

DETACHED GARAGES & ACCESSORY STRUCTURES (WOOD FRAME)

Construction and Zoning for detached garages, storage sheds and other accessory buildings that serve single family dwellings.



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Note:

The R.M of Tache Building By-law is primarily an administrative document that adopts the Manitoba Building Code and related standards to provide constructive requirements. Throughout this booklet the Manitoba Building Code will be referred to as the building code.

Detached garages and accessory structures vary in size and area and it is beyond the scope of this booklet to deal with every possible situation. The requirements and construction guidelines that follow are provided to assist you in designing and constructing a detached garage or accessory structure which will comply with the regulations. If the nature of your project is different than that contained in this booklet and you are not familiar with the regulations which may be applicable, it is recommended that you contact the R.M of Tache building inspector.

Every effort has been made to ensure the accuracy of information contained in this publication. However, in the event of a discrepancy between this publication and the R.M of Tache Building By-law, the By-law and current Manitoba Building Code and Ammendments will take precedence.

Permit Requirements

Every detached accessory structure that is larger than 10 sq. m. (108 sq. ft.), including metal frame, fabric covered storage facilities, requires a building permit. Permits are obtained by submitting the required information to the R.M of Tache Building & Planning Department at 28007 Mun 52N (on the corner of PR 206 and TCH) or by visiting our website at www.rmtache.ca.

While a building permit is not required for accessory structures less than 10 sq. m. (108 sq. ft.) in area, they must be situated on the property in accordance with the R.M of Tache Zoning By-law and constructed in accordance with the building code.

Foundation Slabs

A building permit is required for pouring the concrete slab for your future garage or accessory structure however, you need to ensure the slab meets all applicable building code and zoning regulations with respect to;

- a. allowable size;
- b. appropriate thickness and reinforcing; and
- c. allowable distances from property lines and the dwelling

as explained in other sections of this booklet.

The building code has specific requirements for foundation slabs for structures greater than 50 sq. m. (538 sq. ft.) or larger in area –see page 8.

As well, the R.M of Tache Zoning By-law has side yard regulations which, together with the proposed width of the roof eaves, will affect the location of the structure relative to the property lines. Please refer to the section on Zoning requirements for further information regarding acceptable locations and allowable size for your detached garage or accessory structure.

Be sure to obtain your building permit before proceeding with the construction of the garage or accessory structure.

Permit Application Requirements

You may be required to provide a copy of a *Surveyor's Building Location Certificate*. Alternatively a digital site plan showing all property dimensions; locations of all buildings; and the location and size of the proposed structure (including doors & windows) may be acceptable at the discretion of the authority having jurisdiction.

While no construction plans are required if you are building a one-storey conventional wood framed detached garage (commonly referred to as a 'garage package') structure, in some instances, additional information including plans or design by a structural engineer may be required.

Carports

A building permit is required to build a carport. Whether the carport stands alone or is attached to another structure, all zoning and building code regulations apply.

Construction plans <u>are required</u> for all carports and need to include detailed information regarding roof framing, posting and the posting foundations as well as the size and construction of the beams over the top of the posts.

Where the carport is attached to the house it must comply with all regulations for house additions. The zoning and building code regulations for house additions are different from those contained in this booklet. Please contact the R.M of Tache Building & Planning department at 204-878-3321 if you require any additional information.

Property Lines

You cannot rely on sidewalks, lane-ways, tree lines, roads or fences to determine where your property line is located. The only accurate way to determine your property line is with a *Manitoba Land Surveyor's Staking Certificate*. If you do not have a copy of this certificate, you may need to retain the services of a qualified Land Surveyor – this is the best way to avoid property boundary disputes with neighbours.

Zoning Requirements

Detached Garages, Carport, Covered Patio, Tool House, Shed or Similar Building are Accessory Uses/Structures that are "**P**" **Permitted** in all zones, see below.

