

**COMMERCIAL BUILDING PERMIT APPLICATION CHECK LIST**

**New Buildings, Additions (Commercial, Institutional, and Industrial)**

Drawings or Documentation Required - Copy of all drawings are required. (no faxes or photocopies). Scale not less than 3/16" = 1'-0" (1:50) unless otherwise noted.		CHECKED	
Drawing Section	Details	Submitted	Accepted
Building Grades Plan	<ul style="list-style-type: none"> <li>▪ Site dimensions and North arrow</li> <li>▪ Must include grade levels to an established pattern, locations and setbacks from other buildings on the property lines, access routes for fire department, storm water control, locations of fire hydrants and utilities, curbs/sidewalks and elevations of such, and parking stalls required</li> <li>▪ Required for all new buildings and may be required for additions to existing buildings</li> </ul>		
Architectural Site Plan	<ul style="list-style-type: none"> <li>▪ Site dimensions and North arrow</li> <li>▪ Location and dimensions of all buildings on the site, including dimensions to the nearest property lines. Limiting distance from each building face unless included in a Code Review Page</li> <li>▪ Location of all site services</li> <li>▪ Parking &amp; Barrier Free Parking Stalls</li> <li>▪ Street names and location, as well as, location and width of any lanes</li> <li>▪ Legal description (Lot number, Block number, Plan number)</li> <li>▪ Street address, floor number, and tenant suite number</li> </ul>		
Building Code Analysis/Report	<ul style="list-style-type: none"> <li>▪ Complete code analysis including occupancy type, occupancy loads, limiting distance (special separation), rated assemblies required, travel distance, exit requirements</li> </ul>		
Architectural Floor Plans	<ul style="list-style-type: none"> <li>▪ All interior and exterior alterations</li> <li>▪ Indicate the use of all rooms and areas. Include occupancy loads unless included in the Code Review</li> <li>▪ Indicate all door and window sizes (may be provided in door and window schedules)</li> <li>▪ Construction of wall assemblies, including fire and sound separations</li> <li>▪ Structural information (may be provided on structural drawings)</li> <li>▪ Fire Protection Components as per 2.2.3 ABC Division C (if applicable)</li> <li>▪ Required for ALL building permit applications. Floor Plans must indicate all work to be carried out, door swings, door dimensions, interior room finishes, etc.</li> </ul>		
Architectural Roof Plans	<ul style="list-style-type: none"> <li>▪ Indicate all roof top mechanical units, dimensions, setback from roof edges, skylights, accessible decks, guard rails, planters, landscape, roof drains, and parapets</li> </ul>		
Architectural Ceiling Plans	<ul style="list-style-type: none"> <li>▪ Indicate all horizontal spaces above the ceiling and use</li> <li>▪ Indicate lighting fixtures</li> <li>▪ Include any fire resistance ratings and show all fire stopping of penetrations in rated assemblies</li> </ul>		
Architectural Cross Section	<ul style="list-style-type: none"> <li>▪ Stair dimensions (width, rise, run, number of risers) height of guards, handrails, and extensions</li> <li>▪ Wall, floor, roof and/or ceiling assemblies (descriptions or cross sections)</li> <li>▪ Fire-resistance rating details of any required fire separations including test(s) references</li> <li>▪ Fire stopping details for service penetrations of fire separations</li> <li>▪ Required for new buildings, additions to existing buildings, and most applications which involve an alteration to an existing building. Construction details/cross sections should indicate dimensions and construction details for floor, wall, and roof assemblies. Fire-resistance assemblies shall be ULC listed, or tested by a recognized laboratory, or comply with Appendix D of the ABC, or if applicable, Table A-9.10.3.1. A &amp; A-9.10.3.1. B.</li> </ul>		

