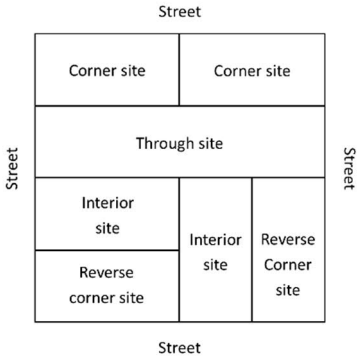
Development Services
638 Princess Avenue. Brandon MB. R7A 0P3
T: 204.729.2110 F: 204.728.2406
www.brandon.ca/planning

Do I need a permit to build my shed?

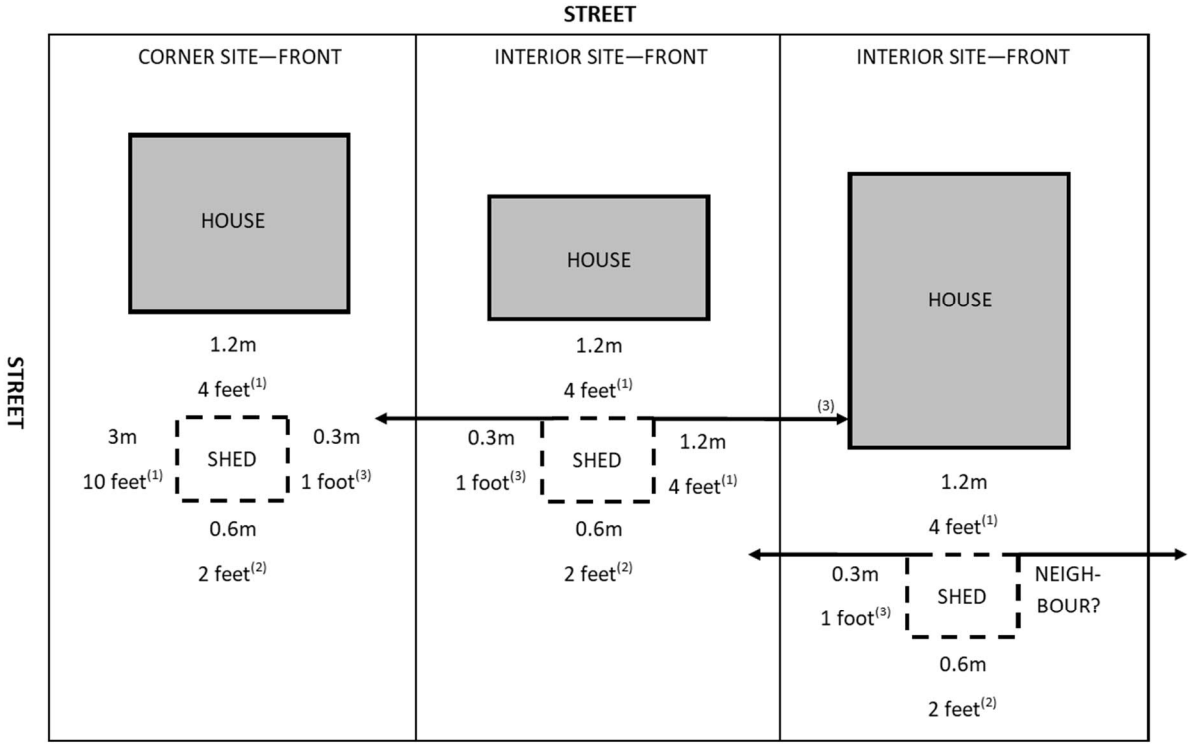
What size of shed are you building?
A permit is not required if the proposed shed is less than 107 square feet (10 square meters) in area. However, you must follow the Manitoba Building Code and City of Brandon Zoning Bylaw rules below.

Where can I build my shed?

