

New asbestos regulation

Dealing with ACM—asbestos-containing material

Effective 1 November 2005, a new regulation will govern all operations involving asbestos in Ontario construction.

Regulation 278/05, *Designated Substance—Asbestos on Construction Projects and in Buildings and Repair Operations*, has replaced the old Regulation 838. You can download the new regulation from www.csa.org.

Here are the ten major changes.

1. Asbestos-containing material (ACM) is now defined as 0.5% or more asbestos. Previously it wasn't defined.
2. Bulk samples taken to determine the presence, type, and quantity of asbestos have to be performed by a competent person. The new regulation specifies the number of bulk samples and the analytical method to be used for identifying the type and percent of asbestos in the building material. You don't need to take bulk samples if you treat the material as if it were ACM.
3. Certain operations involving ACM have changed from one "Type" classification to another. The boxes on the following pages show which operations are classified as Type 1, 2, and 3 (see pages 5 and 7).
4. Respiratory requirements for Type 1, 2, and 3 operations have changed. The new requirements are summarized in the table on pages 8-9.
5. Glove bag procedures for removing ACM from pipes and other structures are now incorporated under Type 2 operations.
6. You must notify the Ministry of Labour for all Type 3 operations and all glove bag operations where more than 1 m² of ACM is being removed.
7. A negative pressure of 0.02 inches of water is required inside the enclosure (relative to the area outside the enclosure) for Type 3 operations. You can use negative-air machines properly maintained by a competent worker and equipped with High Efficiency Particulate Aerosol (HEPA) filters.



The pressure difference between the inside and outside of the enclosure must be measured by a competent worker at regular intervals. A digital monometer can be used to measure the pressure differential.

Creating negative air pressure is not required for outdoor or demolition work.

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8. Forced air (fans blowing) clearance sampling is required after some Type 3 removal and clean-up operations. Sampling must be performed after the work area is dry and after a visual inspection by a competent person.

The new regulation specifies the two analytical methods used for counting fibres—phase contrast microscopy (PCM) and transmission electron microscopy (TEM).

With PCM, the area passes the clearance test if all samples are less than 0.01 fibres per cubic centimetre in concentration. With TEM, the area passes the clearance test if the average asbestos fibre concentration level inside the enclosure is less than, or the same as, the average asbestos fibre concentration outside the enclosure.

If the PCM clearance test fails, the employer has the option to

re-analyze all of the PCM samples by TEM. Otherwise decontamination, cleaning, and sampling must be repeated until the enclosure passes the test.

9. If you wish to use another equivalent method not specified in the regulation, you must submit a proposal in writing to the joint health and safety committee or the health and safety representative. The equivalent method proposed must afford protection equal to that specified in the regulation.
10. After 1 November 2007, all Type 3 asbestos abatement workers and supervisors must take a training program approved by the Ministry of Training, Colleges and Universities.



Type 1 operations

- Installing or removing ceiling tiles that are ACM, if the tiles cover an area less than 7.5 square metres and are installed or removed without being broken, cut, drilled, abraded, ground, sanded, or vibrated.
- Installing or removing non-friable ACM, other than ceiling tiles, if the material is installed or removed without being broken, cut, drilled, abraded, ground, sanded, or vibrated.
- Breaking, cutting, drilling, abrading, grinding, sanding, or vibrating non-friable ACM if
 - 1) the material is wetted to control the spread of dust or fibres, *and*
 - 2) the work is done only by means of non-powered hand-held tools.
- Removing less than one square metre of drywall in which joint-filling compounds that are ACM have been used.



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Type 2 operations

- Removing all or part of a false ceiling to obtain access to a work area, if ACM is likely to be lying on the surface of the false ceiling.
- Removing or disturbing one square metre or less of friable ACM during the repair, alteration, maintenance, or demolition of all or part of machinery or equipment or a building, aircraft, locomotive, railway car, vehicle, or ship.
- Enclosing friable ACM.
- Applying tape, sealant, or other covering to pipe or boiler insulation that is ACM.
- Installing or removing ceiling tiles that are ACM, if the tiles cover an area of 7.5 square metres or more and are installed or removed without being broken, cut, drilled, abraded, ground, sanded, or vibrated.
- Breaking, cutting, drilling, abrading, grinding, sanding, or vibrating non-friable ACM, if the material is not wetted to control the spread of dust or fibres, and the work is done only by means of non-powered hand-held tools.
- Removing one square metre or more of drywall in which joint-filling compounds that are ACM have been used.
- Removing insulation that is ACM from a pipe, duct, or similar structure using a glove bag.
- Cleaning or removing filters used in air-handling equipment in a building where sprayed fireproofing is ACM.
- Breaking, cutting, drilling, abrading, grinding, sanding, or vibrating non-friable ACM if the work is done by means of power tools that are attached to dust-collecting devices equipped with HEPA filters.
- Any other operations with ACM not already classified as Type 1 or Type 3.

Type 3 operations

- Breaking, cutting, drilling, abrading, grinding, sanding, or vibrating non-friable ACM by means of power tools, if the tool is not attached to a dust-collecting device equipped with a HEPA filter.
- Removing or disturbing more than one square metre of friable ACM during the repair, alteration, maintenance, or demolition of all or part of a building, aircraft, ship, locomotive, railway car or vehicle, or any machinery or equipment.
- Spraying a sealant on friable ACM.
- Cleaning or removing air-handling equipment, including rigid ducting but not including filters, in a building where sprayed fireproofing is ACM.
- Repairing, altering, or demolishing all or part of a kiln, metallurgical furnace, or similar



structure made in part of refractory materials that contain asbestos.

- Repairing, altering, or demolishing all or part of any building in which asbestos is or was used in the manufacture of products, unless the asbestos was cleaned up and removed before 16 March 1986.

See respirator chart, pages 8 & 9...