Architectural Exterior Elevations	<ul style="list-style-type: none"> <li>▪ Exterior cladding, roof finishes</li> <li>▪ Dimensions of exterior guards and guard details, where applicable</li> <li>▪ Storeys, elevations related to building grades</li> <li>▪ Indicate all window and door openings</li> <li>▪ Spatial separation percentage openings and fire-resistance ratings</li> <li>▪ Exit exposure protection</li> <li>▪ Elevations to include all exterior doors, exterior guard heights, windows and exterior cladding material, etc.</li> </ul>		
Architectural Building Envelope Details	<ul style="list-style-type: none"> <li>▪ Construction details/cross section should indicate dimensions and details of proposed windows, walls, roofs, roof classification rating, balconies, decks, and the typical interface between elements</li> <li>▪ Details for penetrations through roof &amp; exterior wall(s)</li> </ul>		
NECB Building Envelope Details	<ul style="list-style-type: none"> <li>▪ Gross wall and roof area; total window, skylight and exterior door area</li> <li>▪ Ratio skylight to floor area, and vertical fenestration and door area to gross wall area,</li> <li>▪ Overall thermal transmittance of walls, roofs, floors fenestration, doors, and skylights</li> <li>▪ Description and location of air barriers and air leakage of fenestrations and doors</li> <li>▪ Heat loss coefficients as the sum of the product's thermal transmittance in the building envelope</li> <li>▪ Heat loss coefficient for the building, dividing the heat loss of products by the floor area</li> </ul>		
Architectural Schedules	<ul style="list-style-type: none"> <li>▪ Door and window number indicating location, hardware type, fire resistance rating, type of material (including frames, size, and swing direction)</li> </ul>		
Barrier Free Designs	<ul style="list-style-type: none"> <li>▪ Exterior Signage and parking area markings</li> <li>▪ Barrier free details for washrooms, ramps and entrances. Include dimensions and heights of all fixtures: grab bars, robe hooks, lavatories, handles, thresholds, parking stalls, and signs</li> </ul>		
Structural	<ul style="list-style-type: none"> <li>▪ Exit exposure protection</li> <li>▪ Construction details/cross sections of all building elements</li> <li>▪ Piles; footings; grade beam; columns; sizes, depths, steps, rebar designs and concrete requirements.</li> <li>▪ Slabs; sizes, depth, rebar designs, penetration locations and concrete requirements.</li> <li>▪ Geotechnical requirement for the footing, piles and soil conditions including</li> <li>▪ Foundation and structural as per part 2.2.4 ABC</li> </ul>		
Mechanical	<ul style="list-style-type: none"> <li>▪ Kitchen exhaust hood and duct work</li> <li>▪ Location of all air handling units exhaust and supply duct work, including fire stopping details</li> <li>▪ Location and size of exhaust and supply fans</li> <li>▪ NFPA 96 Commercial kitchen requirements detailed</li> <li>▪ HRV size and ratings</li> </ul>		
NECB Mechanical Details	<ul style="list-style-type: none"> <li>▪ A description of each HVAC system detailing its function, design details, performance characteristics and distribution arrangement, including heat loss calculation for the building.</li> <li>▪ Schematic and control diagrams, and sequence of operation</li> <li>▪ Start/stop and adjustment procedure</li> </ul>		
Plumbing	<ul style="list-style-type: none"> <li>▪ Details of all supply, waste, and vent systems throughout the building, including size and type of material</li> <li>▪ Details of all fire stopping of penetrations through rated assemblies</li> <li>▪ Grease interceptor size and location</li> <li>▪ Equipment layout</li> <li>▪ Sink type(s) &amp; number of compartments</li> <li>▪ Show all backflow preventers and locations</li> <li>▪ Detail and bypass on water meters</li> </ul>		
NECB Water Heating System Details	<ul style="list-style-type: none"> <li>▪ A description of each water heating system detailing its function, design details, performance characteristics, and distribution arrangement</li> <li>▪ Schematic and control diagrams and sequence of operation and piping insulation details</li> <li>▪ Start/stop and adjustment procedure</li> </ul>		

