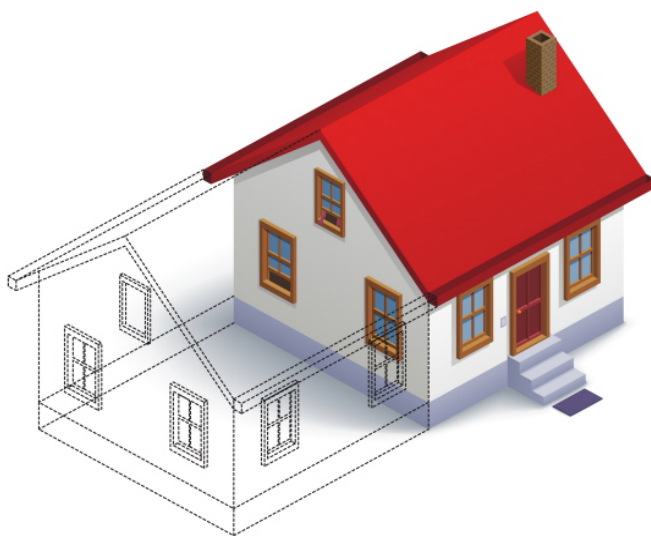


HOUSE ADDITIONS

A guide to the plans required when applying
for a Building Permit



TANNER'S CROSSING
PLANNING DISTRICT

Table of Contents

Floor Plan.....	3
Foundation Plan.....	3
Section/Details.....	5
Elevation Plan.....	6
Material Specifications.....	8

NOTE:

This booklet outlines the plans required by Tanner’s Crossing Planning District when applying for a Building Permit to construct a “basic” addition to a home. Please note that regulations, requirements and codes are subject to change over time. It is always a good idea to consult with your building official prior to beginning to plan a project.

One (1) set of plans will be required.

Please note that the homeowner may be required to obtain the services of a Professional Engineer when:

1. Site conditions, excavation depths or foundation constructs vary;
2. The construction involves the use of certain structural components (ex. steel beams, glulam/microlam beams, piles, prefabricated trusses, etc.), or;
3. Where in the opinion of the Authority Having Jurisdiction (AHJ), the nature of the work is complex.

Also note that a building permit does NOT include any electrical work to be undertaken. Homeowners who intend to perform their own electrical work must apply for separate ELECTRICAL PERMITS from MB Hydro prior to starting the work.

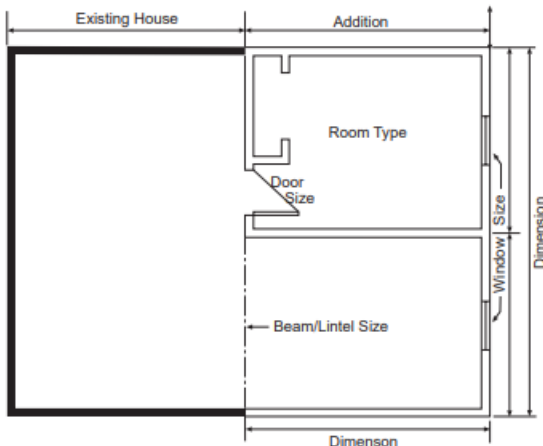
FLOOR PLAN

The following information is required on the floor plan drawing:

- Size of addition – dimensioned
- Size and type of rooms in the addition
- Location and sizes of windows, doors, closets, etc.
- If there is a fireplace, indicate type and location
- Size of all beams/lintels in wall openings
- Locations of any proposed plumbing fixtures

NOTE: In addition to the interior door leading into the room, bedrooms must contain;

- At least one egress window which provides an unobstructed opening of not less than 0.35sq.m. (3.75sq.ft.), with no dimension less than 380mm (15”), or;
- An exterior door openable from the inside.



FOUNDATION PLAN

The design of any foundation begins with the type of soil contained in the site to be built upon.

Various soil conditions differ in allowable bearing pressure which determines the size and type of construction of the

foundation's footings. For **stable** soils with an allowable bearing pressure of 75kPa or greater, foundations may be designed in accordance with Part 9 of the MB Building Code without obtaining the services of a professional engineer, however the plan must show enough detail to confirm compliance with the code.

