

BuildTECH

Consulting & Inspections Inc.

Building & Fire Code Consulting &
Inspections

p: 306.370.2824

f: 306.978.3014

e: info@buildtechinspections.ca

Box 1612 . Martensville, SK . S0K 2T0

www.buildtechinspections.ca

Plan Review Checklist – BASEMENT DEVELOPMENT

Home Owner/Builders: The following information is required when submitting an application for a residential building permit and before a building permit is issued. The plan review will not begin until all required information is provided.

APPLYING FOR A BUILDING PERMIT DOES NOT EQUATE TO PERMISSION TO START CONSTRUCTION – BUILDING PERMITS WILL BE ISSUED BY THE MUNICIPALITY ONCE ALL ZONING AND BUILDING APPROVALS ARE COMPLETE.

Required Information:

2 complete sets of basement development plans are required to be submitted along with the **Building Permit Application** for review and record. The plans shall include:

- **Basement Layout Drawings** with the following information:
 - Exterior and Interior wall locations / room sizes and overall dimensions
 - Stair locations and dimensions (cross sections)
 - Window sizes, locations, and type
 - Door sizes, locations and swing direction
 - HVAC unit/system location
- **Basement Development Checklist** properly filled out.

Basement Suite Development:

- A basement suite is a type of *secondary suite* and has specific requirements, specifically to providing a sound and fire separation between the suite and main house.
- For development of a BASEMENT SUITE, complete the information outlined in this checklist and show specific details of how the requirements for a secondary suite are to be constructed; see "Guidelines for Secondary Suites".

Required On-Site Inspections: (inspection requirements may change depending on the project type and size)

- Pre-Drywall; first inspection is inspection of framing, insulation, and poly.
- Final; development is ready for occupancy with all health and life-safety systems operating.
- A drywall inspection may be required for a basement suite development to inspection fire and sound separation.
- NOTE: electrical permits and inspections are regulated through SaskPower and are the owner's responsibility, BuildTECH does not perform electrical inspections.

BASEMENT DEVELOPMENT CHECKLIST

Provide the following information, and submit with permit application for a residential basement development.
(See reverse side for applicable code requirements)

Name: _____

Address: _____

Municipality: _____

FLOOR PLAN:

Along with the information to be provided with this form, a floor plan 'sketch' is required to be provided. The sketch can be hand-drawn and not-to-scale. The floor plan should include the following information:

- Overall dimensions of basement
- Room sizes
- Window sizes and type (bedroom egress)
- Location of smoke alarm(s) / carbon-monoxide alarm(s)
- Plumbing facilities
- Fireplace (note gas, wood burning, or other)

BASEMENT INSULATION DETAILS

CHECK ALL APPROPRIATE BOXES
FILL IN ANY REQUIRED BLANKS

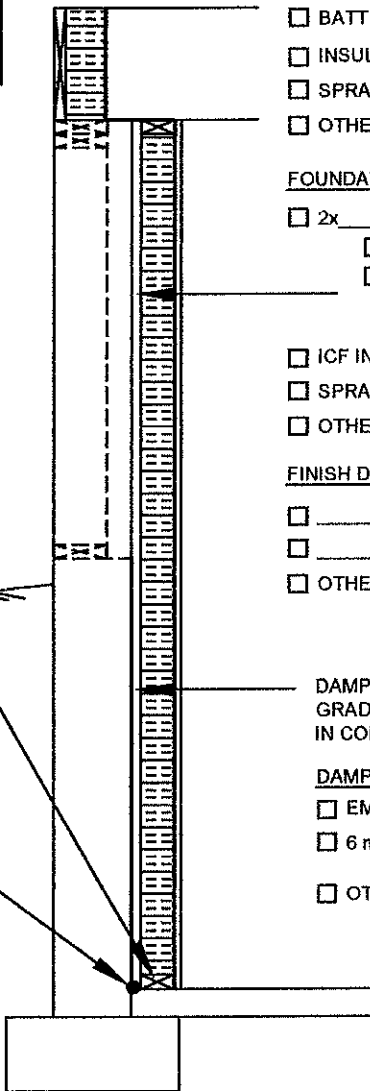
FOUNDATION TYPE:

- CONCRETE FULL HEIGHT
- CONCRETE WALL W/ WOOD FRAME PONY WALL
- INSULATED CONCRETE FORM (ICF)
- PRESERVED WOOD (PWF)
- OTHER: _____

PROTECTION FROM DAMPNESS:

- PT BOTTOM PLATE
- SEPARATED BY POLY / SILL GASKET

(EXISTING) SOIL GAS BARRIER:
FLEXIBLE SEALANT INSTALLED AT PERIMETER OF SLAB AND PENETRATIONS



RIM JOIST DETAILS: (EXISTING)

- BATT INSUL W/ POLY
- INSULATED RIM JOIST PANEL
- SPRAY FOAM
- OTHER: _____

FOUNDATION INSULATION DETAILS: (EXISTING)

- 2x _____, R _____ (FIBERGLASS / MINERAL WOOL)
 - 6-mil CGSB POLY AIR / VAPOUR BARRIER (WARM SIDE)
 - RIGID INSULATION APPLIED TO FOUNDATION WALLS (MUST HAVE VAPOUR PERMEANCE GREATER THAN 170 ng / (Pa * s * m2) WHERE APPLIED ABOVE GRADE)
- ICF INSULATED FORM
- SPRAY FOAM
- OTHER: _____

FINISH DETAILS: (EXISTING)

- _____ " DRYWALL
- _____ " OSB / PLYWOOD
- OTHER: _____

DAMP PROOFING REQUIRED ON CONCRETE TO GRADE HEIGHT ONLY, IF WOOD FRAMING MEMBERS IN CONTACT WITH CONCRETE

DAMP PROOFING DETAILS: (EXISTING)

- EMULSIFIED ASPHALT / TAR
- 6 mil CGSB POLY (SLIT OPENINGS IF INSTALLED ABOVE GRADE)
- OTHER: _____

OTHER CHECK ITEMS:

- Handrail provided at stairs to basement.
- Stairs protected by walls or guard rail.
- Bathroom exhausted by:
 - Fan (w/switch) vented directly to outdoors
 - Connection to existing house ventilation system (w/ switch)

INTERIOR WALL FRAMING:

- 2x _____ @ _____ inch o.c.
- PT bottom plate, or
- Poly / sill gasket concrete separation
- Steel stud framing

Prepared by

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BASEMENT DEVELOPMENT CHECKLIST, PAGE 2

CODE ARTICLES

| NBCC 2010 | Description |
|--------------|--|
| | <p>The following NBCC Article descriptions are summaries of the articles and sentences, not the actual NBCC 2010 code article.</p> |
| 9.9.10.1. | <p>The bedroom windows must comply with the requirements of Section 9.9.10.1., including the following:</p> <ul style="list-style-type: none"> • Openable without the use of keys, tools, or special knowledge, and without the removal of sashes or hardware, and • Have an unobstructed opening of not less than 0.35 m² (3.8 f²) with no dimension less than 380 mm (15 inches), and maintain the required opening during an emergency without the need for additional support. |
| 9.8.7.1. | A handrail is required at interior stairs with more than 2 risers. |
| 9.8.8.1. | Flights of steps and landings shall be protected by a guard on each side that is not protected by a wall for the length where there is a difference in elevation of more than 600 mm (24") between the walking surface and the adjacent surface. |
| 9.10.19.1. | A hardwired smoke alarm is required on all floor levels. On floor levels where bedrooms are located, they shall be installed <i>in each bedroom</i> , plus one in the hallway or living space on that same level. All smoke alarms in the dwelling shall be interconnected. |
| 9.13.2.6. | Where wood framing members are in contact with the concrete foundation walls, the concrete wall is required to have damproofing installed starting at the basement floor and terminating at ground level. |
| 9.13.4.7. | The perimeter of the basement floor slab, and all penetrations shall be sealed with a flexible sealant to prevent soil gas leakage. |
| 9.23.2.3. | The wall bottom plates are required to be pressure-treated, or separated from the concrete with .05 mm polyethylene sheet. |
| 9.25.2.1. | Exterior basement walls shall be insulated sufficiently enough to prevent moisture condensation on their room side during the winter. |
| 9.25.3.1. | Insulated walls shall be constructed with an air / vapour barrier system to provide a continuous barrier to air and vapour leakage. Polyethylene sheet air / vapour barrier shall be 6 mil CGSB polyethylene sheet made continuous at all joints and penetrations. |
| 9.32.3.7. | The bathroom requires an exhaust fan that is exhausted directly to the outdoors, or be exhausted by the house ventilation system. |
| 9.32.3.9. | A carbon monoxide detector is required in each bedroom, or within 5m of each bedroom door. A properly located combination smoke / CO alarm will satisfy this requirement. Plug-in style carbon monoxide detectors do not meet this requirement. |



