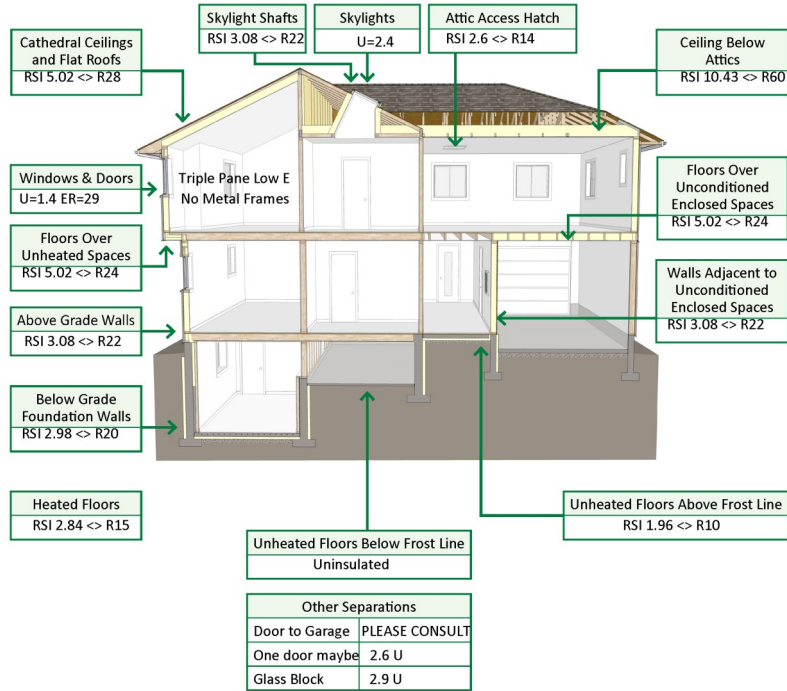


## Section 9.36 Energy Efficiency

### Thermal Characteristics of Building Assemblies

The graphic below illustrates the various common building envelope assemblies that must each meet the minimum effective thermal performance values as given in Section 9.36.



THE ABOVE AND BELOW GRADE FOUNDATION WALLS LISTED ABOVE ARE BASED ON 2X6 CONSTRUCTION SPACED 24" O.C.

This brochure has no legal status and cannot be used as an official interpretation of the various codes and regulations currently in effect. Users are advised to contact Planning and Development Services for assistance, as the City of Prince Albert accepts no responsibility to persons relying solely on this information.

# Residential Drawing Regulations

What you need to know before you plan on building a house, addition or renovation

### Planning and Development Services

1084 Central Avenue

Prince Albert, SK

S6V 7P3

P: (306) 953-4370

Email: [pds@citypa.com](mailto:pds@citypa.com)

Monday to Friday 8:00am –4:45pm

[www.citypa.ca](http://www.citypa.ca)



City of  
**Prince Albert**

## General Requirements

Depending on your building project different steps and process will be required. Your project must comply with all zoning and building code requirements. This brochure is intended as a guide to assist you with the understanding of those requirements. For further information and guidance, please contact the department directly.

A building permit is required for the construction of a new home, an addition, and most renovations. The information in this brochure is to provide you with information on the building permit application process, the information required on building plans and the inspection process.

### New Home application Process:

- Building Permit Application Received
- Applicant directed to Public Works once application and plans provided
- Public Works has applicant fill out other required applications, Grade Certificate, Sewer/Water application, and Crossing Application
- Building Permit Review completed
- Once approved applications are completed from public works, these applications will be returned to Planning & Development
- Building Permit will be ready to be Issued to applicant

### Alterations, Additions, application Process:

- Building Permit Application Received
- Building Permit Review Completed
- Building Permit Issued to applicant

## Section 9.36 Energy Efficiency (January 1, 2019)

### Effective January 1, 2019 Section 9.36 Energy Efficiency will be in force.

Section 9.36 of the National Building Code provides regulations for all dwellings defined under Part 9 of the NBC and all office, retail and low hazard industrial buildings under 300m<sup>2</sup> (3,230 ft<sup>2</sup>). These requirements will vary across the province and are based on Appendix C Table C-2 Climatic Design Data from the NBC. From Appendix C, Table C-2 Climatic Design Data, Prince Albert's Degree days below 18°C is 6100. Based on Appendix C, Prince Albert will fall under Zone 7B.