TABLE 3-5: ACCESSORY USE, BUILDING OR STRUCTURE TABLE

						Z 0	NE				
	USE, BUILDING OR STRUCTURE	AG AL	All C	RRW RRE	RS RT RMH	RM1 RM2	1	05	AR	NE	VA
25	Private garage, carport, covered patio, tool house, shed or similar building	P	P	Р	Р	Р	P	P	P	Р	P

Figure 1

Please see *Table 3-5 Accessory Use, Building or Structure Table* from the R.M. of Taché Zoning By-law No. 10-2017, for a specific accessory use to determine if the use is "P" Permitted, "C" Conditional or "-" Not Permitted.

Setbacks

All Accessory Buildings, including Detached Garages, shall adhere to the minimum and maximum requirements and size requirements for **Accessory Uses** within the corresponding zone of the property. See *Table 4-4: Residential Bulk Use Requirements* for the *"RS" Residential – Single Unit Zone* below as an example.

TABLE 4-4: RESIDENTIAL BULK USE REQUIREMENTS

		Minimum Requirements									
			Site		Yards				Maximum Requirements		
Resid	dential	Site Area (feet ¹ /acres)	Lot Area per Dwelling Unit	Site Width (feet)	Front Yard (feet)	Side Yar	d (feet) Corner	Rear Yard (feet)	Site Coverage (%)	Building Height (feet / storeys)	
Zone	Use										
RS	Primary	5500 (a)	n/a	50 (a)	20 (b)	5	12	25	45	30	
RS	Accessory		•		20	5	12	10	10	15	

Figure 2

Figure 3 illustrates generally where the required front, side and rear yards are located (in blue) and the minimum setback distances (dashed black lines).

Please see *Tables 4-2, 4-3, 4-4, 4-8, and 5-7* of the R.M. of Taché Zoning By-law for individual zone minimum and maximum yard and building requirements.



Figure 3





As regulated in the Zoning By-law, and shown in Figure 4, all setback distances for Accessory Buildings shall be measured from the <u>furthest</u> <u>projection (eave/overhang)</u> of the building to the property line.

The height of all Accessory Buildings is measured from top of floor to roof peak.

Figure 4

Note: One exception to the setback distances is "when the floor area of an accessory building or structure is <u>less than 108 square feet (10.9 sq. metres)</u> in the "RS" and "RT" zones, the minimum side yard and rear yard distance is <u>3</u> <u>feet"</u> (Table 4-4, Item f).

Maximum Size

The maximum size of an Accessory Building is determined by the maximum Site Coverage permitted for Accessory Buildings in each Zone. Site Coverage means the area, measured as a percentage of the total site area, which is occupied by a principal or accessory building, or structure. Please see Tables 4-2, 4-3, 4-4, 4-8, and 5-7 of the Zoning By-law to determine the accessory building site coverage for a zone.



IF THE SITE AREA IS 7,200 SQ.FT. AND APPLICABLE BUILDING FOOTPRINT IS 3,000 SQ.FT. IS 41.6%



Foundation Requirements – 1 Storey Only

- For a detached garage having a building area of less than 50 m² (538 ft²) it is recommended that a concrete slab with a thickness of not less than 100 mm (4 in.) be used as shown in FIGURE 4a.
- 2. For a building area of 50 to 70 m² (538 to 753 ft²) inclusive, it is recommended that a thickened edge concrete slab be used as shown in FIGURE 4b.
- 3. For foundations other than those shown in Figures 4a and 4b, or if the building area is greater than 70 m². (753 ft²), or if the garage supports an upper floor or a roof with other than limited attic storage* floor area, the foundation must be designed by a professional engineer.

* Attic storage shall be limited to 1,066 mm (3 ft. 6 in.) in height, 2,590 mm (8 ft 6 in.) in width and a 1.0 kPa (20 psf.) storage live load. Storage can run the length of the building.





Additions to existing detached structures

For a garage, shed or carport addition to an existing structure, the entire foundation, both the existing and the addition, must be made to comply with the foundation requirements shown in FIGURES 4a and 4b or alternatively the foundation must be designed by a professional engineer.

