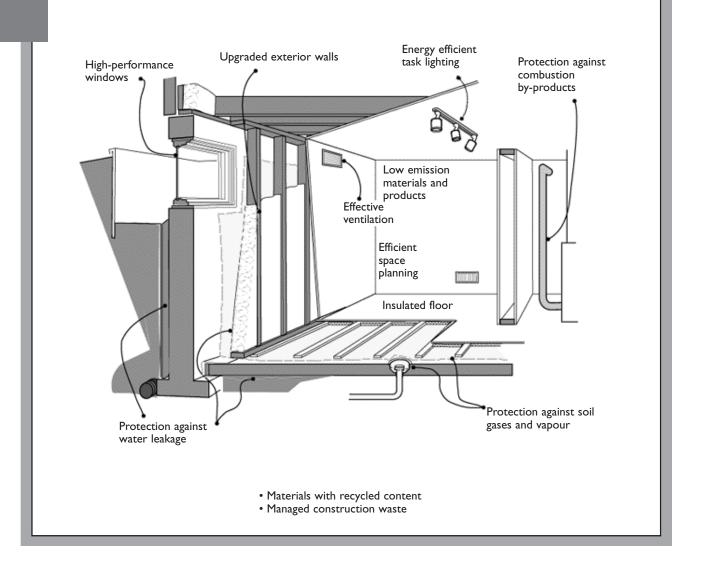
HEALTHY HOUSINGTM

Basements











Occupant Health

Protection against water leakage

Water leakage will lead to the development of mold and mildew. Minor leaks can be repaired from the interior. Significant leakage may require excavation around the foundation to remedy the problem. No work should commence until all moisture problems have been corrected.

Protection against soil gases and vapour

Provide an effective air barrier on the interior face of the wall to isolate the living area from soil gases. Seal around all openings and joints in the slab. In areas with high radon levels, install a sealed floor trap. Ensure an effective seal over sump pits.

Low emission materials and products

When selecting materials for the interior of the converted basement, minimize the use of materials with high levels of volatile organic compounds (VOCs). Specify water-based paints and adhesives.

Effective and efficient ventilation

When finishing your basement, ensure that your existing heating and ventilation system has adequate capacity to serve the new space, providing heat and fresh air while allowing for the exhaust of stale air. Provide direct exhaust venting from areas used for crafts or for storage of toxic materials such as solvents and paints.

Protection against combustion by-products

 Make certain that your furnace is properly vented and that there is an adequate supply of combustion air to prevent backdrafting and spillage of combustion gases.



Energy Efficiency

Upgraded exterior walls

Basements can account for as much as 30 per cent of the heat loss from a home. Higher insulation levels and effective air sealing in the foundation and floor assemblies will improve energy performance. Install rigid insulation; polyethylene can be placed over concrete floor slabs before the new flooring to enhance comfort levels.

High-performance windows

 Energy rated, high-efficiency window units will enhance comfort and provide long-term energy savings.

Energy efficient task lighting

 Compact fluorescent fixtures are four times more efficient than standard incandescent bulbs. Task lighting will allow for extra light when and where it's needed.



Resource Efficiency

Materials with recycled content

 Glass fibre batt or cellulose insulation, drywall and a variety of flooring products are available with recycled content.



Environmental Responsibility

Efficient space planning

 Careful attention to design can result in optimal use of purchased materials and reduced construction wastes.

Durable materials

 More durable materials (moisture-resistant) last longer, minimizing the future burdening of landfill sites.

Construction waste

 In many markets, scrap wood, drywall and metal can be either reused or recycled.



Affordability

Life cycle analysis

Improving the energy efficiency of your basement can significantly reduce the cost of operating your home. Converting unused basement space into efficient, usable space may improve the resale value of your home.

To find more $Healthy Housing^{TM}$ fact sheets plus a wide variety of information products, visit our website at

www.cmhc.ca

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