



# Finishing your basement

## Required plans information

You must submit plans with your building permit application to your local authority before starting any construction. The plans should contain the following **floor plan** and **cross-section** information:

## Floor plan requirements

- Show proposed and existing rooms.
- Indicate the use and dimensions of the proposed rooms under development.
- Indicate details of any structural changes.
- Show locations of smoke alarms.
- Indicate locations, sizes and swing direction of all doors.
- Indicate window sizes and locations.

## Cross-section requirements

Cross-section details shall be provided where required by the safety codes officer and should incorporate the following:

**Insulation:** The perimeter of the foundation wall is to be insulated from the top of the wall to a minimum of 600 mm (24 inches) below the exterior finished ground level. This insulation is to have a minimum thermal resistance value of RSI 1.4 (R8).

### Foamed plastic insulation materials:

These can be dangerous when exposed to fire and must be protected by a thermal barrier (i.e. drywall).

**Vapour Barrier** installed on the heated side of the insulation.

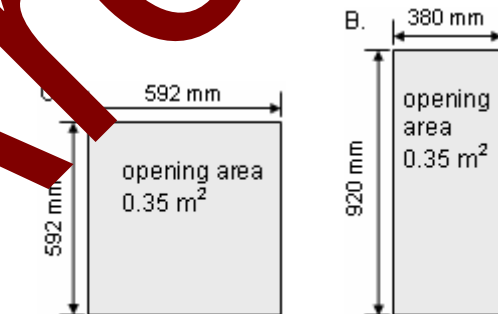
## Bedroom windows

Unless a bedroom has a door that leads directly to the building exterior, or the basement is sprinklered, each bedroom must have at least one window that can be opened from the inside without the use of tools or technical knowledge.

This window must provide an unobstructed opening with a minimum area of  $0.35 \text{ m}^2$  ( $3.77 \text{ ft}^2$  or 543 square inches), and no dimension less than 380 mm (15 inches). See the drawings below for further clarification.

## Examples of conforming and non-conforming bedroom windows

A. **Does not conform** to area requirements. The opening in example A is only  $0.144 \text{ m}^2$ , and it will not allow the average occupant to pass through the window as an alternate means of escape during a fire emergency.



Examples B and C conform to height, width and area requirements

## Window egress into window-well

If a window opens into a window-well, a clearance of at least 550 mm (about 22 inches) between the window and the wall of the window-well is required.

An awning-style window opening into a window-well may pose a challenge in maintaining this clearance, and it could interfere with the occupant's ability to exit through the window-well. The required clearances **must** be maintained when the window is in the open position.

## Gas-fired furnaces

In developed basements, gas-fired furnaces and water heaters must be enclosed in a separate room from the living space, as required in the current edition of the Alberta Building Code.

## Smoke alarms

Smoke alarms located in both the main dwelling and the basement must be installed as per the current edition of the Alberta Building Code.

They must be hard-wired into an electrical circuit and interconnected so they will all operate in unison.

## Carbon monoxide alarms

Carbon monoxide alarms shall be installed in every home containing a solid-fuel-burning appliance, as required in the current edition of the Alberta Building Code. The alarms are also recommended for existing homes.