A GUIDE TO:

# ACCESSORY STRUCTURES

CITY OF PORT COLBOME
BUILDING DIVISION



#### Disclaimer

This information package is provided by the City of Port Colborne Building Division for information purposes only. It provides various requirements from the applicable bylaws and Ontario Building Code (OBC). In any case where there exists a discrepancy between the information in this document and the City of Port Colborne By-laws or the OBC, the requirements established by by-law or OBC shall prevail. This information package is intended to assist residents in making educated decisions when planning construction. The individual property owner/applicant is solely responsible to ensure that all required by-laws, codes and regulations are met, and all projects are maintained to the requirements of the municipality through its By-laws.



#### 1.0 Permits

# 1.1 What is an Accessory Building?

An accessory building is a building or structure separate from the primary building which is not used for human habitation and is used as an accessory use to the primary building. Accessory Buildings may include but are not limited to:

- Garages
- Sunrooms or solariums
- Decks
- Porches
- Sheds
- Barns
- Gazebos
- Carports

# 1.2 When a Building Permit is required

A building permit to construct an accessory building is required for any accessory building that has a building area that exceeds 10 square metres (108 square feet). Sheds used for storage purposes only with no plumbing require a permit when the building area exceeds 15 square metres (161 square feet). When a building permit to construct an accessory building is required, the permit must be issued and in the possession of the property owner prior to the start of any construction activity. When a building permit is not required, approvals and other regulations may still be required before construction can begin. Contact the Building Division should you have questions about the applicable laws and regulations.



# 1.3 Obtaining a Building Permit to Construct an Accessory Structure

A permit application is available from the Building Division office at Port Colborne City Hall or at the City of Port Colborne website. The review of your submitted package will not begin until all the required information is submitted, and the application package is considered complete. The Chief Building Official will then review the submitted application package for compliance with all applicable building codes, Bylaws, and other regulations. This process may take up to two weeks from the submission of the permit application. Once the permit is approved and recommended for issuance, the applicant is required to pay the outstanding building permit fee and pickup the building permit before commencing any work. A complete application shall include:

- Completed application forms
- All required drawings and approvals
- Minimum application fee

## 1.4 Required Drawings and Plans

An application for a building permit to construct an accessory building shall be accompanied by specific drawings. A complete set of drawings will consist of the following:

The site plan drawing must show the entire property, the location and the size
of all buildings and the proposed location of the new accessory buildings.
 Dimensions shall be given from the proposed accessory building to all property
lines and buildings which currently exist on the site.



- The floor plan drawings shall include all sizes, spans, and spacing of structural elements as well as the size, type of construction, and location of all walls, partitions, and building elements. Door and window location and sizes as well as associated lintel sizing is also required.
- The elevation drawings shall illustrate the proposed appearance of each side of the accessory building. Where similar sides exist, drawings of duplicate sides may be eliminated. Elevation drawings shall include height dimensions which shall be referenced to the adjacent grade level.
- The section/detail drawing(s) must illustrate the proposed construction of the accessory building as well as the materials to be used.

Additional drawings may be requested by the Building Division if the information submitted is insufficient to provide the details requested above.

# 2.0 Owner Responsibility

The owner of the property has several responsibilities for any building project. These responsibilities begin before any construction begins and continue after the construction of the building is complete.

#### 2.1 Prior to Construction

It is the responsibility of the property owner to:

- Obtain a building permit and necessary approvals
- Ensure that the proposed accessory building is not located on any easement, drainage, swale, septic system, or right-of-way
- Obtain all applicable permits for any electrical works from the appropriate authority



 Call Ontario One Call for locates of any services on the property prior to excavation.

# 2.2 During Construction

Once a building permit has been issued, the property owner is also responsible to:

- Ensure the building is constructed as per the approved drawings. Any revisions
  to the approved drawings shall be submitted to the Building Division for approval
  prior to proceeding with the revisions. Additional fees may be required for
  revisions to the building permit.
- Schedule all required inspections upon completion of each stage of the construction process as outlined in your permit package (48-hour notice is required).
- Ensure all electrical installations are installed in accordance with all applicable electrical codes and standards, and that necessary electrical inspections are conducted.

