

Interior Tenant Improvements and Change of Use/Occupancy

Guideline

Guideline ESP - 21

Purpose

This guideline has been developed to help improve consistency with the education and enforcement for new construction or renovations involving interior Tenant Improvements for Part 3 or Part 9 buildings.



Code Reference

Current National Building Code – Alberta Edition Division B

The Current National Energy Code of Canada for Buildings

STANDATA 19-BCI-003 "Barrier – Free Access to Stages"

APEGA Professional Practice Standard – Authenticating Professional Work Products & Authentication Requirements for As-Built, Record, and As-Acquired Drawings

AAA Practice Bulletin – Professional Involvement on Building Projects

Rocky View County Guideline – Spray Paint Operations

Rocky View County Guideline – Professional Involvement

Rocky View County Guideline – Racking Systems



Summary

The requirements of this Guideline are applicable to interior Tenant Improvements (TI's) and are designed to provide clarity towards the options available for ensuring compliance to the current National Building Code — Alberta Edition. A Building Permit is required for all projects such as Renovations, Mezzanine Additions, Change of Use/Occupancy, New Tenancy, HVAC equipment additions and Life/Safety System Alterations/Additions that serve the tenant space.



Interpretation

This Guideline provides clarity and direction from Rocky View County on their interpretation of Code compliance for Part 3 or Part 9 Tenant Improvements. These projects may require Professional involvement, and it is essential to discuss your project with any Professionals of record or a local Safety Codes Officer for compliance with applicable Codes. Based on the information provided within this

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Guideline, Tenant Improvements applications shall include the following information and/or documentation.

1) **Definitions** – as per the current NBCAB are:

- a) <u>Barrier-free</u> means that a Building and its facilities can be approached, entered, and used by persons with physical, cognitive or sensory disabilities.
- b) <u>Building area</u> means the greatest horizontal area of a Building above grade within the outside surface of exterior walls or within the outside surface of exterior walls and the centre line of firewalls.
- c) <u>Exit</u> means that part of a means of egress, including doorways, that leads from the floor area it serves to a separate Building, an open public thoroughfare, or an exterior open space protected from fire exposure from the building and having access to an open public thoroughfare.
- d) <u>Fire Separation</u> means a construction assembly that acts as a barrier against the spread of fire.
- e) <u>Mezzanine</u> Mezzanine means an intermediate floor assembly between the floor and ceiling of any room or storey and includes an interior balcony. Mezzanine Additions can have exceptions to special protection and may be classified as a second floor.
- f) <u>Repair garage</u> means a Building or part thereof where facilities are provided for the repair or servicing of motor vehicles.
- g) <u>Storage garage</u> means a Building or part thereof intended for the storage or parking of motor vehicles and containing no provision for the repair or servicing of such vehicles.
- h) <u>Storey</u> Storey means that portion of a Building that is situated between the top of any floor and the top of the floor next above it, and if there is no floor above it, that portion between the top of such floor and the ceiling above it.

National Energy Code of Canada for Buildings Application (NECB)

<u>Definitions</u> – as per the current NBCAB are:

- a) Addition means any conditioned space that is added to an existing building and that increases the building's floor surface area by more than 10 m².
- b) <u>Floor surface area</u> means the area of a floor surface, including heated garages, measured from the interior surface of the perimeter walls at or near floor level, including the area occupied by columns, interior walls and openings in the floor.

2) National Energy Code of Canada for Buildings Application (NECB)

(NECB) is applicable to new construction and additions to existing Base Buildings under a Tenant Improvement when a 2nd floor or mezzanine is added. Base Buildings designed to the NECB will dictate the compliance path for any future Tenant Improvements (e.g.- prescriptive or performance modeling compliance). Tenant Improvements will need to comply with, but not limited to the applicable provisions listed below:

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- a) <u>NECB Part 4 (Lighting)</u> Lighting power allowances, lighting controls, and daylighting controls.
- b) NECB Part 5 (Heating, Ventilating & Air Conditioning Systems) Equipment sizing (RTU, MUA and packaged units), air intake and outlet dampers, piping/insulation, temperature controls, energy/heat recovery units, shut-off/setback controls, vestibule heaters and equipment efficiencies.
- c) <u>NECB Part 6 (Service Water Systems)</u> Equipment efficiency and insulation, piping insulation, equipment controls, and maximum water flow rates.
- d) <u>NECB Part 7 (Electrical Power Systems and Motors)</u> Means of monitoring distribution systems can be required with provision for feeders, transformers and electrical motors.
- e) <u>NECB Part 8 (Building Energy Performance Compliance Path)</u> A computer simulated model of a proposed and reference building for compliance.

