BEFORE YOU BUILD...

SECONDARY SUITES

City of Saskatoon
Building Standards

Table of Contents

1.0 General Information

The purpose of the Secondary Suite Guide is to provide information on the building standard requirements for one-unit dwellings with a secondary suite, and is intended to aid the homeowner, designer and builder in the design and construction of secondary suites.

When do these guidelines apply?

These guidelines apply when developing a secondary suite or a second dwelling unit in a single family detached dwelling.

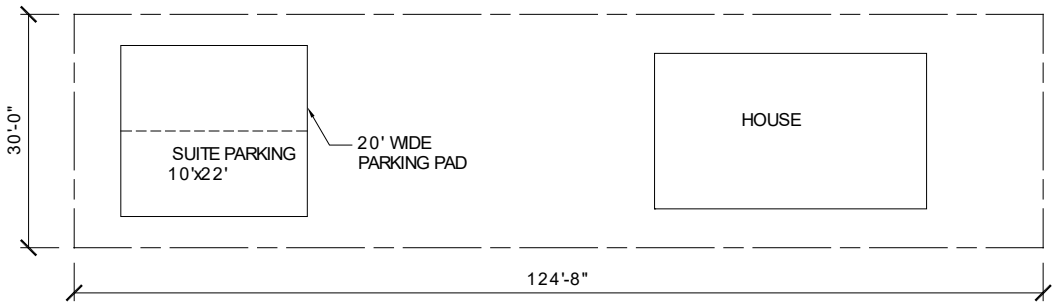
Suites developed after January 1, 1999, must comply with the minimum standards of the current NBC.

What if the suite was developed years ago?

Suites developed before January 1, 1999, may be eligible for the Legalizing Existing Suites program. Please contact Community Standards at 306-975-2645 for more information.

What are the application requirements?

1. A well-drawn site plan or a copy of a Surveyor's Certificate showing all property dimensions, location of all buildings, and location and size of the required parking.
2. The minimum size requirement of parking spaces in a required front yard is 2.7m x 6m. The minimum size requirements of parking spaces having direct access to a rear lane is 2.7m x 6.7m
3. As per Section 5.30(g) of the Zoning Bylaw, parking spaces shall be either hard surfaced or compacted gravel. If compacted gravel is used for required parking it shall be delineated (wood or concrete curbing)



4. Floor plans of all levels are required. Floor plans shall be to scale, be fully dimensioned, indicate location of all vertical smoke-tight barriers, location of smoke and carbon monoxide alarms and indicate the use of each room. As well, all appliances in the utility rooms are to be noted.

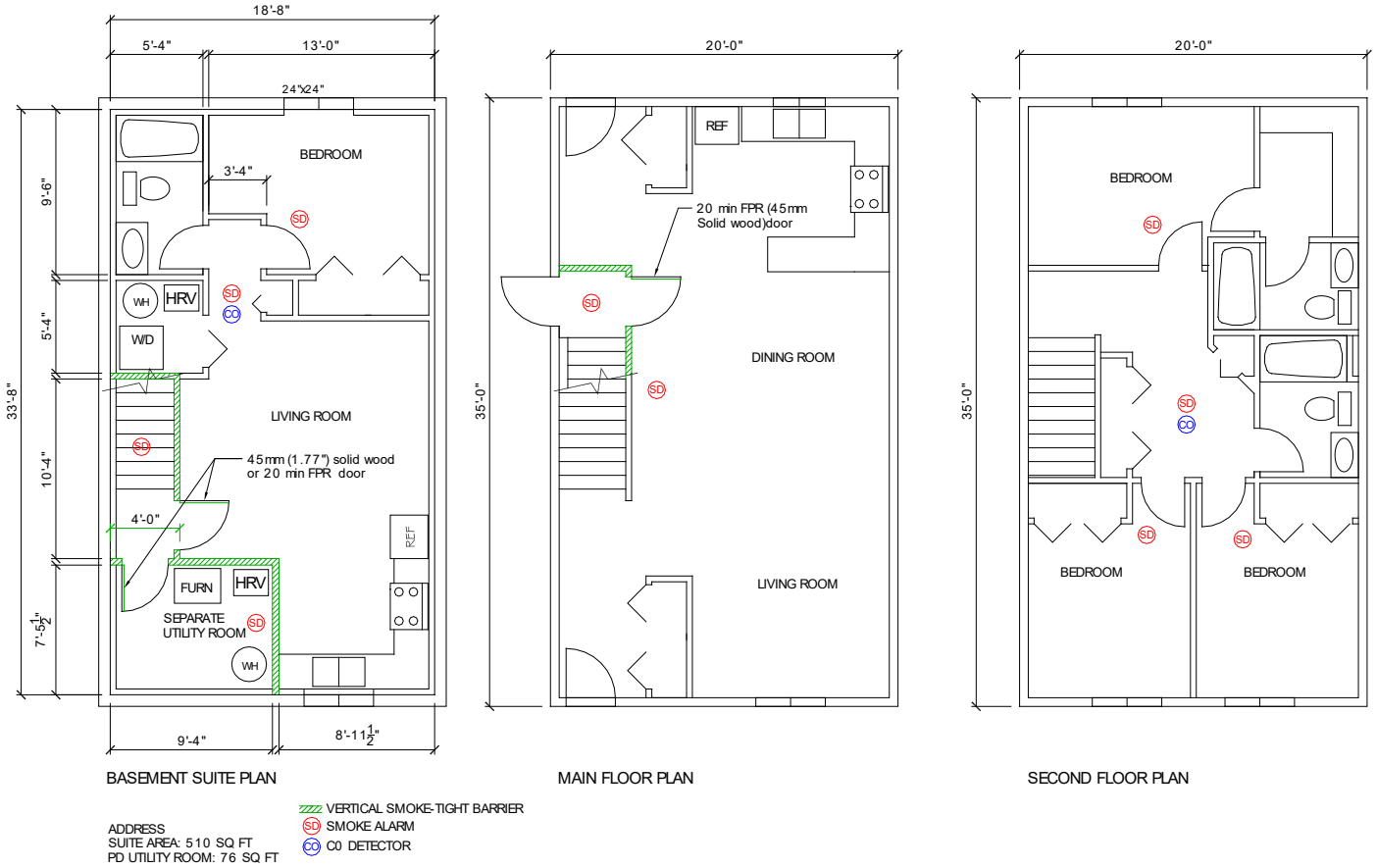


Figure 2 – Sample Floor plans

5. Details of all construction (perimeter walls, interior partitions, vertical and horizontal smoke-tight barriers) are required. See Section 3 – Smoke-tight Barriers & STC Ratings and the checklist at the end of this handbook.
6. A ventilation design form is required to be completed and be submitted at time of application. Please see the design forms on the Permit Forms and Applications webpage.
7. Before the permit is closed, the ventilation installer must submit a ventilation certificate verifying that the installation meets the design. The certificate is also available on Permit Forms and Applications webpage.
8. Apply online at saskatoon.ca/epermitting

2.0 Zoning Bylaw and Building Bylaw Information

What is a secondary suite?

A secondary suite is a small dwelling unit within a house. Often, secondary suites are in the basement.

Can I develop a secondary suite in my house?

