

Guiding Development • Building Community

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### FARM BUILDINGS

This is a guide of what is required for farm buildings and permit applications, please ensure to submit plans that are applicable to your proposed construction, as this is for reference only.



### Do I have to farm to qualify for a farm building?

Yes, "farm building" means a building or part thereof which does not contain a residential occupancy and which is associated with or located on land devoted to the practice of farming and used essentially for the housing of equipment or livestock, or the production, storage, processing of agricultural and horticultural produce or feeds, but does not include a building that is classified as a high hazard industry occupancy.

Farm buildings may include but, are not limited to, produce storage and packing facilities, livestock and poultry housing, milking centres, feed preparation centres, farm workshops, greenhouses, farm retail centres and horse riding, exercise and training facilities.

Unenclosed and unconditioned<sup>2</sup> shelters for animal or storage of fiber and forage and solid manure storage facilities with roofs are only subject to the structural requirements of the Manitoba Building Code. A farm building that is not of low human occupancy is subject to the requirements of the Manitoba Building Code but is still considered a "farm building".

<sup>&</sup>lt;sup>2</sup>Unenclosed and unconditioned space any space within a building the temperature of which is not controlled to limit variation in response to the exterior ambient temperature by the provision, either directly or indirectly, of heating or cooling over substantial portions of the year.

### Who is the Authority for Farm Buildings?

### **Manitoba Building Code**

Red River Planning District is the permitting authority under the Manitoba Building Code for farm buildings in Manitoba. This applies to all classifications of farm buildings.

#### **Manitoba Electrical Code**

Manitoba Hydro is responsible for administering the Manitoba Electrical Code and issuing electrical permits.

### **Livestock Manure and Mortalities Management Regulation**

Manitoba Sustainable Development is responsible for issuing permits for manure storage facilities under the Livestock Manure and Mortalities Management Regulation.

## How large and What height of a structure can I build?

The allowable size of the detached structure is determined by both the relevant zoning regulations and the size of the lot.

Please provide us with a tax roll number or a legal description and the municipality or city in which you are building in order for our office to determine your zoning.

The RRPD website at www.redriverplanning.com can assist with this information with the interactive property maps which are available to the public.

### Where can I build on my property?

The placement of the detached accessory structure is determined by the relevant zoning regulations, existing structures and relevant utilities.



### What types of Farm Buildings are there?

### Farm Buildings Under 600m2 (6,458.35 sq. ft.) not including F1 High Hazard Occupancies

A farm building that has a building area of 600m<sup>2</sup> (6,458.35 sq. ft.) or less is governed by the RRPD office and will require a development permit.

This permit is issued based on a review of the zoning requirements which includes, but is not limited to the use, location, and size.

### Farm Buildings Over 600m2 (6,458.35 sq. ft.) with low human occupancy

A farm building that has a building area of more than 600m2 (6,458.35 sq. ft.) that is of low human occupancy is regulated under the provisions contained in the Manitoba Building Code Section 3.10.

A farm building that falls within the regulations of the code requires a building permit from the Red River Planning District Office.

### Farm Buildings Over 600m<sup>2</sup> (6,458.35 sq. ft.) that is not of low human occupancy

A farm building that has a building area of more than 600m<sup>2</sup> (6,458.35 sq. ft.) is regulated under the provisions contained in the Manitoba Building Code.

A farm building that falls within the regulations of the code requires a building permit from the Red River Planning District Office.

# Farm Buildings <u>Under</u> **600m**<sup>2</sup>. (6,458.35 sq. ft.) not including F1 High Hazard Occupancies.

A farm building that has a building area of 600m<sup>2</sup> (6,458.35 sq. ft.) or less is governed by the RRPD office and will require a development permit.

This permit is issued based on a review of the zoning requirements which includes, but is not limited to the use, location, and size.

### **Application requirements:**

- · Completed application form
- Site plan showing proposed structure with the distances from property lines and all existing buildings on site, including all sizes of all existing structures
- Building Plans including floor plan, elevation plan detailing height
- Completed Farm Declaration form

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# Farm Buildings <u>Over</u> **600m**<sup>2</sup>. (6,458.35 sq. ft.) with low human occupancy.

A farm building that has a building area of more than 600m2 (6,458.35 sq. ft.) that is of low human occupancy is regulated under the provisions contained in the Manitoba Building Code Section 3.10.

A farm building that falls within the regulations of the code requires a building permit from the Red River Planning District Office.

This permit is issued based on a review of the zoning and building requirements which includes, but is not limited to:

Use Size

Location Mechanical

Structural

A farm building under this category which

- i. Is not mechanically heated, cooled or ventilated,
- ii. Has at least 20% of the total area of its perimeter walls open to the outdoors, and
- iii. Is used only as a shelter for farm animals or for storage of fibre and forage, or
- iv. Is used or part of it is used for manure storage may be exempt from Sections 3.10 and 6.1. and Articles 6.2.1.1. and 6.2.1.4.

