ASBESTOS IN BUILDINGS

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ASBESTOS! The word itself may make us think of debilitating diseases such as asbestosis, lung cancer and mesothelioma. This doesn't seem right that a naturally occurring mineral can do such harm. Well, it does… and it doesn't.

It does cause these diseases if workers are overexposed to airborne fibres released from asbestos-containing materials over long periods of time.

It doesn't cause these diseases if the asbestos-containing materials are properly managed in-place or even removed altogether.

In the past, asbestos was added to a variety of products to strengthen them, provide heat insulation and improve fire resistance. In most products, asbestos is combined with a binding material so that it is not readily released into the air. However, if asbestos should become airborne and is inhaled, it can remain in the lungs for a long period of time, producing the risk for severe health problems that do not appear until many years later.

Asbestos can cause asbestosis, a scarring of the lungs that leads to breathing problems and heart failure. Workers who manufactured or used asbestos products and have high exposures to asbestos were often affected with asbestosis. Inhalation of asbestos can also cause lung cancer and mesothelioma, a rare cancer of the lining of the chest and abdomen lining. It may be linked to cancer of the stomach, intestines, and rectum, as well. The regulation of asbestos in British Columbia workplaces falls under the jurisdiction of the Workers' Compensation Board (WCB). Sections 6.1 to 6.32 of the Occupational Health & Safety Regulation specifically address asbestos.

To summarize these applicable sections of the Regulation, an employer must ensure that:

- an inventory of ALL asbestos-containing materials (ACMs) is current
- all ACMs are identified by labeling or signs
- a risk assessment is conducted by a qualified person on all ACMs in the inventory
- friable ACMs are controlled
- proper procedures are in place for work with, or in the vicinity of, ACMs
- worker exposures to airborne ACMs are assessed
- all workers at risk of exposure to asbestos receive adequate training

Now how can these WCB requirements affect the architectural community? Imagine a project where an older building is to be renovated (1983 or earlier). The client does not have an inventory of ACMs nor any labeling. WCB requirements for asbestos should be satisfied *prior* to the planned renovation. Having to deal with an asbestos issue after being discovered during a renovation only adds significant project delays and potential WCB penalties — to say nothing of the potential health risks.

It is important to understand that just because a building is being renovated it does not mean that all the asbestos must be removed. Through implementation of an effective asbestos management program that meets the requirements of the WCB Occupational Health & Safety Regulation, a group of trades can work in the vicinity of asbestos-containing materials without cause for concern.

If asbestos issues are taken care of properly from the beginning, then the WCB is happy, the workers are happy and the architect can be more confident about the control of health hazards during the project.

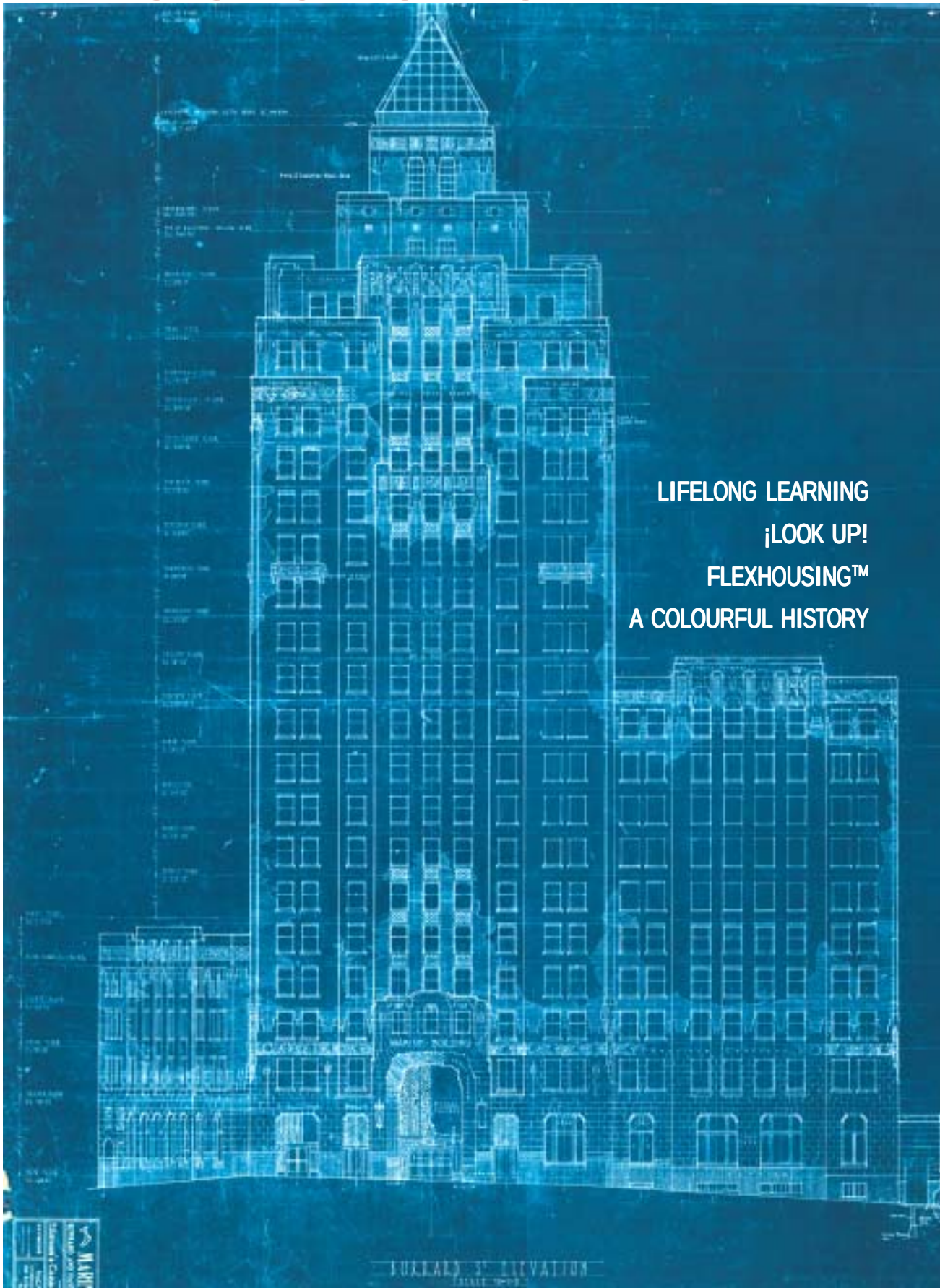
More that 3,000 products in use today still contain asbestos although, generally, use of these materials ended by approximately 1983. Most of these materials were used in heat and acoustic insulation, fireproofing, roofing materials and flooring materials. Some of the more common products that may contain asbestos include:

- Structural sprayed-on fireproofing
- Thermal system insulation (e.g. on pipes and boilers)
- Duct insulation
- Acoustical and decorative spray
- Drywall joint compound
- Ceiling tiles
- Cement board
- Transite
- Paper products
- Roofing felts
- Adhesives
- Roofing asphalt
- Floor tiles and linoleum
- Gaskets
- Cement pipes
- Caulking putties
- Plaster
- Duct seal

For more information, contact Theodor Sterling Associates, (604) 681-2701.

TOP: Worker dressed in protective clothing handles asbestos.

architectureBC



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