A secondary suite can be developed in any house which meets the following criteria:

- A secondary suite is only permitted within a single family detached house.
- No more than one garden, garage or secondary suite accessory to a one-unit dwelling shall be allowed per site. Not more than one secondary suite is permitted in any house.
- Secondary suites shall not be in one-unit dwellings located within a dwelling group.
- The gross floor area of the house, including the basement, must be greater than 100 sq m (1075 sq ft).
- From the suite entrance to a public land or street, there is a pathway that is at least 860 mm (34 in) wide.
- Where a secondary suite has an entrance which is separate from that of the principal dwelling, the entrance may only be located on a side or rear wall of the principal dwelling.
- An interior landing is required at the entrance to the suite.
- Only one secondary suite, garden suite, or garage suite is allowed per site. Please contact Development Services and Building Standards for more information on garden and garage suites.

What other Zoning restrictions are in place for secondary suites?

- A secondary suite shall have no more than two bedrooms.
- A secondary suite may not be larger than 80m^2 (861ft^2) of floor area and cannot occupy more than 40% of the gross floor area of the building.
- One off street parking space shall be provided for the secondary suite. This is in addition to the required off street parking spot for the main dwelling unit.
- The principal dwelling shall have direct access to the mechanical room without having to access the secondary suite.

Please refer to Section 5.30 of the Zoning Bylaw No. 8770 for more information.

My neighbour has a basement suite that is the full basement and has three bedrooms. How can this be a legal suite?

In R2 zoning districts and multiple-unit dwelling districts, two-unit dwellings are allowed on lots that are at least 15m (50 ft) wide. Two-unit dwellings are not required to meet section 5.30 of the zoning bylaw for secondary suites however the separations between the dwelling units in a two-unit dwelling are typically more restrictive than what is described in other sections of this booklet.

3.0 Smoke-Tight Barriers & STC Rating

What is a smoke-tight barrier?

A smoke-tight barrier is a construction assembly that impedes the movement of smoke from one dwelling unit to another dwelling unit and from common spaces to the rest of the building within a house with a secondary suite.

Where are smoke-tight barriers required?

A smoke-tight barrier is required between:

1. The principal dwelling unit and the secondary suite (at the walls and ceiling).
2. Common spaces (at walls and ceiling) and the rest of the building.

See sample plans in Section 8.0.

How do I build a smoke-tight barrier?

A smoke-tight barrier is obtained by installing one layer of 12.7 mm (½") drywall on each side of the wall and one layer of 12.7 mm (½") drywall on the ceiling. The seams must be taped and mudded or fire taped.

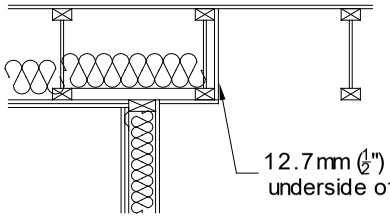
If the ceiling adjacent to a vertical smoke-tight barrier is not drywalled, the smoke-tight barrier [12.7 mm (1/2") drywall] on the wall must extend to the underside of the subfloor.

All penetrations must be tight fitting or sealed with caulking or spray foam. Spray foam must be adequately protected with a thermal barrier as per NBC article 9.10.17.10.

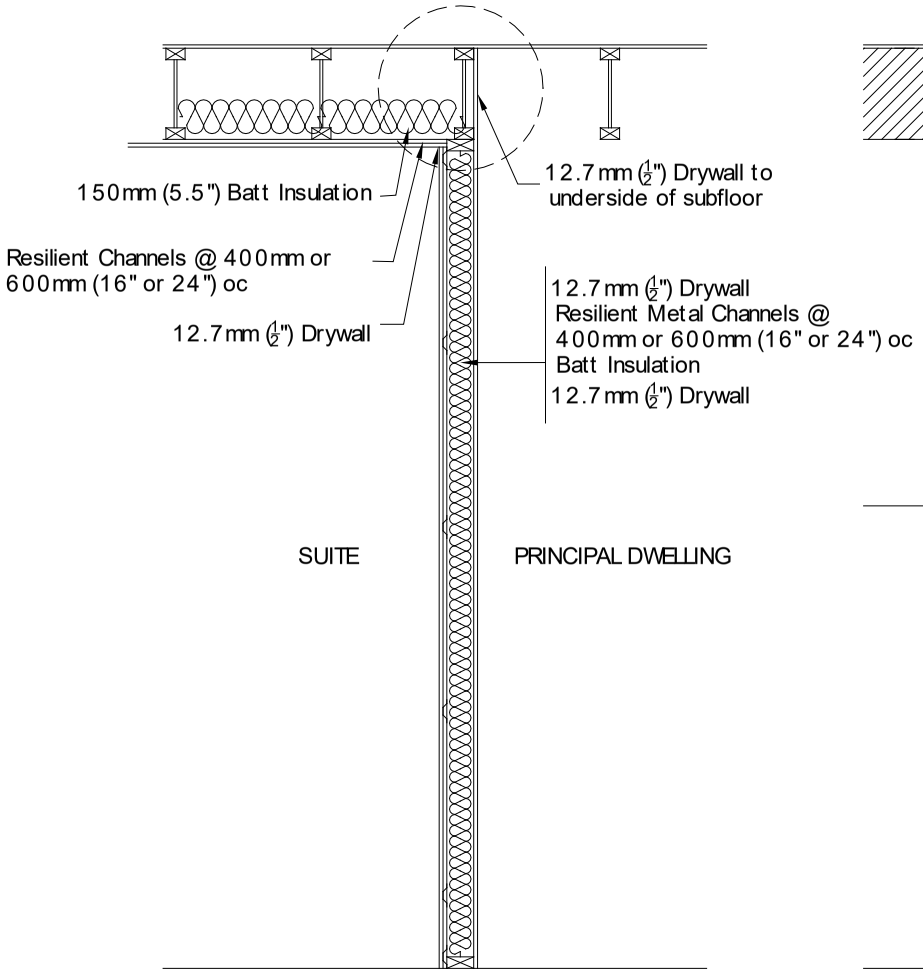
Doors located in a smoke-tight barrier are required to be 45 mm (1.75") thick solid core installed in a 38 mm (1½") thick wood jamb and have a self-closing device, or have a 20 minute fire protection rating. Doors with indents or decorative panels are not allowed in a smoke-tight barrier unless the door has a 20 minute fire protection rating.

Can I use spray foam to provide the smoke-tight barrier above the wall?

