Public Health Division
Environmental Public Health Services

Public Health and Housing

Capital Health
EDMONTON AREA

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RENTAL HOUSING ACCOMMODATIONS

Rental housing makes up a significant portion of the dwellings in many municipalities. The relative safety and security of a building, apartment, or room should provide comfort and peace of mind to a renter as should a home for an owner.

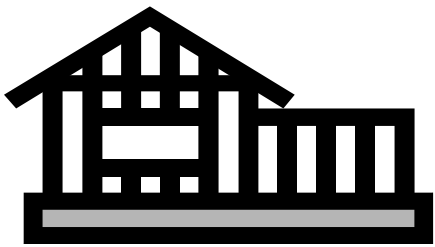
All rental housing accommodations are subject to inspection by the regional health authorities. Housing properties in Edmonton and surrounding area will be inspected by officers from **Capital Health**.

A health inspector or environmental health officer may conduct inspections of dwellings such as apartment buildings, houses, hotels, motels, rooming houses, and boarding lodges, including group homes and foster homes, at any reasonable time. These agents are designated as Executive Officers in the province of Alberta and act to protect the health and safety of the population. Inspectors work with a network of officers and professionals and respond to many complaints about rental dwellings, commercial accommodations, and public buildings.

This publication is intended as supplementary information for interpreting the requirements of the **Minimum Housing and Health Standards**.

MAINTENANCE AND NECESSITIES

Several basic necessities should be provided with most lodgings, including proper cooking and bathing facilities; plumbing, electrical, and heating equipment that is installed in accordance with the relevant codes and is properly maintained; functional smoke alarms; well-maintained exterior doors and windows, and two means of egress.



Deficiencies

The following is a list of common problems that require immediate attention:

1. water infiltration (from any source, but most commonly caused by leaking basements, poor site drainage, eavestrough disrepair, and damaged foundations)

2. foundation disrepair (holes or cracks in basement walls and floors, shifting of supports)

3. leaking roof (most commonly resulting from damaged or missing shingles and flashing, holed construction)

4. broken windows or doors, including glass panes, panels, and frames

5. missing or broken locks on exterior windows and doors

6. lack of two exits from a suite (in addition to entrance/exit doors, all bedrooms must have openable window areas sufficient for emergency egress (3.8 sq.ft)

7. deficient guardrails, handrails, or rails (missing, not secure, poorly maintained and/or of insufficient height and balluster spacing to prevent falls and entrapment)

8. badly damaged and holed walls, floors, or ceilings

9. sewage or plumbing problems, washroom deficiencies (fixtures that are leaking, improperly installed or in disrepair

10. interrupted/disconnected or unsafe utilities (property owners are required to properly maintain and/or repair heating/water/ electrical systems/fixtures so that they are safe and that interruptions in service are minimized. If the utilities service is paid for by the property owner then he/she cannot allow interruption to the service due to non-payment)

11. electrical problems (exposed conductors, panel or wiring hazards)

12. no smoke alarms or inadequate numbers of smoke alarms

13. absent or inadequate lighting in stairs or corridors

14. inadequate food preparation facilities (facilities that are inadequate or in disrepair, including refrigerators, stoves, sinks, counters and cupboards)

15. unsafe and/or unhealthy conditions resulting from a biological or chemical contamination (mould, asbestos problems, etc.)

16. insect or rodent infestations (cockroaches, silverfish, pharoah ants, bed bugs, and mice)

17. other: there may exist conditions not described above that are considered nuisances

IMPORTANT HEALTH AND SAFETY ISSUES

Health and safety problems exist in many older buildings and converted buildings, with originally constructed features now presenting hazards. Many basements and attics were not intended for use as living space. Many problems may be found in existing rental housing premises, and must be corrected with respect to health and safety, using codes as an acceptable reference.

Any replacement of building structures is to be conducted in compliance with the current Alberta Building Code, and these criteria should be considered as well for owner-occupied homes.

