

Operations and Maintenance

Description

[su_spoiler style="fancy" icon="chevron" title=" Introduction "] The following document contains the University of Florida's Asbestos Operations and Maintenance (O&M) plan. The primary objective of this plan is to protect building occupants and workers by minimizing the potential for exposure to asbestos fibers.

The reader is to use this document as a supplement to his or her current asbestos training. Also refer to the complete OSHA asbestos standards, Florida DBPR requirements, U.S. EPA regulations, the University Asbestos Policy (Appendix E), and other relevant asbestos guidance documents.

Asbestos is the name of a class of minerals that occur in fibrous form. Due to its heat and chemical resistance and its strength and flexibility, asbestos has been used in thousands of different building and non-building related materials. While most uses of asbestos have been banned, some asbestos containing products remain on the market today. The most commonly encountered types of asbestos containing materials at UF include floor tile and mastic, pipe insulation, fireproofing, window glazing, asbestos cement products and roofing. All building materials in structures built prior to 1981 must be presumed to contain asbestos unless laboratory analysis or historical data indicate otherwise. EPA regulations require that all buildings, regardless of age, be surveyed for asbestos prior to demolition or renovation.

Health effects related to asbestos exposure are due to the inhalation or ingestion of asbestos fibers. Asbestos is a known carcinogen that can cause cancer in the lungs, larynx, trachea and other locations of the body. The debilitating respiratory disease, asbestosis, may also result from asbestos exposure.

Asbestos in good condition that remains undisturbed does not represent an exposure hazard. It is important to check with the appropriate contact before disturbing building materials suspected of containing asbestos.

See Appendix A for a list of definitions relevant to this O&M Plan.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Surveillance of Buildings "] The University maintains a program of periodic surveillance of all known or suspected asbestos containing materials. All accessible functional spaces with known or suspected asbestos containing materials are visually inspected a minimum of once a year. Scheduling leniency is permitted in sensitive areas (e.g. some research labs, housing units). The current condition of the asbestos containing material is evaluated relative to its condition at previous surveys. Deterioration or a change in the condition of any asbestos containing material is documented. If this deterioration results in an increased exposure risk to building occupants the deteriorated area is scheduled for hazard abatement.

Inspections are performed by individuals who are currently certified as EPA Asbestos Building Inspectors or who have been trained to recognize asbestos hazards.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Notification "]

Building Occupants

Buildings presumed to contain asbestos containing materials are posted with a notice sign ([Appendix B](#)) alerting occupants to the presence of asbestos and providing guidance on where to find further information. These notices are posted inside of the buildings near the entrances.

Contractors

Contractors arriving on campus to work are notified about the presence of asbestos containing materials through their contract documents. Specifically, the form titled "Statement for Bids" is included in the bid documents for all construction projects. It gives notice of the possibility of encountering asbestos containing materials in University buildings.

For selected contractors, there is a form titled "Notice to Contractors of Asbestos Containing Materials in University Buildings". This form is included with letters sent by Purchasing to successful vendors.

Information pertaining to asbestos is also included in the University Construction Manual.

Training of Employees There are various levels of training required depending on the type of involvement with asbestos materials. Each division (i.e., Health Center, IFAS, Physical Plant Department, Reitz Union) is responsible for ensuring employees are trained for their level of asbestos involvement. Environmental Health and Safety can guide and assist in training. Documentation of training activities must be provided to the EH&S office.

Awareness Training This is the minimum level of training, and is required for all custodial and maintenance employees having the potential to come into contact with asbestos during their normal job duties. The training is required within 30 days of initial assignment and annually thereafter.

Class I and Class II Training Employees who will be removing or disturbing asbestos or presumed asbestos containing materials must receive training meeting the requirements of the EPA Model Accreditation Plan or complete specialized training as described below.

Specialized Class II Training Training to allow Class II work on vinyl and resilient flooring, resinous and cementitious (Transite®) panels, roofing material, gaskets, and siding material is available through Environmental Health and Safety, TREEO and other outlets. With the specific exceptions of roofing material and vinyl and resilient flooring, projects performed after this training are limited to 160 square feet or 260 linear feet per project for maintenance purposes only.

Class III Training Follow requirements for Class I or Class II as appropriate.

Competent Person for Class I and Class II Work The competent person shall be trained in all aspects of asbestos removal and handling, including: abatement; the contents of the OSHA standard; the identification of asbestos; and other practices for reducing the hazard. Such training shall be obtained in a comprehensive course for supervisors, such as the State approved course conducted by TREEO, or a course equivalent in stringency, content and length. Annual refresher training is required.

