

# Asbestos

Asbestos is a hazardous material that poses serious health risks, including lung cancer, mesothelioma, and asbestosis, when its fibers are inhaled. In Saudi Arabia, asbestos was widely used until its health dangers became well-known. Its peak usage occurred in the 1980s, continuing until **the country implemented a ban on asbestos in 1998**. However, in some older buildings, houses, remote villages, and other locations, there remains a small chance of asbestos still being present.

Since NCC T&D projects are conducted in various locations across Saudi Arabia, this document outlines the minimum requirements for safely working with or around asbestos-containing materials (ACM), whenever necessary.

## Definition of Asbestos-Containing Material (ACM)

Asbestos-containing material (ACM) is defined as any material containing 0.5% or more asbestos by dry weight. The types of asbestos regulated include:

- Actinolite
- Amosite
- Anthophyllite
- Chrysotile
- Crocidolite
- Tremolite

Asbestos-containing materials (ACMs) can be found in a variety of places, especially in older buildings and products manufactured before asbestos bans were implemented. Here are some common locations where asbestos may be present:

## Buildings and Construction Materials

- Roofing and siding materials: Asbestos cement sheets, shingles, and tiles.
- Insulation: Around pipes, boilers, ducts, and in attics (as loose-fill or sprayed insulation).
- Flooring: Vinyl tiles, backing for vinyl sheets, and adhesives used to install flooring.
- Walls and ceilings: Asbestos-containing plaster, textured coatings, or acoustic tiles.
- Fireproofing materials: Panels, blankets, and spray-on fireproof coatings.

## Residential Homes

- Heating systems: Asbestos insulation on old furnaces, boilers, and water heaters.
- Electrical components: Asbestos paper or cloth used in electrical wiring.
- Cement products: In water tanks, gutters, or drainage pipes.

## Vehicles

- Brake pads and linings: Especially in older vehicles or heavy equipment.
- Clutch facings: Containing asbestos to withstand high heat.
- Gaskets and seals: Used in vehicle engines.

## Furniture and Household Items (Rare Cases)

- Fire-resistant furniture: Older fireproof safes or ironing boards.
- Heating appliances: Such as old stoves or heaters with asbestos insulation.

## Remote and Older Communities

In remote villages or underdeveloped areas, asbestos-containing materials may still exist in:

- Schools, hospitals, and government buildings.
- Houses or infrastructure built before the asbestos ban.

If any NCC T&D employees or approved subcontractors discover asbestos-containing material (ACM) at any project location, it is crucial to manage the situation safely and effectively. The following protocol must be followed to ensure the safety of everyone involved:

#### **Immediate Actions**

- Do Not Touch or Disturb: Workers must not touch, cut, drill, or disturb the material to prevent exposure.
- Inform Key Personnel: Notify NCC T&D project key personnel and the HSE Department immediately.
- Isolate the Area: Restrict access by cordoning off the area until it is assessed.

#### **Project Planning and Risk Assessment**

- Identify Potential Asbestos: Include suspected ACMs in project risk assessments and survey works.
- Plan for Asbestos Risks: Address asbestos handling and emergency protocols in risk assessments.

#### **Worker Training and Awareness**

- Asbestos Awareness Training: Train workers on:
  - What asbestos is and where it might be found.
  - Health risks of asbestos exposure.
  - Actions to take if asbestos is discovered.
  - Actions to avoid, such as touching or disturbing the material.

Toolbox Talks: Familiarize workers with asbestos protocols during pre-job safety briefings.

#### **Role of Key Personnel and HSE Team**

- Communicate Risks: Inform workers about potential asbestos hazards during planning and surveys.
- Engage Specialists: Contact certified asbestos professionals for assessment and management if needed.
- Emergency Procedures: Ensure workers understand asbestos discovery protocols.

For more information, refer to NCC T&D's relevant IMS procedures or consult our HSE Department for expert guidance and training resources aligned with Saudi Arabian regulatory requirements.