

The Asbestosis Research Council



Recommended Code of Practice

*On Precautions to be taken
when Cutting, Drilling or Machining
Asbestos Cement and Asbestos-based
Boards in the Shipbuilding Industry*

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Present factory regulations recognise asbestosis as an industrial disease which could arise from the inhalation of asbestos dust. The regulations, which stipulate rules for the protection of work-people engaged in the manufacture of certain types of asbestos products, do not include any special requirements relating to the handling of products containing asbestos for use in the ship-building industry.

The Ministry of Labour is now considering extending the regulations which apply to the handling of asbestos and asbestos cement products in factories so that they cover wider applications of handling and processing and, while it is not certain to what extent this change will apply to the shipbuilding industry, it is felt that some preliminary guidance should be given. This guidance takes the form of a Recommended Code of Practice which is prepared in anticipation of the extension to the regulations.

The use and manipulation of asbestos and asbestos cement products is very diverse and ranges from the fixing of an occasional single sheet to extensive operations involving cutting or machining by power-driven equipment. While care should always be exercised, special precautions are only necessary when there is a possibility that operatives may inhale asbestos dust as a result of proximity to cutting, grinding or similar operations.

Finally it should be emphasised that there is no hazard in the handling, working and fixing of these products, provided that the simple precautions outlined below are followed. For convenience, the Recommended Code of Practice is divided into two sections:

- a Work in factories or shipyard workshops. (Section 2)*
- b Work in ships under construction or repair. (Section 3)*

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Recommended Code of Practice

1 Products

This Code of Practice covers asbestos cement and other asbestos-based boards. The content of asbestos may vary, but the recommendations are the same for all products.

2 Work under Factory or Shipyard Conditions in Confined Spaces

The following procedures should be adopted when working with asbestos products.

2.1. Cutting, Grinding or Turning by Mechanical Means

- 2.1.1. When mechanical cutting or machining takes place, efficient dust extraction equipment should be installed, or respirators of a type which are approved by the Factory Inspectorate should be worn.
- 2.1.2. The approved respirators should be carefully maintained, and adequate servicing arrangements should be made to ensure that this is done, and that employees are not without respirators during maintenance (see note A).
- 2.1.3. Waste, dust or off-cuts should not be allowed to accumulate in the working area and should be disposed of in such a way as to avoid escape of dust. Damping or wetting of waste before disposal is recommended.
- 2.1.4. Vacuum cleaning plant should be used to keep ledges, floors, trusses, etc. free from dust accumulation. Removal of dust by brushing should be avoided.

2.2. Additional Hygiene

- 2.2.1. The best standards of good factory and workshop housekeeping and hygiene should apply to mechanical cutting areas. Such areas are best segregated and used for no other purpose. In addition to dust exhaust on machines, a good standard of general room ventilation should be maintained.

- 2.2.2. Operatives should wear overalls in free condition. These overalls should be of synthetic material and should be changed regularly.
- 2.2.3. Where heating is necessary, radiators rather than fan assisted heaters should be used.

2.3. Medical Supervision

- 2.3.1. Operatives should be advised on the dangers of cutting asbestos and asbestos cement.
- 2.3.2. Wherever possible, arrangements should be made for the examination of workers who are exposed to asbestos. Particular attention should be given to workers before employment or as soon as possible after employment.

3 Work in Ships under Construction

Where a considerable run of cut material is required, site-cut material rather than site-cut material should be used. Some site-cutting is, however, inevitable and should be followed in such cases:

3.1. Mechanical Cutting on Ships

- 3.1.1. In general, the same recommendations apply to workshop cutting, bearing in mind the temporary nature. When power cutting is used, dust extraction plant should be used.
- 3.1.2. Where it is not possible for an adequate dust extraction system to be used, where there is still a risk of inhalation, a respirator should be worn by the operative to ensure adequate servicing arrangements as in 2.1.2. above.

3.2. Hand Cutting and Drilling

- 3.2.1. When hand cutting and drilling is used, an exhaust system is impracticable, and the use of type respirators (see section 2.1.2)

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1 Code of Practice

1 Products

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2 for Shipyard Conditions Confined Spaces

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Working by Mechanical Means

When cutting or machining takes place, efficient dust
extraction should be installed, or respirators of a type
approved by the Factory Inspectorate should be worn.
Tools should be carefully maintained, and
arrangements should be made to ensure that
employees are not without respirators during
the work.

Dust should not be allowed to accumulate in the
workshop and should be removed in such a way as to avoid
drying or wetting of waste before disposal is
made.

Water should be used to keep ledges, floors,
walls and equipment free from dust accumulation. Removal of dust by
vacuuming should be used.

A good factory and workshop housekeeping
system should be maintained in all areas used for mechanical cutting areas. Such areas
should be used for no other purpose. In addition to
this, a good standard of general room
cleanliness should be maintained.

2.2.2. Operatives should wear overalls that can be kept in a clean, dust-
free condition. These overalls should be made from nylon or other
synthetic material and should be free from open pockets, etc.

2.2.3. Where heating is necessary, radiant panel heaters should be used,
rather than fan assisted heaters which tend to keep dust in suspen-
sion.

2.3. Medical Supervision

2.3.1. Operatives should be advised on the precautions to be taken when
cutting asbestos and asbestos cement products.

2.3.2. Wherever possible, arrangements should be made for routine
examination of workers who are regularly engaged in this work.
Particular attention should be given to examining new workers
before employment or as soon as possible afterwards (see note B).

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Work in Ships under Construction or Repair

Where a considerable run of cut material is required in any one size, pre-cut
material rather than site-cut material should be used.

Some site-cutting is, however, inevitable and the following practice should
be followed in such cases:

3.1. Mechanical Cutting on Ships

3.1.1. In general, the same recommendations apply as for factory or
workshop cutting, bearing in mind that the operation will be of a
temporary nature. When power cutting tools are used a portable
dust extraction plant should be made available.

3.1.2. Where it is not possible for an exhaust system to be used and
where there is still a risk of inhaling asbestos dust, an approved
respirator should be worn by the operative. The same steps to
ensure adequate servicing arrangements should be taken as noted
in 2.1.2. above.

3.2. Hand Cutting and Drilling

3.2.1. When hand cutting and drilling has to take place and a dust
exhaust system is impracticable, operatives should wear approved-
type respirators (see section 2.1.2.).

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- 3.2.2. Dust can be avoided by damping the material (e.g. by drip feeding) where the nature of the product permits.
- 3.2.3. Floors should be kept free of cutting dust, using portable industrial vacuum cleaning equipment. In the event of this not being available, a dampening agent should be applied to the dust immediately before sweeping up.

Notes

- A Notes on the care and maintenance of respirators are being prepared and will be available from the Council separately.
- B Notes on the medical examination of workers in the asbestos industry are available from the Council.

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The Asbestosis Research Council

Secretary

Dr S. Holmes

P.O. Box No 40

Rochdale, Lancashire

Telephone: Rochdale 47422

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