Check with your local development office to see if permits are required for renovation jobs. Getting municipal inspectors involved can give you peace of mind about projects, and passed inspections may help you with future insurance claims. Typically, permits are required for

- structural changes to walls, roofs, or foundations
- any additions, including a deck, that requires a foundation
- significant changes to the electrical or plumbing systems
- significant demolition of the house structure

- excavation or landscaping that requires new grading

1. **WINDOWS FOR EGRESS:** a bedroom must be provided with a window that may be opened from the inside, and have an unobstructed opening of at least 0.35m^2 (3.8 sq.ft). This is the resulting minimum open area when any sliding or hinged panes are moved. No window dimension less than 380mm (15") is allowed.

   Many basements and basement areas, and even attic spaces, may have been modified for rental as a "suite", but there may have been no modification of the bedroom windows in these areas. All bedrooms must be provided with a window as described above, and the exterior wall may require alterations to accommodate an acceptable window.
   - Rooms with small window openings should not be used as bedrooms.
   - Rooms with no windows should not be used as bedrooms.
   - Windows with storm panes held in place with exterior butterfly clips must be modified.

   For additional information on window dimensions and emergency egress see **Appendices A** and **B**, respectively.

2. **RAILS:** proper guards and handrails must be provided on all stairs and elevated structures.

   - **Handrails:** handrails must be provided on all stairs and located 800mm to 900mm (32" to 36") measured vertically from the edge to the tread nosing.
   - **Guardrails:** any raised deck, balcony, mezzanine, stair, walkway, landing, porch or floor where the difference in elevation between adjacent floor levels exceeds 600mm (24") must be provided with a guard.
     - **Guard height (1)** is required to be 900mm (36") above the finished floor level or grade where the difference in elevation is not more than 1800mm (6 feet).
     - **Guard height (2)** is required to be 1070mm (42") above the finished floor level or grade where the

difference in elevation exceeds 1800mm (6 feet).

- **Openings** through a guard must not exceed 100mm (4”).
- **Horizontal** railings are not allowed, as they facilitate climbing.

Many old rails do not conform to current safety requirements, and must be modified or replaced so as to prevent child entrapment and falls. Considering the above specifications, the following do not conform:

- Guard heights that are too low.
- Guards with spindles spaced more than 4 inches apart.
- Guards with V-shaped openings that widen to more than 4 inches.
- Guards with ornamental components and have openings more than 4 inches.
- Guards with horizontal components that facilitate climbing.

3. **HEATING AND VENTILATION:** all heating appliances and ventilation devices must be installed and/or constructed in accordance with health and safety requirements. If fuel-burning appliances are not operating properly, they can give off combustion gases such as carbon monoxide and nitrogen oxides, which can have serious effects at high concentrations.

    - **Gas-fired appliances:** all heating appliances are to be properly installed and maintained in good working condition, and be capable of safely and adequately heating all habitable rooms, bathrooms, and toilet rooms to a temperature of 22^{o}C (71°F). Cooking appliances and portable space heaters are not to be used as a primary heating source.
    - **Ventilation (1):** all rooms used for sleeping must have an openable window or a mechanical device for ventilation. Note: a ventilation window may be a dual

function of the egress window or may be in addition to the egress window.

- **Ventilation (2):** all rooms containing a flush toilet, bathtub or shower must be provided with functioning natural or mechanical ventilation.
- **Appliance ventings:** all appliance venting must be free of rust, properly attached and graded, and be in good repair

Many older buildings may not have adequate ventilation in bedrooms and bathrooms. These problems may be addressed by installing a mechanical ventilation fan in rooms with excessive moisture build-up and condensation. Windows with small three-hole openings covered with a slider or windows that are too small to provide effective ventilations should be modified or replaced.

Other Problems Encountered

1. **LOW HEADROOM CLEARANCE:** many basements and basement areas, and even attic spaces, are modified for rental as a "suite", but there may be no modification of the ceilings or doorways in these areas. Any area with ceiling height or "doorway" less than 6 feet should not be considered for living space. Ceiling heights and headroom clearance over stairs should ideally have a measurement of 6'6" (six feet and six inches). Existing suites with variable headroom clearance may be reviewed on a case-by-case basis.

2. **SMOKE ALARMS:** many smoke alarms are not routinely tested for functionality.

    - It is recommended that an actual smoke source be used to test the alarm's response.
    - Many of the new types of smoke alarms have test buttons with which to adequately test the alarm's response.

    Smoke alarms that are older than 10 years should be replaced.