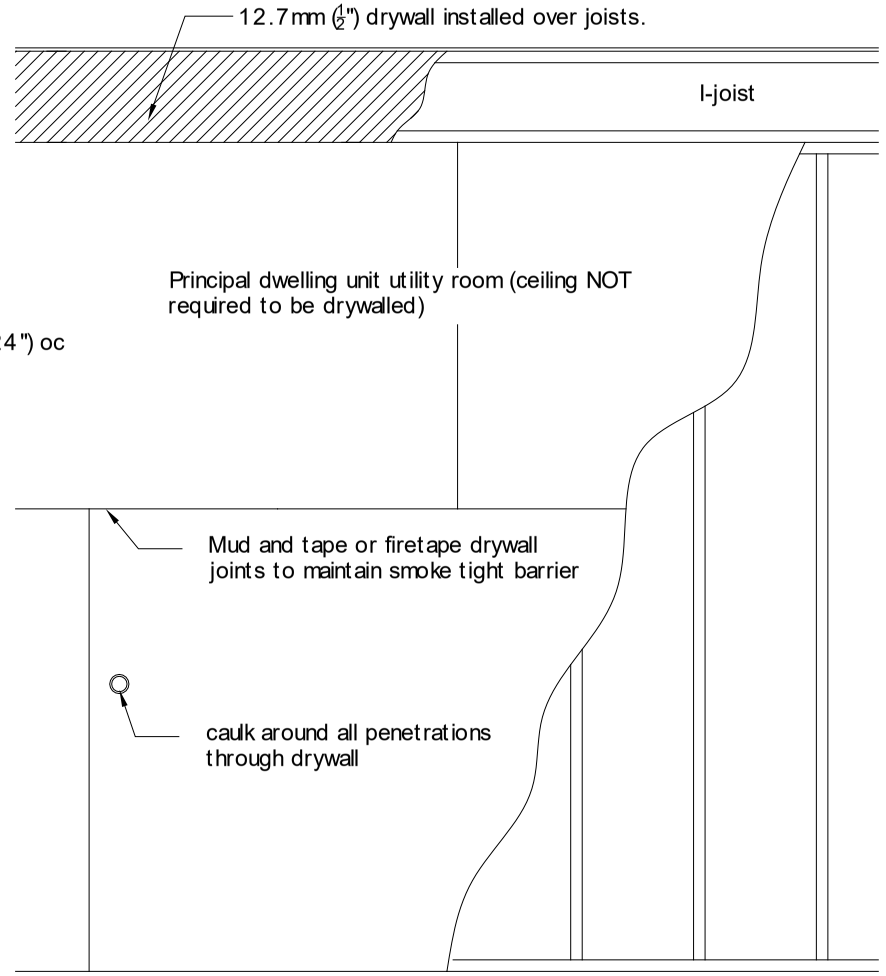
Yes, spray foam installed by a certified installer is permitted to fill the joist spaces above the wall. A thermal barrier is required to be installed over the spray foam (See Wall Section 3). A spray-foam insulation form completed by the certified installer must be submitted with the permit application. The form can be found on the Permit Forms and Applications webpage.



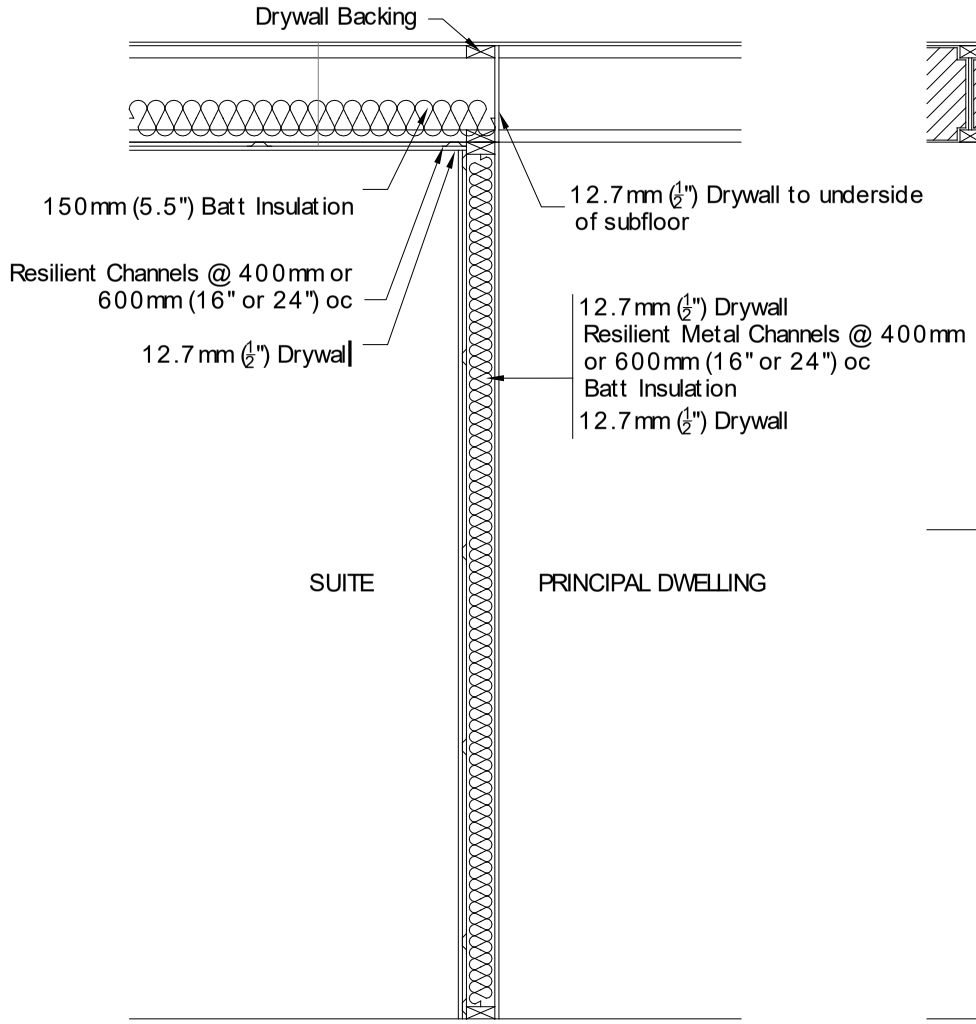
DETAIL 1
JOISTS PARALLEL AND OFFSET FROM WALL



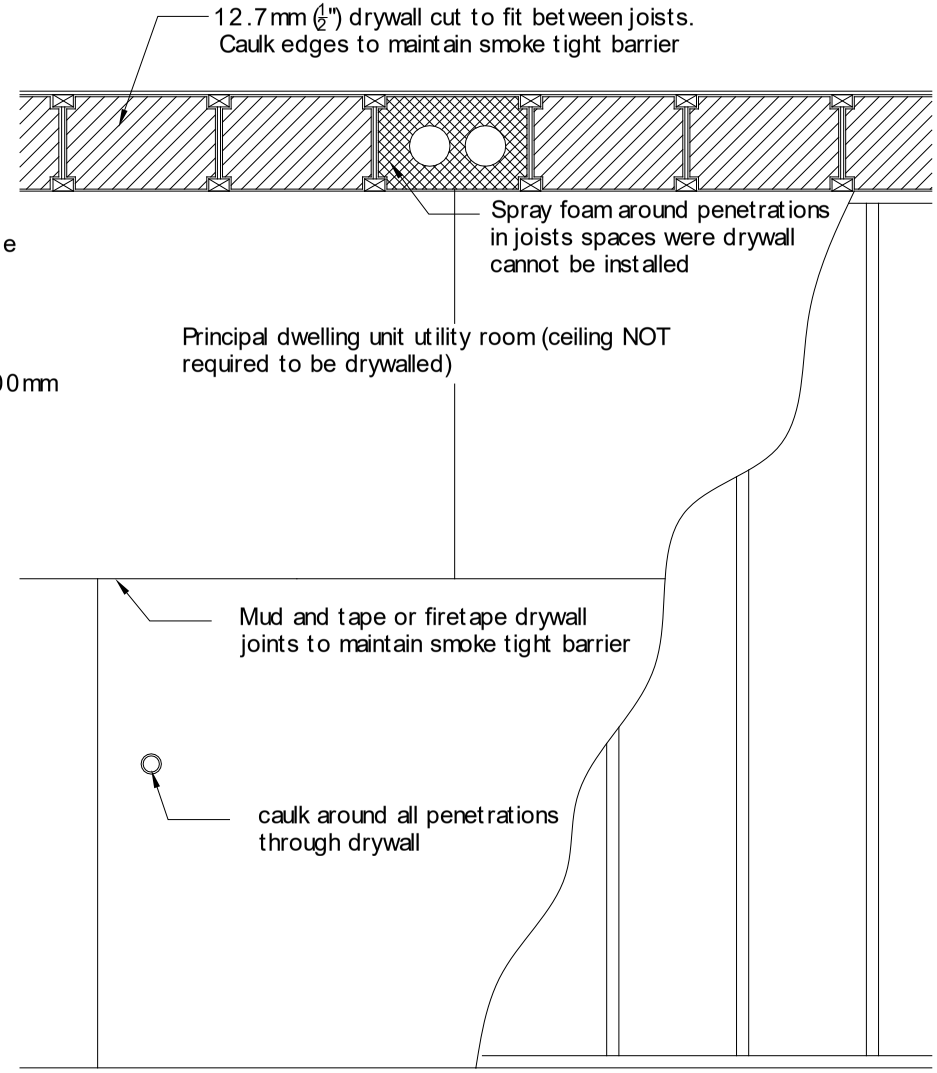
WALL SECTION 1
SMOKE TIGHT BARRIER (DRYWALL) EXTENDING TO
UNDERSIDE OF SUBFLOOR
JOISTS PARALLEL TO WALL