Note:

The details and standards in the pamphlet are considered nonengineered details and are based on past "good construction practice". Variations from these design standards are <u>ONLY</u> permitted where the design is by a professional engineer. Some variations that will require an engineer are:

- 1. Wood mudsill foundation and anchorage details to prevent uplift due to wind.
- Foundation slab that includes a curb of more than 150 mm (6 in.) of retaining wall to hold back the earth where the lot is not level.
- 3. Foundation slab that is greater than 70 m² (753 ft²)
- 4. Foundation slab that supports a second floor or roof attic storage with a height of more than 1,066 (3 ft. 6 in.) and/or supports a load more than 1.0 kPa (20 psf.).

Concrete Specification

Concrete used for all detached garage or accessory structure foundation slabs must have a minimum compressive strength of 32 MPa (4600 psi) after 28 days and must have air entrainment of 5 to 8 per cent.

Fire Ratings

You must fire-rate only those walls which are closer than 600 mm (2 ft.) to any property line that faces an adjoining property other than the street or public lane.

Required fire-ratings can be achieved by applying a layer of 15.9 mm (5/8 in.) standard non-rated drywall or 12.7 mm (1/2 in.) fire-rated (Type X) drywall or equivalent to the inside face of the wall.

Openings in Walls

Windows and other openings, including doors, are only permitted in a wall if the wall is 1.2 m (4 ft.) or more from the property line of an adjoining property other than the street or public lane. There are no distance restrictions between wall openings in a detached structure and a single family dwelling on the same lot.

Framing Methods

The framing details described in this pamphlet are based on a 1-storey wood-framed structure that do not include any additional superimposed loads and further design consideration may be required to address these loads. Framing methods must be in accordance with good building practice. A detailed discussion of this aspect of construction is beyond the scope of this publication. However, some common framing details are indicated on the following pages. Refer to FIGURES 5, 6, & 7, and TABLES 1 & 2. Where the structure will not be a standard wood frame structure, such as post and beam, concrete block, brick (including brick veneer), metal framing or where the framing members exceeds what is prescribed in this booklet, the design must be engineered and drawings must be submitted under the seal and signature of a professional engineer, licenced to practice in Manitoba.



FIGURE 5 - Wall Framing and Lintel Detail

Notes to FIGURE 5:

- <u>Double top plate</u>: Joints must be staggered at least one stud spacing and lapped or suitably tied at corners or intersecting walls.
- 2. <u>Lintel</u>: Refer to TABLE 1 to determine the size of lintel required for the opening width you select.
- <u>Through stud:</u> Refer to TABLE 2 to determine the maximum spacing and maximum unsupported height of studs.
- 4. <u>**Cripple stud:**</u> The building code requires these studs to be a single full length piece of lumber extending from the underside of the lintel to the bottom plate. Two cripples are required on both sides of opening when opening is greater than 3 m (9 ft. 10 in.)
- 5. **Single bottom plate:** To prevent uplift, this plate must be firmly anchored down using a minimum 12.7 mm (1/2 in.) diameter anchor bolts at each side of door openings, at each end of each wall, and at intervals not exceeding 2.4 m (7 ft. 10 in.).

FIGURE 6 - Exterior Corner Detail







TABLE 1 - Wood Lintel Spans for Windows and Man Doors

Size of Lintels	Allowable Spans
2 - 38 x 89 mm (2 - 2 x 4)	1.19 m (3 ft. 11 in.)
2 - 38 x 140 mm (2 - 2 x 6)	1.79 m (5 ft. 10 in.)
2 - 38 x 184 mm (2 - 2 x 8)	2.18 m (7 ft. 2 in.)

Notes to TABLE 1:

- 1. This table is for use with Spruce-Pine-Fir lumber grades 1 & 2.
- 2. Built-up lintels must be constructed of full length members. No splicing of members is permitted between supports.

TABLE 2 - Size and Spacing of Studs

Type of Wall	Supported Loads (including dead loads)	Minimum Stud Size	Maximum Stud Spacing	Maximum Upsupported Height
Exterior	Roof with	38 x 64 mm	400 mm	2.4 m (7ft. 10
	or without	(2 x 3)	(16 in.)	in.)
	attic	38 x 89 mm	600 mm	3.0 m
	storage	(2 x 4)	(24 in.)	(9ft. 10in.)

