

SECTION 02 82 11
ASBESTOS ABATEMENT

PART 1 GENERAL

1.1 SUMMARY

A. Section includes abatement and removal of asbestos containing glue dots and exterior window caulk.

1.2 SYSTEM DESCRIPTION

A. Remove as asbestos-containing, approximately 360 square feet of black glue associated with foam ceiling insulation from Second Floor Rooms 233, 234, 236, and 237. Remove as asbestos-containing, approximately 640 linear feet of exterior window caulk from second and third floor porches. All work shall be performed in accordance with Part 56 of Title 12 of the Official Compilation of Codes, Rules and Regulations of the State of New York (Cited as 12 NYCRR Part 56)

B. Work includes but not be limited to contractor obtaining all required licenses, permits, tests, reports, receipts (all preceding as required), materials, labor, equipment and all other operations and incidentals necessary to completely abate and properly dispose of all flooring materials identified for removal.

C. As required submit written notification to the State of New York Department of Labor and Federal agencies in accordance with 40 CFR 61.145 to 155.

D. Quickly & properly dispose of all asbestos containing materials.

E. Contractor shall supply all supervision, materials, equipment, transportation, labor and all other incidentals necessary to complete the work.

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.

B. Abatement Plan

1. Schedule.
2. Removal Procedures.
3. Disposal Procedures.

C. Permits

1.4 CLOSEOUT SUBMITTALS

A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for submittals.

B. Test results.

C. Receipts or bills of laden

1.5 QUALITY ASSURANCE

A. Perform Work in accordance with all applicable Federal, State and local regulations pertaining to the abatement, removal and disposal of Asbestos Containing Materials.

B. Maintain one copy of each document on site.

C. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

D. Use equipment adequate in size, capacity, and numbers to accomplish the work of this Section in a timely manner.

1.6 QUALIFICATIONS

A. The Contractor shall be completely qualified and licensed for asbestos's abatement.

1.7 OCCUPANCY

A. The building will be occupied during the period of performance. The work area will be unoccupied. Refer to section 01 00 00 General Requirements for more information.

1.8 COORDINATION

A. Section 01 00 00 - General Requirements: Requirements for coordination.

B. Five business days prior to commencement of the work, TTI Environmental, Inc. shall be notified at 856-840-8800 x31.

1.9 ADDITIONAL WORK

A. Provide a separate line item quotation for the following work:

1. Project air monitoring and testing for all abatement activities associated with this project.
2. Abatement of 50lf of asbestos-containing pipe insulation.

PART 2 PRODUCTS

2.1 This section not used.

PART 3 EXECUTIONS

3.1 ASBESTOS ABATEMENT PROCEDURES FOR BLACK GLUE ASSOCIATED WITH FOAM CEILING INSULATION:

- A. All work shall be in accordance with NYCRR Part 56-7, Work Area Preparation. Work Area shall be prepared utilizing two layers of 6 mil plastic sheeting as outlined in 12 NYCRR Part 56.
- B. Abatement activities shall be performed in accordance with NYCRR Part 56-78, Asbestos Abatement. Use plastic sheeting to cover all remaining items and fixtures located within the kitchen and laundry room. Isolate doorways with 6 mil plastic sheeting. Place plastic sheeting on floor areas where the material is to be stored or package the materials immediately.
- C. A personal decontamination system enclosure shall be provided outside the regulated abatement work area and attached to all locations where personnel shall enter or exit the regulated abatement work area. One personal decontamination enclosure system for each regulated abatement work area shall be required.
- D. After the installation of the personal decontamination system, full PPE in compliance with current OSHA regulations shall be worn in regulated abatement work areas during preparation activities, for all friable OSHA Class I or Class II asbestos projects. Asbestos abatement contractor's respirator selection, filter selection, medical surveillance and respiratory training must be consistent with current OSHA regulations
- C. Shutdown and lock out of electric power to all negative pressure containment enclosures within the regulated abatement work areas shall be required as per current applicable OSHA standards. All existing power to fixtures, lights, machinery and outlets within the enclosure must be shut down and locked out. The asbestos abatement contractor shall provide temporary power and lighting to the regulated abatement work area, and insure safe installation of temporary power sources and equipment used where high humidity or water shall be sprayed in accordance with all applicable codes. All temporary power to regulated abatement work areas shall be brought in from outside the regulated abatement work area. This temporary power shall be protected by a ground fault circuit interrupter (GFCI) before the entry point to the regulated abatement work area.
- D. All OSHA Class I, Class III, and interior Class II asbestos abatement projects shall employ negative air pressure equipment ventilation. The negative air pressure equipment shall operate continuously, twenty-four (24) hours a day, from startup of negative air pressure equipment, through the cleanup operations and satisfactory clearance air sampling results being obtained, or the asbestos project is complete.
- E. A manometer shall be used to document the pressure differential for all OSHA Class I Large and Small size asbestos project regulated abatement work areas. A minimum of -0.02 column inches

of water pressure differential, relative to pressure outside the regulated abatement work area, shall be maintained within the regulated abatement work area, as evidenced by manometric measurements.