#### 2.3 After Construction

It is the responsibility of the property owner to:

 Maintain all building components in accordance with all applicable by-laws to the minimum standards which have been approved at the time of the final inspection.



# 3.0 Inspections

# 3.1 Footing and excavation inspection

The footing and excavation inspection is required prior to the pouring of any concrete and upon the completion of the foundation excavation. The OBC requires that the foundation be at a minimum depth of 1.2 metres (3.94 feet) from grade level. It should be noted that a full foundation is not always necessary.

## 3.2 Backfill inspection

The backfill inspection is required prior to backfilling of the excavated area around the completed foundation. The Building Official must inspect the foundation only when a foundation is provided.

## 3.3 Framing inspection

The framing inspection is required upon the completion of the framing of the building. The Building Official must be able to inspect all structural elements such as connections to the foundation elements, framing members, posts, columns, beams, and trusses. Where pre-engineered trusses are used, the engineered stamped drawings for the trusses must be available on site for the framing inspection.

# 3.4 Final/ Occupancy

The final inspection is required upon completion of the building construction and prior to occupancy of the building. The project is considered complete when all foundation, framing, doors and windows, roof and exterior finish are installed as indicated on the approved drawings and plans in accordance with all applicable codes and by-laws. The Building Official will issue a passing inspection report upon the completion of a successful Final inspection. You will receive a checklist of all required inspections with your issued building permit package.



#### 4.0 Enforcement

# 4.1 Inspection for compliance

The Building Official may inspect at any time during construction to determine compliance with any applicable codes and regulations. Where non-compliance exists, removal of deficient items may be ordered, or occupancy denied until the items are rectified to the satisfaction of the Building Official.

# 4.2 Penalty

Every person who contravenes the provisions of the OBC is guilty of an offence and upon conviction is liable to fines as provided for in the Provincial Offences Act, R.S.O. 1992, C.23, S.36(1)

# 5.0 Accessory Building Construction

# 5.1 Applicable Codes

In addition to the other regulations discussed in this package, the construction of accessory buildings must satisfy the requirements of the OBC. The following sections of this package have been included to offer some limited information from the OBC. This information is offered for reference as it is understood that many homeowners do not have access to the codes in question. For complicated designs and construction detailing, the assistance of a professional designer should be sought to ensure compliance with the required regulations prior to application.



#### 5.2 Foundations

A foundation is required to be provided for all accessory structures to a minimum depth of 1.2 metres (3.9 feet) measured from grade to the bottom of the footing. A foundation is not required for accessory buildings:

- That are not constructed using masonry or masonry veneer
- That are not more than 1 storey in building height
- That are not more than 55 square metres (592 square feet.) in building area, and
- Where the distance from grade to the underside of the floor joists is not more than 600mm (1' 115/8")

\*\* NOTE: All four points must be met to be exempt from the requirements for a foundation \*\*

Where a foundation is provided, the foundation wall must extend above finished grade by a minimum of 150mm (5.875 in.).

#### 5.3 Columns

Column construction is regulated by the OBC. The following excerpts from the code provide typical requirements for columns in relation to their use in accessory buildings.

- Solid wood columns shall be a minimum of 89 mm x 89 mm (3.5 in. x 3.5 in.);
- Poured concrete column piers shall be a minimum of 190 mm x 190 mm (7.5 in x 7.5 in); and
- Built up stud posts shall be at least as wide as the girder or beam they support.



# 5.4 Wall Framing

The code provides several regulations and resources for the proper sizing of members used to frame a building.

One such regulation is that wood studs are limited to a maximum height dependant on the spacing and size of the stud being used. The following table provides some reference for the proper sizing of studs. Where the building design requires studs to exceed the limitations outlined in the table below, engineering documentation will be required to be submitted with the permit application.

