

## SECTION 02 82 13.23 NON-FRIABLE ASBESTOS-CONTAINING ROOFING

### PART 1 GENERAL

#### 1.1 SCOPE OF WORK

This section covers removal of non-friable asbestos roofing materials as determined by the owner's consultant, such as built-up roofing, cement asbestos board (transite), or asphalt shingles. This section only refers to roofing materials located on the exterior of the building. See section 02 82 13 for requirements related to abatement of roofing materials located on the interior of the building.

- A. The contractor shall verify that planned removal methods are within State of Oregon Occupational Safety and Health Administration (OSHA) and Department of Environmental Quality (DEQ) guidelines for maintaining exempt status of this material.
- B. Testing performed by the owner shall not alleviate the contractor from any responsibility for complying with OSHA and DEQ rules. The owner or its environmental consultant cannot be held liable for any citations of non-compliance or injury as a result of the work.
- C. Roofing materials contained within the building structure shall not be addressed by this section. Such materials shall be handled by the asbestos abatement contractor in accordance with asbestos abatement specifications.
- D. Table 1 lists materials to be removed. Locations are noted on drawing HA2.

**Table 1. Asbestos-Containing Non-Friable Roofing Materials to be Removed**

| <b>Asbestos-Containing Building Materials</b>   | <b>Approximate Quantity (square feet)</b> |
|---|---|
| Asbestos-containing built-up roofing and mastic | 15,500                                    |

#### 1.2 RELATED WORK

- A. Not Used
- B. Not Used

#### 1.3 REFERENCED STANDARDS TO BE INCORPORATED INTO THIS SECTION

- A. Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1926.1101 Occupational Exposure to Asbestos, Construction Industry Standard.
- B. Johnson Roofing Company, Inc. March 15, 1995. OSHA Agreement #94-41039.
- C. Environmental Protection Agency National Emissions Standards for Hazardous Air Pollutants. CFR Title 40, Part 61, Subparts A and M.
- D. State of Oregon DEQ. How to Remove Nonfriable Asbestos-Containing Petroleum-Based Roofing Materials (updated March 2014).

- E. Department of Transportation Regulations 49 CFR 171 and 172.
- F. State of Oregon DEQ. Oregon Administrative Rule 340, Division 248. Asbestos Requirements.
- G. State of Oregon DEQ. How to Remove Nonfriable Cement Asbestos Materials (updated March 31, 2014).

#### 1.4 ASBESTOS RELATED PROCEDURES

- A. At minimum, removal of intact, non-friable asbestos-containing built-up roofing is to be performed in compliance with OSHA 1926.1101, the Johnson Roofing Company, Inc./OSHA Agreement #94-41039 March 15, 1995.
- B. The following procedure shall be followed at a minimum:
  - 1. Provide a competent person on the job site at all times during roof removal. The competent person is defined in the Johnson Roofing Co., Inc. Assoc./OSHA Agreement #94-41039 March 15, 1995.
  - 2. The competent person shall determine the following:
    - a. Whether the material is intact or non-intact
    - b. That appropriate work practices for removal of roofing are utilized
    - c. That all workers engaged in the removal are properly trained
    - d. That air monitoring is performed
  - 3. The contractor is to follow all procedures according to OSHA 1926.1101 and the OSHA Agreement #94-41039 March 15, 1995.
  - 4. The contractor is responsible for DEQ notifications and associated fees.

#### 1.5 REMOVAL PROCEDURES FOR ASBESTOS-CONTAINING BUILT-UP ROOFS

- A. Roofing shall be removed in an intact state to the extent feasible.
- B. Wet methods shall be used to remove roofing materials that are not intact, or that will be rendered not intact during removal, unless such wet methods are not feasible or will create safety hazards.
- C. Cutting machines shall be continuously misted during use, unless a competent person determines that misting substantially decreases worker safety.
- D. All dust that results from using a power roof cutter to remove built-up roofs shall be collected by a HEPA dust collector, or HEPA-vacuumed along the cut line, or gently swept and the remaining still-wet dust and debris carefully and completely wiped up along the cut line. The dust and debris shall be immediately bagged or placed in covered containers.
- E. Roof material that has been removed from a roof shall not be dropped or thrown to the ground. Unless the material is carried or passed to the ground by hand, it shall be lowered to the ground via a covered, dust-tight chute, crane, or hoist.

- F. Any areas of asbestos-containing roofing material that is not intact shall be lowered to the ground as soon as practicable, but in any event, no later than the end of the work shift. While the material remains on the roof, it shall be kept wet, placed in an impermeable water bag, or wrapped in plastic sheeting.
- G. Upon being lowered, unwrapped material shall be transferred to a closed receptacle in such a manner so as to preclude the dispersion of dust.
- H. Roof level heating and ventilation air intake sources shall be isolated and the ventilation system shut down during demolition and roof-system installation.
- I. The interior of the building shall be protected from roofing debris. Any roofing debris which enters the building shall be fully cleaned and removed in accordance with procedures laid out in specification 02 82 13 and at the abatement contractor's expense.

#### 1.6 DISPOSAL OF ASBESTOS-CONTAINING ROOFING MATERIAL

- A. The contractor is required to notify the landfill operator of proposed disposal materials, confirming that the asbestos-containing roofing materials are acceptable at that landfill.
- B. The contractor shall confirm which method of disposal is required and perform transportation, packaging, and disposal accordingly.
- C. The contractor shall provide to the owner a signed, written confirmation from the landfill operator.
- D. The contractor shall provide the appropriate manifest, signed by the contractor and the landfill operator, to the owner within 10 days of the time the material left the site.

END OF SECTION 02 82 13.23