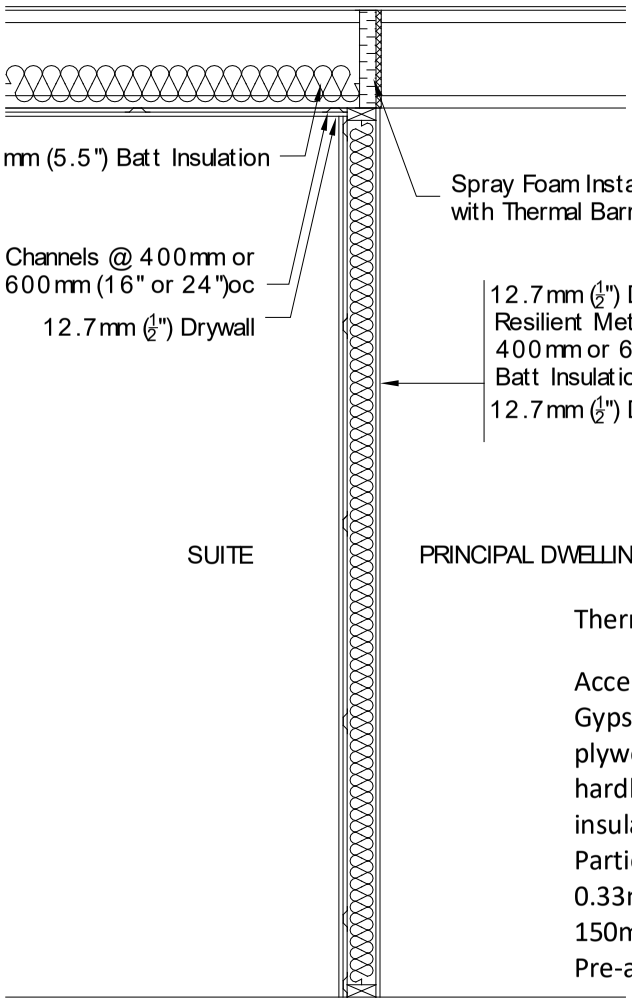
ELEVATION 1
SMOKE TIGHT BARRIER (DRYWALL) EXTENDING TO
UNDERSIDE OF SUBFLOOR
JOISTS PARALLEL TO WALL



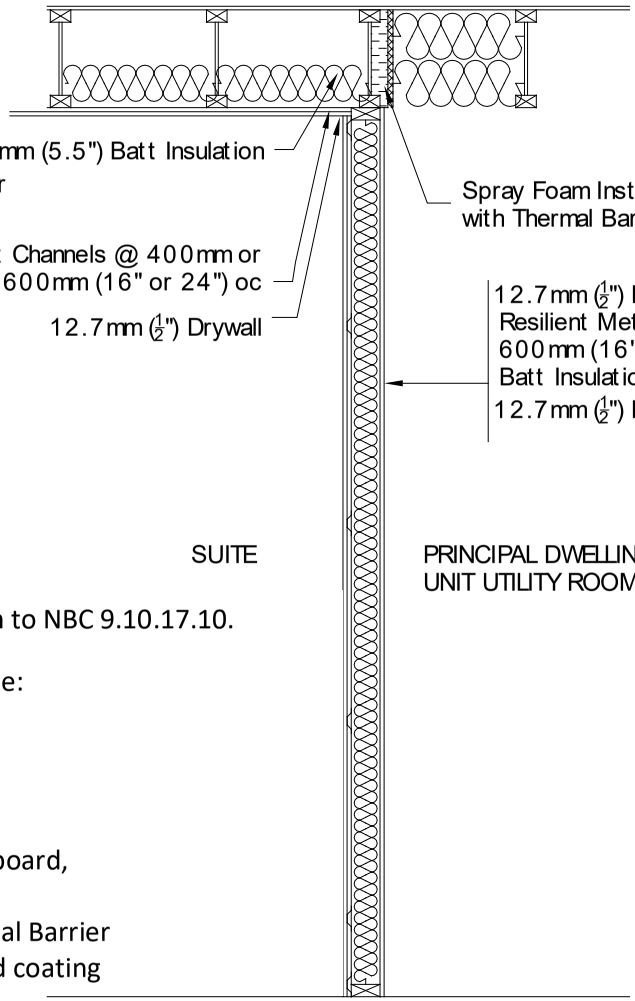
WALL SECTION 2
SMOKE TIGHT BARRIER (DRYWALL) EXTENDING TO UNDERSIDE OF SUBFLOOR
JOISTS PERPENDICULAR TO WALL



ELEVATION 2
SMOKE TIGHT BARRIER (DRYWALL) EXTENDING TO UNDERSIDE OF SUBFLOOR
JOISTS PERPENDICULAR TO WALL



WALL SECTION 3
SMOKE TIGHT BARRIER (SPRAY FOAM) EXTENDING TO UNDERSIDE OF SUBFLOOR
JOISTS PERPENDICULAR TO WALL



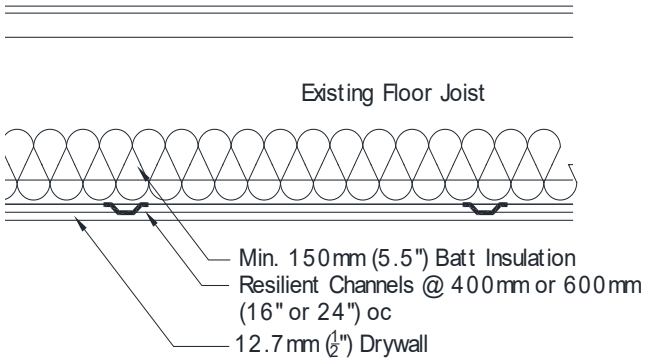
WALL SECTION 4
SMOKE TIGHT BARRIER (SPRAY FOAM) EXTENDING TO UNDERSIDE OF SUBFLOOR
JOISTS PARALLEL TO WALL

Thermal barrier to conform to NBC 9.10.17.10.