Note to TABLE 2:

This table is for use with all species of lumber and minimum grades of standard, stud, and No. 2.

Overhead Door Lintel

The size of lintel required depends entirely upon the load which it must support which, in this case, is determined by the style of roof. See TABLES 3 & 4.

How are the tables used in determining the required overhead door lintel size?

If the roof style selected is Gable #1 as shown in FIGURE 8, then TABLE 3 is used to determine the lintel size. This table is used where the door opening DOES NOT SUPPORT the roof, i.e. where the roof framing elements such as trusses or rafters run parallel to the door opening.

FIGURE 8 - Roof Style with Lintel NOT SUPPORTING roof framing



TABLE 3 - Wood Lintels - NOT SUPPORTING roof Loads

Maximum Door opening Width	Lintel - Gable roof only (Door in Gable End)
2.44 m (8 ft.)	2 - 38 x 184 mm (2 - 2 x 8)
3.66 m (12 ft.)	2 - 38 x 235 mm (2 - 2 x 10)
4.27 m (14 ft.)	3 - 38 x 235 mm (3 - 2 x 10)
4.88 m (16 ft.)	3 - 38 x 235 mm (3 - 2 x 10)
5.49 m (18 ft.)	3 - 38 x 286 mm (3 - 2 x 12)

Notes to TABLE 3:

- 1) This table is for use with Spruce-Pine-Fir lumber grades 1 & 2.
- 2) Built-up lintels must be constructed of full length members. No splicing of members is permitted between supports.

If the roof type selected is as shown in FIGURE 9, i.e. Gable #2, Hip, Mono, or Flat, then TABLE 4 is used to determine the lintel size. This table is used where the lintel over the door opening SUPPORTS the roof, i.e. where the roof framing elements such as trusses or rafters run perpendicular to the door opening.

To select a size of wood lintel simply match the door opening size with the appropriate supported length in TABLE 4 to find the minimum lintel size.

FIGURE 9 - Roof Styles With Lintel SUPPORTING Roof framing.



TABLE 4 - Wood Lintels - SUPPORTING Roof Loads

SUPPORTED LENGTH (see note 3 below)

Width of opening (Lintel Span)	2.44 m (8 ft.)	3.05 m (10 ft.)	3.66 m (12 ft.)	4.27 m (14 ft.)	4.88 m (16 ft.)
2.44 m	3 - 38 x 184mm	3 - 38 x 235mm			
(8 ft.)	(3 - 2 x 8)	(3 - 2 x 10)			
2.74 m	3 - 38 x 184mm	3 - 38 x 184mm	3 - 38 x 184mm	3 - 38 x 235mm	3 - 38 x 235mm
(9 ft.)	(3 - 2 x 8)	(3 - 2 x 8)	(3 - 2 x 8)	(3 - 2 x 10)	(3 - 2 x 10)
3.05 m	3 - 38 x 184mm	3 - 38 x 235mm	3 - 38 x 235mm	3 - 38 x 235mm	3 - 38 x 286mm
(10 ft.)	(3 - 2 x 8)	(3 - 2 x 10)	(3 - 2 x 10)	(3 - 2 x 10)	(3 - 2 x 12)
3.66 m	3 - 38 x 235mm	3 - 38 x 235mm	3 - 38 x 286mm	4 - 38 x 286mm	4 - 38 x 286mm
(12 ft.)	(3 - 2 x 10)	(3 - 2 x 10)	(3 - 2 x 12)	(4 - 2 x 12)	(4 - 2 x 12)
4.27 m (14 ft.)	3 - 38 x 286mm (3 - 2 x 12)	3 - 38 x 286mm (3 - 2 x 12)	4 - 38 x 286mm (4 - 2 x 12)	Design Req'd by Engineer	Design Req'd by Engineer
4.88 m (16 ft.)	3 - 38 x 286mm (3 - 2 x 12)	4 - 38 x 286mm (4 - 2 x 12)	Design Req'd by Engineer	Design Req'd by Engineer	Design Req'd by Engineer
COL. 1	2	3	4	5	6

Notes to TABLE 4:

- The lintels in this table are Spruce-Pine-Fir lumber grades 1 & 2, except those marked *which are Douglas Fir lumber grades 1 & 2.
- 2) Built-up lintels must be constructed of full length members. No splicing of members is permitted between supports.
- Supported length means half the span of trusses, roof joists, or rafters supported by the lintel plus the length of the overhang beyond the lintel (see FIGURE 10).
- 4) If the supported length is between the sizes shown, use the column with the greater depth. For garages or storage sheds with a door width or supported length greater than shown on the tables, consult a Professional Engineer.
- 5) The spans shown in the table are the clear spans between the load bearing supports at each end of the lintel. To find the total length of lintel needed, add the two bearing lengths of the support to the clear span.
- 6) The minimum bearing length of the support at each end of the lintel must be 89 mm (3 1/2 in.).

- Lintel sizes smaller than those shown on these tables may be used provided the lintel has been designed by a Professional Engineer and the lintel design and calculations are submitted and accepted.
- The above noted lintels are not designed to carry masonry or floors above the overhead door. For these types of applications consult a Professional Engineer.
- The deflection limit for lintels was set at a maximum 15 mm (0.6 in.) to ensure proper closure of garage doors. For Wood Lintel Substitutions please see TABLE 8 on Page 21.

Example:

In order to select the correct size of lintel in cases where it is supporting the roof, three pieces of information are needed: the size of the garage, the width of the overhead door opening, and the size of the roof overhang.

Assume a 7.32 m x 7.32 m (24 ft x 24 ft) garage with a 2.74 m (9 ft.) overhead door opening and a 600 mm (2 ft.) overhang. Refer to TABLE 4.

Begin by selecting the row for a 2.74 m (9 ft.) overhead door opening. Next, knowing that the supported length will be half the distance of the roof span plus the overhang (see FIGURE 10), we divide the 7.32 m (24 ft.) roof span by 2 and add the 600 mm (2 ft.) roof overhang to get the total supported length of 4.27 m (14 ft.).

Now looking along the table to column 5 where the supported length is 4.27 m (14 ft.), we see that the proper size of lintel would be $3 - 38 \times 235$ mm ($3 - 2 \times 10$). If there was no roof overhang over the door opening we would look to column 4 where the supported length is 3.66 m (12 ft.). The correct lintel size, in this case, would be $3 - 38 \times 184$ mm ($3 - 2 \times 8$).



Roof Framing Methods

In wood framing, there are basically three methods for framing roofs. They are:

1. Framing with pre-manufactured trusses.

Truss manufacturers and suppliers will provide a truss framing plan (with layout and bracing details) that must be followed when installing the truss system.

2. Conventional Framing

This is also known as stick framing. FIGURE 11 shows a typical cross section of a gable roof and TABLE 5 indicates maximum rafter spans for various species and sizes of rafters. Note that FIGURE 11 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.

If you are framing a roof containing hip or valley rafters, the hip and/ or valley rafters must be not less than 50 mm (2 in.) greater in depth than the common rafters and not less than 38 mm (1 1/2 in.) in thickness.

FIGURE 11 - Roof Rafter and Collar Ties for Gable Roof.



TABLE 5 - Roof Rafter Spans -Rafter NOT SUPPORTING Ceiling

		Member		fter Spac	ing	Member	Rafter Spacing			
Commercial Designation	Grade		12 in.	16 in.	24 in.	Size	300 mm	400 mm	600 mm	
Beerginaaterr		(in.)	ft in.	ft in.	ft in.	(mm)	m	m	m	
		2x4	9-4	8-6	7-5	38x89	2.86	2.59	2.27	
Douglas	No. 1	2x6	14-9	13-5	10-11	38x140	4.49	4.08	3.34	
Fir	and	2x8	18-10	16-4	13-4	38x184	5.74	4.97	4.06	
-Larch	No. 2	2x10	23-0	19-11	16-3	38x235	7.02	6.08	4.96	
		2x12	26-9	23-2	18-11	38x286	8.14	7.05	5.76	
		2x4	8-11	8-1	7-1	38x89	2.72	2.47	2.16	
Spruce	No. 1	2x6	14-0	12-9	11-2	38x140	4.28	3.89	3.40	
Pine	and	2x8	18-5	16-9	14-6	38x184	5.62	5.11	4.41	
Fir	No. 2	2x10	23-7	21-5	17-8	38x235	7.18	6.52	5.39	
		2x1	28-8	25-2	20-6	38x286	8.74	7.66	6.25	
Col. 1	2	3	4	5	6	7	8	9	10	