- F. Movable objects within the regulated abatement work area shall be pre-cleaned using HEPA-filtered vacuum equipment and/or wet cleaning, and such objects shall be removed from the regulated abatement work area to an uncontaminated location. Upholstered furniture and drapes shall be HEPA vacuumed twice before removal from the regulated abatement work area. Carpeting shall be HEPA-vacuumed twice and cleaned before removal from the regulated abatement work area. If disposed of as asbestos-contaminated waste material, cleaning of carpeting is not required. If carpeting is left in place, it shall be covered with three-eighths (3/8) inch thick plywood sheathing prior to required plasticizing.
- G. Fixed objects and other items which are to remain within the regulated abatement work area shall be pre-cleaned using HEPA-filtered vacuum equipment and/or wet cleaning methods. Such objects and items shall be enclosed with two (2) layers of at least six (6) mil fire retardant plastic sheeting and sealed airtight with duct tape.
- H. Critical barriers shall be constructed to seal off all openings and penetrations to the regulated abatement work area including, but not limited to, operable windows and skylights, doorways and corridors (which shall not be used for passage), ducts, grills, diffusers, HVAC system seams, and any other penetrations to surfaces within the regulated abatement work area. Critical barriers shall be constructed using two (2) independent layers of at least six (6) mil fire-retardant plastic sheeting with each layer sealed separately with duct tape.
- I. All floor, wall and ceiling surfaces, except where abatement of ACM shall be performed on those specific surfaces, shall be covered with two (2) layers of, at a minimum, six (6) mil fire-retardant plastic sheeting. The floor shall be plasticized first, and its plastic sheeting shall extend up the walls a distance of at least twelve (12) inches on all sides. The walls shall then be plasticized by applying plastic sheeting from the ceiling to the floor, overlapping the floor sheeting by at least twelve (12) inches. Next, the ceiling shall be plasticized overlapping the walls by at least twelve (12) inches, to form a secure airtight seam. This process shall be repeated for the second layer of plastic sheeting for the floor, walls and ceiling. All seams within a layer shall be separated by a distance of at least six (6) feet and sealed airtight with duct tape. All seams between layers shall be staggered at least two (2) feet.
- J. Disposal. The asbestos containing material shall be packaged and disposed of in accordance with all State of NY and Federal EPA/OSHA regulations.

3.2 ASBESTOS ABATEMENT PROCEDURES FOR EXTERIOR WINDOW CAULK:

- A. The immediate work area shall be considered to be the area from which the asbestos containing materials are actively being removed. The asbestos project regulated abatement work area shall extend twenty-five (25') feet from the perimeter of the immediate work area and shall have signage in accordance with Section 56-7.4 of 12 NYCRR Part 56.
- B. All work shall be in accordance with NYCRR Part 56-11.6 Exterior Project Removal of Non-friable ACM Roofing, Siding, Caulking, Glazing Compound, Transite, Tars, Sealers, Coatings, and Other NOB ACMs.
- C. An airlock shall be required at the entrance to the regulated abatement work area to serve as a changing area, if the workers shall have to pass through enclosed publicly occupied space, such as from a roof through an interior stairway, to access the decontamination units.
- D. Regulated abatement work area preparation shall also comply with Sections 56-7.2, 7.3, 7.4, 7.5, 7.6, 7.7 and 7.9 of 12 NYCRR Part 56.
- E. The personal decontamination system enclosures can be remote but must be within fifty (50) feet of the building/structure entrance used by the asbestos handlers (workers), and shall be removed only after obtaining satisfactory clearance air results for the regulated abatement work area or an acceptable visual inspection has determined that the abatement is complete, as per Section 56-9. 2(e).
- F. Prior to the placement of critical barriers, affected surfaces shall be pre-cleaned using HEPA-filtered vacuum equipment and wet cleaning methods. All openings within the regulated abatement work area shall be sealed with critical barriers installed as per 12 NYCRR Part 56 Section 56- 7.11(a), prior to beginning Phase II B activity on the project. The critical barriers shall be removed only after satisfactory clearance air sampling results have been obtained or the asbestos project is complete.
- G. For larger work area removals, any operable windows or openings to the building at the work level or on the floor below within twenty-five (25) feet of the immediate work area shall be plasticized with two (2) layers of six (6) mil fire retardant polyethylene sheeting. The windows can be plasticized outdoors, or for reasons of safety, from the indoors. Window, door and louver units subject to complete removal must have their openings plasticized at the interior of the building. Windows that are fixed or non-operable and that will remain sealed airtight for the duration of abatement activities, do not require installation of critical barriers.

- H. Removal of window caulk shall utilize manual wet methods for all non-friable ACM removals. Residual non-friable ACM shall be wet scraped and HEPA vacuumed. Materials removed shall be containerized or immediately wrapped in two (2) layers of six (6) mil fire retardant plastic sheeting and secured air tight prior to transport to the waste decontamination facility.
- I. Visible accumulations of loose asbestos containing waste material shall be cleaned up using rubber or plastic dustpans and rubber squeegees or HEPA filtered vacuums. Metal shovels may also be used, except in the vicinity of plastic sheeting, critical barriers and isolation barriers, which could be perforated by these tools. To pick up excess water and gross wet debris, a wet-dry HEPA filtered shop vacuum dedicated to asbestos abatement may be used. This cleaning shall be done whenever there is sufficient asbestos waste material to fill a single leak-tight bag/container, or this cleaning shall be done at the end of each work shift whichever shall occur first. Visible debris shall be maintained adequately wet.
- J. Final clean-up and clearance procedures for abatement shall comply with 12 NYCRR Section 56-9, except that only one (1) stage of cleaning (final) is to be performed. Lockdown encapsulant use is not required.

PROJECT COMPLETION:

- A. After completion of all work the contractor shall contact the TTI Environmental Inc. to schedule for a clearance inspection and perform required clearance sampling.

END OF SECTION