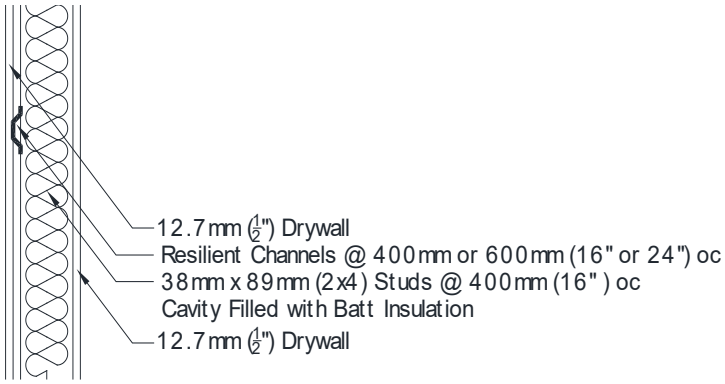
Acceptable products include:
Gypsum wall board,
plywood,
hardboard,
insulating fibreboard
Particle board, OSB, waferboard,
0.33mm sheet metal
150mm (5.5”) Roxul Thermal Barrier
Pre-approved spray applied coating

What is a sound transmission class and how do I build it?

Sound transmission class (STC) is a rating that shows how well a material or assembly stops the transmission of sound. The higher the rating, the less sound is transferred. An STC of at least 43 is required between the principal dwelling unit and the secondary suite. This is obtained by the following construction:

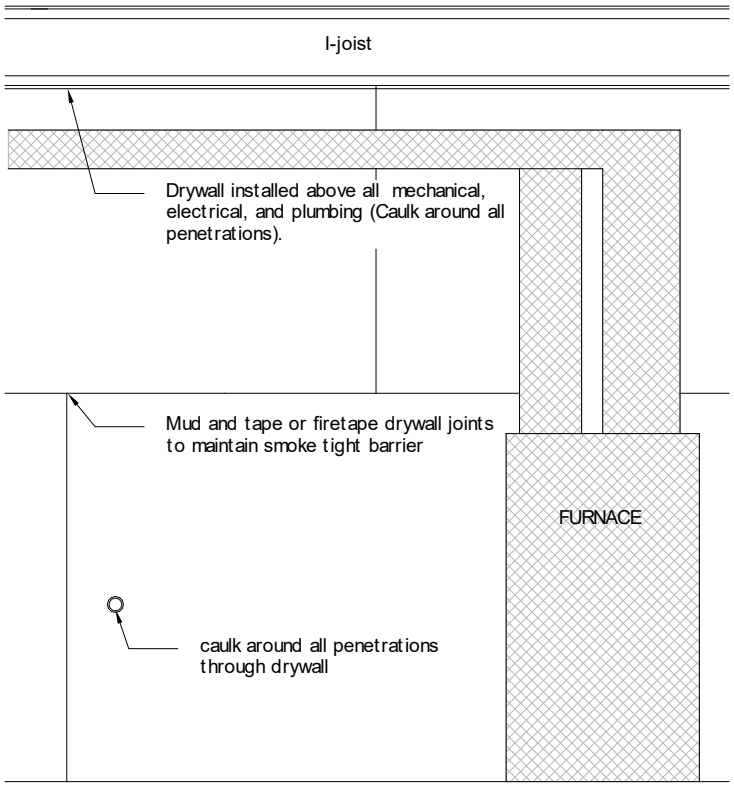


TYPICAL CEILING SMOKE TIGHT BARRIER & 43 SOUND TRANSMISSION CLASS RATING

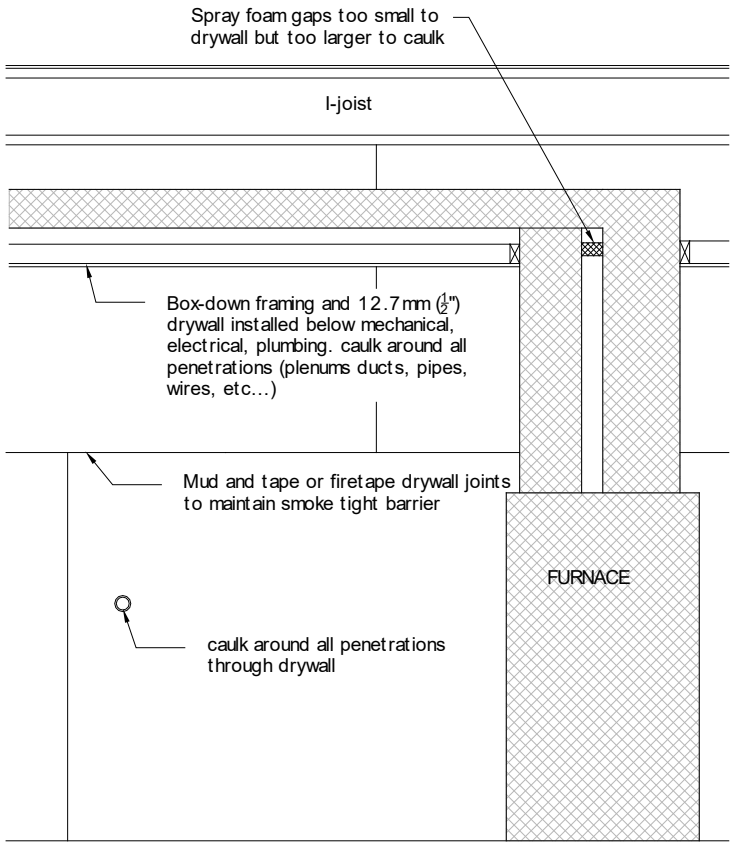


TYPICAL WALL SMOKE TIGHT BARRIER & 43 SOUND TRANSMISSION CLASS RATING

Other construction assemblies are acceptable as per the NBC Section 9.10 and Tables 9.10.3.1-A and B, however it is the applicant's responsibility to prove the STC rating.



ELEVATION 3
COMMON UTILITY ROOM
CEILING REQUIRED TO BE DRYWALLED
DRYWALL INSTALLED DIRECTLY TO JOISTS



ELEVATION 4
COMMON UTILITY ROOM
CEILING REQUIRED TO BE DRYWALLED
CEILING LOWERED TO DRYWALL AROUND MECHANICAL EQUIPMENT

Do I need to drywall the underside of my landing and stairs?

The ceiling of a stair used by the suite must be drywalled. If the stairwell is not separated from the basement suite, the ceiling (underside of stairs above) must also have a minimum 43 STC.

4.0 Smoke and Carbon Monoxide Alarms

Where are smoke alarms required?

Hardwired and interconnected smoke alarms are required:

1. In each bedroom.
2. On each floor within a dwelling unit, located in the hallway if the floor area serves bedrooms.
3. The landing area at the top of basement suite stairs.
4. In every area that is contained within a smoke-tight barrier (such as furnace rooms and stairwells)
5. In any room where a flexible duct penetrates a smoke-tight barrier. Refer to Section 6.0 Ventilation and Heating.

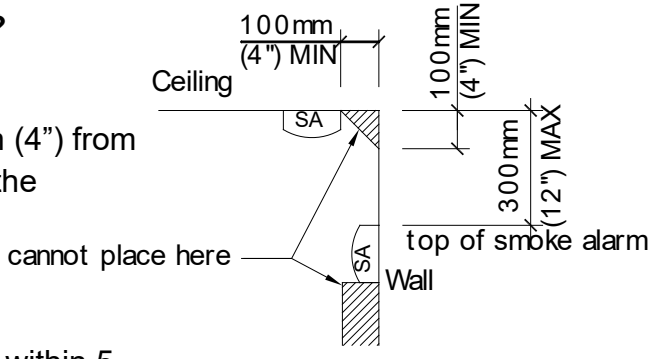
All smoke alarms must be interconnected, so that the activation of one smoke alarm will cause all other smoke alarms to sound in both the principal dwelling unit and the secondary suite. See sample plans in Section 8.0

I have an older house that does not have hard-wired smoke alarms. Do I have to install hardwired smoke alarms in all the rooms noted above?