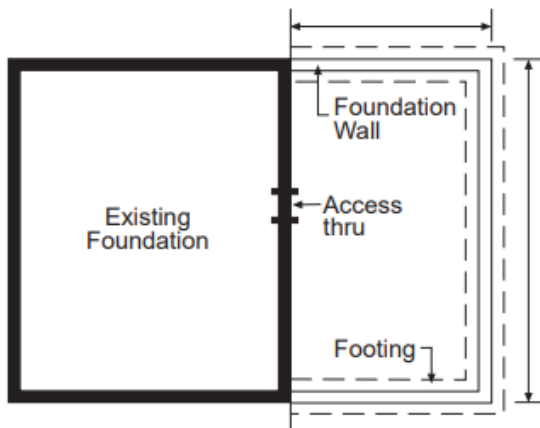
Foundations in soils with an allowable bearing pressure lower than 75kPa, or **unstable** soils such as clays must be designed in accordance with Part 4 of the MB Building Code and must be sealed by a professional engineer.

Exceptions/allowances may be made for very small additions, dependant on the state or construction of the existing house foundation and favourable site conditions, as determined by the AHJ.

There are two (2) basic types of foundations you can use when constructing an addition:

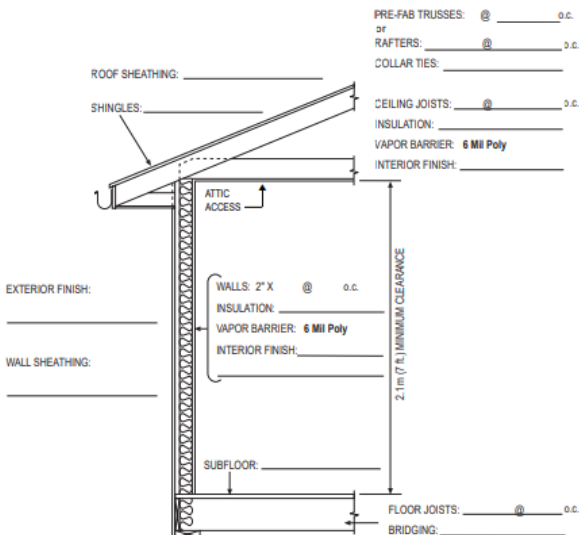
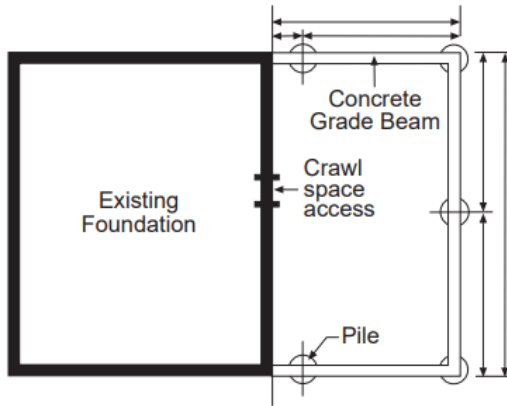
1. BASEMENT FOUNDATION

- a) If you construct a wood basement it must be designed and sealed by a registered professional engineer,
- b) If you construct a concrete basement it must meet the minimum code standards for wall thickness and reinforcement.



2. PILE/PIER AND FOOTING FOUNDATION

- a) If you construct a one (1) storey addition, your foundation must meet the minimum standards of the code; or it must be designed and sealed by a professional engineer.
- b) If you construct a two (2) storey addition; a grade beam and pile foundation must be designed and sealed by a professional engineer.
- c) A wood beam can be used instead of a concrete grade beam; pile spacing and size would still be the same as illustrated below.



SECTION/DETAILS

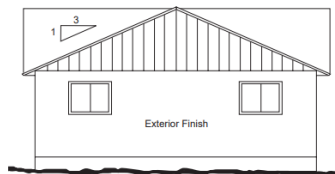
The following information must be indicated on the section plan drawing:

- a) Type and thickness of materials in the roof, walls and floor assemblies. These include (but are not limited to) all structural members (framing), air/vapour barriers, insulation (type/size/R-value) and interior/exterior finishes.
- b) Anchorage of the building to the foundation
- c) Any points of mechanical connection (any metal connectors such as joist hangers, saddles or connection plates).
- d) Details of any/all reinforcement (rebar) in any structural concrete.