# Size and Spacing of Studs

Type of Wall	Supported	Minimum Stud	Minimum Stud	Maximum Stud
	Loads	Size, mm (in.)	Size, mm (in.)	Height, m (ft-
				in)
Exterior	Roof with or	38 x 89 (2" X	600 (24")	3.0 (9'-10")
	without attic	4")		
	storage			

#### 5.5 Door and Window Lintels

The following table contains information referenced from the OBC in relation to property sizing of lintels which are required above window and door openings in load bearing walls. Where opening dimensions exceed those covered by the information below, dimensional lumber may not be suitable for sue and engineered lumber or structural steel may be required.



## Maximum Spans for (Spruce, Pine, Fir) Lintels

Lintel Supporting	Lintel Size mm (in.)	Max Lintel Span, m (ft. – in)	Max Lintel Span, m (ft. – in)
Roof and Ceiling Only *	2 - 38 x 89 (2" x 4") 2 - 38 x 140 (2" x 6") 2 - 38 x 184 (2" x 8") 2 - 38 x 235 (2" x 10") 2 - 38 x 286 (2" x 12")	0.93 (3' - 0") 1.35 (4' - 5") 1.64 (5' - 4") 2.01 (6' - 7") 2.33 (7' - 7")	0.93 (3' - 0") 1.35 (4' - 5") 1.64 (5' - 4") 2.01 (6' - 7") 2.33 (7' - 8")
Roof, Ceiling, and One Storey *	2-38 x 89 (2" x 4") 2-38 x 140 (2" x 6") 2-38 x 184 (2" x 8") 2-38 x 235 (2" x 10") 2-38 x 286 (2" x 12")	0.84 (2' - 9") 1.19 (3' - 10") 1.44 (4' - 8") 1.73 (5' - 8") 1.96 (6' - 5")	0.74 (2' - 5") 1.02 (3' - 4") 1.20 (3' - 11") 1.45 (4' - 9") 1.66 (5' - 5")

<sup>\*</sup> Applicable only where spans of supported joints do not exceed 4.9 meters (16.1 ft.), and where the span or the trusses do not exceed 9.8 meters (32.2 ft.).

# 5.6 Roof Framing

The following tables contain information referenced from the Ontario Building Code in relation to proper sizing of roof rafters and roof joists. A roof rafter differs from a roof joist in that a roof rafter does not support a ceiling. If a ceiling is to be directly attached to the roof members, the table for roof joists shall be used. Where pre-engineered roof trusses are used, these tables do not apply.



# Maximum Spans for (Spruce, Pine, Fir) Roof Joists

Roof Joist	Maximum Roof Joist Span, m (ft. – in.)		
	300 mm (12.) O.C	400 mm (16 in.)	600 mm (24 in.)
		O.C	O.C.
38 x 89 (2" x 4")	1.82 (5' – 11")	1.65 (5'- 4")	1.44 (4' – 8")
38 x 140 (2" x 6")	2.86 (9' – 4")	2.60 (8' – 6")	2.27 (7' – 5")
38 x 184 (2" x 8")	3.76 (12' – 4")	3.42 (11' – 2")	2.99 (9' – 9")
38 x 235 (2" x 10")	4.81 (15' – 9")	4.37 (14' – 4")	3.82 (12' – 6")
38 x 286 (2" x 12")	5.85 (19' – 2")	5.31 (17' – 5")	4.64 (15' – 2")