3) Storage/Repair Garages

Any tenant space with an overhead vehicular door intended for storage of 5 or more motor vehicles, the following requirements will apply, subject to the design, storage and operations:

- a) Ventilation requirements:
 - i. Natural Ventilation details, as per Part 6 of the Building Code,
 - ii. Mechanical Ventilation details, including make-up air as per Part 6 of the Building Code with CO/NO2 detectors, subject to the combustion fuel of the stored vehicles, or;
 - iii. During operating hours, a continuous supply of outdoor air at a rate of not less than 3.9 L/S for each square metre of *floor area*.
- b) Fire separations with a minimum 1.5 h fire-resistance rating from other occupancies for storage garages and 2 hours for repair garages.

4) Protected Exits

Exits from floor areas are designed to allow the occupants to safely exit a space or floor area to the outdoors or a separate Building. The following shall form part of the design for exits that serve floors above the first storey:

- a) An exit above the first storey can lead out through a lobby instead of a protected exit, subject to conditions, see Articles 3.4.4.2. and 9.9.8.5. in the Building Code (as applicable). Refer to your local Safety Codes Officer or Professional, if Professional involvement is required.
- b) Exits from stories above the first storey shall be constructed with a fire separation to protect the integrity of the exit facility. With the exception of standpipes, sprinklers and wires/cables in totally enclosed raceways, these exit facilities shall not have any other penetrations.
- c) Concealed space below Exit stairs Unless no access or use is intended, the underside of the exit stairs shall be protected with a minimum 45-minute fire separation or as per the Part 3 Base Building classification. Where sprinkler heads are required, access for service and maintenance shall be provided.

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5) Demising walls separating tenants/occupancies

A Building Permit is required for demising walls and will require:

- a) Structural drawings to address the specified framing, anchorage and bracing; including complete A & B Schedules at Building Permit application stage.
- b) Architectural drawings if the project requires involvement of an Architect; including complete A & B Schedules at Building Permit application stage.
- c) Fire separations with a fire-resistance rating will require a ULC listed assembly design number. Such listings shall be submitted for review.

6) Storage Racking Systems

A Building Permit is required for any Racking System that is more than 3.6m (12') in height measured from the ground level to top of storage. If the Racking System will be submitted at a later date, a separate Building Permit will be required prior to any construction taking place. (Refer to the Racking System Guideline online for further details).

7) Fire Stopping

All penetrations through rated fire separations such as walls, floors and ceilings require a ULC listed design:

a) "Fire Stop Test Designs – Electrical" & "Fire Stop Test Designs – Mechanical" forms must be submitted to our office prior to requesting a framing inspection on the project. (refer to our website for access to these forms).

8) Floor/Roof loading changes

All floors and roofs must be designed to the minimum specified live loads as per Table 4.1.5.3. of the Building Code or for project specific dead load applications. Subject to the scope of work but not limited to, the following can apply:

- a) A stamped Professional Engineer design approving the dead load install of new HVAC units on an existing roof serving the tenant space.
- b) A floor design stamped by a Professional Engineer is required for new floor or roof design load changes, indicating the new design loading.
- c) A structural review letter by a Professional Engineer confirming the existing concrete slab is designed to handle the imposed loads with any new floor or mezzanine addition.
- d) When there is a change of occupancy, a Professional Engineer letter or design shall be submitted to verify the existing floor/roof design can support the intended live or dead loads; or specify any alterations to the structure in order to accommodate the higher floor/roof loads.