Medical Surveillance Medical examinations and consultations are required for all employees who are engaged in asbestos

work for a combined total of 30 or more days per year or; are exposed at or above the permissible exposure limit or excursion limit; and for employees who wear negative pressure respirators. Days when fewer than sixty minutes of asbestos work are completed are not included in the 29-day count.

These examinations are repeated at least annually thereafter. If the examining physician determines that any of the examinations should be provided more frequently than specified, affected employees will be examined at the frequencies specified by the physician.

Medical examinations include a medical and work history, with special emphasis directed to the pulmonary, cardiovascular, and gastrointestinal systems. Along with a pulmonary function test, any examinations or tests deemed necessary by the examining physician will be included.

[/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Information Provided to the Physician "] The following information must be provided to the physician by the employee's supervisor before the physical.

- A description of the affected employee's duties as they relate to the employee's exposure.
- The employee's representative exposure level or anticipated exposure level.
- A description of any personal protection equipment to be used by the employee.
- Any information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

[/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Physician's Written Opinion "] The examining physician provides a written statement consisting of the physician's opinion whether the employee has any detected medical conditions that would place the employee at an increased risk of health impairment from exposure to asbestos. Any recommended limitations on the employee, or on the use of personal protective equipment such as respirators, will be noted in the opinion.

The opinion will also include statements that the employee has been informed by the physician of the results of the medical examination, and any medical conditions that may result from asbestos exposure. A statement will also be included that the employee has been informed by the physician of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure.

The physician will not reveal in the written opinion specific findings or diagnoses unrelated to occupational exposure to asbestos. The supervisor will provide a copy of the physician's written opinion to the affected employee within 30 days from its receipt.

[/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Scheduling an Examination "] Asbestos examinations for University employees are generally provided by the Occupational Medicine Clinic located in the Dental Science Building. Other providers may be used with the prior approval of Environmental Health and Safety.

Call the Occupational Medicine Clinic at (352) 294-5700 to schedule an exam. Tell the person who answers that you wish to schedule an asbestos examination. Indicate whether this will be an initial or annual exam. You will be asked for the employee's name, department number and the name of the employee's supervisor.

Once the appointment has been scheduled, contact Environmental Health and Safety at (352) 392-1591 and inform them of the pending appointment. A copy of the physician's written opinion shall be provided to Environmental Health and Safety when it has been received.

[/_su_spoiler] [/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Updated Asbestos Surveys "] An updated asbestos survey, identifying both friable and nonfriable asbestos containing materials,

must be conducted of any building or section of a building that is scheduled for renovation or demolition. The completion of a survey is a requirement of Federal EPA NESHAP regulations. A survey is required regardless of the age of the building and may be specific to the project scope of work. A draft copy of the survey must be reviewed by the University Asbestos Coordinator for completeness prior to accepting the final product. A copy of the updated survey must be kept on site until the renovation or demolition activities are completed.

The survey must be conducted under the supervision of a Florida licensed asbestos consultant. Individuals performing asbestos surveys must be certified as EPA asbestos inspectors through a Florida approved training provider.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Notification Prior to Asbestos Removal Activities "] Occupants of areas adjacent to planned asbestos removal projects must be notified prior to the start of removal activities. This notification may be in writing or by personal communication and must include information pertaining to what material is being removed and what measures are being taken to prevent exposure to asbestos fibers.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Administrative Procedures: Asbestos Abatement By University of Florida Staff "] Only properly training and certified in-house staff are authorized to remove asbestos containing materials in campus facilities. Up to date abatement project supervisor and worker certification documents including those documenting required annual refresher training must be on file with the EH&S Asbestos Program Manager before any abatement activities are approved.

In-house asbestos removal will be limited to small amounts of material for maintenance purposes only. Examples would include HEPA vacuuming loose fireproofing from an open wall cavity or removal of sections of TSI for the purpose of performing repairs on a valve or section of pipe. Safe work practices, as mandated by OSHA, must be followed for all asbestos removal activities.

University personnel removing asbestos containing floor tile and mastic must comply with the training and notification requirements stated in the OSHA Asbestos Construction Standard (29CFR1926.1101) and in FS 469. All removal must be conducted in strict accordance with the procedural requirements of the Resilient Floor Covering Institute (RFCI). An updated negative exposure assessment (NEA) shall be conducted at least annually by each group conducting floor covering removal using the RFCI methods. Air sampling for the NEA must be conducted by a Licensed Asbestos Consultant and a copy of the final NEA report must be submitted to EH&S for approval.