For Recommended Smoke Alarm Placement, see APPENDIX C and refer to City of Edmonton Emergency Response Department, Public Safety and Education Branch resources. Recent studies have shown that having a smoke alarm placed in each sleeping room provides better alarm notification.

RESPONSIBILITY OF LANDLORDS

Owners and operators/property managers of rental premises have the responsibility to provide these basic necessities, and are to ensure that the premises are safe and well-maintained. They must ensure that the housing premises is in compliance with all sections of the Minimum Housing and Health Standards of the Housing Regulation on an ongoing basis, and upgrade important safety items like egress windows and guardrails to meet health and safety requirements.

It is the responsibility of owners, operators, and property managers of rental premises to obtain copies of the applicable Standards and Regulations.

Be advised that converted dwellings (buildings altered from their original use to function as apartments or rooming houses) are subject to the ***Safe Housing Standards*** of the City of Edmonton's **Safe Housing Committee** and the relevant STANDATA of member departments and agencies.

Be advised that landlords must also be in compliance with the **Residential Tenancies Act**, and any associated regulations and standards for maintenance and provision of quality housing.

RESPONSIBILITY OF TENANTS

Tenants of rental premises have the responsibility to report to the owner and/or property manager any problems with their suites or houses. They must participate in a thorough examination of the dwelling prior to occupancy.
Tenants can also obtain copies of the applicable Standards and

Regulations.

Tenants should confer with their landlord (owners, operators, and property managers) if problems are experienced with their rental dwellings, and must allow access for repairs or pest control treatment as per the requirements of the **Residential Tenancies Act**.

Be advised that tenants must also be in compliance with the **Residential Tenancies Act**, and any associated regulations for behaviour, care and cleanliness of any rental housing premises.

HEALTH LEGISLATION, REGULATIONS AND STANDARDS

Electronic versions of the Housing Regulation A.R. 173/99 and the Minimum Housing and Health Standards can be found on the Alberta Health & Wellness website (Legislation) http:// www.health.gov.ab.ca/about/minister/legislation.html.

Official copies of the standards are available by contacting the Legal and Legislative Services branch at (780) 427-6098.

Health Legislation and regulations are available for purchase. Please contact Alberta Queen's Printer Bookstore (10611 - 98 Avenue, Main Floor, Park Plaza, Edmonton, Alberta, T5K 2P7) or www.qp.gov.ab.ca.

The Environmental Health Division of Capital Health is empowered under the Regional Health Authority Act and the Public Health Act to promote and protect the health of the population through the enforcement of public health regulations within the Capital Health Region.

INSPECTIONS AND INFORMATION

Renters and property owners may inquire of several agencies that provide advice for environment, health, and safety concerns:

- **Health Canada**

- 495 – 2703
- www.healthcanada.ca or http://www.hc-sc.gc.ca/

♦ **Canada Mortgage and Housing Corporation**
- 423 – 8700
- http://www.cmhc-schl.gc.ca/

♦ **Alberta Government Services**
Consumer Problems
- 1 (877) 427 – 4088
- www.gov.ab.ca
- http://www3.gov.ab.ca/gs/

♦ **Landlord & Tenant Advisory Board**
(City of Edmonton)
- 496 – 5959
- www.edmonton.ca/ltab

♦ **Problem Properties**
(City of Edmonton – Derelict or Safe Housing)
- 496 – 6031
- www.edmonton.ca

♦ **Bylaw Enforcement**
(City of Edmonton – Untidy Property, Upkeep)
- 496 – 3100
- www.edmonton.ca

♦ **Planning and Development Department Development Compliance Branch**
(City of Edmonton – Developing Your Basement? Customer Information)
- 496 – 3100
- www.edmonton.ca

♦ **Capital Health LINK** Health Advice & Information
- 408 – 5465
- www.capitalhealth.ca

If an inspection occurs in any premises as a result of a routine call or complaint investigation, any contraventions will be noted and timelines will be given to owners to rectify deficiencies. Where

housing deficiencies are deemed critical, an order may be issued, or the premises may be declared Unfit for Human Habitation. It is in the best interests of the housing provider that any rental unit be in compliance with the Standards and Regulation.

