

Standard Interpretations

/ Prohibitions and/or restrictions on aggressive methods for removing asbestos-containing mastic from floors.

- **Standard Number:** 1926.1101 ; 1926.1101(b) ; 1926.1101(g)(8)(i) ; 1926.1101(g)(8)(i)(D) ;
1926.1101(g)(8)(vi)

OSHA requirements are set by statute, standards and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes OSHA's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to OSHA rules. Also, from time to time we update our guidance in response to new information. To keep apprised of such developments, you can consult OSHA's website at <http://www.osha.gov>.

May 18, 2005

Mr. Gerald D. Jeong
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Dear Mr. Jeong:

Thank you for your May 21, 2004, letter to the Occupational Safety and Health Administration's (OSHA's) Directorate of Enforcement Programs (DEP). You have questions regarding OSHA's regulation of the removal of asbestos-containing mastic from floors by the construction asbestos standard, 29 CFR 1926.1101. This letter constitutes OSHA's interpretation only of the requirements discussed and may not be applicable to any question not delineated within your original correspondence. Your paraphrased questions and our replies are below.

Question 1: What provisions of the construction asbestos standard prohibit or restrict aggressive methods for removing asbestos-containing mastic from floors?

Reply: An aggressive method, according to the definition at 29 CFR 1926.1101(b), is "...removal or disturbance of building material by sanding, abrading, grinding or other method that breaks, crumbles, or disintegrates intact ACM." Sanding is the only aggressive method for removing asbestos-containing mastic from floors that the asbestos construction standard explicitly prohibits. This prohibition appears in a part of the standard pertaining to removing all asbestos-containing materials (ACM) associated with vinyl and asphalt floor coverings. The specific provision that prohibits the removal of mastic from floors by sanding is 29 CFR 1926.1101(g)(8)(i)(A). This provision pertains to situations where the floor tile or sheeting has been removed but some pieces of the floor tile or sheeting and some adhesive remain in place on the floor. It stipulates: "Flooring or its backing shall not be sanded."

The standard specifies a method for removing asbestos-containing mastic from floors that is less aggressive than

sanding, depending on the nature of the mastic. This method is set forth at 29 CFR 1926.1101(g)(8)(i)(D), which states: "All scraping of residual adhesive and/or backing shall be performed using wet methods." This scraping is done by means of a stiff-blade scraper.

Question 2: What criteria does OSHA expect an employer to use to determine whether it is feasible to remove the mastic from the floor manually by means of a stiff-blade scraper using wet methods? Can excessive cost or excessive work time be a valid reason for not using this method?

Reply: Although, according to 29 CFR 1926.1101(g)(8)(i), employers are to remove residual mastic from a floor manually by means of a stiff-blade scraper using wet methods, OSHA entered into a settlement agreement with representatives of the floor-covering business that permits employers to alternatively remove residual mastic by using a low-speed floor machine and wetted sand or a removal solution. Pursuant to the settlement agreement, employers may remove residual mastic by either of these alternative methods even when it is feasible to remove the mastic from the floor manually by means of a stiff-blade scraper. The settlement agreement does not provide the details on how to remove residual mastic by these alternative methods, but OSHA interprets the settlement agreement to require that the procedures set forth in the booklet issued in January 1998 by the Resilient Floor Covering Institute titled, ***Recommended Work Practices for Removal of Resilient Floor Coverings***, be followed.

Question 3a: If an electric floor buffer is equipped with an abrasive scrub pad, would using the buffer to remove asbestos-containing floor mastic be classified as an aggressive method?

Reply: Yes, this is an aggressive method of removing the mastic.

Question 3b: Would the use of an electric floor buffer equipped with an abrasive scrub pad be an aggressive method of removing the mastic if the scrub pad is kept immersed in a pool/layer of solvent that has been poured over the floor to soften and dissolve the mastic?

