

# What every homeowner absolutely must do before renovating a basement

**Before you renovate, use this checklist to avoid costly mistakes.**

To be a good candidate for a cost-effective renovation, your basement must also be a safe, healthy foundation for your whole home. The foundation supports the structure above it and resists the pressure of the soil around it. Fixing any foundation problems before you renovate is essential to preserve the durability and structure of your home. You must address structural and moisture issues before you finish the space or install your dream home theatre.

**You must correct these problems before you finish your basement:**

- ✓ **Ceiling height:** ceiling at least 2.1 meters (6.8 ft.) high with headroom below the floor framing and ductwork
- ✓ **Walls, slabs and footings:** cracks, crumbling or powdery mortar or concrete, warped or bowed foundation walls, honeycombs (voids) in the concrete, surface layer of concrete breaking off (spalling)
- ✓ **Floors:** concrete floors lifting up, foundation built on fill or disturbed soil, sinking or settling
- ✓ **Support** of the main floor system: uneven floor joists and beams
- ✓ **Noxious Gases:** Soil gas, methane or radon infiltration
- ✓ **Humidity:** bad smell, water on the floor, damp spots on walls, white, chalky stains (efflorescence), black, white or green mold stains or fuzzy growth, wet or decaying wood windows, sill plates, columns or beam ends in contact with concrete, lifting floor tiles, damp or musty carpeting wet insulation, framing or moisture damage on finished walls, condensation on windows, pipes or other surfaces
- ✓ **Support:** foundation may not adequately support the existing main floor system and any proposed renovations
- ✓ **Pests:** rodents or insects present or previous pest damage

## **Did you know...**

Most building codes require an unobstructed window at least 0.28 m<sup>2</sup> (3 sq. ft.) for ventilation during the non-heating season.

Your finished basement must have an exit path. If a window, it must be large enough and easily reached, and provide safe access to grade level.

Exit doors must be at least 810 mm (32 in.) wide and 2,030 mm (80 in.) high. Corridors must be at least 900 mm (35 in.) wide.

An exit stair must be at least 860 mm (34 in.) wide between wall faces and have at least 1,950 mm (77 in.) head room. You may also need a handrail and a protective guard on the open side of the stair. The rise, run and tread depth of the stairs must conform to local building codes.

Fixing foundation structural problems requires the help of a basement specialist. If you have multiple, severe or expanding cracks, your contractor may also recommend consulting a structural engineer. And if pests have taken up residence, you'll need a professional exterminator.