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9) Barrier Free

Barrier-free design is required on most Tenant improvements, except F1 occupancies. A qualified designer must indicate all applicable information as per Section 3.8 "Barrier-Free Design" of the Building Code. The below listed are some of the common Barrier Free requirements involving a Tenant Improvement:

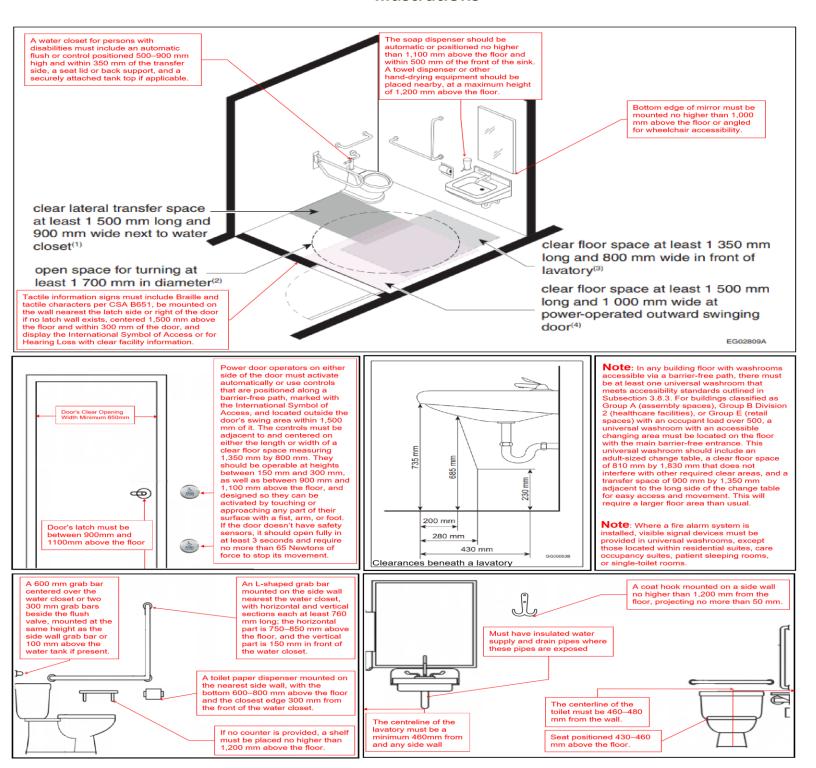
- a) At least one universal washroom, meeting Subsection 3.8.3. standards, must be provided at each location with washrooms in a storey requiring a barrier-free path of travel per Article 3.8.2.3.
- b) All doors and stalls must have a minimum clear opening of 850 mm. A 915 mm door opening into the room may not conform.
- c) The 1700 mm diameter circle within the stall or room must be unobstructed with the door, toilet and lavatory not protruding within the circle.
- d) A 600 mm horizontal grab bar is now required 100 mm above the toilet tank.
- e) If a fire alarm is installed, a visual signal must be installed within the washroom.
- f) For group A, B, or E occupancies with an occupant load greater than 500, an accessible adult-sized change space must include a clear floor space of 810 mm wide by 1830 mm long that does not overlap with other required clear floor spaces, and a transfer space of 900 mm by 1350 mm adjacent to the long side of the clear floor space of the adult-sized change table.
- g) f) If your tenant improvement involves an occupancy like a physician clinic or an office providing professional healthcare services registered with the College of Physicians and Surgeons of Alberta, different barrier-free requirements may apply. Refer to Section 3.8.5 for more information.
 - All doorways along a barrier-free path to these facilities must have a clear width of at least 915 mm when open, with power door operators as per Subsection 3.8.3., allowing activation in the intended travel direction. Main waiting areas must provide a 1,700 mm turning diameter for wheelchair users, and an assistive listening system, per Sentence 3.8.2.9.(2), is required at the main reception and in at least one examination or treatment room. Additionally, one in every five examination and treatment rooms must feature a doorway with a 915 mm clear width, a 1,700 mm turning diameter, and a lavatory that meets Article 3.8.3.16., if provided.

For complete Barrier Free requirements, refer to Section 3.8. of the Building Code. See example of the illustration below for a universal barrier free washroom.



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Illustrations



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Additional Information

- For any Tenant space not listed above, consult with your local Safety Codes Officer for compliance with applicable Codes.
- For the more information on Building codes Accessibility and Part 10 renovations visit the following link: Building codes Accessibility and Part 10 renovations | Alberta.ca
- For access to the Alberta Accessibility Design Guide 2024 visit the following link:
 <u>Accessibility Design Guide 2024</u>
- For access to your free online Codes visit the following link: https://nrc.canada.ca/en/certifications-evaluations-standards/codes-canada/codes-canada-publications
- For access to Alberta specific Standata's for your Tenant Improvement project visit the following link: <u>Building STANDATA | Alberta.ca</u>



Reference

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