An existing house with a new secondary suite must have at least one smoke alarm installed in the principal dwelling unit that is interconnected with all of the secondary suite smoke alarms. All bedrooms in the principal dwelling that were previously permitted are not required to have the smoke alarms upgraded.

Where in the room should the smoke alarm be placed?

Smoke alarms must be installed as per the manufacturer's specifications. They must be placed a minimum of 100 mm (4") from the ceiling or wall and a maximum of 300 mm (12") below the ceiling, when placed on the wall.



SMOKE ALARM LOCATION

Where are carbon monoxide alarms required?

Carbon monoxide alarms are required in each bedroom or within 5 m (16 ft) of each bedroom door. All carbon monoxide detectors must be wired so that when one alarm sounds, all alarms in the building sound. The alarms shall be installed as per the manufacturer's instructions.

Carbon monoxide and smoke alarms can be combined into a single unit.

5.0 Handrails, Guards, Stairs

What are the differences between guards and handrails?

Guards are intended to prevent persons from falling off the edge of stairs, openings around stairs, or where the difference in walking surfaces of 600mm (24”) or more. The guard must be able to withstand the pressure of a human body applied horizontally to it.

Handrails assist persons in ascending or descending stairs. They offer a continuous and graspable handhold to guide and support persons. Please see below for examples of handrails considered graspable.

Handrail graspability is defined as either:

(a) Type I: Handrails with a circular cross section shall have an outside diameter of not less than 32 mm and not more than 50 mm. If the handrail is not circular, it shall have a perimeter dimension of not less than 100 mm and not more than 155 mm with a maximum cross-section dimension of 55 mm. Edges shall have a minimum radius of 0.25 mm; or

(b) Type II: Handrails with a perimeter greater than 155 mm shall provide a graspable finger recess area on both sides of the profile. The finger recess shall begin within a distance of 19 mm measured vertically from the tallest portion of the profile and achieve a depth of at least 8 mm within 22 mm below the widest portion of the profile. This required depth shall continue for at least 10 mm to a level that is not less than 45 mm below the tallest portion of the profile. The minimum width of the handrail above the recess shall be 32 mm to a maximum of 70 mm. Edges shall have a minimum radius of 0.25 mm.

My house is older and the stairs have never had guardrails or handrails. Do I need to have them installed?

Yes. Access to the suite is required to be upgraded to reasonably meet current code requirements. Guards are required on stairs where there is a difference in elevation of more than 600 mm (24”) and a handrail is required on all interior stairs with more than two risers.

How high do my guards have to be?

Guards are to be at least 900 mm (36”) in height. If the top of guard is also to be used as a handrail, the maximum height is 965 mm (38”).

Do stairs have any requirements?

Treads and risers must have a uniform rise and run in any one flight including the top and bottom risers. When choosing flooring it is important to ensure the existing stairs will meet this requirement after flooring is installed.

How much head room is required over stairs and landings?

The clear height over stairs and landings shall not be less than 1.95 m (6’-5”).

6.0 Ventilation and Heating

Can the furnace heat both dwelling units?

No. Air cannot move from one dwelling unit into the other as this would negate the smoke-tight walls and ceiling. A separate heating source is required for the suite.

What can I use to heat the suite?

Electric baseboard heaters, in-floor heating, and a separate furnace are all common heating solutions for the suite.

The house already has an HRV. Do I need to install another HRV for the suite?

The ventilation of the suite must be separate from the principal dwelling unit ventilation. There are many ways that the ventilation of the suite can be achieved; however, HRV's are commonly used as the principal exhaust fan and supply air fan. You should discuss your options with your mechanical contractor.

Is flexible ducting allowed?

Flexible ducting is allowed, however, if a flexible duct penetrates a smoke-tight barrier, a smoke alarm will be required to be installed in the room. For example, an HRV is located in a closet in a suite. A flexible duct goes up through the ceiling, penetrating the smoke-tight barrier. A smoke-alarm would be required to be installed in the closet.

The other option is to provide a non-combustible duct from the HRV to the drywall. After the duct penetrates the drywall, flexible ducting would be allowed.

7.0 General Room Design, Doors, and Windows

What is the required height of basement?

Rooms must be at least 1.95 m (6’-5”) high. Under beams and duct work, the height may be reduced to 1.85 m (6’-1”).

Please see Section 5.0 for the headroom required over stairs.

What is the required width of hallways?

The minimum finished width of a hallway is 860 mm (34”).

Are there any requirements to what door I use?

Doors within a smoke-tight barrier do have special requirements. Please see Section 3.0 Smoke-Tight Barriers & STC Rating**.**

All doors are required to be at least 1.89 m (6’-2 ½”) high when the ceiling height is 1.95m (6’-5”). If the ceiling height is 2.1 m (7 ft) or higher, the door is required to be 1.98 m (6’-6”).

Usually, interior doors are 760 mm (30”) wide. Utility room doors, and any doors in the path to the exterior from the utility room are required to be at least 810 mm (32”) wide.

What is the required size of a bedroom window?

One window in each bedroom is required to have an unobstructed opening size of at least 0.35 sq m (3.8 sq ft). The minimum dimension of this window is 380 mm (15”).

Does that mean an 18”x18” window meets these requirements?

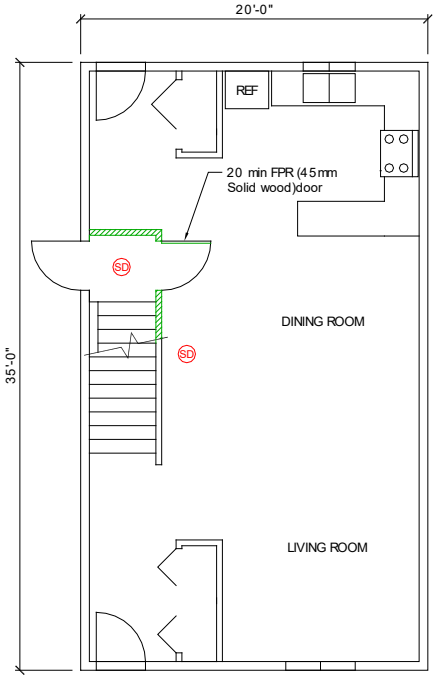
No. The opening a person would climb through must be at least 0.35 sq m (3.8 sq ft). If the actual opening size of the window was 450 mm x 450 mm (18”x18”), the area would only be 0.20 sq m (2.25 sq ft).

What if the bedroom window opens to a window well?

