

Requirements for Building an Attached Garage

Submit:

1. **Attached Garage Form or PLANS** that include the following items below
2. Truss design by truss manufacture. (You cannot make your own trusses).

Site plan

Size and location of garage; setback distances of building(s) from front, rear and sides of the property on all sides; show all existing buildings. If you are with-in 4' of the property line you cannot have any windows on this side. If you are less than 2' from the property line you will need a 45 Min fire rating on that wall.

Foundation plan

Overall size of the foundation; size and location of footings and concrete wall details
Or/and piles and grade beams sizes and details including rebar.

Attached garages foundation must extend to the same depth or greater than the house foundation; have a control joint and be sloped to the exterior.

Cross section c/w details

Cut through views of the building show height of building width of overhangs; type of shingles, sheathing, spacing of roof trusses; slope of roof, siding; wall sheathing; size and spacing of studs; size and spacing of anchor bolts. Include the size of garage doors and the support above.

Garage Slabs (slab-on-grade) and Pole Building; are not permitted for an attached garage

Grade Beam and Piles Max 1280 sq. ft.:

- Garage 0 - 1280 sq. ft. maximum 32 x 40
 - Grade beam and piles must be a minimum or greater than; Option 1: Piles 12" x 12' at 6' 6" o/c with 2-15mm rebar extending from the bottom of pile to into the grade beam and between the piles it must have void form. Grade beam to be 8" x 24" thick with 4-rows of rebar 2 at top and 2 at bottom. 10mm Stirrups are required at 16" o/c. The thickness of the grade beam to be continuous and a minimum of 16" under any bucked down openings.
- Garage Greater than 1280 sq. ft. or greater than 32 x 40
 - Engineered pile foundation

Concrete wall and spread footing:

- Garage Maximum 600 m²
 - E.g.; 20" x 8" footing with two rows 10mm rebar. With a minimum of an 8" x 48" concrete wall comes with two rows of rebar at the top and two at the bottom must conform to 9.15 of the NBC Canada. Garages greater than 12.2M (40') may require larger footings or engineering.

Notes:

- All garages: Install ½" bolts into treated or protected bottom plate at 8' o/c and all corners and beside all openings.
- Double garage doors where the trusses are bearing on the beam above will require an engineered header.
- Attached garage to house door must be weather stripped, have self-closing hinges secured properly, be deadbolt locked, have forced entry blocking at the locks.
- Attached garage cannot have any windows from the house into the garage.
- Attached garage you cannot run forced air heating ducts from the house to the garage.
- Attached garage slab must be sloped to the exterior and have expansion joint against the house.
- Overhead door cripples must be supported on the largest portion of the foundation not in the bucked down area.

Requirements for Building a Detached Garage

Submit:

1. **Detached Garage Form or PLANS** that include the following items below
2. Truss design by truss manufacture. (You cannot make your own trusses).

Site plan

Size and location of garage; setback distances of building(s) from front, rear and sides of the property on all sides; show distance from house to garage; show all existing buildings. If you are with-in 4' of the property line you cannot have any windows on this side. If you are less than 2' from the property line you will need a 45 Min fire rating on that wall.

Foundation plan

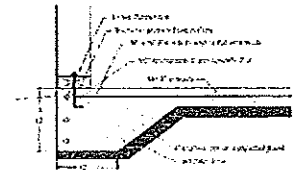
Overall size of the foundation; size and location of slab, concrete footings and walls and sub base and rebar Or/and piles and grade beams sizes including rebar.

Cross section c/w details

Cut through views of the building show height of building width of overhangs; type of shingles, sheathing, spacing of roof trusses; slope of roof, siding; wall sheathing; size and spacing of studs; size and spacing of anchor bolts. Include the size of garage doors and the support above.

Garage Slabs (slab-on-grade) Detached Garages ONLY Max 900 sq. ft.:

- Garage 0 - 592 sq. ft.
 - 8" Thickened edge with 2-rows 15mm rebar in edge tied to pad
- Garage 592 - 900 sq. ft. no side greater than 30 feet
 - 12" Thickened edge with 3-rows 15mm rebar in edge tied to pad



Grade Beam and Piles Max 1280 sq. ft.:

- Garage 0 - 1280 sq. ft. maximum 32 x 40
 - Grade beam and piles must be a minimum or greater than; Option 1: Piles 12" x 12' at 6' 6" o/c with 2-15mm rebar extending from the bottom of pile to into the grade beam and between the piles it must have void form. Grade beam to be 8" x 24" thick with 4-rows of rebar 2 at top and 2 at bottom. 10mm Stirrups are required at 16" o/c. The thickness of the grade beam to be continuous and a minimum of 16" under any bucked down openings.
- Garage Greater than 1280 sq. ft. or greater than 32 x 40
 - Engineered pile foundation

Concrete wall and spread footing:

- Garage 0 - 600 m².
 - 20" x 8" footing with two rows 10mm rebar. With a minimum of an 8" x 48" concrete wall comes with two rows of rebar at the top and two at the bottom must comply to 9.15 of the NBC Canada. Garages greater than 12.2M (40') may require larger footings or engineering.

Garage Pole Building:

- Garage 0 - 1280 sq. ft. maximum 32 x 40
 - Maximum Height 14'. Poles must be 4' in ground. 2-ply 2x10 headers around entire perimeter notched and bolted to poles maximum of 8' o/c. Trusses to be residential with hurricane ties.

Notes:

- All garages: Install 1/2" bolts into treated or protected bottom plate at 8' o/c an all corners and openings
- Double garage doors where the trusses are bearing on the beam above will require an engineered header.
- Overhead door cripples must be supported on the largest portion of the foundation not in the bucked down area.
- Windows and doors to caulked. Doors to have forced entry blocking both sides at lock height
- Sheathing membrane (Tar paper, Tyvec, Typar) required under siding.

Carport Requirements

Submit:

1. Carport Worksheet or drawings that include the following items below:
 - Site plan and plan view of the carport
 - Pile, pad or pier designs and spacing
 - Post, spacing, type, size and material
 - Attachment type of post to pile
 - Beam material, size and plies
 - Attachment to existing building
 - Roof truss designs from manufacture if using trusses
 - Rafter details size and spacing
 - Roofing material

Note:

Hand built trusses are not allowed. If rafter framing you must meet the requirements under NBC 9.23.13 "Roof and Ceiling Framing"

General Details:

- Carports require a foundation below frost.
- Piles must be a minimum of 12" x 12' with 2 rows 15mm rebar
- Piles and post maximum spacing to be 8'0" apart unless designed to accommodate longer spans for beams
- Piers must have a pad 24x24x6" with a 12" concrete column
- Piers must be a minimum 48" into ground
- You must meet the zoning regulations
- Beams must meet the required span tables
- Beams must be notched in post or secured to the top with a metal fastener

Width of Carport	Minimum Beams Posts Spacing @ 8' o/c
16'	2-ply- 2x8
20	2-ply-2x8
24	2-ply-2x10
28	2-Ply – 2x10
32	2-Ply – 2x10

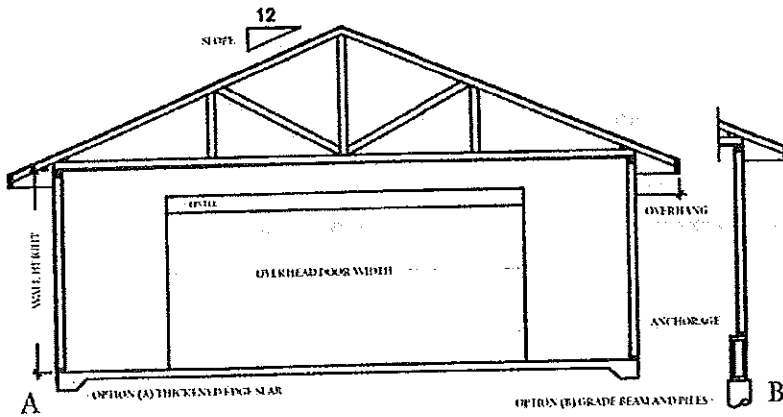
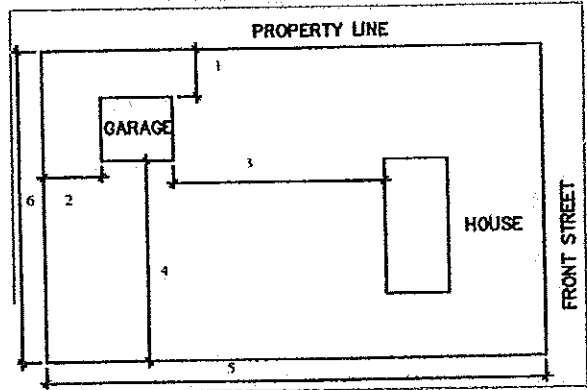
Rafters	Allowable Spans			
(31.3 PSF Snow Load)	2x4	2x6	2x8-	2x10
12" o/c (spruce)	8'-11"	14'-0"	18'-5"	23'-7"
16" o/c (spruce)	8'-1"	12'-9"	16'-9"	21'-5"
24" o/c (spruce)	7'-1"	11'-2"	14'-6"	17'-8"