EH&S must be notified of any proposed in-house asbestos removal at least one week prior to the start of work activities. A written work plan outlining the methods of removal and safe work practices must be submitted to EH&S and approved prior to the start of abatement.

EH&S will review each project on a case by case basis and may require the implementation of additional safe guards, an adjustment to proposed work practices or air monitoring.

EH&S also reserves the right to require that the proposed abatement activities be performed by an approved contractor rather than as an in-house project.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Administrative Procedures: Contracted Work "] To initiate a project the Project Manager selects an approved asbestos abatement contractor and a licensed asbestos consultant, if required. An [Asbestos Project Notification form](#) would then be completed and submitted to EH&S. Estimates are acceptable for costs and dates, and may be

corrected at the completion of the project.

The completed APNF is forwarded to the University Asbestos Coordinator by the Project Manager. The selected contractor shall provide the necessary notifications to the Department of Environmental Protection and/or the Department of Business and Professional Regulation (floor covering removals only).

Within 30 days of completing site asbestos activities the Project Manager will need to obtain project reports from the asbestos contractor, and if applicable the licensed asbestos consultant, and provide them to the Asbestos Coordinator at Environmental Health and Safety. An amended APNF should be sent if corrections have been made to the original information.

[/_su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Maintenance of Asbestos-Containing Materials "] All asbestos work on campus shall be conducted in compliance with the applicable OSHA standard: 29 CFR 1926.1101 or 1910.1001 depending on the type of work. OSHA enforces these standards for contractors and consultants, and the US EPA enforces them under the Worker Protection Rule 40 CFR 763 for University employees. Additional State of Florida requirements are found in FAC Chapter 469.

[_su_spoiler style="fancy" icon="chevron" title=" Prohibited Practices "] The following work practices shall not be used for any work that disturbs asbestos containing materials, regardless of measured levels of asbestos exposure or the results of initial exposure assessments:

- High-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filtered exhaust air;
- Compressed air used to remove asbestos, or materials containing asbestos;
- Dry sweeping, shoveling or other dry clean-up of dust and debris containing ACM and PACM;
- Employee rotation as a means of reducing employee exposure to asbestos.

Projects without a negative exposure assessment may not be carried out without the written permission of the University Asbestos Coordinator.

Specific work practices are in place for tasks impacting wallboard systems containing less than one percent (<1%) asbestos (see Appendix G).

[/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Routine Maintenance and Cleaning "] It is important to minimize the disturbance of asbestos-containing materials and the subsequent release of asbestos fibers. This can be accomplished by staying out of physical contact with materials that contain, or are presumed to contain, asbestos.

Dust and debris in an area containing visibly deteriorated ACM shall not be dusted or swept dry, or vacuumed without using a HEPA vacuum filter. This cleaning shall only be carried out by certified asbestos workers.

[/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Asbestos-Containing Flooring Material "] All floor tile installed prior to 1990 must be treated as asbestos containing unless sampling has indicated that the material is asbestos free. The asbestos floor covering poses no significant health concerns as long as it remains in an intact and undamaged state. The Physical Plant Division annually or more often if needed applies wax to the floor tile which serves to seal the flooring and to further minimize the risk of exposure.

Sanding of flooring material is prohibited. Stripping of finishes shall be conducted using the least

abrasive pads possible at a speed lower than 300 rpm and employing wet methods.

Burnishing or dry buffing may be performed only on flooring that has sufficient finish so that the pad cannot contact the flooring material, and the tiles and adhesives remain intact throughout the process.

Building occupants must not alter the floor covering in any way that may result in an asbestos fiber release. This includes drilling through asbestos floor covering. Care must also be used when moving equipment across any asbestos tile. Any observed damage to the tile must be promptly reported to the appropriate maintenance division, and to EH&S at 392-1591 immediately.

See Appendix F for specific requirements concerning the removal of asbestos containing floor coverings.

[/_su_spoiler] [/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Removing or Disturbing Asbestos Containing Materials "] [_su_spoiler style="fancy" icon="chevron" title=" Final Clearance Air Monitoring "] When friable asbestos containing material is removed or non-friable asbestos containing material becomes friable during removal, and the amount of material is 3 square or linear feet or greater, final air clearance sampling must be conducted. For projects 3 linear or square feet to 260 linear or 160 square feet, PCM clearance testing is required. For projects over 260 linear or 160 square feet, TEM clearance testing will be required. All final clearance testing must follow the published AHERA protocol methods.

