

Identifying and handling low density asbestos fibre board (LDB)

This guide should be read in conjunction with:

- [How to manage and control asbestos in the workplace Code of Practice](#)
- [How to safely remove asbestos Code of Practice](#)

What is low density asbestos fibre board?

LDB is a friable asbestos containing material. It is a lightly compressed board containing asbestos fibres in a calcium silicate plaster. It is sometimes referred to as asbestos insulating board. LDB can contain up to 70 per cent asbestos fibres by volume. In comparison, asbestos cement sheeting typically contains between 5 to 20 per cent asbestos.

LDB was manufactured from the 1950s to the 1970s as a flat sheet, or a perforated sheeting product and was sold under product names such as 'Asbestolux' and 'Duralux'.

Where is low density asbestos fibre board found?

LDB was typically used for wall and ceiling panels, thermal and acoustic insulation, fire protection, and for general building work in industrial and commercial buildings, education facilities and domestic premises. It is unlikely to be found in buildings constructed after 1982.

What is the risk of exposure from low density asbestos fibre board?

If LDB is in good condition and left undisturbed it presents a low risk. If LDB is broken, removed or disturbed without precautions and controls in place, the potential for asbestos fibres to be released is high. More precautions are needed to minimise risks when managing, maintaining or removing LDB than for asbestos cement sheeting.

Identifying LDB

LDB looks similar to plasterboard and asbestos cement sheeting, commonly known as fibro. When in good condition and in place, it may be difficult to visually distinguish between LDB and other types of asbestos-containing sheeting. The following may be required to identify the sheeting.

Label

LDB can be identified by looking at the rear side of the sheeting for the trade name Asbestolux or Duralux, as shown in photo 1. The absence of a label does not mean the material is asbestos free.

Ceiling sheets and tiles

LDB was often used as ceiling sheets and tiles and for acoustic purposes. LDB ceiling tiles were commonly perforated. Different patterns of perforated ceiling tiles were used with the difference being the number of holes per sheet as shown in photo 2.



Photo 1: Rear side of LDB ceiling sheet showing trade name.

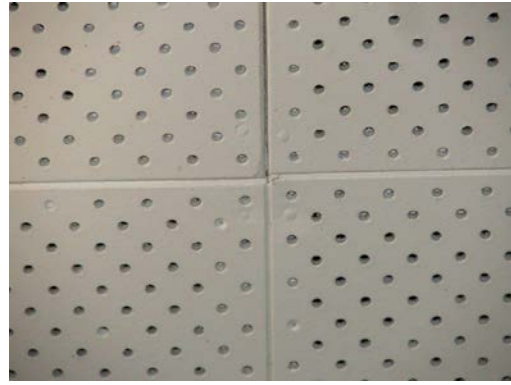


Photo 2: Front side of perforated LDB.

Hardness

LDB is softer than asbestos cement sheeting because calcium silicate plaster was used to bond the asbestos fibres instead of cement. When tapped, for example with a car key, LDB will produce a dead or dull sound, indicating a soft or low density product. Using hand pressure, the head of a screwdriver will easily dent the surface as shown in photo 3.

Asbestos cement sheeting or fibro will produce a sharp or clicking sound when tapped by a car key indicating a very hard and brittle, high density product. Using hand pressure, the head of a screwdriver will not penetrate the surface and will usually just scratch paint off.



Photo 3: Hand pressure from a screwdriver will dent the surface.

Strength

LDB will bend or flex when pressure is first applied and then tear rather than snap once the breaking point is reached. It is difficult to remove nails and other fasteners without LDB tearing and breaking into very small pieces.

When broken, the edges of LDB appear ragged or torn with no sharp edges as shown in photos 4 and 5. You can see a high percentage of asbestos fibres—the entire surface of the broken sheeting looks furry or fibrous.



Photos 4 and 5: Ragged or torn edges of broken LDB.

Asbestos cement sheeting breaks more cleanly as shown in photo 6.



Photo 6: Examples of sharply broken edges on asbestos cement sheeting.

Finding fasteners

The heads of fasteners, nails and clouts are often embedded or partially embedded or recessed into the surface of LDB sheeting due to the softness of the sheeting as seen in photo 7.

In contrast, the heads of the fasteners in asbestos cement sheeting do not sit level with the surface as seen in photo 8.



Photo 7: Recessed fastener heads in LDB.

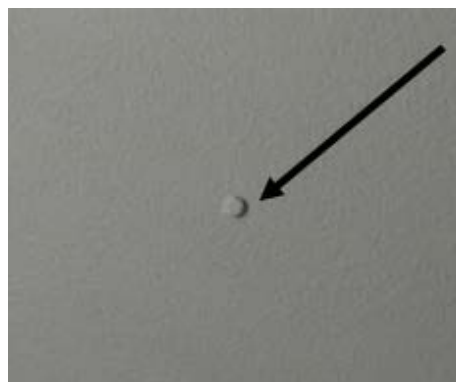
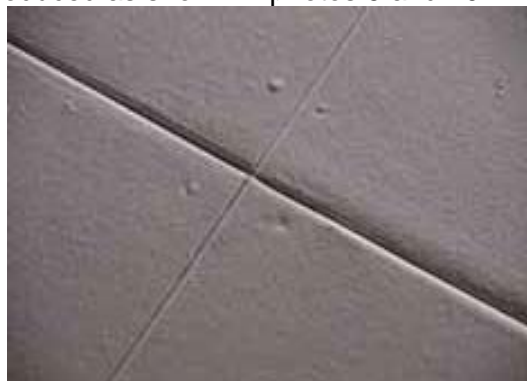


Photo 8: Fastener in asbestos cement sheeting does not sit level with the surface.

Joins between sheets

The edges of LDB products were often bevelled or slanting and hand planed so when fixed together with another sheet, a V-joint finish would be produced as shown in photos 9 and 10.



Photos 9 and 10: Examples where fasteners are fixed into the LDB sheeting and the edges are bevelled or slanted.

Joins of asbestos cement sheeting are usually covered over with flat or moulded timber cover strips. The sheets are sometimes joined with timber cover strips as shown in photo 11.



Photo 11: Asbestos cement sheets joined with timber cover strips.

Management of LDB

LDB may be managed in place if it is in good condition and the risk of damage or disturbance is low. Otherwise it should be prioritised for removal as its disturbance can release a large amount of asbestos fibres.

Removal, maintenance and service work on LDB

LDB must only be removed by a class A licensed asbestos removalist. Work on LDB other than removal work performed by a class A licensed asbestos removalist is prohibited except for in specific circumstances as outlined in section 419(3) of the Work Health and Safety Regulation 2011 (the Regulation).

Some restricted maintenance and service work on LDB is also permitted when done in accordance with the following LDB approved methods under section 419(4) of the Regulation:

- [Minor repairs and minor damage to low density asbestos fibre board](#)
- [Painting undamaged low density asbestos fibre board](#)
- [Drilling holes up to 30mm in diameter into low density asbestos fibre board](#)
- [Temporarily moving a low density asbestos fibre board ceiling tile](#)
- [Installing or removing fixtures or fittings to low density asbestos fibre board.](#)



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