Note to TABLE 5:

This table applies to roofs with a slope of 1 in 3 or greater. Roof slopes of less than 1 in 3 are subject to different loading conditions, e.g. adequate ridge support must be provided.

Example

In order to select the correct rafter size for a 6.72 m x 6.72 m (22 ft. x 22 ft.) garage with a gable roof having a slope of 1 in 3 or greater, with spruce rafters (without collar ties) spaced 600 mm (24 in.) apart, we will proceed as follows;

First, we must know the rafter span – the horizontal distance from the outer edge of the wall to the peak of the roof. In this example the distance is 6.72 m (22 ft.) divided by 2 or 3.36 m (11 ft.).

Next, we look to TABLE 5 in the Spruce-Pine-Fir section for a 600 mm (24 in.) rafter spacing for a dimension that equals or exceeds 3.36 m (11 ft.). In this case the value is 3.89 m (12 ft. 9 in.). We now look at the member size column to determine the size of rafter needed. In this case it is a 38 x 184 mm (2 x 8 in.) rafter. This rafter size is the minimum size of rafter required for the span of 3.36 m (11 ft.) for this particular gable style roof.

If collar ties are permitted and are used, the required span would be less than 3.36 m (11 ft.) and a smaller member size could be looked up in the table.

Rafters & Trusses

3. Framing with homemade trusses.

This is not recommended for complicated roofs having complex angles or roofs having hips and/or valley rafters. For simple gable roofs, wood trusses must be constructed in accordance with an accepted truss design.

Truss designs vary depending upon spans, roof slope, etc. Before manufacturing your own trusses, obtain an accepted truss design drawing showing the span, the size of the members, the size and thickness of the plywood gussets, and the nailing patterns. Do not copy truss designs used on other buildings. These designs may be inadequate for your application.

Alternatively, the truss may be designed by a professional engineer registered in the Province of Manitoba.

<u>Note</u>: The use of gang nails (metal plates) in manufacturing homemade trusses is not permitted. These types of fasteners are only intended for use under the design and quality control of a truss manufacturer.

Edge Support for Roof Sheathing

When using trusses or rafters at 600 mm (24 in.) spacings with panel-type roof sheathing of less than 12.7 mm (1/2 in.) thickness, support must be provided to all edges of each roof sheathing panel including those that meet at the ridge. This can be accomplished with the use of 'H' clips as shown in FIGURE 12 and/ or solid blocking.

FIGURE 12 - 'H' Clip Detail



Additional Code Requirements

There are various other requirements concerning framing, sheathing materials, sheathing paper, flashing, siding, shingling, and stucco application, etc. Most of these aspects of construction are dealt with in the previously mentioned book Canadian Wood Frame Construction or the current edition of the Manitoba Building Code.

APPENDIX A

TABLE 8	- Woo	d Lintel	Substitutions
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From Table	Structural Composite Lumber (SCL)
3 - 2 x 8	2 - 13/4" x 71/4"
2 - 2 x 10	2 - 13/4" x 71/4"
3 - 2 x 10	2 - 13/4" x 91/2"
2 - 2 x 12	2 - 13/4" x 91/2"
3 - 2 x 12	3 - 13/4" x 91/2"
4 - 2 x 12	2 - 13/4" x 117/8"

Notes to TABLE 8

- 1) To be used in dry service conditions and standard duration of load.
- 2) Working stress design properties:

Modulus of Elasticity	2.0 x 10 6 psi Allowable
Bending Stress	2800 psi Allowable Shear
Stress	250 psi (perpendicular to glueline or wide face of strand)
Allowable Bearing Stress	500 psi (parallel to glueline or wide face of strand)

Permit applications requiring additional information

Listed below are certain instances where additional information, including plans, may be required for a permit application to build a detached accessory structure.