Detached Garage Worksheet

Form#
2010-045

FLOOR PLAN	Name	
	Address	
	Phone#	
	Email	

Garage Size	Width		Length	
-------------	-------	--	--------	--



	Distance garage to:	Final
1	RH Side Yard	
2	Back or Alley	
3	House or Front	
4	LH Side Yard	
5	Lot Depth	
6	Lot Width	

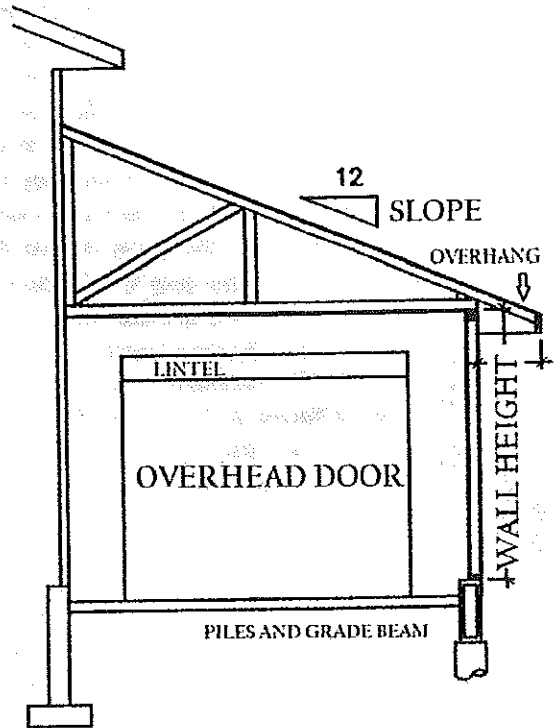
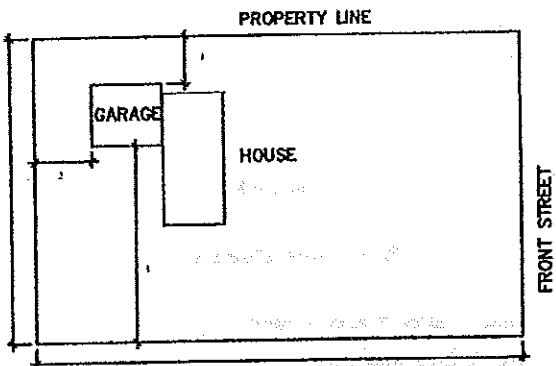
Item	Item	Description (fill in below)
Roof	Roof Sheathing type and thickness :	
Roof	Spacing of roof trusses:	
Roof	Width of overhang:	
Roof	Type of roofing, e.g. Asphalt, metal,:	
Wall	Height of walls:	
Wall	Type of studs and spacing e.g. 2x4 @ 24" o/c:	
Wall	Type and thickness wall sheeting:	
Wall	Type of membrane e.g. tar paper, tyvec:	
Wall	Type of siding:	
Foundation	Type of wall anchors (min 1/2" @ 8' o/c):	
Foundation	Thickness of interior slab:	
Foundation	Type of sub base; e.g. Gravel, rushed rock:	
Foundation	Rebar in slab size and spacing e.g. 10mm @ 24":	
Foundation	Thickened Edge Slab thickness and width :	
Foundation	Rebar in Edge, size and rows:	
Foundation	Grade Beam Size (minimum 8" x 24"):	
Foundation	Pile size and spacing minimum 12" x12' @ 6'6":	
Door	Overhead doors note each, type and size :	
Door	Lintel above door type, size and plies:	
Door	Are the trusses supported on the lintel:	

Attached Garage Worksheet

Form#
2010-046

Information	Name	
	Address	
	Phone#	
	Email	

Garage Size	Width	Length	
-------------	-------	--------	--



Site Plan	Distance from garage to:	Notes
1	RH Side Yard	
2	Back or Alley	
3	LH Side Yard	
5	Lot Depth	
6	Lot Width	