### Additional notes & information to be included on the Building Plans

- The R-value of all insulation shall be indicated relative to each assembly
- Make, Model, Capacity in (Kw), and efficiency rating for water heaters, furnaces, air conditioners and boilers.
- All windows to be Triple Pane Low E, Doors need a minimum value of 1.4U
- What method of compliance is used ex. Prescriptive, Trade-off or Performance Modeling
- Pipes and ducts that penetrate to the exterior shall have backflow dampers installed, and the penetrations sealed and insulated to a minimum of R22
- Heat/Energy Recovery Ventilators, have a sensible heat-recovery efficiency of at least 60% at an outside air test temperature of 0°C and at least 55% at an outside air test temperature of -25°C
- Heating, Ventilation, Water Heating and Air Conditioning systems have been designed in accordance with Part 9 & 9.36 of the National Building Code
- Spray foam is not allowed as insulating cover in all instances and plans should indicate the use of Spray foam near air ducts
- Walk out basement will need to be designed by a professional engineer
- Trade off calculations need to be provided in full and shall be limited to a single element within any given facing assembly ( a window may be calculated as a trade in a west facing wall but trade-off may not be compared to a different wall
- Designs submitted under the full trade off compliance path shall be designed by a professional engineer or architect and include all calculations
- Performance modeling designs must be designed by professional engineer or architect. The design must be accompanied by a letter of assurance stating full compliance with all aspects and list the software used as per 9.36.5.4. (8) and that 10 years of data as defined by 9.36.5.5. were utilized.



## General Requirements

### 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

### Structural Drawings

Structural drawings show the structural support components and details of the proposed project, from the foundation to the rooftop. Minimum information requirements for structural drawings include, but are not limited to, the following:

- Foundation plans, details, sections and all applicable schedules (ex. pile schedules)
- Slab-on-grade and slab plans, section and details
- Floor framing plans, sections and details
- Roof framing plans, sections and details
- Loadbearing walls, pads, columns, beams and joists

### Assurance of Field Review and Compliance for Electrical, Ventilation System & Plumbing Facilities

“Assurance of Field Review and Compliance” form is to be submitted after the project is complete.

The intent is that Assurance of Field Review and Compliance forms will be completed by the contractor that completed the work. This letter provides the assurance that the construction conforms to the applicable National Building Codes of Canada. The Building Division will not close the building permit unless this letter is completed and submitted to our office.

## General Requirements

Each project requires a certain amount of inspections at different stages of the project. Below is the required inspections when building permits are issued. Depending on your specific project some of these inspections might not be required.

### Footing Inspection

This is to be completed prior to pouring any concrete for footings, slabs and grade beams to ensure proper sizes, soil conditions, rebar, locations

### Backfill

This is to be completed prior to backfilling any excavation to ensure the proper damp proofing, drainage tile, crushed rock, insulation is in place

### Real Property Report

This is to be provided to our office once the foundation has been installed. You will have to hire a legal land surveyor to complete the real property report. The real property report provides legal proof where the foundation is situated on the lot in relation to the property lines.

### Soil Gas Depressurization

This inspection is required prior to pouring any basement slabs, to ensure the rough in has been completed and that the perimeter and any penetrations are all sealed up.

### Framing Inspection

This is completed once the framing has been done, windows, and doors installed, the electrical, and plumbing may have started to be installed.

### Poly & Insulation

This is completed once the house has been insulated and poly installed. Prior to installing any drywall

### Final Inspection

This is completed once all aspects of the project is completed, if no deficiencies, letter of assurance and RPR has been submitted with no issues the building permit will be closed.



## 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 one (1) complete set of drawings are required to be submitted with every application for building permit.

### Professional Design Required

In general, the use of screw piles, grade beam & pile foundation over one (1) storey and pressure treated wood foundations (PWF) are required to bear the seal and signature of a design professional licensed to practice in the province of Saskatchewan.

### Required Plans

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

### Site Plan

A site plan identifies buildings and other features in relation to property lines. It must identify existing buildings, structures, and features on the property, and the changes to the property created by the proposed project. Minimum information requirements for site plans include, but are not limited to, the following:

- North Arrow, Legal Description, Civic Address
- Abutting street names and lane
- Property lines and dimensions
- 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
- Building elevation (top of main floor slab)



## General Requirements

### 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 buildings as well. Minimum information requirements for floor plans include, but are not limited to, the following:

- Exterior, interior and partition wall layouts
- Exterior and interior dimensions
- Door and Window sizes, locations
- Stair plans and details, including cross-sections, handrail and guard details
- Plumbing fixtures
- Minor structural elements (lintel sizes, materials, lengths)
- Location of Smoke Detectors, and Carbon Monoxide Alarms
- Indicate what materials will be used if soffits project within 1.2m of a property line

### Building Elevation Drawings

A building elevation drawing shows the exterior views of the building for each building face, and 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
- Wall Area’s from finished grade to soffits
- 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
- Attachment/ relationship to existing buildings (where applicable)
- Subfloor Depressurization System, materials and location