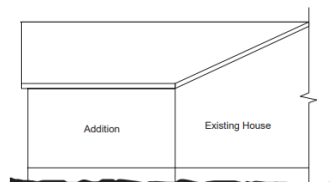
ELEVATION PLAN

An elevation plan (side view of the building's exterior) shall include the following information:

- a) Clear illustration of all sides of the building
- b) Type of finish materials (foundation, walls and roof)
- c) Chimney location & height (if applicable)
- d) Indication of roof slope
- e) Height of finished grade
- f) Locations of all windows and doors
- g) Any proposed entrances, decks, stairs, etc.



REAR ELEVATION



SIDE ELEVATION

MATERIAL SPECIFICATIONS

MINIMUM THICKNESS OF ROOF SHEATHING					
Maximum Spacing of Supports	Plywood		Waferboard and Strandboard		Lumber
	Edges Supported	Edges Unsupported	Edges Supported	Edges Unsupported	
mm	mm	mm	mm	mm	mm
300	7.5	7.5	9.5	9.5	17.0
400	7.5	9.5	9.5	11.1	17.0
600	9.5	12.5	11.1	12.7	19.0

in.	in.	in.	in.	in.	in.
12	$\frac{5}{16}$	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{11}{16}$
16	$\frac{5}{16}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{7}{16}$	$\frac{11}{16}$
24	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{7}{16}$	$\frac{1}{2}$	$\frac{3}{4}$
Column 1	2	3	4	5	6

THICKNESS OF WALL SHEATHING				
Type of sheathing	Minimum Thickness			
	Supports @ 16 in. o.c.	Supports @ 24 in. o.c.	Supports @ 400 mm o.c.	Supports @ 600 mm o.c.
	in.	in.	mm	mm
Lumber	$\frac{11}{16}$	$\frac{11}{16}$	17.0	17.0
Fibreboard	$\frac{3}{8}$	$\frac{7}{16}$	9.5	11.1
Plywood	$\frac{1}{4}$	$\frac{5}{16}$	6.0	7.5
Waferboard/Strandboard	$\frac{1}{4}$	$\frac{5}{16}$	6.35	7.9
Column 1	2	3	4	5

THICKNESS OF SUBFLOORING			
Maximum Spacing of Supports	Plywood	Waferboard and Strandboard	Lumber
mm	mm	mm	mm
400	15.5	15.9	17.0
500	15.5	15.9	19.0
600	18.5	19.0	19.0

in.	in.	in.	in.
16	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{11}{16}$
20	$\frac{5}{8}$	$\frac{5}{8}$	$\frac{3}{4}$
24	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
Column 1	2	3	4

CEILING JOIST SPANS

Commercial Designation	Grade	Member Size (in.)	Rafter Spacing			Member Size (mm)	Rafter Spacing		
			12 in.	16 in.	24 in.		300 mm	400 mm	600 mm
			ft.-in.	ft.-in.	ft.-in.		m	m	m
Douglas Fir -Larch	No.1 and No. 2	2 x 4	10 - 8	9 - 8	8 - 6	38x89	3.27	2.97	2.59
		2 x 6	16 - 9	15 - 3	13 - 4	38x140	5.14	4.67	4.08
	No. 2	2 x 8	22 - 1	20 - 1	17 - 6	38x184	6.76	6.14	5.36
		2 x 10	28 - 2	25 - 7	22 - 4	38x235	8.63	7.84	6.85
Spruce-Pine-Fir	No.1 and No. 2	2 x 4	10 - 2	9 - 3	8 - 1	38x89	3.11	2.83	2.47
		2 x 6	16 - 0	14 - 6	12 - 8	38x140	4.90	4.45	3.89
	No. 2	2 x 8	21 - 0	19 - 1	16 - 8	38x184	6.44	5.85	5.11
		2 x 10	26 - 10	24 - 5	21 - 3	38x235	8.22	7.47	6.52
Column 1	2	3	4	5	6	7	8	9	10

