

Standard Interpretations / Installing a barrier film over asbestos-containing flooring

- **Standard Number:** 1926.1101(k)(9)(vi) ; 1926.1101 ; 1910.1001(j)(7)(iv) ; 1910.1001

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>.

April 21, 2014

Douglas R. Lawson, Ph.D., CIH
URS Corporation
1155 Elm St, Suite 401
Manchester, New Hampshire 03101

Dear Dr. Lawson:

Thank you for your January 29, 2014, letter to the Occupational Safety and Health Administration's (OSHA) Directorate of Enforcement Programs for your specific questions regarding a proprietary process for covering asbestos-containing flooring and the requirements of the OSHA Asbestos standard, 29 CFR 1926.1101. This reply letter constitutes OSHA's interpretation only of the requirements discussed and may not be applicable to any question not detailed in your original correspondence. Your paraphrased question and our reply are below.

Background: You explained that your company is working with the developer of an impermeable film or membrane (Asbestos Barrier System®) that is rolled out to cover and seal over existing asbestos-containing flooring, e.g., vinyl asbestos tile (VAT), linoleum, mastic. You described this installed film as an "encasement system" for any asbestos flooring, which may then be covered with a non-asbestos flooring system, e.g., leveling compound, mastic, quartz tiles.

You also stated that you recently completed a negative exposure assessment (NEA) for asbestos during a recent installation of this barrier film at a client's facility over an existing asbestos-containing floor. You reported that 12 personal air samples were collected on workers performing a 5-step installation over two days: (1) pre-clean existing asbestos-containing floor by vacuuming with high efficiency particulate air (HEPA) vacuum; (2) roll out self-adhering barrier film over clean floor; (3) apply floor-leveling compound over installed film; (4) apply flooring adhesive (mastic) over hardened leveling compound; and, (5) install new floor tiles.

Question: We believe that the installation of this barrier film over asbestos-containing flooring, followed by the installation of a new flooring system on top, does not fall under any of the requirements of Class I through Class IV asbestos operations under 29 CFR 1926.1101, since no asbestos-containing materials are disturbed. Therefore, workers performing this installation will require only a 2-hour asbestos awareness training program, and no personal protective equipment will be required for asbestos. Does OSHA agree?

Reply: No, OSHA does not agree. As a preliminary matter, OSHA does not approve, endorse, or recommend any particular manufactured product or proprietary process because the manufacturer cannot ensure how the product or process will be used. The final determination of compliance with OSHA's standards must take into account all factors pertaining to a particular work site with respect to employee safety and health.

Installation of your barrier film over asbestos-containing flooring must be evaluated by the employer's competent person to classify the asbestos activity in accordance with the standard (see *competent person*, defined at 29 CFR 1926.1101(b)). For example, in the steps you listed to install this barrier film, the pre-cleaning of the asbestos-containing floor using a HEPA vacuum would be a Class IV operation since construction workers would contact the ACM flooring, per the standard's definition of *Class IV* at 29 CFR 1926.1101(b). Accordingly, employees performing Class IV work require the training specified in 29 CFR 1926.1101(k)(9)(vi) of at least 2 hours. If the pre-cleaning was, instead, performed by the building owner's custodial staff, this work would be covered under OSHA's general industry Asbestos standard, 29 CFR 1910.1001, which requires a similar asbestos awareness training in 29 CFR 1910.1001(j)(7)(iv). If some of the floor tiles were found to be damaged and requiring removal before the barrier film could be applied, this removal would be a Class III or Class II activity under 29 CFR 1926.1101. Emptying of asbestos waste and replacement of the HEPA filters in a loaded vacuum may be a Class III operation (see *Class II* and *Class III* definitions at 29 CFR 1926.1101(b)).

After your barrier film is rolled out and adhered onto an existing floor, the employer's competent person may determine that none of the remaining steps to install the new layer of non-asbestos flooring are classified operations under the Asbestos standard, because the remaining work does not contact or disturb the ACM. Of course, several other OSHA construction standards may be applicable to the installation of a new floor. Examples include those requiring safety when applying chemical adhesives, cutting quartz tile, etc., such as, 29 CFR 1926.59, *Hazard Communication*, 29 CFR 1926.55, *Gases, Vapors, Fumes, Dusts, and Mists*, and many other standards in 29 CFR Part 1926. Again, the employer's competent person must make these determinations to ensure workers are appropriately trained and protected from workplace hazards.

Finally, you should also know that the U.S. Environmental Protection Agency has additional standards and requirements for asbestos work that may apply to your proprietary process. Furthermore, depending on where your product is used, States that have their own occupational safety and health programs must set and enforce standards that are at least as effective as Federal OSHA standards. Employers should be aware of all applicable state and local regulations.

We do applaud your efforts to ensure worker and product safety to the highest possible degree, and we thank you for your interest in occupational safety and health. We hope you find this information helpful. OSHA's requirements are set by statute, standards, and regulations. Our letters of interpretation do not create new or additional requirements but rather explain these requirements and how they apply to particular circumstances. This letter constitutes OSHA's interpretation of the requirements discussed. From time to time, letters are affected when the Agency updates a standard, a legal decision impacts a standard, or changes in technology affect the interpretation. To assure that you are using the correct information and guidance, please consult OSHA's website at www.osha.gov.

If you have further questions, please feel free to contact the Office of Health Enforcement at (202) 693-2190.

Sincerely,

Thomas Galassi, Director
Directorate of Enforcement Programs