Residential Ventilation System Design & Install Certification

| | | | |
|--------------------------------|--|------------------------------------|--|
| Project Address: | | Municipality: | |
| Owner: | | | |
| Ventilation Contractor: | | HRAI #: (If Applicable) | |

A Building Permit has been issued for the installation of a residential ventilation system for this project under the requirements of the *Uniform Building Accessibility Standards Act and Regulations*, which includes the National Building Code of Canada, 2010.

Part 1 - Ventilation System Design (Submit Prior to Installation)

Required to be submitted prior to *Framing Inspection*

The ventilation system will be designed and constructed in accordance with:

| | | | |
|--------------------------|---|--------------------------|---|
| <input type="checkbox"/> | Section 9.32, National Building Code of Canada, 2010. | <input type="checkbox"/> | CAN / CSA – F326 (HRAI certification number must be provided above) |
|--------------------------|---|--------------------------|---|

The ventilation system will be installed:

| | |
|--------------------------|---|
| <input type="checkbox"/> | In conjunction with a Forced Air Heating System. |
| <input type="checkbox"/> | Not in conjunction with a Forced Air Heating System; fresh air supply to bedrooms and other spaces as per 9.32.3.5. |

The ventilation system will be comprised of (check **ALL** that apply):

| | |
|--------------------------|--|
| <input type="checkbox"/> | A combination of a Heat Recovery Ventilator and Supplemental Exhaust Fan(s) as described in Articles 9.32.3.3. to 9.32.3.7. and 9.32.3.12. (2010 NBCC), or in conformance with the requirements of CAN/CSA-F326-M. |
| <input type="checkbox"/> | A separate Principal Ventilation Fan and Supplemental Exhaust Fan(s) as described in Articles 9.32.3.3. to 9.32.3.7. (2010 NBCC), or in conformance with the requirements of CAN/CSA-F326-M. |
| <input type="checkbox"/> | Heating appliances (furnaces, water heaters, fireplaces, etc) are direct vent or mechanically vented. |
| <input type="checkbox"/> | Heating appliances (furnaces, water heaters, fireplaces, etc) are not direct vent or mechanically vented, and Protection Against Depressurization will be achieved: |
| <input type="checkbox"/> | In accordance with Article 9.32.3.8 (NBCC 2010) |
| <input type="checkbox"/> | Through the test method described in CAN/CGSB-51.71, "The Spillage Test: Method to Determine the Potential for Pressure-Induced Spillage from Vented, Fuel-Fired, Space Heating Appliances, Water Heaters, and Fireplaces. |

Part 2 – Install Certification (Submit After Installation)

Required to be submitted prior to *Final Inspection*

The installer's signature is declaration that the ventilation system installation meets the submitted system design, and all applicable requirements of The National Building Code of Canada, 2010. The contractor is responsible for balancing the system to the design air flows, as well as balancing the Heat Recovery Ventilator (if applicable).

Signature _____
Date

Print Name _____
Company