[/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Class I Work "] This is work involving the removal of thermal system insulation, or surfacing material, and typically will not be performed by University employees.

[/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Class II Work "] Where a negative exposure assessment cannot be documented, or where the job conditions indicate there may be exposure above the PEL, or where the asbestos containing material cannot be removed in a substantially intact state, a negative pressure enclosure must be used. These barriers are necessary to prevent the migration of airborne asbestos from the regulated area. The effectiveness of the barriers should be verified by perimeter area monitoring or visual surveillance.

Class II work also may be performed using a method allowed for Class I work, and glove bags and glove boxes are allowed if they fully enclose the Class II material to be removed. Impermeable drop cloths must be placed on surfaces beneath all removal activity.

For Class II work the competent person must be specially trained in a course that meets the criteria of EPA's Model Accreditation Plan (40 CFR 763) for project supervisor, or its equivalent.

[/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Specialized Class II Work "]

Removing Vinyl and Resilient Flooring Materials

Vinyl and resilient flooring materials are exempted from the 160 square foot limit. This work requires specialized training provided, or approved, by the University of Florida Asbestos Coordinator.

Flooring or its backing is not to be sanded, ground, abraded or intentionally broken or chipped. Vacuums equipped with HEPA filter, disposable dust bag, and metal floor tool (no brush) shall be used to clean floors.

Resilient sheeting shall be removed by cutting with wetting of the snip point and wetting during

removal. Rip-up of resilient sheet floor material is prohibited. All scraping of residual adhesive and/or backing shall be performed using wet methods.

Dry sweeping is prohibited. Mechanical chipping is prohibited unless performed in a negative pressure enclosure. Tiles must be removed substantially intact.

Roofing Material

Roofing materials are exempted from the 160 square foot limit. This work requires specialized training provided, or approved, by the University of Florida Asbestos Coordinator.

When removing roofing material that contains asbestos, remove the roofing material in an intact state to the extent feasible.

Cutting machines shall be continuously misted during use, unless the competent person determines that misting substantially decreases worker safety. All loose dust left by the sawing operation must be HEPA vacuumed immediately. Cutting of cement asbestos (Transite®) is prohibited without the written permission of the University Asbestos Coordinator.

Unwrapped or unbagged roofing material must be immediately lowered to the ground by way of covered, dust-tight chute, crane or hoist, or placed in an impermeable waste bag or wrapped in plastic sheeting and lowered to ground by the end of the work shift.

Upon being lowered, unwrapped material shall be transferred to a closed receptacle in such manner to preclude the dispersion of dust. Roof level heating and ventilation air intake sources shall be isolated or the ventilation system shall be shut down.

Cementitious Asbestos Siding & Transite Panels

These materials are limited to 160 square feet per project, for maintenance purposes only. This work requires specialized training provided, or approved, by the University of Florida Asbestos Coordinator.

Cutting, abrading or breaking siding, shingles, or Transite® panels, is prohibited unless the competent person can demonstrate that methods less likely to result in asbestos fiber release cannot be used. All non-roofing cement asbestos materials with exposed asbestos surfaces shall be sprayed with amended water, or encap sealant before removal.

Gaskets

If a gasket is visibly deteriorated and unlikely to be removed intact, removal shall be done within a glovebag. The gasket shall be thoroughly wetted with amended water before its removal. The wet gasket shall be immediately placed in a disposal container. Any scraping to remove residue must be performed wet. This work requires specialized training provided, or approved, by the University of Florida Asbestos Coordinator.

[/_su_spoiler] [/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Requirements for Asbestos Contractors "] Work is to be performed in accordance with the 29 CFR 1926.1101 (OSHA Asbestos Construction Standard), in addition to accepted industry work procedures, and other applicable

Federal, State, and County regulations.

On site superintendent must be a “competent person” as defined in 29 CFR 1926.1101 (b). Superintendent must be on the job site full time during the entire contract period of work execution. Superintendent must have a minimum (3) three years experience in type(s) of work and products specified for the project.

All work, for all routine projects is to be conducted with asbestos exposures at or below the OSHA permitted exposure level (PEL). Written approval by the University Asbestos Coordinator is required for projects that are intended to exceed the PEL.

[_su_spoiler style="fancy" icon="chevron" title=" Insurance "] Contractor must comply with the liability insurance and other pre-job submittal requirements listed in [Appendix D](#).

[/_su_spoiler] [/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Requirements for Licensed Asbestos Consultants "] Work is to be performed in accordance with the ASTM E 1368-00, Standard Practice for Visual Inspection of Asbestos Projects, in addition to accepted industry work procedures, and applicable Federal, State, and County regulations.

