Commercial, Multi-Family Alterations: D & E Occupancy

PL 1309 (2023-12)

Guide to a Complete Application

This guide is provided to improve the quality of applications and promote completeness to avoid delays in permit processing. This does not limit your design options or provide advice on Code compliance. Further documents or details may be required depending on the application.

This guide only applies to commercial and multi-family alterations and not additions*. It specifically applies to alterations for D and E occupancies. According to the National Building Code – Alberta Edition, a D occupancy is for business and personal services and an E occupancy is for mercantile businesses.

NBC-AE refers to the National Building Code – 2019 Alberta Edition, NECB refers to the National Energy Code of Canada for Buildings, and ASHRAE means American Society of Heating and Air-Conditioning Engineers. Requirements can change when the next Code is in force.

GENERAL REQUIREMENTS

Owner, Professionals, Designers and Contractors must comply with all requirements of the NBC-AE, NECB and ASHRAE, the Alberta *Safety Codes Act* and associated regulations.		SUPPLIED YES	SUPPLIED NO
ASBESTOS	**Notes**		
• A completed Asbestos Abatement form shall be submitted where applicable.	– Asbestos abatement forms are often required when working on buildings constructed pre-1990.	☐	☐
PROFESSIONAL INVOLVEMENT	**Notes**		
NBC-AE Division C 2.4.2. Professional Involvement	– NBC-AE Division C 2.4.2. has criteria to help you determine if a professional Architect or Engineer needs to design your project.	☐	☐
PROFESSIONAL SCHEDULES	**Notes**		
NBC-AE Division C 2.4.3. Schedules of Professional Involvement • When required by NBC-AE Division C 2.4.2. Schedules of Professional Involvement shall be provided for all applicable professions involved in the project.	– Schedule templates are in Appendix C of the NBC-AE. – Submit A and B schedules with all relevant signatures, including the owner. – Submit C schedules before occupancy/use.	☐	☐
SCOPE OF WORK STATEMENT	**Notes**		
NBC-AE Division C 2.2.10.4 Required Information • A clear statement outlining the work that is included in the proposal is to be provided on the drawings.	– Provide a scope of work defining what work is under the permit and what is not.	☐	☐
LOCATION	**Notes**		
NBC-AE Division C 2.2.2.2 Site Plan • A Site Plan showing subject building in relation to the surrounding buildings. • Key Plan showing relationship of tenant space to the remainder of the building.	– Provide a site plan showing the location of the building and neighbouring buildings. – If the work is part of a larger building, provide a key plan. It must show the unit/space within the larger building. – A brief description of the nature and name (if known) of the businesses in adjacent units, and building code use classification of all adjacent units, shall be provided.	☐	☐

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CODE ANALYSIS	Notes		
NBC-AE Division C 2.2.2.1 General Information Required **NBC-AE Division C 2.2.10.4 Required Information** • Provide a building code analysis, including sufficient information about the current and proposed nature of the building or space being altered to demonstrate that the work, when complete, will meet the requirements of this code.	Identify and note the following: – Existing and proposed building classifications. – Building height and number of storeys (identify any existing mezzanines). – If the building construction is combustible or non-combustible. – Areas (size) of the building, suite or area of work (as applicable). – Firewalls sub-dividing the building. – Number of exits required and provided with related travel distances.	☐	☐
DRAWINGS	**Notes**		
NBC-AE Division C 2.2.2.1 Architectural Drawings • Construction assemblies/details for all new and altered assemblies. • Floor Plan of all affected floors (including mezzanines if present). • Elevations and Sections (as applicable).	– Floor plans should be not less than 1:100 scale and include: ○ wall locations ○ wall types ○ room names/uses ○ door/window locations and ratings (if applicable) ○ interconnected floor spaces ○ means of egress and ratings ○ stairs ○ exit locations and ratings ○ washrooms and barrier free provisions, like corridor and door widths ○ washroom turning circles ○ accessory provisions	☐	☐
NBC-AE Division C 2.2.4.3 Structural Drawings • Structural Plans/Details for any structural alterations. • Structural review and letter for new mechanical equipment not supported on grade.	– All documents must reference the correct address and edition of the NBC-AE. – Design loads shall comply with Part 4 **OR** must provide a structural engineer's letter confirming design loads.	☐	☐
NBC-AE Division C 2.2.6.2 Mechanical Drawings • Drawings and specifications for all new mechanical equipment being installed.	– Provide locations and specifications for all new or altered mechanical equipment.	☐	☐
NBC-AE Division C 2.2.7.2 Electrical Drawings • Floor Plans indicating all new electrical equipment.	– For new or altered electrical equipment, show the location, type and specifications. – Show exit signage, emergency lighting and fire alarm system components.	☐	☐
NBC-AE Division C 2.2.3.2 Plans of Fire Suppression Systems • Provide sprinkler drawings where an existing system is modified.	– Provide sprinkler drawings when: ○ installing a new sprinkler system ○ adding to or making big changes to an existing system	☐	☐
ENERGY CODE	**Notes**		
NECB Division C 2.2.2.1 General Information Required **NECB Division C 2.2.2.8 Documentation Requirements for Building Performance Compliance** • Provide an NECB project summary form (if applicable).	– The Energy Code often applies to First Tenancy of a unit. – The Energy Codes applies to buildings constructed after 2016 where there are changes to the envelope or building systems. – If using Prescriptive/Trade-off, provide all calculations and equipment efficiencies. – If using Performance Compliance, provide an energy modelling report stamped by the professional of record.	☐	☐