An asterisk indicates situations where a design (plans or letter) under seal of a registered professional engineer will also be required.

Additional information for the construction of an accessory structure will be required when:

- 1. The area of the new accessory structure's foundation will be greater than 70 sq. m. (753 sq. ft.). * Note: For more information on the foundation requirements for accessory structures including those for the foundation of an addition to an existing accessory structure see page 9.
- 2. The accessory structure will be supported on wood mudsills (e.g. no concrete floor). The method of anchorage of the accessory structure to the ground in order to prevent wind uplift will have to be indicated. *
- 3. The foundation is to include retaining walls (wood or concrete) in order to hold back earth because the lot where the accessory structure will be located is not level. Or other instances where concrete walls higher than six inches will be constructed on top of a slab. *
- If the accessory structure will have an irregular shape (i.e. not square or rectangular), beam and foundation details may be required. (Engineering design may also be necessary).
- 5. The accessory structure will not be "standard wood frame construction". Any of several alternative construction methods including: post and beam, concrete block, brick (including brick veneer) or metal frame construction (including steel studs), will have to be designed by an engineer.*
- 6. The wall height of the accessory structure will be greater than 3.0 m (9 ft. 10in.).*
- 7. A steel lintel will be used instead of a wood lintel for the overhead door of the accessory structure.*

- The roof of the accessory structure is to be framed with "homemade" trusses. *In this case, the design will have to be sealed by a registered professional engineer.
- The accessory structure will have a gambrel or a mansard roof type. *Plans will also be required for roofs that have an octagonal or similar circular shape.
- 10. The accessory structure will have attic storage space. Plans will be required.*
- 11. A dormer will be constructed on the roof of a new or existing accessory structure. Plans will be required.
- 12. A beam will be located in the interior of an accessory structure to support a roof with slope of less than 1 in 3 or for support of hoist. * (Or similarly, where an interior wall or interior posts will provide support for the structure.*)
- 13. A deck is to be located on the roof of a new or existing accessory structure, such as a detached garage. All building code requirements for decks will have to be met. Also, the Zoning requirements for building height and location will have to comply. Plans for the entire structure, including the foundation, will be required. The foundation design will have to be determined to be adequate. *
- 14. The accessory structure will be two-storey. In this case, plans for the entire structure, including the foundation, will be required. Additionally, the foundation design will have to be engineered. *Zoning requirements for height must also comply.
- 15. A detached accessory gazebo or similarly occupied structure is to be located on top of an existing deck. Here the plans will have to indicate the design of the new gazebo. It will have to be shown how the existing deck joists, beams and foundation will provide proper support under the new gazebo walls and will also anchor down the new structure to prevent wind uplift.
- 16. Construction plans will be required for all detached carports. Detailed information must be provided on the roof framing, the number of posts, the post foundation and the size of the beams over top of the posts. *Engineering may be required.

17. An accessory structure is to be constructed adjacent to an

"up and down" duplex. Limiting distance calculations will be required. The limiting distance calculations are required in order to limit the spread of fire between an accessory structure and dwellings on the same property. The limiting distance calculations will determine how close the accessory structure can come to the dwelling units and what materials can be used in the construction of the accessory structure.

Construction plans will be required for this type of accessory structure including elevation drawings. The elevation drawings must show window locations, type of cladding (e.g. stucco, siding, etc.) and dimensions of the wall facing the dwelling. Information will also be required for the wall of the dwelling that faces the accessory structure. The information that will be required for the dwelling wall includes an elevation drawing showing: wall height, wall width and area, type of wall construction (e.g. wood frame), size of all windows in the wall and type of wall cladding.

NOTES:

In order to determine what the necessary limiting distance requirements will be for your particular project and provide the required plans, applicants are advised to retain the services of an engineer, architect, or other qualified person.

Other accessory structure construction designs that are not specifically identified above may also require additional information including engineering. Contact the R.M of Tache building inspector for additional information.