Referrals will be made to local and provincial agencies that govern the following aspects of a premises when appropriate:

- Fire code
- Electrical code
- Plumbing & Gas codes
- Building code and construction
- Planning and Development permits and zoning
- Business licensing

If problems exist that may affect the health and safety of occupants of rented dwellings, request an Environmental Health Officer or a Public Health Inspector's information or inspection by calling **Capital Health** at 413-7711.

SOURCES

Canada Mortgage and Housing Corporation
Alberta Building Code 1997
Alberta Municipal Affairs
City of Edmonton Emergency Response Department, Public Safety and Education Branch
City of Edmonton Plumbing, Gas and Building Inspection

Appendix A: Openable Window Area Dimensions

Openable Area 3.8 square feet = 547 square inches		
Dimension 1 (inches)	**Dimension 2** (inches)	**Openable Area** (sq.inches)
15	36.4667	547
16	34.1875	547
17	32.1765	547
18	30.3889	547
19	28.7895	547
20	27.3500	547
21	26.0476	547
22	24.8636	547
23	23.7826	547
24	22.7917	547
25	21.8800	547
26	21.0385	547
27	20.2593	547
28	19.5357	547
29	18.8621	547
30	18.2333	547
31	17.6452	547
32	17.0938	547
33	16.5758	547
34	16.0882	547
35	15.6286	547
36	15.1944	547
37	14.7838	547
Table developed by **S. Sihota, Health Officer - Capital Health 2003**		

These dimensions must be measured with the window in its fully-opened position.

Appendix B: Emergency Egress

The Minimum Housing and Health Standards of the Housing Regulation pursuant to Section 66 of the Public Health Act states:

III. HOUSING PREMISES; (3. Safe and Secure)

(b) Emergency Egress

For buildings of 3 storeys or less and except where a bedroom door provides access directly to the exterior or the suite is sprinklered, each bedroom shall have at least one outside window which may be opened from the inside without the use of tools or special knowledge.

(i) Windows referred to above shall provide unobstructed openings with areas not less than 0.35m^2 (3.8ft^2), with no dimension less than 380 mm (15 in.).

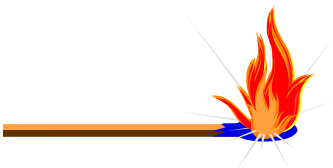
(ii) If the window referred above is provided with security bars, the security bars shall be installed so they may be opened from the inside without the use of any tools or special knowledge.

WHEN FIRES OCCUR

Although bedroom windows are not considered to be ordinary escape routes, using them in an emergency has saved many occupants.

In very short time, and in as little as three minutes, a small fire in a room can build up and

- create conditions so hot that everything will suddenly burst into flames (flashover)
- create clouds of thick, black smoke that hang from the ceiling
- cause temperatures to reach 300°C (572°F) – hot enough to melt clothes to skin and scorch lungs
- create toxic gases like carbon monoxide, hydrogen cyanide, ammonia, and other irritants that affect eyes, nose, throat and lungs, numbing the senses



Therefore, it is important to have a simple plan of exiting a building when there is little or **NO TIME**, conditions are **DARK**, the room is **HOT**, and the environment is **DEADLY**.

COMMON PROBLEMS WITH WINDOWS

Windows without an acceptable openable area may have

- Difficulties in adjusting it to a fully open position:
  - Panes sticking in the frame
  - Broken components
- Obstructions preventing window from opening:
  - Exterior fasteners (butterfly clips, nails or screws holding pane in place, etc.)
  - Window wells with too little space provided outside the window
  - Window mechanisms that get in the way and reduce the size of the opening

The unobstructed opening must be measured between the window components (sashes, jambs, sills, opening mechanisms, etc.) with the window in the fully open position. It is not simply the dimensions of the rough opening or the glass area.

Although breaking a window is an obvious way of opening a hole, nothing suggests that openings are to be provided this way, nor is it necessary to crawl over or between bits of broken glass.

MAINTENANCE CONSIDERATIONS

A high window or skylight may satisfy the dimension requirements but would defeat the intent of building code Article 9.7.1.3 because it is so high that it cannot be reached for exit purposes. It is recommended that the sill of windows intended for use as emergency exits be not higher than 1.5m above the floor. Windows in basement bedrooms should have improved access, for example, by installing built-in furniture below the window.

