

PLANNING & DEVELOPMENT SERVICES ADVISORY

CRAWLSPACE/ATTIC/ROOF SPACE SAFETY REQUIREMENTS



Question

What building safety requirements are required in crawlspaces and attics?

Answer

That depends on how the crawlspace or attic/roof space is specifically designed in a project and how it is intended to be used.

Background

Crawlspace is not defined in the NBC, but it is included in the definition of a *horizontal service* space.

A *horizontal service space* is defined as "a space such as an attic, duct, ceiling, roof or crawl space oriented essentially in a horizontal plane, concealed and generally inaccessible, through which *building* service facilities such as pipes, ducts and wiring may pass".

Attic or roof space is defined as "the space between the roof and the ceiling of the top *storey* or between a dwarf wall and a sloping roof".

A **service room** is defined as "a room provided in a building to contain equipment associated with *building* services".

Service space is defined as "space provided in a *building* to facilitate or conceal the installation of *building* service facilities such as chutes, ducts, pipes, shafts or wires".

*If the crawl space or attic <u>is intended for a person to enter and undertake maintenance</u> or other operations pertaining to building services from within the space, the NBC requires that additional safety measures be in place.

Requirements of all crawlspaces

Some (not all) of the occupant safety requirements from Part 3 include:

- Depending on the use and height of a crawlspace, it may need to be treated as a basement for fire blocking, floor assembly rating and fire containment requirements (3.2.2.9)
- Any requirement related to a *horizontal service space* such as access (3.6.4.5) and fire blocks (3.1.11.5)
- Any crawlspace requirements including access (3.6.4.6) and fire blocks (3.1.11.6)



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Any applicable requirements in Section 3.6 for service facilities (3.6.1.1)

Requirements of all attic or roof spaces

Some (not all) of the occupant safety requirements from Part 3 include:

- Any requirement related to a *horizontal service space* such as access (3.6.4.5) and fire blocks (3.1.11.5)
- Any requirement related to an *attic or roof space* such as access (3.6.4.4) and fire blocks (3.1.11.1)
- Any requirements in Section 3.6 for service facilities (3.6.1.1)

Requirements of crawlspaces and attics/roof spaces intended for a person to enter and undertake maintenance and other operations from within the space

If a crawl space and/or attic/roof space is designed for an person to enter and undertake maintenance, then it is required to either be designed as a *storey* with all applicable requirements, or the design needs to conform to all the requirements in Sentence 3.2.1.1(8). These additional requirements include sprinklers, fire alarm notifications, exit signage, emergency lighting, egress and exit travel distance limitations, and prohibition from space opening on an *exit*. The intent of the additional requirements is to ensure that such spaces do not impose an undue fire safety risk to persons.

Frequently Asked Questions

1. What is the reason for this advisory?

Concern with current building practices and safety of personnel entering *service spaces* that do not appropriately meet the requirements of Sentence 3.2.1.1(8). An inquiry was sent to the National Research Council (NRC) and their response supports what is communicated in this advisory. NRC's technical team is the publisher of the National Building Code.

2. What makes my crawlspace or attic/roof space considered to be serviceable?

Any equipment or services such as plumbing clean outs, compressors, sump pumps, fans etc. that are not serviceable from floor level above or below by a hatch.

3. What conditions will be in place if there are only non-serviceable building services in the crawl space and/or attic/roof space?

A condition will be placed on the permit that the space has not been designed as a *service space* or a *service room*. A permanent sign at the entrance to the space will be required to be posted, and this information will need to be kept in the building fire safety plan. Any service is required to be conducted from the *storey* above or below.

4. Can a fuel fired appliance be in a crawl space or attic/roof space?



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Some equipment is required to be located in a *service room*, such as fire fueled appliances (3.6.2.1). A *service room* is not permitted to be in a crawls space unless it meets the same design requirements as a *storey* along with any additional *service room* requirements (3.6.2).

- 5. Can an attic/roof space or crawlspace be used for storage?
 If any space is used for storage, it is an occupancy, based on the definition. Any storage space would then be required to be designed as a storey.
- 6. How does this apply to existing buildings?

 Building Standards & Inspections understands that many existing crawl spaces contain serviceable building equipment which were not designed as either a service room or enterable service space when initially constructed. Our process to evaluate these buildings will be in alignment with the provincial legislation when evaluating the new changes to existing crawlspaces, understanding the cost implications and risk associated of the changes.

For more information on Building Permits, Building Safety or Zoning Information, please visit Regina.ca or contact <u>Service Regina</u>.