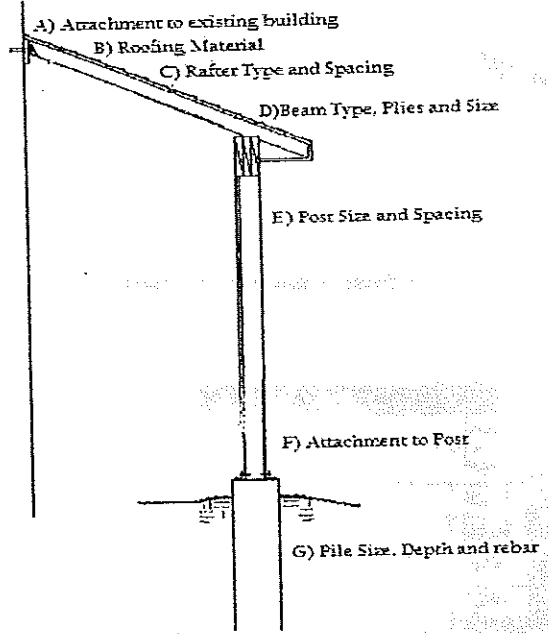
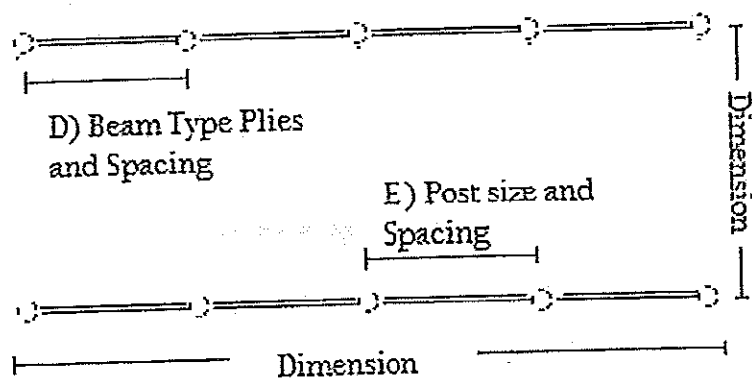
Garage Details	Item	Description (fill in details)
Roof	Roof Sheathing type and thickness :	
Roof	Spacing of roof trusses:	
Roof	Width of overhang:	
Roof	Type of roofing, e.g. Asphalt, metal:	
Wall	Height of walls:	
Wall	Type of studs and spacing e.g. 2x4 @ 24" o/c:	
Wall	Type and thickness wall sheathing:	
Wall	Type of membrane e.g. tar paper, tyvec:	
Wall	Type of siding:	
Foundation	Type of wall anchors (min 1/2" @ 8' o/c):	
Foundation	Thickness of interior slab:	
Foundation	Type of sub base; e.g. Gravel, rushed rock:	
Foundation	Rebar in slab size and spacing e.g. 10mm @ 24":	
Foundation	Grade Beam Size (minimum 8" x 24"):	
Foundation	Rebar in grade beam :	
Foundation	Pile size and spacing minimum 12" x12' @ 6'6":	
Foundation	Rebar in pile:	
Door	Overhead doors note each, type and size :	
Door	Lintel above door type, size and plies:	
Door	Are the trusses supported on the lintel:	

Carport Worksheet	Form# 2010-047
-------------------	-------------------

Information	
Name	
Address	
Phone#	
Email	

General Information			
Size of the Carport	Width	Depth	
Lean-two type against other building	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Standalone post and beam 2-sides	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

Carport Details



CARPORT DETAILS (See picture above) FILL IN ALL BLANK SPACES		
Letter	Item	Description
A	Type of Attachment to existing building	
B	Type of Roofing Material	
C	Rafter type, size and spacing	
D	Beam Type, Plies and Spacing	
E	Post type, size and spacing	
F	Type of Anchorage: post to pile or pier	
Foundation Options: Piers; Piles, or Screw Piles (screw piles require an engineered design)		
G	Pier Type: e.g. 12" Concrete	
G	Depth of Pier: minimum 48"	
G	Pad Size: e.g. 24x24x6"	
Note	Piers must have a pad and be a minimum of 48" into the ground. (Bell piers are allowed)	
G	Pile size and depth (see note below)	
Note	Piles must be a minimum of 12" round x 12' deep	
G	Screw Piles: Type, Depth and Brand	
Note	Screw Piles require and engineers design and a torque report when installed	