Special Knowledge

Windows should be easy to operate and obviously openable. Any type of window that requires several steps to operate requires “special knowledge”. A window that must be adjusted by

incorporating these steps to obtain the minimum opening is unacceptable. This would include units that “slide-and-tilt”, pop-up, unclip from two or more locations, detach-and-remove, etc. For example, a slider window that has the ability to flip open into the room (for ease of cleaning) requires several steps and is not considered to be a normally-opening window.

A window’s opening hardware is usually designed to be detached from windows, but detaching the hardware is not considered part of the normal opening operation. A release mechanism would require “special knowledge” to use, because it

- is hidden from plain view
- requires the user to be familiar with how it functions
- requires dexterity to operate

Quick-release hardware, intended to improve an occupant’s ability to release the hardware, does not appear to be commonly used. Even if quick-release hardware could eliminate the need for special knowledge, when the opening hardware is detached (or is light enough to be broken away) so that the opening is large enough to be a means of escape, the window is no longer held in an open position. The window therefore, becomes the obstruction.

Latching devices are required to be in plain sight to an occupant from the inside of the building and should not require special knowledge to operate. Latching devices are typically engaged, for security or to ensure the window is shut tightly, and released as part of the normal operating process.

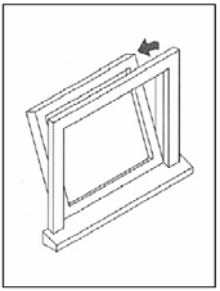
Insect screens, security bars, grilles, or similar devices should be easily removed or released from the inside. A security bar should be easily opened from the inside without the use of any tools or special knowledge.

Window Styles and Types

Windows that can satisfy the requirements of the Minimum Housing and Health Standards and the Alberta Building Code are usually the “full vent inswing awning”, “casement”, and “slider”.

Hoppers and awning types are the least desirable types of windows for bedrooms.

Hopper

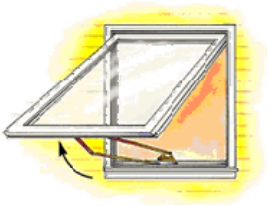


A hopper window swings open on a horizontal axis at or near the bottom of the frame. It has a latch to hold it closed and does not typically come with an opening operator, so that it can swing open freely or be held partially open with a catch.

With a typical hopper window, an occupant would have to crawl over the pane of glass to escape.

Hopper windows are not commonly used for bedrooms.

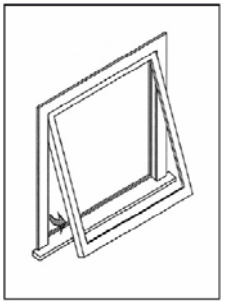
Awning



An awning window swings open on a horizontal axis at or near the top of the frame (at an intermediate dividing bar / mullion). The opening hardware for an awning window typically extends between the middle of the sill and the middle of the window sash, and obstructs an occupant's escape.

In general, awning windows do not meet the intent for a means of escape.

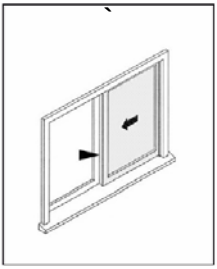
Full Vent Inswing Awning

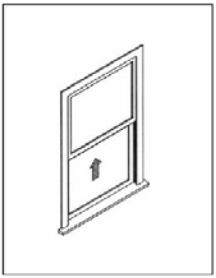


Full vent inswing awning windows swing open on their horizontal axis at or near the top of the frame. This type of window swings in towards the user and does not restrict the clearance when going into a window well.

A catch must be available to hold the window in the open position.

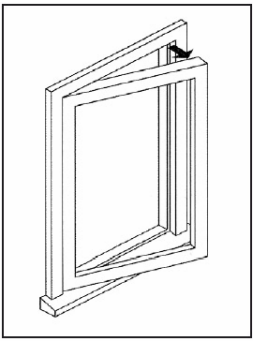
Slider





Horizontal and vertical slider windows are commonly used in residential construction. The unobstructed opening should be measured when the window is in the fully open position.