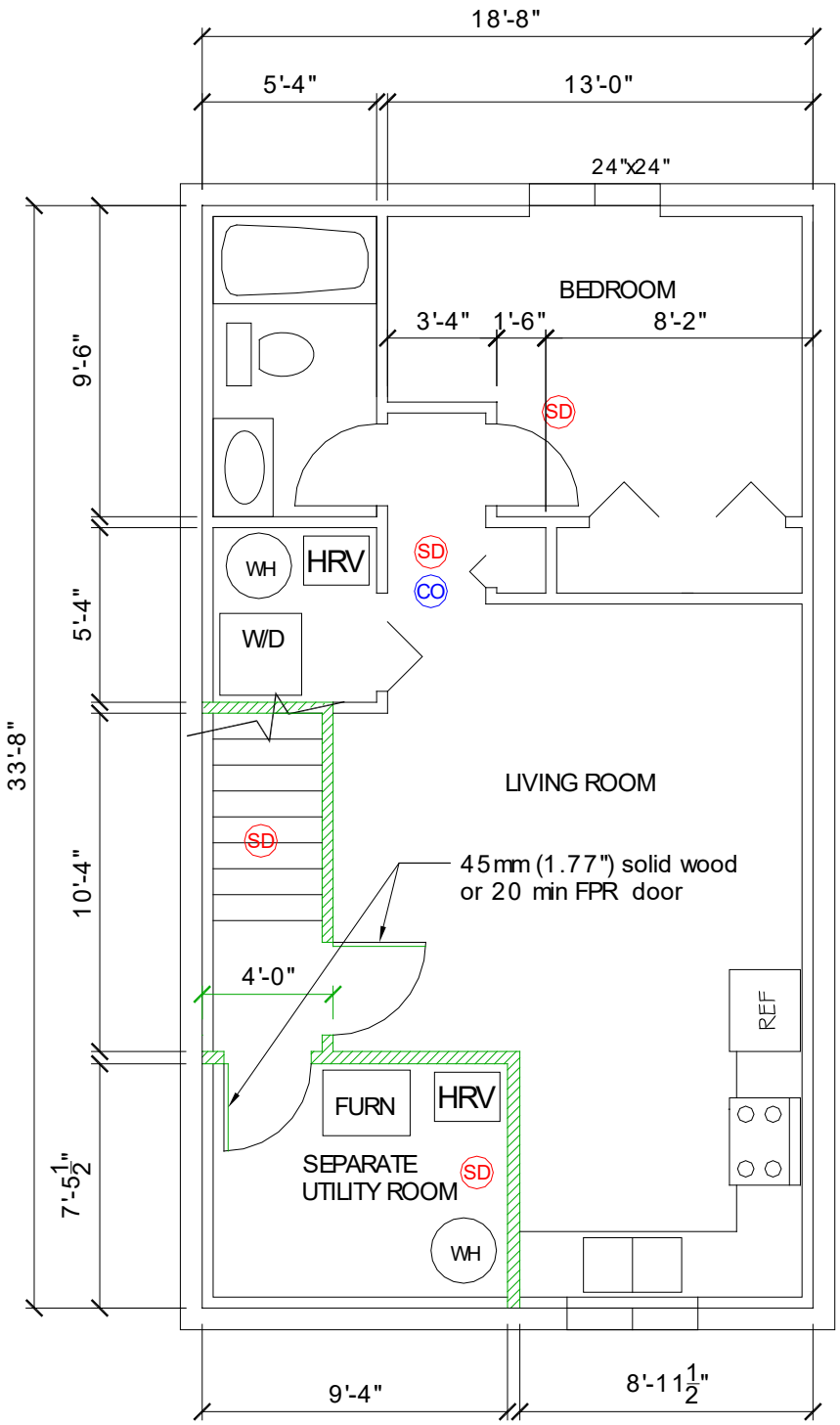
The window well is to have a minimum of 760 mm (30”) clear space in front of it, when the window is open. The well must be wider than the window. If there is a deck over the window, a height of at least 760 mm (30”) is required to an open public thoroughfare.

8.0 Sample Drawings

Plan 1 – Separate utility rooms, common stairwell



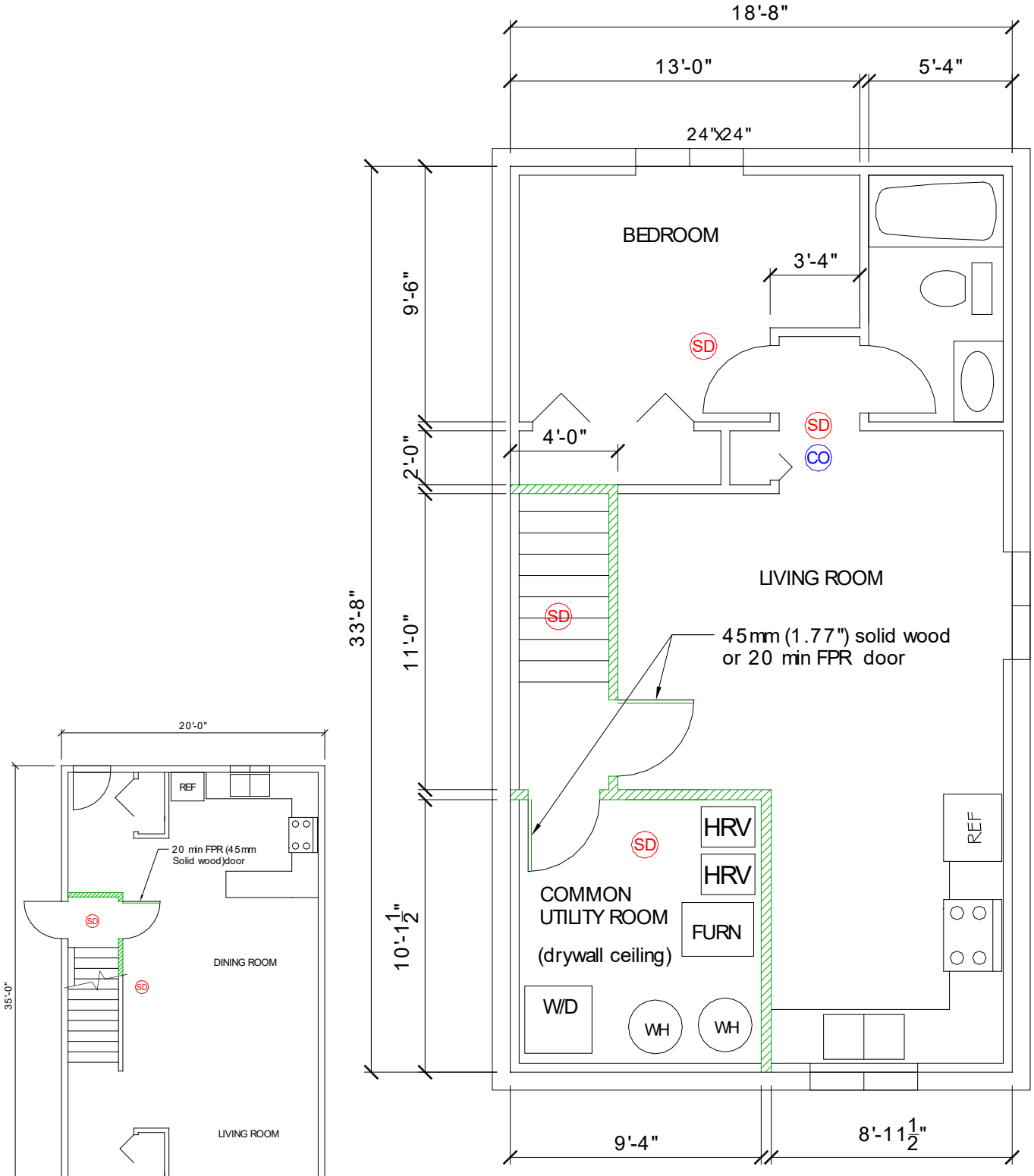
MAIN FLOOR PLAN



ADDRESS
SUITE AREA: 510 SQ FT
PD UTILITY ROOM: 76 SQ FT

SMOKE-TIGHT BARRIER
SD SMOKE ALARM
CO C0 DETECTOR

Plan 2 - Common utility room, common stairwell (shared laundry equipment makes room common)