ROOF RAFTER SPANS

Rafter not supporting ceiling
(Design Roof Snow Loads for 1.5 kPa (30 psf))

Commercial Designation	Grade	Member Size (in.)	Rafter Spacing			Member Size (mm)	Rafter Spacing		
			12 in.	16 in.	24 in.		300 mm	400 mm	600 mm
			ft.-in.	ft.-in.	ft.-in.		m	m	m
Douglas Fir -Larch	No.1 and No. 2	2 x 4	9 - 4	8 - 6	7 - 5	38x89	2.86	2.59	2.27
		2 x 6	14 - 8	13 - 4	10 - 10	38x140	4.49	4.08	3.34
	No. 2	2 x 8	18 - 8	16 - 2	13 - 2	38x184	5.74	4.97	4.06
		2 x 10	22 - 10	19 - 9	16 - 2	38x235	7.02	6.08	4.96
Spruce-Pine-Fir	No.1 and No. 2	2 x 4	8 - 10	8 - 1	7 - 1	38x89	2.72	2.47	2.16
		2 x 6	13 - 11	12 - 8	11 - 1	38x140	4.28	3.89	3.40
	No. 2	2 x 8	18 - 4	16 - 8	14 - 4	38x184	5.62	5.11	4.41
		2 x 10	23 - 5	21 - 4	17 - 6	38x235	7.18	6.52	5.39
Column 1	2	3	4	5	6	7	8	9	10

ROOF JOIST SPANS

(Design Roof Snow Loads for 1.5 kPa (30 psf))

Commercial Designation	Grade	Member Size (in.)	Rafter Spacing			Member Size (mm)	Rafter Spacing		
			12 in.	16 in.	24 in.		300 mm	400 mm	600 mm
			ft.-in.	ft.-in.	ft.-in.		m	m	m
Douglas Fir -Larch	No.1 and No. 2	2 x 4	7 - 5	6 - 9	5 - 10	38x89	2.27	2.06	1.80
		2 x 6	11 - 8	10 - 7	9 - 3	38x140	3.57	3.24	2.83
	No. 2	2 x 8	15 - 3	13 - 11	12 - 2	38x184	4.69	4.26	3.72
		2 x 10	19 - 6	17 - 9	15 - 5	38x235	5.98	5.44	4.74
Spruce-Pine-Fir	No.1 and No. 2	2 x 4	7 - 1	6 - 5	5 - 7	38x89	2.16	1.96	1.71
		2 x 6	11 - 1	10 - 1	8 - 10	38x140	3.40	3.08	2.69
	No. 2	2 x 8	14 - 7	13 - 3	11 - 7	38x184	4.46	4.05	3.54
		2 x 10	18 - 7	16 - 11	14 - 9	38x235	5.70	5.18	4.52
Column 1	2	3	4	5	6	7	8	9	10

BUILT-UP FLOOR BEAM SPANS Supporting ONE Floor in Houses

Douglas Fir-Larch Grade No. 1 & 2

Size of Beam	Supported Joist Length					Size of Beam	Supported Joist Length				
	8 ft.	10 ft.	12 ft.	14 ft.	16 ft.		2.4 m	3.0 m	3.6 m	4.2 m	4.8 m
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.		m	m	m	m	m
3-2x8	9 - 9	8 - 8	7 - 11	7 - 4	6 - 11	3-38x184	2.99	2.67	2.44	2.26	2.11
4-2x8	11 - 3	10 - 1	9 - 2	8 - 6	7 - 11	4-38x184	3.45	3.09	2.82	2.61	2.44
3-2x10	11 - 11	10 - 8	9 - 8	9 - 0	8 - 5	3-38x235	3.66	3.27	2.98	2.76	2.59
4-2x10	13 - 9	12 - 3	11 - 2	10 - 5	9 - 9	4-38x235	4.22	3.78	3.45	3.19	2.98
3-2x12	13 - 10	12 - 4	11 - 3	10 - 5	9 - 9	3-38x286	4.24	3.79	3.46	3.21	3.00
4-2x12	15 - 11	14 - 3	12 - 11	12 - 1	11 - 3	4-38x286	4.90	4.38	4.00	3.70	3.46