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TECHNICAL REQUIREMENTS

BUILDING CLASSIFICATION	Notes		
NBC-AE Division A 1.1.1.2. Application to Existing Buildings **NBC-AE Division A 1.3.3. Application of Division B** **NBC-AE Division B 3.1.2. Classification of Buildings by Major Occupancy Type** **NBC-AE Division B 3.1.3. Multiple Occupancy Requirements** **NBC-AE Division B 3.2.1.1. Exceptions in Determining Building Height**	Must determine and state correct building classification to establish the necessary features of the building. These include but are not limited to: – fire resistance ratings of floors – structural elements – exits – travel distance – special conditions – the requirements for sprinklers, Fire Alarm Systems, smoke control and firefighter access Building classification is based on: – occupancy type (identify multiple occupancies) – building footprint area – number of storeys above grade (show mezzanines and floors/storeys) – number of streets facing elevations – construction type (combustible or non-combustible) Consider the following: – If increasing the occupant load, is exiting still adequate? – Is the building or space existing non-conforming? – Do you need new firewalls? – Interconnected floor spaces – Are you adding to an existing one or creating one? – Are you modifying the sprinkler or fire alarm systems? – Do your finishes have the appropriate flame spread rating and/or smoke development classification?	☐	☐
FIRE DETECTION AND EARLY WARNING	**Notes**		
NBC-AE Division B 3.2.4.1. Determination of Requirements for a Fire Alarm System **NBC-AE Division B 3.2.4.2. Continuity of Fire Alarm System**	– Ensure the building has an existing fire alarm and/or sprinkler system, if required. – Confirm if the fire alarm or sprinkler system are being modified. – Confirm if your proposal triggers a need for one or both.	☐	☐
MEZZANINES AND FLOOR OPENINGS*	**Notes**		
NBC-AE Division B 3.2.8.1 Application **NBC-AE Division B 3.2.8.2. Exceptions to Special Protection** **NBC-AE Division B 3.2.8.4. Vestibules** **NBC-AE Division B 3.2.8.5 Protected Floor Space** **NBC-AE Division B 3.4.2.2 Means of Egress from Mezzanines**	– Show existing mezzanines. – Confirm if there is an interconnected floor space. – Confirm if the means of egress and exiting widths are affected by the proposed alterations.	☐	☐

