



A guide to

Working with Asbestos-Cement Products

Introduction

Fibre-cement products have been used extensively as roofing and cladding materials in New Zealand but only products fitted before the mid-1980s are likely to contain asbestos. While the fibre-cement plants in Auckland and Christchurch discontinued the use of asbestos in 1983, some building materials containing asbestos may have been imported after that date.

What are the health risks?

Asbestos can cause asbestosis, lung cancer and mesothelioma, if sufficient asbestos fibres are deposited in the lungs. Most researchers believe there is an exposure “threshold” (or amount of asbestos fibre that must be exceeded) before a disease develops, and that the risk is related to the lifetime respiratory dose of asbestos.

The risk of lung cancer is increased considerably in people who are exposed to asbestos and smoke cigarettes. For this reason, it is strongly recommended that people working with asbestos do not smoke.

It is generally considered that if asbestos-cement products are in reasonable condition and are left undisturbed, exposure to asbestos fibre will be minimal and not pose a significant health risk. High asbestos fibre levels are produced when the products are disturbed, especially when poor work practices are used in removing asbestos cement sheets.

At all times, work should be arranged so that there is minimal release of dust containing asbestos fibres.

Legal requirements

Although a certificate of competence for work involving asbestos is no longer required for removing asbestos-cement products (provided power tools are not used and the asbestos cement sheet is not friable), the work must be done in accordance with the Health and Safety in Employment (Asbestos) Regulations 1998. The OSH publication *Guidelines for the Management and Removal of Asbestos* provides information on the practicable steps that can be taken to comply with the regulations. Copies of the guidelines are available from local OSH offices.

Asbestos-cement roofing should only be removed by experienced contractors using equipment that allows them to work safely at heights.

Safe working procedures for asbestos-cement products

The following procedures are to be used when working with asbestos-cement products:

- **Do not waterblast** asbestos-cement products. High-pressure water blasting will break up the cement matrix and release significant amounts of asbestos fibre. Clean-up operations after water blasting asbestos cement have proved difficult and expensive.

- **Plan the job to minimise exposure to others.** Close doors and windows to limit the spread of any dust. Ensure that people are kept out of the area. Where appropriate, relocate the building's occupants during the work.
- **Keep material damp.** Asbestos-cement sheets may be wetted or sealed during removal to minimise the possibility of dust release. Care must be taken to ensure that wetting asbestos-cement roofs does not create a slipping hazard.
- **Do not use power tools.** Except for the removal of fixing screws, power tools should not be used when working on or demolishing asbestos-cement products. Power saws, in particular, should not be used to cut material containing asbestos.
- **Avoid breaking asbestos-cement sheets.** Whenever possible, remove the entire sheet. Do not cut or break up the sheets for disposal in plastic bags.
- **Wear appropriate protection.** It is recommended that you wear disposable overalls and a suitable dust respirator. (If a disposable type is used, it should have two straps).
- **Do not drop asbestos-cement sheets.** Lower removed sheets to the ground to avoid unnecessary breakage.

Cleaning up and disposing of asbestos-containing material

- **Be thorough.** Asbestos-cement residues in the removal area should be cleaned up by wet wiping or vacuuming. Remove all asbestos waste from the site, including disposable overalls and respirators.
- **Cover up and dispose of immediately.** Asbestos-cement sheets should be kept wet and wrapped in plastic or suitably sealed and removed from site as soon as possible, using covered bins or a covered truck.
- **No resale.** Asbestos-cement sheets must not be reused or offered for sale.
- **Dispose of asbestos safely.** All asbestos-containing waste must be buried at a refuse site approved by the local authority.

Maintenance of asbestos-cement materials

The risk from existing asbestos-cement material is low unless it is disturbed and releases fibres. If it is in sound condition, cleaning or sealing the surface is not usually necessary. For aesthetic reasons, however, or to extend the useful life of the material, applying a surface coating may be an option.

Cleaning

Where cleaning of an asbestos-cement roof or cladding is required, the recommended method is to use low-pressure water and a cleaning agent. In some cases, it may be necessary to kill moss or lichen with a proprietary chemical. When working on a roof, consideration must be given to the brittle nature of the material and the fact that the surface will become slippery when wet.

Asbestos fibre washed off the roof should not be allowed to dry out but collected and disposed of wet.

Sealing

Ordinary paints are generally unsuitable for applying directly to weathered asbestos-cement as they do not bond well. Suitable specialist products are available, and professional advice should be sought.

When to replace

As with all products, asbestos-cement has a limited life. Roofing or other cladding that has weathered to the extent of becoming structurally unsound, or no longer waterproof, should be replaced. Although not a legal requirement, it is recommended that a professional asbestos removal contractor be employed to dismantle large areas of asbestos-cement products.

Further information and advice

For more information on working with products that contain asbestos, contact your local Occupational Safety and Health office.