Spruce-Pine-Fir Grade No. 1 & 2

Size of Beam	Supported Joist Length					Size of Beam	Supported Joist Length				
	8 ft.	10 ft.	12 ft.	14 ft.	16 ft.		2.4 m	3.0 m	3.6 m	4.2 m	4.8 m
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.		m	m	m	m	m
3-2x8	10 - 7	9 - 5	8 - 7	8 - 0	7 - 6	3-38x184	3.25	2.90	2.65	2.45	2.30
4-2x8	12 - 2	10 - 11	9 - 11	9 - 3	8 - 8	4-38x184	3.75	3.35	3.06	2.83	2.65
3-2x10	12 - 11	11 - 7	10 - 6	9 - 9	9 - 2	3-38x235	3.97	3.55	3.24	3.00	2.81
4-2x10	14 - 11	13 - 4	12 - 1	11 - 3	10 - 7	4-38x235	4.59	4.10	3.74	3.47	3.24
3-2x12	15 - 0	13 - 5	12 - 2	11 - 4	10 - 8	3-38x286	4.61	4.12	3.76	3.48	3.26
4-2x12	17 - 4	15 - 6	14 - 1	13 - 1	12 - 3	4-38x286	5.32	4.76	4.34	4.02	3.76
1	2	3	4	5	6	7	8	9	10	11	12

BUILT-UP FLOOR BEAM SPANS Supporting TWO Floors in Houses

Douglas Fir-Larch Grade No. 1 & 2

Size of Beam	Supported Joist Length					Size of Beam	Supported Joist Length				
	8 ft.	10 ft.	12 ft.	14 ft.	16 ft.		2.4 m	3.0 m	3.6 m	4.2 m	4.8 m
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.		m	m	m	m	m
3-2x8	7 - 5	6 - 7	6 - 0	5 - 7	5 - 3	3-38x184	2.27	2.03	1.85	1.71	1.60
4-2x8	8 - 6	7 - 8	6 - 11	6 - 5	6 - 0	4-38x184	2.62	2.34	2.14	1.98	1.85
3-2x10	9 - 0	8 - 1	7 - 4	6 - 11	6 - 5	3-38x235	2.77	2.48	2.26	2.10	1.96
4-2x10	10 - 5	9 - 4	8 - 6	7 - 11	7 - 4	4-38x235	3.20	2.86	2.62	2.42	2.26
3-2x12	10 - 6	9 - 4	8 - 6	8 - 0	7 - 6	3-38x286	3.22	2.88	2.63	2.43	2.28
4-2x12	12 - 1	10 - 10	9 - 10	9 - 2	8 - 7	4-38x286	3.72	3.32	3.03	2.81	2.63

Spruce-Pine-Fir Grade No. 1 & 2

Size of Beam	Supported Joist Length					Size of Beam	Supported Joist Length				
	8 ft.	10 ft.	12 ft.	14 ft.	16 ft.		2.4 m	3.0 m	3.6 m	4.2 m	4.8 m
	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.		m	m	m	m	m
3-2x8	8 - 0	7 - 2	6 - 7	6 - 1	5 - 9	3-38x184	2.46	2.20	2.01	1.86	1.74
4-2x8	9 - 3	8 - 3	7 - 6	7 - 1	6 - 7	4-38x184	2.85	2.55	2.32	2.15	2.01
3-2x10	9 - 10	8 - 10	8 - 1	7 - 6	6 - 11	3-38x235	3.01	2.70	2.46	2.28	2.11
4-2x10	11 - 4	10 - 2	9 - 2	8 - 8	8 - 1	4-38x235	3.48	3.11	2.84	2.63	2.46
3-2x12	11 - 5	10 - 3	9 - 4	8 - 8	7 - 10	3-38x286	3.50	3.13	2.85	2.64	2.38
4-2x12	13 - 2	11 - 9	10 - 10	10 - 0	9 - 4	4-38x286	4.04	3.61	3.30	3.05	2.85
1	2	3	4	5	6	7	8	9	10	11	12