Please contact the office for additional information

### Application requirements:

- Completed application form
- Site plan showing proposed structure with the distances from property lines and all existing buildings on site, including all sizes of all existing structures
- Professional Engineered sealed construction plans
- Mechanical plans
- Code Analysis
- Letters of certification from the Structural and Mechanical Engineers
- Completed Farm Declaration form

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# Farm Buildings <u>Over</u> **600m**<sup>2</sup>. (6,458.35 sq. ft.) that is not of low human occupancy

A farm building that has a building area of more than 600m<sup>2</sup> (6,458.35 sq. ft.) is regulated under the provisions contained in the Manitoba Building Code.

A farm building that falls within the regulations of the code requires a building permit from the Red River Planning District Office.

This permit is issued based on a review of the zoning and building requirements which includes, but is not limited to:

Use Size

Location Mechanical

Structural

This structure must be considered as being one of the major occupancy classifications and meet the requirements of the MBC for that major occupancy classification.

Application under the following Sections and Parts of the Manitoba Building Code would apply:

- Part 1
- Section 3.10
- Part 4
- Section 6.1. and Articels 6.2.1.1. and 6.2.1.4.

### **Application requirements:**

Farm buildings that are over 600m2 that are not of low human occupancy will be required to submit a Commercial Permit Application with the following: (this is a general list of required documents, please call the RRPD office for additional application requirements)

- Completed COMMERCIAL application form
- Site plan showing proposed structure with the distances from property lines and all existing buildings on site, including all sizes of all existing structures
- Professional Engineered sealed construction plans
- Mechanical plans
- Code Analysis
- Letters of certification from the Structural and Mechanical Engineers



## What is Low Human Occupancy and how do I know?

Low human occupancy, in respect to farm builidngs means "an occupancy with an occupant load of not more than one person per 40 m² during normal use".

Take the total building area (in m²) and divide it by 40 m² to determine how many human occupants are permitted to occupy the building during normal use and still have the building be considered a low human occupancy farm building. If that number is exceeded during normal building use, then the farm building would be considered as, an "other than low human occupancy farm building" and submit to the regular requirements of the Manitoba Building Code. If that occupancy is not exceeded during normal use, then it is a "farm building of low human occupancy" and subject to the special requirements for low human occupancy farm buildings under Section 3.10 of the Manitoba Building Code.

### **Example:**

Farm Building Area of 600 m<sup>2</sup> (divided by 40 m<sup>2</sup>) has a maximum human occupancy of 15 to be considered a low human occupancy. The designer can also state the occupant load the farm building is designed for (e.g. 4-5 persons), but it must be not greater than the calculated occupant load of 15.

# What are the requirements for farm buildings of low human occupancy?

Farm buildings of low human occupancy do not need to comply with the requirements of Part 3 of the MBC that would normally apply to buildings over 600 m<sup>2</sup>.

Instead they are subject to specific requirements under **Section 3.10 of the MBC**.

The requirements for farm buildings of low human occupancy are intended to reflect the lower risk that comes from these facilities being occupied by a low number of workers who are familiar with their environment. The requirements of Section 3.10 are also consistent with current farm building practices which need to accommodate high humidity environments and the need for relatively free movement across the facilities.

The following is a summary of the requirements for farm buildings over 600 m<sup>2</sup> of low human occupancy in the MBC.

### Maximum Floor Areas for Farm Buildings of Low Human Occupancy In accordance with MBC Section 3.10.1.2

Number of Storeys	Maximum <i>Floor Area</i> per <i>Storey</i>
1	4800 m²
2	2400 m²
3	1600 m²

### Can I have Fuel Storage in my Farm Building?

### **Fuel Storage Tanks**

Article 3.10.4.1. requires that fuel in a farm building be stored in conformance with the Manitoba Fire Code (MFC). Fertilizers, particularly nitrate fertilizers, are explosive chemicals when mixed with petroleum fuels. Therefore, fertilizers, fuels, and other farm chemicals must be stored far from each other and from other buildings.

### **Entrance and Exiting Requirements**

#### **Number of Exits**

Article 3.10.7.1. requires that a farm building of low human occupancy must have at least two exits per storey consisting of exterior exit doorways spaced remotely from each other at opposite ends of the building as an exit may become inaccessible as the result of fire or smoke. By allowing for an alternative escape route, occupants can evacuate safely and quickly in the event of fire.

### **Type of Exits**

This Article specifies the acceptable exit facilities for a farm building of low human occupancy.

Article 3.10.7.1. requires a farm building of low human occupancy to have at least two primary exits per storey consisting of exterior exit doorways spaced remotely from each other at opposite ends of the building. However, all other exits may consist of:

- a. an exterior doorway,
- b. subject to Article 3.10.7.3, an exterior exit passageway,
- c. an exterior ramp,
- d. an exterior stairway,
- e. a fire escape conforming to Subsection 3.4.7.,
- f. subject to Article 3.10.7.4., a horizontal exit, or
- g. an openable window or panel providing an opening measuring not less than 900 mm by 900 mm with the bottom of the opening no more than 1.5 m above the adjascent floor level.

