

Township Of Essa A Homeowners Guide To Finishing A Residential Basement

This document provides homeowners a summary of the Building Permit submission requirements for constructing a residential finished basement

The Ontario Building Code outlines the minimum requirements for various elements, such as framing and materials, and can be viewed on E-laws web site simply type in www.e-laws.gov.on.ca Click the preferred language, click the search or browse the current consolidated law. Under the Browse Current Consolidated Law click the B for Building Code, scroll down and find Building Code act, 1992, S.O 1992, co.23, Click the plus button to the left, and then click Building Code.

Required Drawings

Two complete sets of plans that are legible and drawn to conventional scale are required to be submitted with the Building Permit Application Form & Schedule 1 Designer Application

Wall construction cross section

- Wall and construction including existing materials to be maintained
- Studs sizes
- Insulation
- Vapour barrier

Floor Plan

- Wall location and thickness
- Room names
- Window sizes
- Plumbing location fixtures to be installed pipe size (If applicable) (If washroom installed in basement)
- Exhaust fan location for washroom (If applicable) (If washroom installed in basement)
- HVAC Supply location (not required but better building practice that heat supplies be located a maximum 6" off the floor & ventilation grates installed in partitions)
- Switch location for basement lights
- Door sizes and locations
- Ceiling construction and height above finished floor, under beams, ducts

Required Inspections

For Finished Basement of: Single, Semi-Detached, Row-house and Townhome Dwelling Units.

At key stages of building construction, your work must be inspected to ensure that the applicable stage of construction complies with the Ontario Building Code.

The permit plans and specifications must be on site and made available to the Building Official at the time of inspection if approved plans are not on site no inspection will be conducted and the inspection will have to be re-booked.

To ensure the availability of a Building Official, you should book inspections 48 hours in advance. Failure to have the appropriate inspection performed may result in you having to uncover and expose the work for inspection, or other Orders issued, etc.

For a list of required inspections that may apply based on the proposed alterations, Please refer to the following.

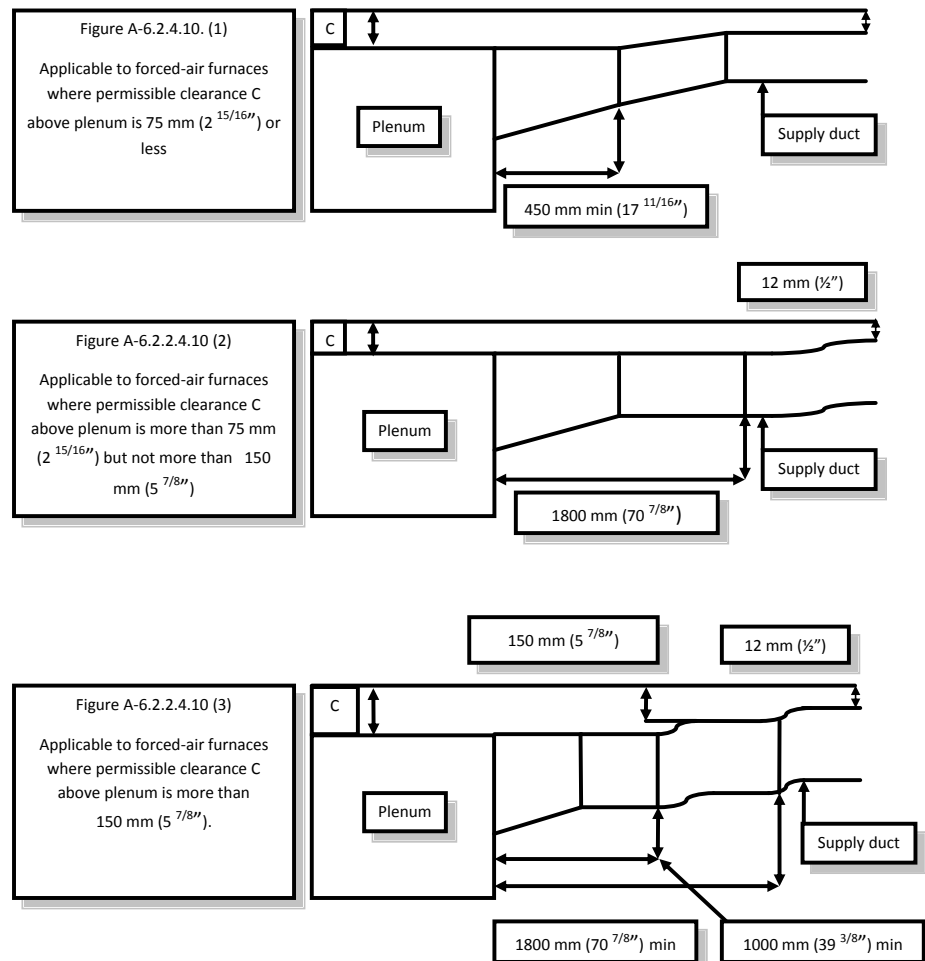
Inspection Description

- **Plumbing** – Underground/above basement floor required prior to covering underground Plumbing. Please note, piping should be installed for drains above basement floor at this inspection. (Test required) (If Applicable).
- **Plumbing - Rough-In** required at completion of plumbing rough-in, water piping system. (Test Required) (If Applicable).
- **Framing -** Required at completion of structural framing.
- **HVAC -** Required if changes are made to system.
- **Ventilation -** Required if washroom is installed.
- **Insulation/Vapour Barrier -** Required at completion of insulation and vapour barrier.
- **Final -** Required at completion of the basement's alterations.