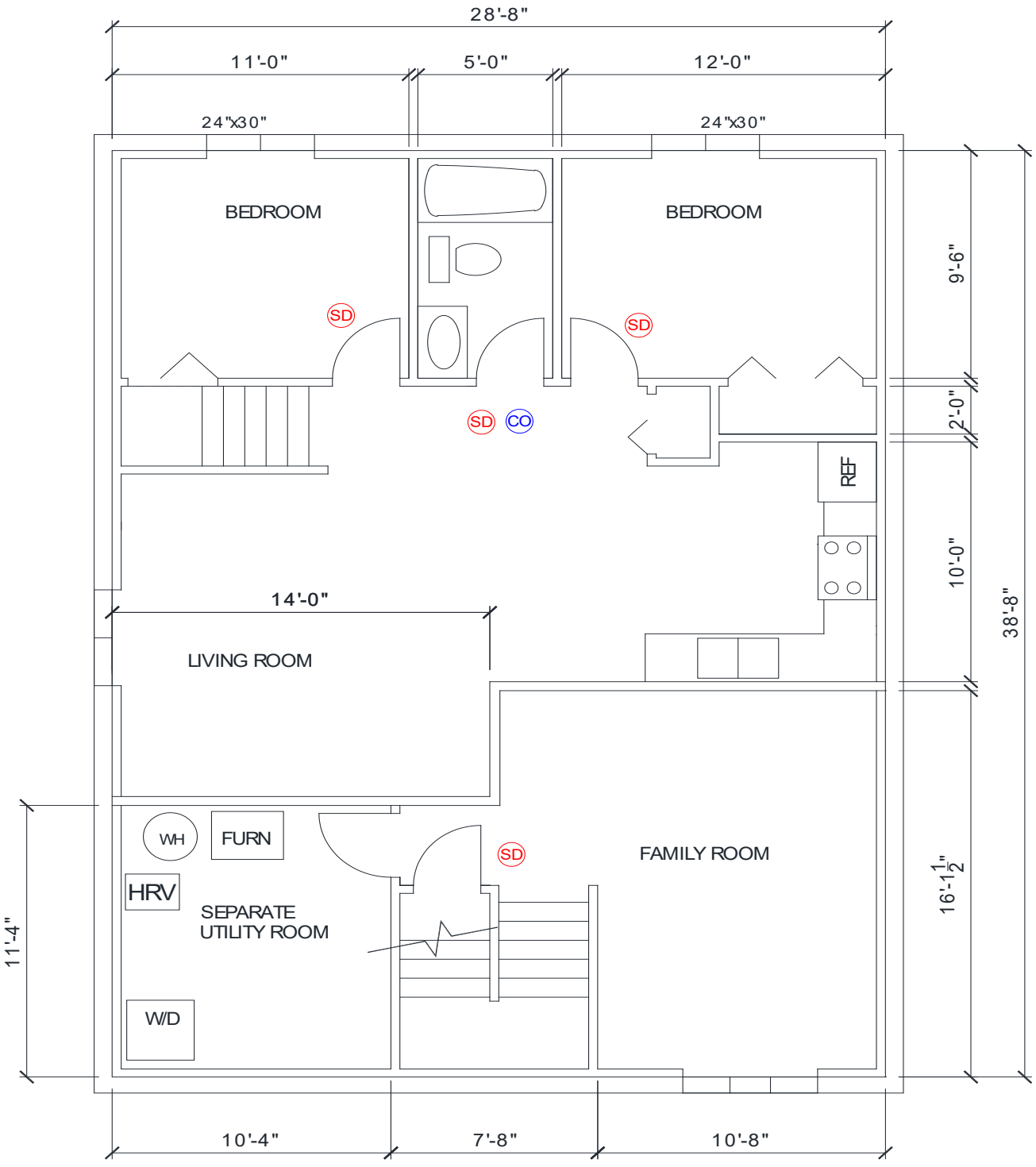


MAIN FLOOR PLAN

ADDRESS
SUITE AREA: 479 SQ FT
COMMON UTILITY ROOM: 102 SQ FT

SMOKE-TIGHT BARRIER
SD SMOKE ALARM
CO C0 DETECTOR

Plan 3 – Separate entrance, separate utility room



ADDRESS
SUITE AREA: 667 SQ FT
FAMILY ROOM AREA: 214
PD UTILITY ROOM: 117 SQ FT

SMOKE-TIGHT BARRIER
SD SMOKE ALARM
CO C0 DETECTOR

9.0 Checklist

The following checklist may be used with your permit application.

Perimeter Walls:

Interior Damp-proofing: Polyethylene ☐
Emulsified Asphalt ☐

Stud Size: 2x4 ☐ 2x6 ☐
Stud Spacing: 16" ☐ 24" ☐

Insulation Type:
Batt ☐ Rigid ☐ Spray Foam* ☐
Insulation R-value: R12 ☐ R20 ☐ Other _____

** If spray foam insulation is used a Spray Foam Insulation Request form is required to be submitted with the application.*

Vapour Barrier: 6 mil CGSB Polyethylene ☐
Other _____

Interior Partitions:

Stud Size: 2x4 ☐ 2x6 ☐
Stud Spacing: 16" ☐ 24" ☐

Interior Finish:

Gypsum Board ☐ Other _____

Vertical Smoke-tight Barrier (Walls):

Stud Size: 2x4 ☐ 2x6 ☐
Stud Spacing: 16" ☐ 24" ☐

Sound Absorption Material: Batt Insulation ☐
Other _____

Resilient channels: Yes ☐ No ☐
Spacing: 16" ☐ 24" ☐

Finish: ½" Regular Gypsum Board ☐
Other _____
Single layer ☐ Double layer ☐

Door :
45mm (1¾") solid core wood c/w closer & solid jamb ☐
20 minute FPR ☐

Joist spaces (when ceiling not required to be finished):
½" Regular Gypsum Board ☐
Spray Foam with thermal barrier ☐
Other _____

Horizontal Smoke-tight Barrier (Ceiling):

Sound Absorption Material: Batt Insulation ☐
Other _____

Thickness of Material: 5.5" (R20) ☐
Other _____

Resilient Metal Channels: Yes ☐ No ☐
Spacing: 16" ☐ 24" ☐

Finish: ½" Regular Gypsum Board ☐
Other _____
Single layer ☐ Double layer ☐

** See Section 3.0 Smoke-Tight Barrier and STC Rating for information on when utility room ceilings are required to be smoke-tight.*

What appliances are installed in the main utility room?

Electric water heater/ boiler serving:
Suite ☐ Principal Dwelling ☐

Fuel-fired (natural gas) water heater/ boiler serving:
Suite ☐ Principal Dwelling ☐

Natural gas furnace serving:
Suite ☐ Principal Dwelling ☐
Other _____

How will the suite be heated?

Separate Furnace ☐ Electric Baseboard ☐
In-floor heat ☐ Other _____

** See Section 3.0 Smoke-Tight Barriers & STC Rating for more information on thermal barriers and details of continuous smoke-tight barriers.*

City of Saskatoon

For more information contact:

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Saskatoon SK S7K 0J5

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Fax: (306) 975-7712
Website: www.saskatoon.ca
Email: building.standards@saskatoon.ca

Office Hours

Monday- Friday 8:00am – 5:00pm

This pamphlet has no legal status and cannot be used as an official interpretation of the various codes and regulations currently in effect. Users are advised to contact Building Standards for assistance, as the City of Saskatoon accepts no responsibility to persons relying solely on this information.

March 2023