Reply: Yes, this is still an aggressive method of removing the mastic. However, pursuant to the settlement agreement mentioned in the reply to Question 2, this method may be used if the procedures for using a removal solution set forth in ***Recommended Work Practices for Removal of Resilient Floor Coverings*** are followed exactly. For your convenience we provide the procedures here with some needed clarifications that we have added in brackets.

REMOVAL METHOD #1 [This is the method that uses a removal solution.]

- a. Start in corner of the room farthest from the entrance door. Apply the removal solution (e.g., "mop on, mop off, no machine scrub," stripping solution) by using a hand sprayer or mop over an area of residual adhesive so that the adhesive in this area always remains wet during its removal. Allow the area to soak for 5-10 minutes. Remove the adhesive using a floor machine equipped with a 3M black floor pad (or equivalent), ensuring that the floor is kept wet in the area where the machine is operating. **[The floor machine must be a low-speed floor machine that spins the floor pads at no greater than 175 revolutions per minute.]**

Warning

Electrical shock hazard exists. Use a ground fault circuit interrupter for any electrical connections of equipment used in a wet environment.

- b. Occasionally push away the adhesive slurry from the subfloor with a wall or floor scraper or squeegee to check for complete removal. Continue to use the floor machine, equipped with black pad, in the same area until the concrete subfloor is cleaned to the degree necessary for the new floor installation.

- c. Adhesive around the edge of the room and in areas that were missed or difficult to reach with the machine can be removed with a hand-held piece of the black floor pad using the above procedures.

Warning

Electrical shock hazard exists. Use a ground fault interrupter for any electrical connections of equipment used in a wet environment.

- d. Wet HEPA vacuum the adhesive slurry. When the HEPA vacuum is full, place commercially suitable water absorbent into the HEPA container until the adhesive slurry is absorbed. An absorbent material may be used on the slurry to absorb the adhesive residue. Place the adhesive waste from the HEPA vacuum or floor into heavy-duty impermeable bags or leak-tight containers with an appropriate label stating, for example "Caution—Contains Asbestos. Avoid Creating Dust. Breathing Asbestos May Cause Bodily Harm." Close and seal the trash bag securely for disposal. Dispose in an approved landfill only.
- e. Rinse floor area with clean water using a hand sprayer or mop. Worker footwear should also be cleaned and rinsed.
- f. Wet-vacuum standing water with HEPA vacuum cleaner.
- g. Continue steps a. through f. until the entire room is complete.
- h. Allow subfloor to dry and vacuum with a HEPA vacuum with metal floor attachment.
- i. Minimize walking on the wet adhesive to the extent feasible. Worker footwear must be cleaned or removed before leaving the work area.

Question 4: Would the use of an electric floor buffer equipped with broom/brush-like bristles to loosen residual mastic that is immersed within a pool of solvent be an aggressive method for removing the mastic?

Reply: Yes, it is an aggressive method for removing the mastic and applies a work practice that is different from any presented in the construction asbestos standard or permitted by the settlement agreement mentioned in the reply to **Question 2**. Therefore, in order to use this different method, the employer must comply with the provisions set forth in 29 CFR 1926.1101(g)(8)(vi) for using alternative work practices and controls.

As you may know, the State of California administers its own occupational safety and health program under a plan approved and closely monitored by Federal OSHA. Section 18 of the Occupational Safety and Health (OSH) Act requires states to promulgate standards that are, "at least as effective" as the federal standards, although they may be more stringent. Should you wish to contact the State of California, you may direct your inquiry to:

California Department of Industrial Relations
 455 Golden Gate Avenue — 10th Floor
 San Francisco, California 94102

John Rea, Acting Director
 Phone:(415) 703-5050
 Fax: (415) 703-5059

Thank you for your interest in occupational safety and health. We hope you find this information helpful. OSHA requirements are set by statute, standards, and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes OSHA's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to OSHA rules. Also, from time to time we update our guidance in response to new information. To keep apprised of such developments, you can consult the website at <http://www.osha.gov>. If you have any further questions, please feel free to contact the Office of Health Enforcement at (202) 693-2190.