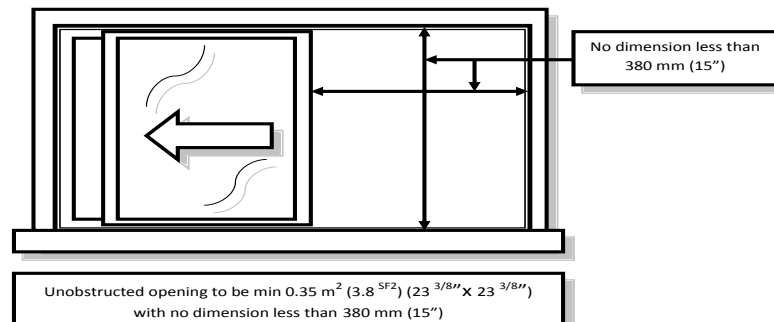
Wall Cross Section Example

Foundation Wall
Interior damp proofing with a permeance not less than $170\text{ng}/(\text{Pa}\cdot\text{m}^2)$ (3 PERM INS) extending from the basement floor to ground level example: type S roll roofing 2x4 studs @16" on center
Protection from dampness of untreated lumber bottom plate with not less than 0.05 mm (0.002 in) polyethylene film or type S roll roofing or provide pressure treated bottom plate
Min RSI 2.11 (R 12) or RSI 3.34 (R19) for electric heat insulation to a max off finished floor of 380 mm ($14\frac{15}{16}$ ")
Vapour barrier with not greater than $60\text{ng}/(\text{Pa}\cdot\text{S}\cdot\text{m}^2)$ (0.78 PERMS INS), example: 6 mil Vapour barrier
 $\frac{1}{2}$ drywall over studs

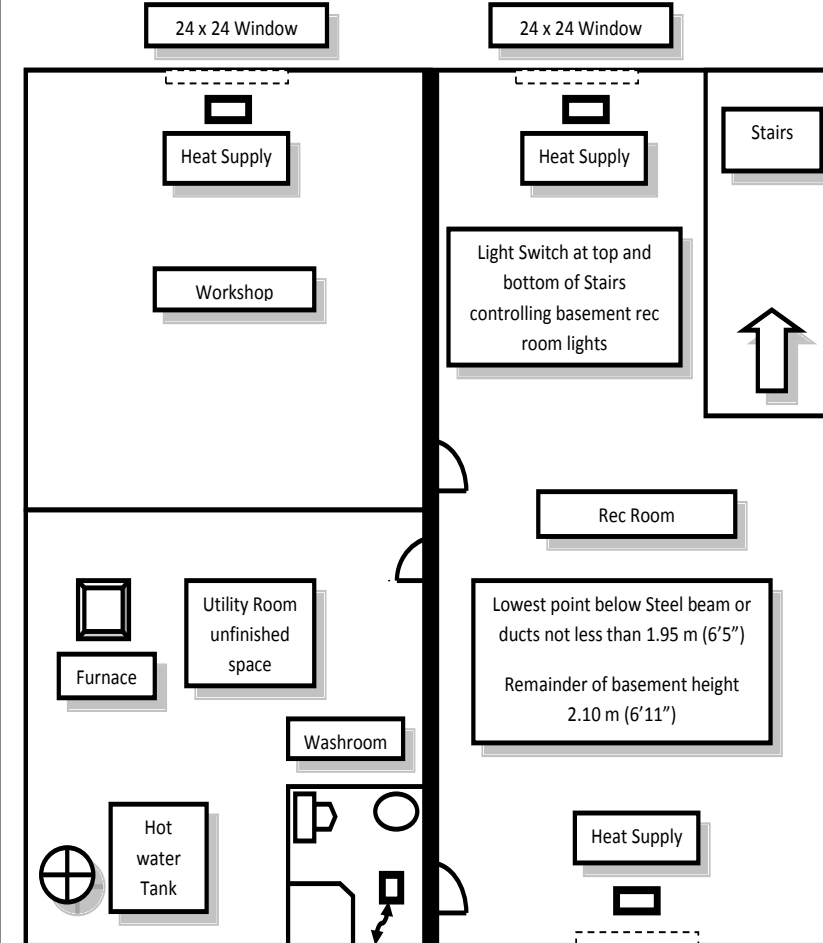
Clearances From Combustibles Example



Bedrooms in basement window requirements example



Plan Example



Hooking up to existing underground plumbing, shower, water closet, sink
Installing new exhaust fan
Min 5L/2 (10.6 cfm)
Sound rating of 2.5 for CAN/CSA-C260-M testing or 3.5 for HVI 915 testing
insulated to min RSI 0.5 (R3)

Washroom door to be min 610 mm (24") wide x 1980 mm (6' 6") high
All other doors to be min 760 mm (30") wide x 1980 mm (6' 6") high

24 x 24 Window

All partition walls to be 2x4 with $\frac{1}{2}$ drywall on both sides except utility room
Ceiling to be $\frac{1}{2}$ drywall

Note: dimensions have been left off example please provide all dimensions of rooms to be finished for permit