On site representatives must be a “competent person” as defined in 29 CFR 1926.1101 (b). At a minimum, the on site representative must have NIOSH 582 or equivalent asbestos air sampling and analysis certification and have an up to date asbestos abatement project management and supervision certification from a Florida approved training provider.

If the on site representative is not able to perform his or her duties due to any contractor created safety or health hazard at the site, the representative must direct the contractor to correct the hazard. If the contractor cannot, or will not correct the hazard, the on site representative shall notify the University Project Manager, and shut the project down until the hazard can be corrected.

Air monitoring by the licensed asbestos consultant shall include adequate personnel samples to confirm contractor’s compliance with the NEA.

The on site representative shall have the necessary training, equipment and experience to verify that the contractor is maintaining adequate diminished pressure and air changes per hour in the NPE. [/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Appendix A: Definitions "] **Asbestos:** includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that has been chemically treated or altered.

Asbestos-Containing Material (ACM): any material containing more than one percent asbestos.

Class I Asbestos Work: the removal of thermal system insulation and/or surfacing material (ACM or PACM).

Class II Asbestos Work: removal of any ACM which is not Class I, such as wallboard, floor tile, ceiling tile, linoleum, transite board, roofing materials and mastics.

Class III Asbestos Work: repair and maintenance operations where ACM is likely to be disturbed.

Class IV Asbestos Work: maintenance and custodial activities during which employees contact but do not disturb ACM, and activities to clean up dust and debris which may be generated by Class I, II, or III

work.

Clearance Air Monitoring: Air monitoring conducted by an Asbestos Project Monitor at the conclusion of an asbestos project. Clearance air monitoring includes the successful completion of a final visual inspection for work area debris and the collection and analysis of air samples in accordance with AHERA protocols.

Competent person means, in addition to the definition in 29 CFR 1926.32 (f), one who is capable of identifying existing asbestos hazards in the workplace and selecting the appropriate control strategy for asbestos exposure, who has the authority to take prompt corrective measures to eliminate them, as specified in 29 CFR 1926.32(f): in addition, for Class I and Class II work who is specially trained in a training course which meets the criteria of EPA's Model Accreditation Plan (40 CFR 763) for supervisor, or its equivalent and, for Class III and Class IV work, who is trained in a manner consistent with EPA requirements for training of local education agency maintenance and custodial staff as set forth at 40 CFR 763.92 (a)(2).

Friable Asbestos Containing Material: any material containing more than one percent asbestos, which when dry, may be crumbled, pulverized or reduced to powder by hand pressure.

High Efficiency Particulate Air (HEPA) Filter: a filter capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter.

Negative Exposure Assessment (NEA): a demonstration by the employer, which complies with the criteria in OSHA 29 (CFR) 1926.1101 paragraph (f) (2) (iii), that the employee exposure during the monitored operation is expected to be consistently below the PELs.

Non-Friable Asbestos Containing Material: materials in which asbestos is bound in a matrix which cannot, when dry, be crumbled, pulverized or reduced to powder by hand pressure (such as floor tile and asphaltic building materials).

Permissible Exposure Limits (PELs):

1. Time Weighted Average (TWA): the employer shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 0.1 fiber per cubic centimeter as an eight (8) hour time weighted average.
2. Excursion Limit (EL): the employer shall ensure that no employee is exposed to an airborne concentration of asbestos in excess of 1.0 fiber per cubic centimeter of air as averaged over a sampling period of thirty (30) minutes.

Presumed Asbestos Containing Material (PACM): thermal system insulation and surfacing material in buildings constructed no later than 1980, are assumed to contain asbestos until it has been analyzed to verify or negate its asbestos content.

Regulated Area: means an area established by the employer to distinguish areas where airborne concentrations of asbestos exceed or there is a reasonable possibility that they may exceed the permissible exposure limits.

Vinyl Asbestos Floor Tile (VAT): vinyl floor tile and in some cases its mastic which contain more than

one percent asbestos and must be handled as ACM.