Electrical	<ul style="list-style-type: none"> <li>▪ Indicate exit signs, emergency lighting, &amp; fire alarm devices, where applicable</li> <li>▪ Indicate lighting fixtures and ceiling plan.</li> <li>▪ Site exterior lighting</li> <li>▪ Electrical rough-in plan, line drawings including breakers conduit and receptacles</li> <li>▪ Low voltage security and fire alarm plans</li> <li>▪ Panels service and utility distribution</li> <li>▪ Include conduit sizes; conductor overcurrent sizing for electrical services</li> <li>▪ Note any patient care areas identified as per C.E.C Section 14, if applicable</li> </ul>		
NECB Lighting details	<ul style="list-style-type: none"> <li>▪ As-built single-line diagram of the lighting control system showing the location of each illuminated zone and associated switches and controls</li> <li>▪ Installed interior lighting power in conditioned spaces, in kW</li> <li>▪ Average lighting power density, in W/m<sup>2</sup>, obtained by dividing the installed interior lighting power by the total floor area</li> <li>▪ If the building area method is used to determine the interior lighting power allowance, the associated lighting power density, in W/m<sup>2</sup>, and the gross lighted area, in m<sup>2</sup>.</li> <li>▪ If the space-by-space method is used to determine the interior lighting power allowance, a detailed line-by-line breakdown of spaces, their floor area, in m<sup>2</sup>, the associated lighting power densities, in W/m<sup>2</sup>, and the resulting lighting power allowances, in Kw</li> <li>▪ Interior lighting power allowance, in kW</li> <li>▪ Installed interior automatic controls and justification for spaces exempted</li> <li>▪ Exterior lighting power, in kW, including a detailed line-by-line breakdown of spaces and/or functions</li> <li>▪ Installed exterior automatic controls and justification for spaces and/or functions exempted</li> </ul>		
NECB Electrical Power Systems and Motors	<ul style="list-style-type: none"> <li>▪ An as-built single-line diagram of the buildings electrical distribution system indicating the locations of means to monitor energy consumption</li> <li>▪ Schematic diagrams of electrical control systems for systems other than heating, ventilating and air-conditioning, service water heating and lighting</li> <li>▪ The manufacturer's operational manuals for all electrical equipment</li> </ul>		
Fire Suppression	<ul style="list-style-type: none"> <li>▪ Engineered approved sprinkler drawings</li> <li>▪ Indicate location and type of all heads</li> <li>▪ Indicate the NFPA and Hazard standard you are designing to</li> <li>▪ Indicate density, area, GPM, and PSI</li> </ul>		
Geo-technical/ Soils Report	<ul style="list-style-type: none"> <li>▪ For new buildings, additions, poor soils conditions, slope stability, impacts to foundations, seismic upgrade, etc.</li> </ul>		
NECB Energy Code Documents	<ul style="list-style-type: none"> <li>▪ 9:36 see 9:36 energy code user guide and residential checklist for requirements on drawings</li> <li>▪ NECB SUMMARY SHEET: Summary sheet is required for all NECB submissions</li> <li>▪ NECB EXCEL COMPLIANCE WORKSHEET: Required for all NECB submissions.</li> <li>▪ All calculations for any trade off or prescriptive analysis to show conformity to the code must be available upon request</li> <li>▪ NECB PART 8: A second model will be required to show that the energy use of the changes during construction have been accounted for.</li> <li>▪ See each section above for details required on drawings</li> </ul>		
Alternative Solutions Form	<ul style="list-style-type: none"> <li>▪ Provide an alternative solution form if your design does not comply with Division "B" acceptable solutions. This must include all reference to the Functions and Objective statements.</li> </ul>		
<b>Supporting Documents Required</b>			
Additional Applications	Development, demolition, building, electrical, plumbing, heating, and sprinkler permits, Alberta Health Services Approval (Restaurants), and any business licenses		
Fire Alarm Verification	A fire alarm verification report is required prior to occupancy being granted. This verification must be completed by an approved agency other than the installer. The Fire Alarm Verification shall be witnessed by the Electrical Professional Engineer of Record.		
Engineered Designs	All roof truss, floor joist, beam and lintel designs, and any engineering use to support the required drawings.		
Compliance with this code shall be achieved by complying with the applicable solutions in Division B or using alternative solutions that will achieve at least the minimum level of performance required by Division B in the areas defined by the objections and functional statements attributed to the applicable solutions (see Alternative Solutions Form above).			