Casement



A casement window opens on its vertical axis and usually has opening hardware installed at the bottom of the window. Since this hardware obstructs an occupant's escape, the opening is to be measured to the hardware. In addition to the opening hardware, casement windows usually have latches opposite the hinge. Children should be able to reach these latches if they are expected to escape on their own.

Hinge hardware may allow the window to pivot around an axis at or near the jamb. The opening must be satisfactory with the opening hardware in its most restrictive position and the window fully open.

Windows that can be ACCEPTABLE	Windows that are generally UNACCEPTABLE
	Hopper
	Awning (out-swing)
Full Vent In-swing **Awning**	
Casement	
Horizontal or Vertical **Slider**	

OTHER CONSIDERATIONS

Ice build-up that prevents or restricts the opening of a window is a concern with any type of window. Improved window construction and improved heating and ventilation in houses will lessen the concern over ice build-up. For additional information on window construction, please refer to Housing and Health HANDOUT Windows and Exterior Doors: Windproof, waterproof, weatherproof condition.

Children who are expected to escape through a bedroom window on their own should be taught how to open the window and remove or release any screens or bars that may be installed. Home fire drills should include practice in using the window as a means of escape. For those people who are too young or physically disabled to escape on their own through a window, consider additional smoke alarms in the bedroom to assist with early detection or relocate their bedroom to the first storey to assist with their rescue.

Sources:

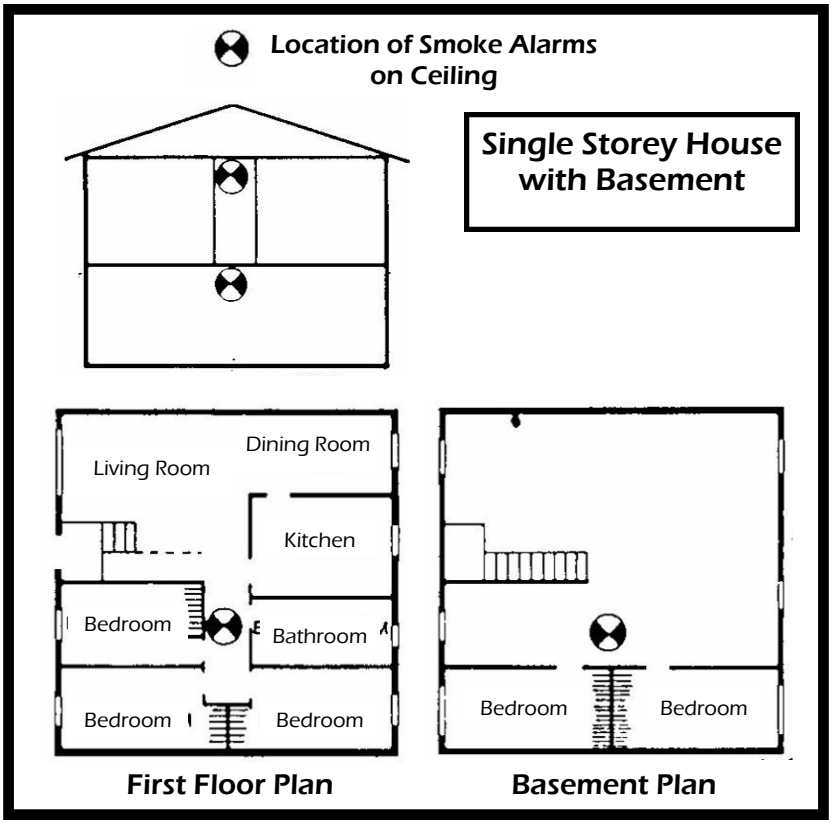
- Canada Mortgage and Housing Corporation
- Alberta Building Code 1997
- Fire Won't Wait, Plan Your Escape! – Alberta Municipal Affairs, Fire Commissioner's Office
- Building Standards Advisory – Saskatchewan Municipal Affairs and Housing
- Installing a Basement Egress Window – City of Hopkins