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Appendix B "] [Asbestos Containing Material Notification](#)

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Appendix C "] [Asbestos Project Notification Form \(APNF\)](#)

[/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Appendix D: Asbestos Contractor General Liability Insurance Policy "] The University of Florida require asbestos contractors doing work for the University to carry asbestos general liability insurance in addition to all other insurance coverage (including but not limited to automobile and workers compensation) required by the bid and contract documents. The asbestos related insurance policy must be procured through an underwriter with an A.M. Best rating of A- or better lawfully authorized to do business in Florida. The insurance policy shall provide that the University of Florida is named as an additional insured. The University shall not be responsible for any sums of money associated with the policy, including any deductible. Coverage shall be on "occurrence" basis, rather than "claims made" and must protect Contractor from all claims arising out of the Contractor's asbestos abatement work for the University. The minimum limits of liability for the asbestos contractor general liability are:

Each Occurrence	Limit \$1,000,000
Personal Injury and Advertising	Injury Limit \$1,000,000
Fire Damage	Limit (any one fire) \$50,000
Medical Expense	Limit (any one person) \$5,000
Products and Completed Operations Aggregate	Limit \$1,000,000
Aggregate (Other than Products/Completed Operations)	Limit \$1,000,000

The Contractor shall file with the University a certificate of insurance and a copy of the policy acceptable to the University prior to the commencement of the work. The policy shall remain in force without interruption from the date of the commencement of the work until the work is completed and the Contractor is off site. The certificate and policy shall indicate that coverage afforded under the policy will not be canceled or allowed to expire until at least 30 days prior written notice has been given to the University.

[_su_spoiler style="fancy" icon="chevron" title=" Bid Submittals "] Contractors who have not successfully provided similar work and products for a University of Florida project in the last two years must provide a minimum of (3) positive written references from clients to whom the contractor has provided similar work and products

[/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Pre-Job Submittal and Consultant's Approval "] The contractor's pre-job submittals must include an original copy of the certificate of insurance and a copy of the policy acceptable to the University prior to the commencement of the work. The contractor's other pre-job submittals must be approved by the project's asbestos consultant, and EH&S must receive a written statement of approval of the submittals from the asbestos consultant 10 business days prior to project start-up.

[/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Contractor's Superintendent "] Contractor's superintendent must be on the job site full time during the entire contract period of work execution. Superintendent must have a minimum (3) three years experience in type(s) of work and products specified for this project. Documentation of work experience must be submitted in the pre-job

submittals. Written notice of any proposed change in the Contractor's designated superintendent must be provided to the University; the University reserves the right to exercise all available legal remedies including cancellation of the contract in the event that a successor superintendent fails to meet the requirements of this provision.

[/_su_spoiler] [/su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Appendix E "] [Asbestos Policy](#)

[/_su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Appendix F "] [Asbestos Floor Tile Policy](#)
[/_su_spoiler] [su_spoiler style="fancy" icon="chevron" title=" Appendix G: Work Practice for Maintenance Activities Associated with Wallboard Systems with <1% Asbestos"] The following Work Practices are to be used when impacting wallboard in any University of Florida (UF) facility. Prior to any maintenance activity that may impact wallboard (cutting, drilling, painting, nailing, patching, removal, etc.), the project manager or facility manager must be notified. It is the responsibility of the project/facility manager to have the subject wallboard tested for the presence or absence of asbestos in the material. Records will be maintained by the facility manager and the Environmental Health and Safety (EH&S) Department of the sampling locations and analytical results. If the wallboard system (note: 'wallboard system' is defined as the combination of the wallboard, joint compound (mud) and seam tape) is negative for asbestos, then the following procedures do not apply. If the composite wallboard system is positive for asbestos (> or equal to 1% asbestos), then the material must be handled by an UF asbestos term contractor. If the composite wallboard system is <1% asbestos (example: wallboard is negative for asbestos, joint compound is positive for asbestos), then the following procedures must be followed. An OSHA compliant Negative Exposure Assessment (NEA) must be established with regards to each task and procedure by an UF asbestos term contractor before the following procedures can be implemented on a standard Maintenance level.

These work practices are to be followed whenever ***drilling or installing nails or screws or cutting through known or presumed asbestos containing joint compound where the wallboard system (wallboard, taping and mud together) contains less than 1% asbestos***. This includes activities such as:

1. hanging pictures
2. installing coat hooks
3. installing shelving track
4. removal of wall fixtures or furnishings
5. attaching modular furniture to walls
6. installing wiremold, switches or outlets,
7. patching
8. painting

These procedures have been reviewed and approved by the UF EH&S Department.

If other work tasks such as **sanding and scraping walls, or specifically cutting along drywall seams**, are necessary; **they must be done by an UF asbestos term contractor**.

