOS-CONTAINING FLOOR COVERINGS

Although vinyl asbestos floor tiles are considered non-friable, the frictional forces exerted on these materials during routine floor-care maintenance operations can generate asbestos-containing particles. Below are the basic guidelines when stripping wax or finish coat from asbestos-containing floor coverings:

- 1. AVOID STRIPPING FLOORS.** Stripping of vinyl asbestos floor coverings should be done as infrequently as possible, such as only once or twice per year, and preferably when the building is unoccupied. Excessive stripping of floors using aggressive techniques will result in increased levels of asbestos fibers in the air.
- 2. STAFF MUST BE PROPERLY TRAINED.** District custodial staff that strips floors must be thoroughly trained to safely and properly operate the machines, pads, and floor care chemicals used at our facilities.
- 3. FOLLOW APPROPRIATE WORK PRACTICES.** Custodial staff that strip floors should follow appropriate work practices, such as those recommended here, under informed supervision. Consult floor tile and floor wax product manufacturers on proper maintenance procedures if you have any questions.
- 4. STRIP FLOORS WHILE WET.** The floor should be kept adequately wet during the stripping operation. Do NOT perform dry stripping. Prior to machine operation, apply an emulsion of chemical stripper in water to the floor with a mop to soften the wax or finish coat. After stripping and before application of the new wax, the floor should be thoroughly cleaned, while wet.
- 5. RUN MACHINE AT SLOW SPEED** The machine used to remove the wax or finish coat should be run at a low rate of speed (i.e., ranging between 175-300 rpm) during the stripping operation. There is a direct correlation between machine speeds and the release of asbestos fibers from asbestos containing floor coverings. The higher the machine's speed the greater the probability of asbestos fiber release.
- 6. SELECT THE LEAST ABRASIVE PAD POSSIBLE.** Use the least abrasive pad as possible, a black pad being the most abrasive and the white pad the least abrasive. Consult with your floor tile and floor finish product manufacturer for recommendations on which pad to use on a particular floor covering.
- 7. DO NOT OVERSTRIP FLOORS.** Stop stripping when the old surface coat is removed. Overstripping can damage the floor and may cause the release of asbestos fibers. Do NOT operate a floor machine with an abrasive pad on unwaxed or unfinished floors,

Finishing of Vinyl Asbestos Floor Coverings

1. Prior to applying a finish coat to a vinyl asbestos floor covering, apply 2 to 3 coats of sealer. Continue to finish the floor with a high percentage solids finish.

It is an industry recommendation to apply several thin coats of a high percentage solids finish to obtain a good sealing of the floor's surface, thereby minimizing the release of asbestos fibers during finishing work.

2. When spray-buffing floors, always operate the floor machine at the lowest rates of speed possible and equip the floor machine with the least abrasive pad as possible. A recent USEPA study indicated that spray buffing with high-speed floor machines resulted in significantly higher airborne asbestos fiber concentrations than spray buffing with low speed machines.
3. When dry-burnishing floors, always operate the floor machine at the lowest rate of speed possible to accomplish the task (i.e., 1200-1750 rpms), and equip the floor machine with the least abrasive pad as possible.
4. After stripping a floor and applying a new coat of sealer and finish, use a wet mop for routine cleaning whenever possible. When dry mopping, a petroleum-based mop treatment is not recommended for use.

DEFINITIONS

1. VAT: Vinyl Asbestos Tile.
2. Non-Friable: Any Asbestos containing material that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
3. Spray Buffing or Burnishing: The act of burnishing a floor finish while using a polishing or rejuvenating liquid. This liquid is sprayed on the buffer or burnisher a small area at a time. The floor machine is then used to polish the floor with this liquid. As a rule, polishes only polish while rejuvenators help fill in minute scratches while polishing. Some of these products contain cleaners to help remove soiling on lightly soiled floors. How often these procedures are performed depends on many factors, such as, floor finish, traffic, machinery used, etc.
4. Dry Burnishing: The act of burnishing (high speed polishing) without any polishers, rejuvenators or cleaners. Just the burnishing machine and the proper pad. This procedure hardens the finish and brings out the shine. Burnishing is performed using what is called a high speed burnisher or buffer. Simply put, this machine is a standard floor machine with an additional set of wheels for stability. These machines operate between 1,000 and 3,000 rpm. The faster the rpm, the faster and better the job can be performed.
5. Wet Scrubbing: A lightly abrasive (scrub) pad or brush is used on a 175-300 rpm floor machine to remove surface wear and dirt from the floor without removing all the floor finish. The floor is scrubbed with a neutral floor cleaner and water. This liquid is then removed with a mop or preferably with a wet vacuum. After rinsing, the floor is then re-coated with a compatible floor finish. The number of coats depends on the given situation and materials used.
6. Floor Stripping: When the floor finish has become heavily imbedded with soiling or discolored, it becomes necessary to totally remove (strip) the existing finish. This is accomplished by first applying a compatible floor finish remover or stripper. After the appropriate dwell time, the finish is liquified. The floors is then scrubbed using an abrasive pad or brush on a 175-300 rpm floor machine. The resulting liquid is then removed using a wet vacuum. These steps, in some cases, have to be repeated two or more times to assure the removal of all the existing finish. The floor is now rinsed as is appropriate with the products being used. The floor is now ready for finishing.
7. Floor Finishing: This process is simply the application of floor finish to various types of floor surfaces. With some finishes and/or on some types of floor surfaces, a sealer should be used prior to the application of a finish. Finish is applied using either an applicator or a mop. Applicators and mops have to be those specifically designed for this purpose, or linting or contamination can occur. The best method with most finishes is to apply several thin coats instead of one heavy coat. When applying finish, care must be taken to allow each coat sufficient time to properly cure and dry before applying the next coat.
8. Training: Instruction provided by a person(s) qualified or proficient in the art of floor maintenance. Such instruction shall consist of hands-on training and incorporate procedures recommended by the flooring industry for the care of asbestos-containing floor tile and/or covering.
9. High Solids Floor Finish: The floor finishes most often used today do not contain any natural waxes. Floor finish generally consists of a blend of polymers, and sometimes fillers, in a water base. The percentage of solids (polymers and fillers) to water is the solids percentage referred to

when discussing floor finish. The water base keeps the solids suspended in liquid form to facilitate their application to the floor. After application, the liquid evaporates, leaving the solids coating the floor surface. Thus, the higher the solids percentage is, the more finish per coat is left on the floor. Quality of floor finishes should not necessarily be confused with this percentage. The quality of a floor finish is more determined by the type and mixture of polymers.

In some lower grade finishes, fillers are used to bring the percentage up, but are actually using a lower percentage of polymer solids. The mixture of polymers in a floor finish determines its drying time, durability, gloss, buffing ability, re-coat and blending ability, etc. This mixture also determines the procedures used to apply and maintain the finish and what kind of surfaces can be coated with any given finish. All these factors have to be taken into consideration when choosing a floor finish for any given floor surface. Generally, a floor finish containing 20% or more finish is considered a high solids floor finish. The high side of this percentage is around 27%. The low side is around 14%.