

GUIDANCE NOTE

SAFE REMOVAL OF ASBESTOS CEMENT

1. Purpose of the document

This guidance note is intended to describe the minimum requirements for safe collection, removal and disposal of damaged asbestos cement roof. It can be integrated within tender documentation for rehabilitation work when asbestos cement is present. It is not meant to cover high risk asbestos containing material such as sprayed asbestos coating, asbestos insulation boards, thermal insulation of pipes, boiler rooms, etc.

Asbestos cement is considered a low risk type of asbestos containing material¹ since the fibres are bounded within the matrix of the cement sheet (non-friable asbestos containing material). Only when physically disturbed or damaged are the asbestos fibres released.

Internationally, it is recommended not to remove asbestos unnecessarily, as removing it can be more dangerous than leaving it in place and managing it².

2. Regulation on Asbestos in Mozambique

Existing regulation in relation to asbestos material in Mozambique includes:

- Decree n. 55/2010 – Ban of production, use, importation, exportation and commercialization of material containing asbestos
- Decree n. 83/2014 – Regulation on Hazardous Waste
 - Identifies products with asbestos as hazardous waste (Annex 9)
 - Hazardous waste management is under responsibility of the producer / owner (art. 4)
 - Ministry in charge of environment has authority to emit rules for hazardous waste (art. 5)
 - All public and private entities involved in hazardous waste management activities have to prepare a written hazardous waste management plan before beginning activities (art. 11)
 - Private or public hazardous waste collection requires proper license (art. 14)
 - During the act of hazardous waste collection, a register of quantities collected, type and destination needs to be produced (art. 14)
 - Hazardous waste has to be labelled properly (Annex 4)

Note: The entity undertaking any project involving asbestos cement removal, transportation, disposal would be expected to liaise closely with Ministry in charge of Environment (MITADER / DPTADER) to verify additional specific requirements to this guidance note.

¹ Source: <https://www.dgs.pt/paginas-de-sistema/saude-de-a-a-z/amianto.aspx>.

“As a general rule, the presence of asbestos in construction material represent a low risk for health, as long as the material is in good conservation state, is not friable and not subject to direct aggressions. Any activity involving perturbing the integrity of the material (cutting, drilling, breaking) increases significantly the risk of realizing fibers in the air.”

² Source : www.use.gov.uk/asbestos/duty.htm

3. Key point to be considered

a. Plan of work and Risk Assessment

Based on site assessment, a Plan of Work and Risk assessment document shall be prepared, including but not necessarily limited to the following:

- Description of the location of the work, including external activities in the surroundings;
- Estimate of quantities of asbestos-containing material and state of the material;
- Any other site-specific risks not directly linked to asbestos;
- Definition of specific work areas, and security access and restriction measures;
- Expected duration of work;
- Personal Protection Equipment and Respiratory Protection Equipment;
- Removal and wrapping/bagging methods;
- Supervision, auditing and track-keeping methods;
- Name of workers and supervisors, including proofs of trainings and experiences;
- Destination for final disposal.

b. Training of workers on safe removal and handling of asbestos cement material

All workers and supervisors directly involved in removal and handling of asbestos cement material shall have received a proper training provided by a trainer suitably qualified and experienced, and to be delivered a written training certificate, including photo ID.

The training shall include but not necessarily be limited to the following:

- Asbestos Awareness Training:
 - Properties, risks and health effects from exposure to asbestos fibres;
 - General knowledge of the types and uses of asbestos and asbestos containing material and their associated risks;
 - Specific situation in Mozambique and areas affected by the cyclone.
- Classroom training on collection, removal and disposal of asbestos cement:
 - Production and use of risk assessments and plans of work;
 - Health and Safety;
 - Assessment of non-asbestos hazards on sites e.g. the safe working at height requirements;
 - Prevention of exposure to asbestos fibres;
 - Selection and correct use of Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE), including short practical;
 - Dealing with accidents and emergencies;
 - Collection and removal of asbestos cement sheets and asbestos waste handling;
 - Personal Decontamination;
 - Final Disposal.

- On-site practical training on collection, removal and disposal of asbestos cement:

- Establishing an asbestos works area.
- Correct use of the PPE and RPE provided.
- Correct use of the equipment to keep the asbestos cement damp.
- The collection of the asbestos cement without further disturbance or damage.
- Wrapping or bagging the asbestos cement with suitable polythene bags or sheeting.
- Placing the asbestos cement in the container for final movement to the disposal location.
- Inspection and audit of the site.
- Arrangement at the site for final disposal.

c. Safe removal and handling of asbestos cement material

Personal Protective Equipment (PPE) and Respiratory Protective Equipment (RPE)	<ul style="list-style-type: none"> - Disposable Class FFP3S respiratory mask - Disposable Category 3 Class 5/6 overall - Gloves - Safety Wellingtons/Gumboots (Wipe Clean)
Other equipment / consumable	<ul style="list-style-type: none"> - Suitable wrapping material (polythene sheets) - Suitable Polythene bags - Warning / Wrapping tape - Cleaning Rags - Sprayer / Wetting agent - Buckets for decontamination - Labels
Procedure / Plan of Work	<ul style="list-style-type: none"> - Work area isolated - Keeping damp with sprayed mix of water and wetting agent / detergent - Bagging and wrapping, avoid breaking - Labelling - Transportation requirements: covered, keep damp

d. Final disposal of asbestos cement material

Arrangement for final disposal site shall be agreed on with Local Authorities and Ministry in charge of Environment (MITADER/DPTADER).

- Buried and covered;
- Area with no access to the population, and no plan for digging in the future;
- Properly demarcated (exact location of the area registered – GPS coordinates);
- Control/security measures of accesses.