Interior and Corner Sites



- 25 feet (7.6m) from front property line
- May be as close as 2 feet (0.6m) to rear property lines - eaves no closer than 1 foot (0.3m)
- Side yard setbacks can vary depending on the type of site you have and how your neighbours home is placed relative to your home. See below for more information.
- Shed must be setback at least 4 feet (1.2m) from house regardless of which side the shed is placed on



(1) Eaves may project 2 feet (0.6m) into required setback

(2) Eaves cannot be any closer than 1 foot (0.3m) to rear property line

(3) If the shed wall is behind house, **and** nearest neighbours house, 1 foot (0.3m) side yard setback (including eaves). If the shed wall is located beside the nearest neighbours house; a 4 foot (1.2m) side yard setback is required.

How do I build my shed?

What size of shed are you building?

Length: Width:

Height*: Area:

*Height is measured from the ground to the midway point of the peak of the roof. The maximum height allowed is 13 feet (4m) and cannot exceed the height of the house.

Can I use a mud sill or skids as a foundation?

- If your shed is less than 592 square feet (55 square meters) in area you may use pressure treated wood mud sills (also known as skids), or a 100mm thick concrete floor slab as a foundation:
  - Ground anchors must be installed to resist wind up lift
  - The underside of the floor must have a minimum clearance of 6" (150mm) from the ground

The following best practices for wood skid foundations are recommended but not required:

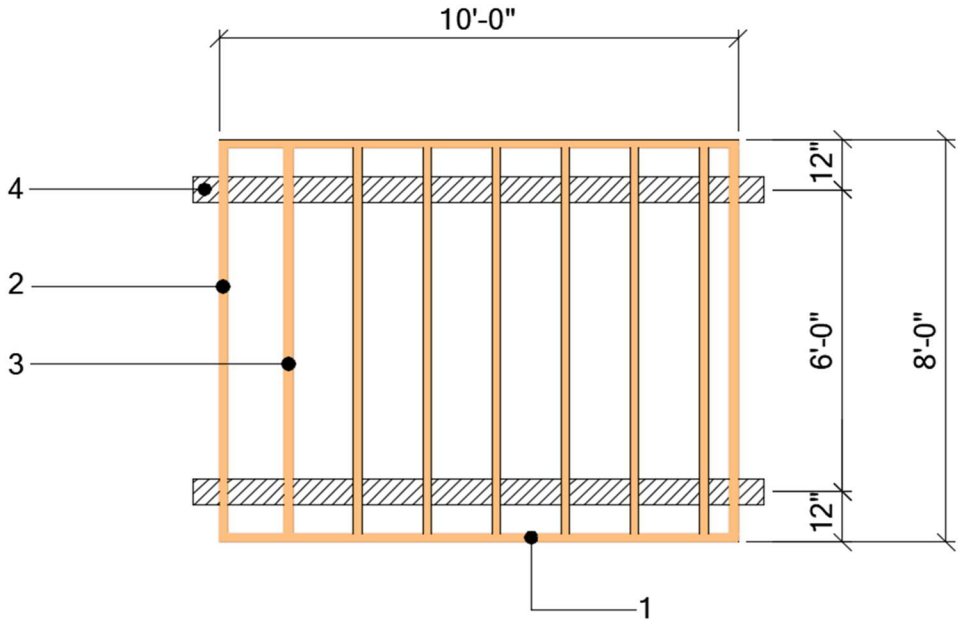
- Top soil and organic materials should be removed from the area below the shed
- The base of the excavated site should be graded from the center toward the outside with a minimum slope of 2% to prevent water accumulation under the shed
- A ground cover of 6 mil polyethylene with joints lapped 4" (100mm) may be placed over the whole area to prevent migration of moisture from the soil to the floor of the shed
- The excavated site area should then be filled with gravel to a level above the surrounding grade

- If your shed is greater than 592 square feet (55 square meters) but less than 753 square feet (70 square meters) you will require a concrete slab that is 6" (150mm) thick with a 12" x 12" (300mm x 300mm) thickened edge. See the accessory building handout for more details.

