

DRAWING REQUIREMENTS

General Requirements

Quality of Plans

All drawings are to be prepared to professional drafting standards. Plans must be scalable and have dimensions. All drawings must have titles and have the scale clearly indicated. Single line drawings or drawings on graph paper will not be accepted. Drawings marked “preliminary only” or “not for construction” will not be accepted.

Number of Drawing Sets

At least two (2) complete sets of drawings are required to be submitted with every application for building permit. Three (3) sets of drawings are required where Saskatoon Health Region approval is required. Refer to the Commercial Building Permit Application form.

Design Professional Required

In general, all drawings submitted for a building that is designed within the scope of Part 3 of the *National Building Code* (NBC) are required to bear the seal and signature of a design professional licensed to practice in the province of Saskatchewan. Refer to the Requirement for a Design Professional handout for more details.

Plans Required

Not every project will require all of the plans listed below, however it is required that all pertinent information be on the drawings received for review. The plans required will depend on the size of the project being applied for. Plans must show all of the intended work and have enough detail so that a person unfamiliar with the project could follow them for construction. Relevant Building Code requirements should be addressed.

Where required information is missing from plans, or plans are incomplete or inaccurate, the time required to process or review the building permit application is likely to increase.

Commercial Site Plan

A site plan identifies buildings and other features in relation to property boundaries. It must identify existing buildings, structures, and features on the property, and the changes to the property created by the proposed project. Much of the required information for these drawings can be found on the property survey. Minimum information requirements for site plans include, but are not limited to, the following:

- North Arrow, Street Name, Address
- Abutting streets and lanes
- Property lines and dimensions
- Rights-of-way and easements
- All existing building and structures (indicate shape and dimensions)
- Proposed construction or demolition (indicate shape and dimensions)
- Setbacks to all property lines from existing and proposed structure(s)
- Separation distances between all buildings and structures on the property
- Landscaping, parking stalls and loading spaces, and driveway locations and sizes
- Vehicle aisles and dimensions, sidewalks and curbs
- Fire access routes and hydrant locations
- Barrier-free access (ramps, landings and curb cuts)
- Site plan control agreement requirements (if applicable)
- Site grading elevations and drainage
- Building elevation (top of main floor slab)
- Sanitary, storm and water main services to the building and site (sizes, location and materials);

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Floor Plans

Floor plans provide a “bird’s eye view” of the different floor levels of the project. Floor plans show scaled dimensions of the project, and include rooms, spaces, and other features. Walls and partitions shall be shown at the appropriate width for the scale used. (Please note that single line wall and partition drawings are not acceptable.) It should be noted that this information is required not only for new construction, but for any existing attached buildings as well. Minimum information requirements for floor plans include, but are not limited to, the following:

- Exterior, interior and partition wall layouts and schedules
- Exterior and interior dimensions
- Room names and dimensions
- Fire-resistance ratings of building components and assemblies (with ULC numbers)
- Door and frame sizes, locations and schedules
- Window sizes, locations and schedules
- Room finish schedules
- Stair plans and details, including cross-sections, handrail and guard details
- Plumbing fixtures
- Locations and sizes of vertical shafts through the floor, including garbage and linen chutes
- Minor structural elements (lintel sizes, materials, lengths)
- Seating layouts for assembly occupancies (eg. restaurants, nightclubs and churches)
- Fixed furnishing, equipment, millwork and shelving layouts
- Barrier-free access details

Building Elevation Drawings

A building elevation drawing shows the exterior views of the building for each building face. Building elevation drawings show height relationships and exterior finish information. A building elevation drawing is required for each building face. Minimum information requirements for building elevations include, but are not limited to, the following:

- Height dimensions
- Exterior finishes and materials
- Exterior building components (walls, roof, doors, windows, etc.)
- Window types
- Roof slope/pitch
- Roof venting
- Top of floor elevation(s)
- Top of finished grade (referenced to site plan)
- Attachment/ relationship of existing buildings (where applicable)

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Building Section Drawings

Building section drawings show a view along an imaginary line cut through the building, indicating its structural and construction elements. These drawings expose and identify the construction elements of the roof, walls, floors, and foundations. Minimum information requirements for building section drawings include, but are not limited to, the following:

- Building components (walls, roof, floors, foundations, etc.)
- Material size and type
- Attachment/ relationship to existing buildings (where applicable)
- Height dimensions
- Top of finish grade elevation
- Top of floor elevation(s)
- Bottom of footing elevation

Other Architectural Drawings

An architectural drawing package may contain other drawings than the basic drawings listed above, such as:

- Mezzanine drawings (Refer to Drawing Requirements for Mezzanines handout)
- Interior room elevations
- Reflected ceiling plans
- Floor finish plans
- Furniture layouts
- Millwork details
- Interior finish drawings

Structural Drawings

Structural drawings show the structural support components and details of the proposed project, from the foundation to the rooftop. All structural systems for a building that is designed within the scope of Part 3 or 4 of the NBC must be signed and sealed by an engineer licensed to practice in the province of Saskatchewan. Minimum information requirements for structural drawings include, but are not limited to, the following:

- Foundation plans, pile design (with layout), details, sections and all applicable schedules ex. **(pile schedules)**
- Slab-on-grade and slab plans, section and details
- Cast-in-place concrete floor plans
- Floor framing plans, sections and details
- Roof framing plans, sections and details
- Structural steel framing plans, sections and details
- Pre-engineered building design certificates and drawings
- Loadbearing walls, pads, columns, beams and joists
- Pre-cast concrete plans, details and sections
- Connection details for all components
- Retaining walls
- Building mounted antennas
- Large, heavy or high signs
- Pedestrian bridges, crane runways, and other special structures

DRAWING REQUIREMENTS**Mechanical Drawings**

Mechanical drawings show the building systems that provide for the heating, ventilation, air conditioning, plumbing and fire protection needs for the proposed project. Mechanical systems for a building that are designed outside the scope of Part 9 of the NBC require the seal and signature of an architect or engineer licensed to practice in the province of Saskatchewan. Minimum information requirements for mechanical drawings include, but are not limited to, the following:

- Heating systems
- Ventilation systems
- Air conditioning systems
- Plumbing
- Repair and storage garage ventilation systems, including CO and NO₂ detectors
- Kitchen exhaust hoods and fire suppression systems
- Ventilation and fire suppression systems for spray coating or powder coating operations
- High hazard industrial systems
- Sprinkler system plans showing pipe sizes, head locations and layout, materials, specifications and hydraulic calculations
- Standpipe and hose system plans showing sizes, layouts, riser drawings, materials, specifications, and hydraulic calculations
- Fire damper locations and details (ULC listings)
- Duct and pipe shaft locations and construction details
- Interceptor pits, sumps, drainage pit details
- Locations of return-air plenums
- Plumbing fixtures and piping (including material specifications)
- Fire stop materials, specifications and locations

Electrical Drawings

Electrical drawings show the materials, systems and equipment necessary to provide for the lighting, electrical power, fire alarm and electrical equipment needs for the proposed project. Electrical systems for a building that are designed outside the scope of Part 9 of the NBC require the seal and signature of an architect or engineer licensed to practice in the province of Saskatchewan. Minimum information requirements for electrical drawings include, but are not limited to, the following:

- Fixtures, fixture locations, and fixture schedules
- Exit and emergency lighting
- Switches, power supplies, emergency back-up and power systems
- Electrical equipment type, locations and schedules
- Electrical panel schedules and locations
- Pull stations, detectors, signal devices, annunciators
- System schedules and line drawings