[_su_spoiler style="fancy" icon="chevron" title=" Requirements "] [__su_spoiler style="fancy" icon="chevron" title=" For Workers "]

- 16-Hour Awareness Training
- Respiratory Protection and Respirator Fit-Test

- Hands on training for penetrating <1% asbestos joint compound
- Know who the competent person is and how to contact them

[_/su_spoiler] [/_su_spoiler style="fancy" icon="chevron" title=" Work Requirements "]

- Approval of competent person
- Wet, non-aggressive methods
- Prompt clean up of material
- Supervisor assures all workers have appropriate training.
- Supervisor verifies current NEA is on record.
- Supervisor provides contact number for competent person to workers.

[_/su_spoiler] [/_su_spoiler style="fancy" icon="chevron" title=" Equipment "]

- HEPA Vacuum
- Spray Bottle or garden sprayer of amended water
- Sponge(s)
- Plastic waste bag(s)
- Plastic sheeting
- Paper towels/absorbent pads
- Duct tape
- Blue masking (painters) tape
- Encapsulant
- Paint or thick primer
- Taping Compound
- Tyvek suit

Other tools required to complete task: drill, razor knife, saw, screwdriver etc.

½-face respirator with high efficiency particulate air (HEPA) filters during NEA monitoring.

Note: Within a furnished space, painters tape should be used in all instances where tape will be in contact with finished building materials. Duct tape must not be in contact with finished building materials because of the significant damage that it may cause.

[_/su_spoiler] [/_su_spoiler] [/_su_spoiler style="fancy" icon="chevron" title=" Work Practices "]
 [/_su_spoiler style="fancy" icon="chevron" title=" Work Procedure for Drilling "] Staff and/or Employees can be present in rooms where drilling or nailing is occurring as long as a current NEA exists that documents exposure levels below the OSHA Permissible Exposure Level (PEL). If obtaining NEA data, room cannot be occupied by non-authorized and non-properly protected personnel.

Gather all required tools at the worksite. Assure all training is up to date, and the competent person is aware of the project. Place plastic on the floor next to work area and secure with tape. Mark the wall where the penetration is needed. Cut a hole in the sponge. Wet the sponge with amended water. Place the sponge over the drill bit. Place drill on the mark. Hold the sponge firmly against the wall. Drill hole. Keep the sponge firmly in place and remove the drill. Set the drill on the plastic on the floor. Wipe the sponge across the area where the hole was drilled, being careful not to release any dust. Place the sponge on the plastic. Wet some paper towels and wipe the wall to assure all debris is removed. When all drilling is complete, remove the power source and spray the drill with water and wipe with a wet paper towel to assure all dust is removed. Pay special attention to the drill bit. Wrap waste in plastic sheeting and secure with duct tape, or place in a plastic bag and seal bag. Dispose of waste in the

shop dumpster. Since the material contains less than 1% asbestos, it does not need to be disposed of as a regulated waste or labeled.

[_/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Work Procedure for Installing Nails "] Staff and/or Employees can be present in rooms where drilling or nailing is occurring as long as current NEA exists that documents exposure levels below the OSHA Permissible Exposure Level (PEL). If obtaining NEA data, room cannot be occupied by non-authorized and non-properly protected personnel.

Gather all required tools at the worksite. Assure all training is up to date, and the competent person is aware of the project. Place plastic sheeting on the floor next to work area and secure with duct tape. Mark the wall where the penetration is needed. Cut a hole through the sponge for the nail. Wet the sponge with amended water. Put the nail through hole in sponge. Place the nail over the mark. Hold the sponge firmly against the wall. Make sure the cut sponge wraps around the nail. Keep the sponge firmly in place, hammer the nail in place. Set the hammer on the paper towels on the floor. Have another person hold the end of the HEPA vacuum to the area and gently pull the sponge down until it is below the nail, being careful not to release any dust. Place the sponge in a plastic bag. Wet some paper towels and wipe the wall to assure all dust is removed. Wet wipe hammer to assure all dust is removed. Wrap waste in plastic sheeting and secure with duct tape, or place in a plastic bag and seal bag. Dispose of waste in the shop dumpster. Since the material contains less than 1% asbestos, it does not need to be disposed of as a regulated waste or labeled.

[_/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Work Procedure for Patching Penetrations "] Never sand exposed asbestos taping compound. Never conduct any activity which disturbs only the taping compound. When scoring, never cut through all the paint layers.

Staff and/or Employees can be present in rooms where patching is occurring as long as current NEA exists that documents exposure levels below the OSHA Permissible Exposure Level (PEL). If obtaining NEA data, room cannot be occupied by non-authorized and non-properly protected personnel.