- Sheds greater than 753 square feet (70 square meters) require foundations to be designed by a Professional Engineer registered in the Province of Manitoba

How do I build my shed floor?

*Shed floor details described below are based on a 1-storey wood frame structure that do not include any additional loads.



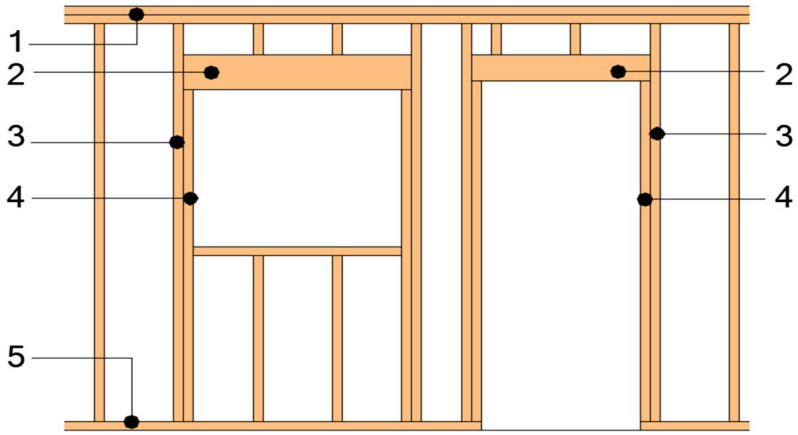
(1) Header Joist : floor joist (3) to be end nailed through header joist (1) to restrict twisting
(2) Rim Joist: also known as an end/ribbon joist. Located at the end of shed floor system
(3) Floor Joist:

FLOOR JOIST SPANS – DESIGN LIVE LOADS FOR 1.9 KPA (40 PSF)									
Commercial Designation	Grade	Joist Size (in)	Maximum Span (ft-in) Joist Spacing			Joist Size (mm)	Maximum Span (m) Joist Spacing		
			12 Inch	16 Inch	24 Inch		300 mm	400 mm	600mm
-Spruce - Pine - Fir	No. 1 and No. 2	2 x 4	6-2	5-8	5-2	38 x 89	1.86	1.72	1.58
		2 x 6	9-7	8-10	8-2	38 x 140	2.92	2.71	2.49
		2 x 8	11-7	11-0	10-6	38 x 184	3.54	3.36	3.2

- A subfloor at least 5/8” (15.5mm) thick must be installed over the floor joists.

(4) 6x6 (140 x 140mm) Pressure Treated Skid: skids must be pressure treated and anchored to the ground

How do I build my shed walls?



(1) Double Top Plate: joints must be staggered at least one stud space and lapped at all corners
(2) Lintel:

WOOD LINTEL SPANS FOR WINDOWS AND DOORS			
Commercial Designation	Grade	Size of Lintels	Allowable Spans
- Spruce - Pine - Fir	No. 1 and No. 2	2 – 2 x 4 (38 X 89 mm)	3'11" (1.19m)
		2 - 2 x 6 (38 x 140 mm)	5'10" (1.79m)
		2 - 2 x 8 (38 x 184 mm)	7'2" (2.18m)

*Built up lintels must be full-length members. Do not splice lintels between supports.