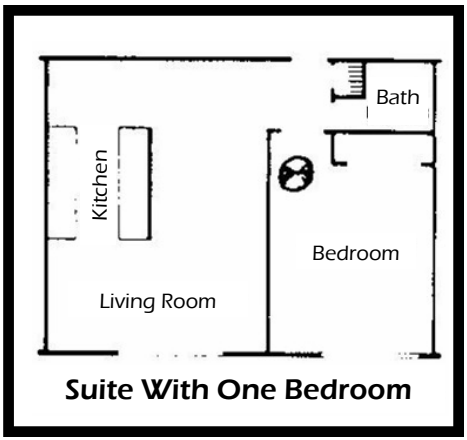
Reviewed by, and with Thanks to

- Hal Wright, Senior Safety Codes Officer – Building Discipline, The City of Edmonton Housing Services
- Ian Sterling, Fire Marshall – The City of Edmonton Emergency Response Department

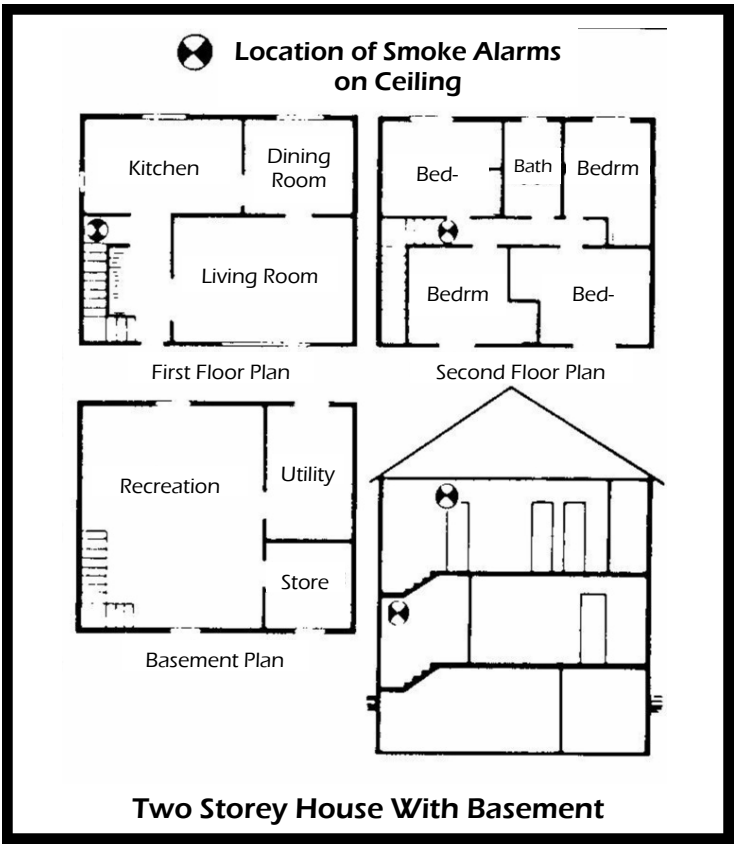
Appendix C: Recommended Smoke Alarm Location

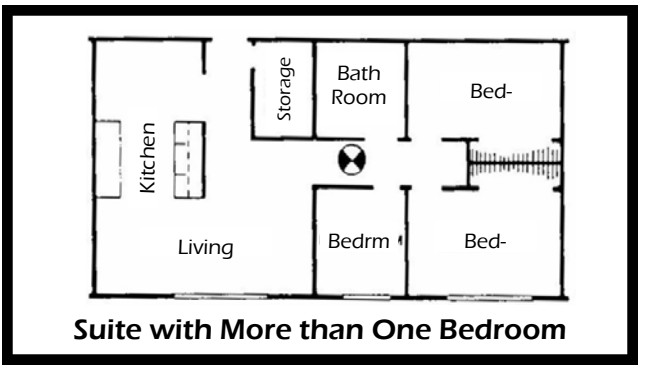
Recommended Smoke Alarm Location





Recommended Smoke Alarm Location





Source: Edmonton Emergency Response Department, Public Safety and Education Branch

Public Health Division
Environmental Public Health Services

For more information, please contact your nearest Environmental Public Health Services office.

Edmonton Main Office	*(780) 413-7928*
Capital Health Centre - South Tower	*(780) 735-1400*
Strathcona	*(780) 467-5571*
Spruce Grove	*(780) 962-7509*
Leduc	*(780) 980-4644*
St. Albert	*(780) 459-6671*

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