Gather all tools at the worksite. Ensure awareness training and work procedure training is up to date and the competent person is aware of the project. Place plastic on the floor next to the work area and secure with duct tape. Ensure all fixtures have been removed from the wall, exposing holes (wire mold, modular furniture, etc.). Encapsulate affected area with paint or encapsulant. Use hammer to drive toggle bolt anchor, etc., below surface. Re-encapsulate affected area. Fill hole with patching compound and wet sand area. Let dry and paint.

[_/_su_spoiler] [_su_spoiler style="fancy" icon="chevron" title=" Work Procedure for Patching Glue Damage or Extensive Wall Damage "] Repairing when sections of wall do not have to be removed.

Staff and/or Employees can be present in rooms where patching is occurring as long as current NEA exists that documents exposure levels below the OSHA Permissible Exposure Level (PEL). If obtaining NEA data, room cannot be occupied by non-authorized and non-properly protected personnel.

Gather all tools at the worksite. Ensure awareness training and work procedure training is up to date and the competent person is aware of the project. Place plastic on the floor next to the work area and secure with duct tape. Encapsulate affected area with paint or encapsulant. If paper is torn but no taping compound is present on paper to be removed, paper can be cut off. Contact competent person with any questions. If taping compound is present on torn paper, encapsulate area. **DO NOT REMOVE PAPER.** If paper with taping compound needs to be removed or repairing large holes, refer to

“Procedure for Removal of Sections of Wallboard” (this document). Once this is done, a patch or other repair can be done.

[__/_su_spoiler] [__su_spoiler style="fancy" icon="chevron" title=" Work Procedure for Label Removal “] Gather all required tools at the worksite. Assure all training is up to date, and the competent person is aware of the project. Place plastic sheeting on the floor next to work area and secure with duct tape. Mist with amended water. Use scraper to remove label, being careful not to penetrate paint layers. If taping compound is damaged, stop work and contact competent person.

[__/_su_spoiler] [__su_spoiler style="fancy" icon="chevron" title=" Work Procedure for Removal of Sections of Wallboard “] Staff and/or Employees cannot be present in rooms where sections of wallboard are removed. **Removal of sections of wallboard greater than five (5) square feet MUST be done by an UF term abatement contractor.** For sections of wallboard less than five (5) square feet:

This is a two person work practice

Staff and/or Employees can be present in rooms where removal is occurring as long as current NEA exists that documents exposure levels below the OSHA Permissible Exposure Level (PEL). If obtaining NEA data, room cannot be occupied by non-authorized and non-properly protected personnel.

Gather all required tools at the worksite. Ensure awareness training and work procedure training is up to date and the competent person is aware of the project. Place plastic sheeting on the floor next to work area and secure with duct tape. Mark the area of wall to be removed. Spray wall surface with amended water. Begin cutting, having another person periodically spray the area where the blade is penetrating while holding the end of the HEPA vacuum to the area being cut. When cutting is complete, spray amended water around penetration. Gently remove the section of wall system as a whole piece. Set removed wall material on plastic, wrap and duct tape or if small enough place in a plastic bag. Spray edges of remaining wall opening with encapsulant. Wet wipe tools to assure all dust is removed. Wrap waste in plastic sheeting and secure with duct tape, or place in a plastic bag and seal bag. Dispose of waste in the shop dumpster. Since the material contains less than 1% asbestos, it does not need to be disposed of as a regulated waste or labeled.

[__/_su_spoiler] [__su_spoiler style="fancy" icon="chevron" title=" Supervisor Checklist “]

- Asbestos sample results
- Current training
- NEA (One year)
- Knowledge of work procedure
- Notify Asbestos Coordinator/Project Manager of date, etc., of project
- Provide Asbestos Coordinator’s/Project Manager’s contact number to workers

General Requirements

1. Asbestos Awareness Training
Required (16 Hour)
2. Certified Asbestos Supervisor not required
3. Personal Protective Equipment

Specific Requirements

Until an NEA is established

Safety Glasses
Foot Protection
Gloves

4. Engineering Controls: One or more of the following must be used, including prompt clean-up
5. Air Monitoring
6. Isolate work area from non-essential personnel and notify essential personnel of work
7. Shut down HVAC, if possible
8. Debris is non-regulated asbestos waste and may be disposed of as general construction waste in Physical Plant dumpster

Wet Methods
HEPA Vacuum
Drop Cloths (6 mil)
Wet Sponges or Shaving Cream
Negative exposure assessment or
objective data

[_/su_spoiler] [_/su_spoiler] [_/su_spoiler]
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