(3) Common Stud: to be spaced 16" (400mm) or 24" (600mm) on center. One continuous common stud is to be located on each side of a window or door opening

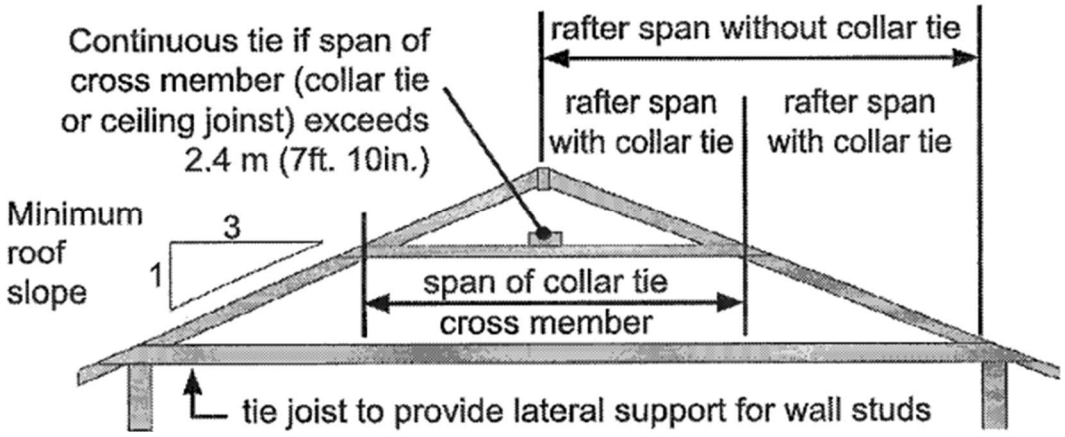
SIZE AND SPACING OF STUDS				
Type of Wall	Supported Loads	Minimum Size	Maximum Spacing	Maximum Unsupported Height
Exterior	Roof with or without attic	2 x 3 (38 X 64 mm)	16 inch (400mm)	7'10" (2.4m)
		2 x 4 (38 x 89 mm)	24 inch (600mm)	9'10" (3.0m)

(4) Trimmer Stud: to run from the top of the bottom plate to the underside of the lintel
(5) Single Bottom Plate: to be anchored with 1/2" (12.7mm) diameter anchor bolts, at a maximum spacing of every 7'10" (2.4m) on center. An anchor bolt must be placed at each side of a door opening, and at each end of the wall. The bottom plate shall be pressure treated material or a layer of 6 mil poly shall be installed under the bottom plate.

How do I build my shed roof?
There are two basic methods for framing the shed roof. They are:

- Framing with pre-manufactured roof trusses
  Roof Truss manufactures and suppliers will provide a truss framing plan (with layout and bracing details) that must be followed when installing the roof truss system.

- Conventional framing
  Also known as stick framing. The figure below shows a typical cross section of a common or gable roof. The table below indicates the maximum rafter spans for various species and size of rafter. Note that the figure below makes use of collar ties as a means of reducing a full rafter span into two smaller spans. Collar ties can only be used in this fashion when the roof slope is 1 in 3 or greater.



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
			Maximum Span feet-inch				Maximum Span meters		
- Douglas - Fir - Larch	No. 1 And No 2	2 x 4	9-4	8-6	7-5	38 x 89	2.86	2.59	2.27
		2 x 6	14-9	13-5	10-11	38 x 140	4.49	4.08	3.34
		2 x 8	18-10	16-4	13-4	38 x 184	5.74	4.97	4.06
		2 x 10	23-0	19-11	16-3	38 x 235	7.02	6.08	4.96
		2 x 12	26-9	23-2	18-11	38 x 286	8.14	7.05	5.76
- Spruce - Pine - Fir	No. 1 And No 2	2 x 4	8-11	8-1	7-1	38 x 89	2.72	2.47	2.16
		2 x 6	14-0	12-9	11-2	38 x 140	4.28	3.89	3.40
		2 x 8	18-5	16-9	14-6	38 x 184	5.62	5.11	4.41
		2 x 10	23-7	21-5	17-8	38 x 235	7.18	6.52	5.39
		2 x 12	28-8	25-2	20-6	38 x 286	8.74	7.66	6.25

*When using 24" (600mm) spacing with panel type roof sheathing less than 1/2" (12.7mm) thick, supports must be provided at each edge of the panel including those meeting at the ridge. You may use H-clips or solid blocking.