

WISHA REGIONAL DIRECTIVE

WISHA Services

Department of Labor and Industries

23.30 ASBESTOS-CONTAINING JOINT COMPOUND IN WALLBOARD SYSTEMS

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I. Background

Joint compound used on wallboard systems often contains asbestos added during the mixing process to improve the working texture of the material. The asbestos in the joint compound is typically much less than 5 percent by weight and the joint compound makes up a minor fraction of the material in the wallboard system. Where work with the wallboard system does not involve sanding, grinding or abrading the wall surface, joint compound will generally remain intact on the surface of the wallboard. The presence of joint compound has not been found to represent a greater hazard of asbestos exposure than treating the wallboard system as a homogenous material. It is important to implement prompt clean-up procedures and avoid pulverizing debris generated during the work.

Because of the circumstances presented by the use of asbestos in such joint compounds, questions arise relating to the application of the requirements of the asbestos standards adopted by the Department of Labor and Industries (L&I) under the authority of the Washington Industrial Safety and Health Act (WISHA), RCW 49.17 and the Washington Asbestos Act, RCW 49.26.

II. Scope and Application

This WISHA Regional Directive (WRD) provides guidance to WISHA enforcement and consultation staff whenever they must address issues concerning employee exposure to hazards involving asbestos-containing joint compound in wallboard systems. This document does not address materials sprayed or applied with a trowel across the full surface of the wall (such surfacing materials are covered under the Class I work provisions of the asbestos standard, found in WAC 296-62-07712).

This WRD supersedes all previous guidance on this subject, both formal and informal.

III. **Interpretive Guidance**

- A. *How do the building survey requirements of WAC 296-62-07721 apply to joint compound?*
1. **Sampling for joint compound.** Owners and employers can generally rely upon full-depth samples of wallboard systems containing joint compound collected during building inspections.

For general demolition and other work dealing with the wallboard system as a whole, building surveys using samples representing the full depth of wallboard material meet the good faith survey requirements. Where sample results identify trace or less than one percent asbestos for the wallboard system, some basic requirements of the asbestos standard will apply but the work will not be considered an "asbestos abatement project" under the definitions of the standard.

However, full-depth samples are not sufficient for wallboard systems where surfacing materials are present or where work will specifically disturb joint compound.

Building inspectors must examine wall systems in sufficient detail to identify extensive patching or application of surfacing layers on walls (as per the EPA AHERA inspection protocols for identification of surfacing materials in 40 CFR 763 Part E). These applications are considered to be "surfacing materials" under the standard, although similar plaster products may be used for joint compound. Surfacing materials have been associated with extensive asbestos exposure and have more stringent handling requirements than most other materials (see the OSHA preamble to the 1994 rulemaking for additional discussion).

Where work practices will selectively disturb joint compound, a full depth sample may not represent the workplace hazard. For example, sanding or scraping a wall may specifically disturb the joint compound and create dust and debris composed primarily of joint compound. Building inspectors must assess the work to be conducted and sample the materials representative of the hazard presented by the work. This may be accomplished using individual samples of different layers or having layers within samples analyzed separately. WISHA enforcement staff may elect to collect samples of dust or debris from the workplace or sample specific materials to make an assessment of the hazard represented by these materials. The specific work activity associated with the sample must be documented.

2. Re-analysis of materials. A full-depth sample result may substitute for layered results in situations where full-depth sampling is determined appropriate by an accredited building inspector. However, where sampling of joint compound has detected asbestos, the overall wallboard materials must not be reported as asbestos free.

Previous sampling may have been conducted for significantly different projects and specifically focused on joint compound (for example, samples assessing a prior painting project where sanding of the wall surface was planned). It is also common practice for laboratories to report layer by layer results for quality control reasons, whether or not this analysis is requested. In either case, it is improper to ignore the known presence of asbestos, but additional information may be collected and used to characterize the overall hazard due to asbestos in the current work.

An accredited building inspector must conduct any reassessment of wallboard systems. The reassessment must be conducted based on objective information collected during inspection of the wallboard system by an inspector or laboratory analysis of samples collected in accordance with EPA protocols. Pertinent objective information includes field documentation of the layers present in the samples and the relative quantities of materials represented by the samples. The level of proof should be equivalent to that for rebuttal of PACM designation and EPA inspection and analysis protocols must be followed. If resampling is conducted with full depth analysis and no asbestos is detected, the wallboard system must still be reported as containing trace or less than one percent asbestos based on the initial sampling.

- B. *What are the work practice requirements for handling wallboard materials under WAC 296-62-07712 in the asbestos standard?*
 1. Wallboard systems with greater than one percent asbestos content. Where asbestos-containing joint compound has been identified and the overall asbestos content of the wallboard system is greater than one percent, then work that disturbs the wall is Class II asbestos work. L&I considers the work an "asbestos project" or "asbestos abatement project" if the wall area involved is greater than one or three square feet, respectively. This also applies to any asbestos containing surfacing material.

Such work falls under the full requirements of the asbestos standard, including all Class II work practice and certification requirements. "Asbestos project" and "asbestos abatement project" are specifically defined terms in Washington State law on asbestos related to the certification requirements for contractors and workers. These terms apply to work where there is a possible exposure to asbestos above the permissible exposure limit.

2. Wallboard systems with less than one percent asbestos content. Where full-depth sampling or reassessment of the wallboard system has been conducted in accord with section III.A of this document and the wallboard system is found to contain less than one percent asbestos or trace asbestos. L&I will not consider the work will an asbestos project.

In such cases, WISHA enforcement staff must assess that the basic asbestos work practice requirements as given in WAC 296-62-17712(2), particularly use of wet, non-aggressive methods and prompt clean-up. Vacuums used must be HEPA filtered. Worker training must include asbestos awareness and hands on training as given in WAC 296-62-07722(5). Respiratory protection must be based on overall dust levels. A competent person must be assigned and trained under the requirements of WAC 296-62-07728.

3. Wallboard systems where no asbestos has been detected. Where appropriate sampling and analysis has been performed and no asbestos has been detected, no provisions of the asbestos standard will be enforced by WISHA compliance staff.

Note: Lead and silica are also commonly found in wallboard systems and any work should be evaluated to ensure any significant hazard due to these materials is addressed. Even where no specific hazard is identified, care should still be exercised in demolition or other work involving the wallboard systems. Total particulate standards from WAC 296-62, Part H, will apply, as well as requirements for demolition in WAC 296-155, Part S. General work practices including misting of debris, non-aggressive work methods and prompt clean-up as given in III.B.2 above will help meet these basic requirements and control any low levels of contaminants not found during pre-work inspections.

Approved: _____

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For further information about this or other WISHA Regional Directives, you may contact WISHA Policy & Technical Services at P.O. Box 44648 or by telephone at (360)902-5503. You also may review policy information on the DOSH Website (<http://www.lni.wa.gov/Safety-health/>).