

Introduction

The purpose of this document is to establish safe work practices and protection for Eastern Washington University (EWU) employees working with acoustical tiles. It shall apply to all building spaces and structures operated by EWU at all campuses and remote locales of occupancy. This procedure outlines requirements within the State Revised Code of Washington (RCW) for operation of higher education facilities and the Washington Administrative Codes (WAC) regarding safety and health core rules. When working within EWU's domain of operations, employees and contracted services are expected to comply with the safe work methods outlined in this document.

Any variance from work procedures in this document must be proposed by a competent person, reviewed by a department supervisor or designated contractor representative who is trained in hazard recognition, and reviewed by EWU's Facilities Operations.

Acoustical Tile Use and Hazards

Acoustical tiles (AT) help limit sound wave reverberation; increase insulation rating; offer audio-visual aesthetics to ceiling, wall, and floor spaces; and acts as a fire barrier component in drop ceilings and open/shared plenum buildings. ATs can be placed using a variety of different techniques including adhesive mastics, fastening devices, interlocking channel, tongue and groove, or resting in hanging metal t-bar channels (drop installation).

Composition of ATs vary significantly by age of production, manufacturer, and use application. Hazardous materials, such as asbestos, short-rod fiberglass, or silica, may be present. Hazards for ATs can be found in manufacturer Safety Data Sheets (SDS) or Material Safety Data Sheets (MSDS). If SDS/MSDS are not readily available for an AT, analytical laboratory sampling can be used to identify hazards. Hazards must be identified and addressed before work involving significant disturbance of ATs can begin. Identification of any hazardous materials in acoustical tiles must be reported to EWU's Project Manager or EWU's Hazardous Materials Coordinator immediately.

Competent Persons

Most acoustical tiles are friable and lightweight by design. Active disturbance of these building materials easily transform ATs into a powdered irritant, respirable dust, or a clean-up issue. People with medical conditions related to respirable sensitivity, anaphylactic precursors, or contact dermatitis related to acoustical tile materials are susceptible to AT respirable dusts and/or residuals. To limit AT releases, work disturbing AT materials should be only performed by trained EWU employees or authorized contract employees. Contract services must be informed of AT work hazards prior to the beginning of work by EWU Construction and Planning or EWU's Hazardous Materials Coordinator.

All EWU employees and contractor workers in the act of disturbing acoustical tiles with hazardous materials must comply with all proper work procedures designated by State of Washington Division of Safety and Health (DOSH), Spokane Regional Clean Air Agency (SCRAA), and/or the United States Occupational Health and Safety Administration (OSHA). Annual asbestos and silica awareness training is required for all EWU employees for before performing the following activities on acoustical tile materials:

- Breaking, chipping, crushing, cutting, drilling, grinding, or sawing;
- Dry sweeping or dumping of waste material;
- Pressurized air use or cleaning;
- Excessive wetting (may contribute to loss of tile integrity, leading to delamination, or unbinding of the material)

Work Involving Acoustical Tiles

Certain work activities and job procedures with ATs may produce significant quantities of dusts. Active release of dust should be limited to prevent or limit exposure to irritating or hazardous materials. Do not cut ATs with power equipment unless a dust collector is used on the equipment or local exhaust is used and personal protective equipment is worn. ATs should be cut or trimmed with knife, razor, or hand saw to limit the creation of dust. Movement of AT materials with recognized or identifiable hazardous content require care in handling. Disturbance of three (3) or more tiles or an area

greater than fifty (50) square feet with hazardous material content, will require a removable non-permeable barrier placed under the area of work.

Work involving general lifting and lowering of acoustical ceiling tiles out of drop installations, interlocking channel, or tongue and groove create the least damage and minimize AT dusts. Removal of some fastening devices may damage tile materials, causing a release of airborne dusts and nuisance fibers. Active elimination of tiles with adhesive mastics is detrimental to all AT types and is considered demolition of the workspace. Demolition or removal of AT containing hazardous materials will require abatement activities. Abatement activities include material sampling, regional permitting for removal, time allocations, and pre-planning of work. Pre-cutting/fitting of tiles in a designated location will limit contamination of larger or occupied areas, and is the recommended practice.

Fallen or damaged acoustical materials should be wetted and scooped into a waste receptacle and identified for hazardous content before designating to an appropriate waste stream. After removing the damaged materials, the area should be cleaned with a light application of an anti-static spray and vacuuming with a High Efficiency Particulate Arrestment (HEPA) rated vacuum. Any remaining dusts must be removed with wet methods, or wiped-down with static attracting wipes to remove residual irritant fibers.

Shutdown of affected building area HVAC systems during active disturbance of AT materials is the preferred engineering control. If possible, work should be performed when the building is unoccupied or at low capacity.

All worker PPE precautions listed by AT manufacturers should be reviewed and followed. If manufacturer PPE guidance is not available, protections for eye, hand, and respiration are recommended with non-permeable barrier clothing as a precaution. After working with AT, it is recommended that contaminated clothing and PPE, be removed for laundering and washing before next use. Wash all affected bodily contact areas with plenty of light soap and water.

Completion of Work

Upon completion of large or significant projects involving expansive installation or modification of acoustical tile materials, EWU's Project Manager and/or EWU's Hazardous Materials Coordinator must be notified to assess the space. Assessment of the ancillary space for proper cleaning is required to ensure the safety of EWU employees, students, and visitors. The affected areas may require additional remediation of the space before normal occupancy can resume.

Resources

[Revised Code of Washington:](https://app.leg.wa.gov/RCW/default.aspx?cite=28B)

<https://app.leg.wa.gov/RCW/default.aspx?cite=28B>

[Washington Administrative Code:](https://apps.leg.wa.gov/WAC/default.aspx?cite=296-800)

<https://apps.leg.wa.gov/WAC/default.aspx?cite=296-800>

[EWU Construction and Planning Department:](https://inside.ewu.edu/facilities/)

<https://inside.ewu.edu/facilities/>

(509)359-6323

[EWU Hazardous Materials Coordinator:](https://inside.ewu.edu/ehs/)

<https://inside.ewu.edu/ehs/>

(509)359-6455

[Spokane Regional Clean Air Agency:](https://www.spokaneleanair.org/)

<https://www.spokaneleanair.org/>

(509)477-4727

[WA State Department of Safety and Health:](http://www.lni.wa.gov/Safety/)

<http://www.lni.wa.gov/Safety/>

(509)324-2600