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MEANS OF EGRESS	Notes		
NBC-AE Division B 3.3.1.1. Separation of Suites **NBC-AE Division B 3.3.1.3. Means of Egress** **NBC-AE Division B 3.3.1.4. Public Corridor Separations** **NBC-AE Division B 3.3.1.5. Egress Doorways** **NBC-AE Division B 3.3.1.7. Protection on Floor Areas with a Barrier Free Path of Travel**	– Provide suitable fire ratings between suites or between suites and public corridors. – Provide required egress routes. – Provide protected floor areas (if applicable). – Separate egress routes or exits appropriately. – Confirm the travel distance is within limits. – Confirm doors and corridors are wide enough. – Confirm new stairs and/or ramps are wide enough, have suitable rise/run and meet guard and handrail requirements.	☐	☐
EXITS	**Notes**		
NBC-AE Division B 3.4.2.1. Minimum Number of Exits **NBC-AE Division B 3.4.2.2. Means of Egress from Mezzanines** **NBC-AE Division B 3.4.2.3. Distance Between Exits** **NBC-AE Division B 3.4.2.5. Location of Exits** **NBC-AE Division B 3.4.3.2. Exit Width** **NBC-AE Division B 3.4.4.2. Exits through Lobbies** **NBC-AE Division B 3.4.4.4. Integrity of Exits**	– Provide the required number of exits. – Appropriately separate exits. – Fire ratings must be correct for exits. – The exit capacity must be correct for the occupant load. – Confirm the integrity of exits (service penetrations, rooms opening into exits) are maintained. – Provide appropriate exit signage and wayfinding where required.	☐	☐
WASHROOMS	**Notes**		
NBC-AE Division B 3.7.2.2. Water Closets **NBC-AE Division B 3.7.2.3. Lavatories**	– Provide enough washrooms for the new occupant capacity	☐	☐
VERTICAL TRANSPORTATION	**Notes**		
NBC-AE Division B 3.5	– Evaluate any new elevators and elevator shafts. – Existing elevators and elevator shafts are accepted unless they are unsafe.	☐	☐
SERVICE FACILITIES	**Notes**		
NBC-AE Division B 3.6	– New service rooms, vertical or horizontal service spaces will be reviewed.	☐	☐
ACCESSIBILITY	**Notes**		
NBC-AE Division B 3.8.2.1 Application **NBC-AE Division B 3.8.2.2 Entrances** **NBC-AE Division B 3.8.2.5 Access to Parking Areas, etc.** **NBC-AE Division B 3.8.3.2 Barrier Free Path of Travel** **NBC-AE Division B 3.8.3.5 Ramps** **NBC-AE Division B 3.8.3.11 Water Closet Stalls** **NBC-AE Division B 3.8.3.12 Universal Washrooms**	– Must maintain or provide barrier free access to and throughout the building or floor. – Provide the required barrier free parking. – Provide barrier free washrooms. – Ensure barrier free washrooms are correctly sized and equipped.	☐	☐
MECHANICAL	**Notes**		
NBC-AE Division B 6.1.1 Application **NBC-AE Division B 6.2.1.1 Good Engineering Practice** **NBC-AE Division B 6.3.1.1 Required Ventilation** **NBC-AE Division B 6.4.1.1 Heating Systems** **NBC-AE Division B 6.9.1.1 Fire Safety Requirements**	– Review the existing and proposed ventilation systems in accordance with the proposed use of the space per ASHRAE 62. – Show all intake and exhaust outlets on the plans/elevations. – Show all new or altered ducts and the location of fire/smoke dampers when passing through rated assemblies. – Separate return air plenums from all exits and public corridors. – Provide all required carbon monoxide detectors. – Confirm new equipment meets the requirements of the NECB 2017 where applicable.	☐	☐

ADDITIONAL INFORMATION	
The following administrative requirements must be met before any building permit can be issued:	
NBC-AE Division C 2.2.10.2 Permit Fees	Permit fees must be paid in full.
Development Permit	A development permit has been released.
Use Approval	The Customer Advisory Services team must be satisfied that the use has not changed or that the new use has been approved by a released development permit. This team will review your application and communicate with you if there are any concerns.
Copies of all currently in force Codes and Standards are published on-line in PDF file format by the Government of Alberta at the following location: https://www.alberta.ca/building-codes-and-standards	

* The addition of a mezzanine or new floor within an existing building is considered by The City of Calgary to represent an addition and not an alteration. This guide does not apply to new buildings and additions. Requirements for applications that include new buildings and additions can be found here.