FLOOR JOIST SPANS

Commercial Designation	Grade	Member Size (in.)	Joist Spacing with Strapping			Joist Spacing with Bridging			Joist Spacing with Strapping & Bridging		
			12 in.	16 in.	24 in.	12 in.	16 in.	24 in.	12 in.	16 in.	24 in.
			ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.
Douglas Fir -Larch	No. 1 and	2 x 4	6 - 7	6 - 0	5 - 5	6 - 10	6 - 3	5 - 5	6 - 10	6 - 3	5 - 5
		2 x 6	10 - 1	9 - 6	8 - 7	10 - 9	9 - 10	8 - 7	10 - 9	9 - 10	8 - 7
		2 x 8	12 - 2	11 - 7	11 - 0	13 - 1	12 - 4	11 - 3	13 - 9	12 - 9	11 - 3
		2 x 10	14 - 4	13 - 8	13 - 0	15 - 3	14 - 4	13 - 6	15 - 10	14 - 9	13 - 9
		2 x 12	16 - 4	15 - 7	14 - 10	17 - 3	16 - 2	15 - 3	17 - 10	16 - 7	15 - 6
	No. 2	(mm)	300mm	400mm	600mm	300mm	400mm	600mm	300mm	400mm	600mm
		m	m	m	m	m	m	m	m	m	m
		38x89	2.00	1.85	1.66	2.09	1.90	1.66	2.09	1.90	1.66
		38x140	3.09	2.91	2.62	3.29	2.99	2.62	3.29	2.99	2.62
		38x184	3.71	3.53	3.36	4.00	3.76	3.44	4.19	3.90	3.44
		38x235	4.38	4.16	3.96	4.66	4.38	4.11	4.84	4.51	4.20
		38x286	4.99	4.75	4.52	5.26	4.94	4.65	5.43	5.06	4.72
Spruce- Pine- Fir	No. 1 and	(in.)	12 in.	16 in.	24 in.	12 in.	16 in.	24 in.	12 in.	16 in.	24 in.
		ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.	ft.-in.
		2 x 4	6 - 1	5 - 8	5 - 2	6 - 6	5 - 11	5 - 2	6 - 6	5 - 11	5 - 2
		2 x 6	9 - 7	8 - 10	8 - 2	10 - 4	9 - 4	8 - 2	10 - 4	9 - 4	8 - 2
		2 x 8	11 - 7	11 - 0	10 - 6	12 - 6	11 - 9	10 - 9	13 - 1	12 - 2	10 - 9
	No. 2	(mm)	300mm	400mm	600mm	300mm	400mm	600mm	300mm	400mm	600mm
		m	m	m	m	m	m	m	m	m	m
		38x89	1.86	1.72	1.58	1.99	1.81	1.58	1.99	1.81	1.58
		38x140	2.92	2.71	2.49	3.14	2.85	2.49	3.14	2.85	2.49
		38x184	3.54	3.36	3.20	3.81	3.58	3.27	3.99	3.72	3.27
		38x235	4.17	3.96	3.77	4.44	4.17	3.92	4.60	4.29	4.00
		38x286	4.75	4.52	4.30	5.01	4.71	4.42	5.17	4.82	4.49
Column 1	2	3	4	5	6	7	8	9	10	11	12

NOTES:


Contact Us

Tanner's Crossing Planning District

PO Box 1072
2nd Floor, Civic Centre
103 Main Street South
Minnedosa, MB R0J 1E0

Phone: 204.867.2364
Cell: 204.868.5973
Email: tcpd@mymts.net

www.discoverminnedosa.com/business/planning-development/

Find Us on Facebook 

Or contact the member jurisdictions of Tanner's Crossing Planning District:

Town of Minnedosa

103 Main Street South
Minnedosa, MB R0J 1E0
Phone: 204.867.2727

R.M. of Minto-Odanah

49 Main Street South
Minnedosa, MB R0J 1E0
Phone: 204.867.3282

Revised 20260312