A permanent exterior ladder at the edge of the egress opening provides access down to the ground level. The escape ladder should be located at the side opposite to the hinges of the door, window or panel that swing inward or outward, and should include hardware that is easy to open from inside.

### **Location of Exits**

Article 3.10.7.5. requires that exits described in Article 3.10.7.2. must be located and arranged so that they are clearly visable or their locations must be clearly indicated. Exits must be accessible at all times.

### **Travel Distance to an Exit**

Article 3.10.7.6. details that travel distance to an exit within a farm building must not exceed 45 m.

Another option would be to place exits along the perimeter which are not more than 60 m apart, measured along the perimeter.

### **Direction of Door Swing**

Article 3.10.7.7. states that an exit door within a farm building that swings inward on it axis must have a sign attached to it, which is not higher than 1.5 m from the floor level and that indicates the direction of door swing.

The door swing in a farm building is allowed to swing inward on the basis of both low occupant load and familiarity of occupants to the escape routes. Also, outward swinging doors may pose a concern for the animals as larger animals can easily push open these types of doors. Furthermore, the air pressure in some agricultural facilities could cause an outward swinging door to be pushed open.

### Stairs and Ladders for Exits above Ground Level or Floor Level

Primary exit doorways required under Article 3.10.7.1 require a stair for the exterior doorway where a doorway is more than 300 mm above the adjacent ground or floor level.

Article 3.10.7.8. requires a stair for exterior doorways be provided where a doorway is more than 600 mm above the adjacent ground or floor level; the ground level is on the outside facing side of the wall, while the floor level is on the inside facing portion of the wall.

Where an openable window or panel is used as an exit it is required that the window sill be no higher than 1.5 m above the adjacent floor level (the side facing inside the building). On the outside of the building, it must be served by a stair where the opening is more than 600 mm above the adjacent ground level, or an exit ladder conforming to Subsection 3.10.8. if the window sill is more than 2.5 m above the ground.

### **Ladder Requirements**

### **Design Load for Ladders**

Article 3.10.8.1. prescribes that the required load for any permanently installed ladder and its fastenings, on any farm structure, be designed for a concentrated load of 1.0 kN (kilonewtons), applied so as to produce the most critical stress in the member concerned. The most critical area is usually at the mid-span of rungs and the ladder fastenings.

Ladders are typically not subject to complicated engineering analyses but its design has evolved over the years through common industry best practices. In situations where unusual loads may be expected or where the ladder is made of steel, the design procedures in Part 4 of NBC apply.

#### **Termination above Ground Level**

Article 3.10.8.2. requires that ladders serving required exits terminate between 1.0 m and 1.5 m above ground level. The bottom of the ladder should terminate 1.0 m to 1.5 m above grade to prevent small children from climbing.

### **Clear Space behind Rungs, Steps or Cleats**

Article 3.10.8.3. requires a clear space of 175 mm between the ladder rungs, steps or cleats and the wall to allow for adequate footing support when used.

### **Spacing of Rungs, Steps or Cleats**

Article 3.10.8.4. establishes that ladder rungs, steps or cleats must be uniformly spaced and the spacing between rungs, steps or cleats on a ladder must not exceed 300 mm.

#### **Distance between Side Rails**

Article 3.10.8.5. establishes that the distance between the side rails of a ladder must be not less than 250 mm.

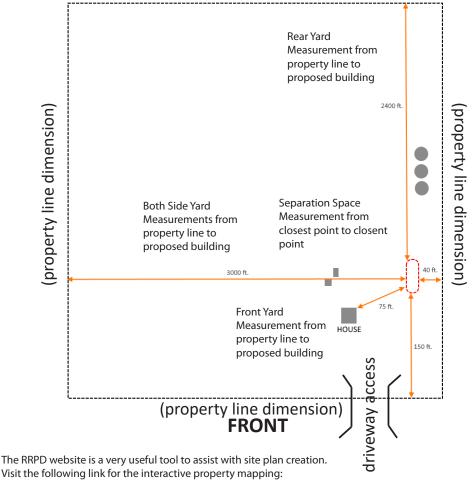
### **Safety Cages**

Article 3.10.8.6. requires safety cages on outside and inside ladders wherever a ladder extends to more than 6 m above ground or floor level.

The cages must start no higher than 3 m from the bottom of the ladder.



### Civic Address **REAR** (property line dimension)



Visit the following link for the interactive property mapping:

https://www.redriverplanning.com/property information.php



EVERY EFFORT HAS BEEN MADE TO ENSURE THE ACCURACY OF INFORMATION CONTAINED IN THIS BOOKLET. HOWEVER IN THE EVENT OF A DISCREPANCY BETWEEN THIS BOOKLET AND THE GOVERNING MUNICIPAL OR BUILDING BY-LAW AND THE MANITOBA BUILDING CODE. THE GOVERNING BY-LAW OR THE MANITOBA BUILDING CODE WILL TAKE PRECEDENCE.

DATE REVISED: NOVEMBER 1, 2022

**Typical Site Plan**