NOTE: Spans provided for in above table are for No. 1 and No. 2 grade lumber

# Maximum Spans for (Spruce, Pine, Fir) Roof Rafters

Roof Joist	Maximum Roof Joist Span, m (ft. – in.)		
	300 mm (12.) O.C	400 mm (16 in.)	600 mm (24 in.)
		O.C	O.C.
38 x 89 (2" x 4")	2.29 (7' – 6")	2.08 (6' – 10")	1.82 (5' – 11")
38 x 140 (2" x 6")	3.61 (11' – 10")	3.28 (10' – 9")	2.86 (9' – 4")
38 x 184 (2" x 8")	4.74 (15' – 6")	4.31 (14' – 1")	3.52 (11' – 6")
38 x 235 (2" x 10")	6.06 (19' – 10")	5.27 (17' – 13")	4.30 (15' – 1")
38 x 286 (2" x 12")	7.06 (23' – 1")	6.11 (20' – 0")	4.99 (16' – 4")

NOTE: Spans provided for in above table are for No. 1 and No. 2 grade lumber

# Maximum Spans for (Spruce, Pine, Fir) Built Up Ridge Beams

Beam Size, mm (in.)	Max. Span, m (ft. – in.)	NOTE:
3 – 38 x 184 (2" x 8")	2.01 (6' – 7")	
4 – 38 x 184 (2" x 8")	2.32 (7' – 7")	1. Spans provided for in
5 – 38 x 184 (2" x 8")	2.59 (8' – 6")	this table are for No. 1 and
3 – 38 x 235 (2" x 10")	2.46 (8' – 0")	No. 2 grade lumber.
4 – 38 x 235 (2" x 10")	3.84 (12' – 7")	
5 – 38 x 235 (2" x 10")	3.17 (10' – 4")	2. Beam spans are
3 – 38 x 286 (2" x 12")	2.85 (9' – 4")	calculated based on a
4 – 38 x 286 (2" x 12")	3.29 (10' – 9")	maximum supported
5 – 38 x 286 (2" x 12")	3.68 (12' – 0")	length of 4.9 m (16 ft. 1
		in.).
		3. Supported length
		means have the sum of
		the rafter, joist or truss
		spans on both sides of the
		beam. 4. Minimum bearing
		is 76 mm (3 in.).



# 5.7 Cladding

Some aspects of the exterior finish or cladding of the accessory structure is also regulated by the OBC. The following points summarize the applicable requirements:

- Exterior walls shall be constructed to minimize the ingress of precipitation (rain and snow) into the wall assembly and the interior of the building
- A minimum clearance of 200 mm (7 7/8" in.) must be provided between finished grade and any cladding material which is adversely affected by moisture such as siding, stucco, etc.

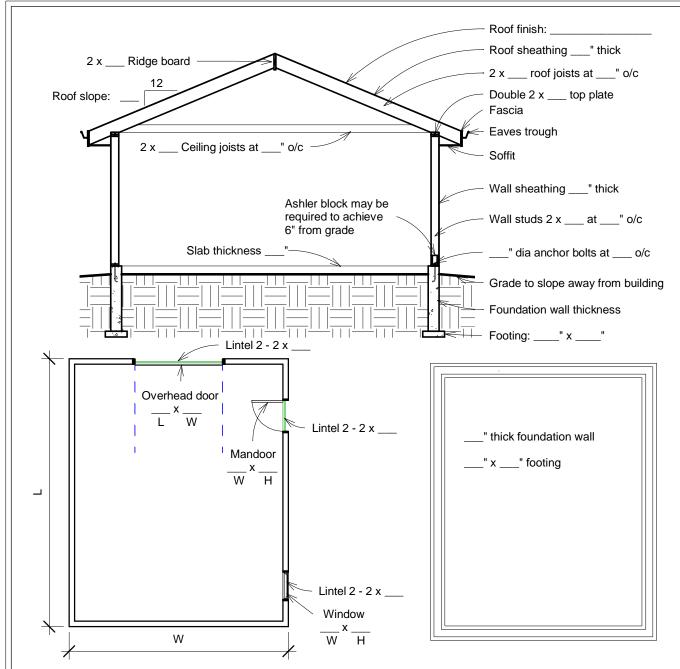
# 5.8 Grading and Drainage

The following points must be incorporated into the construction and placement of any accessory building on a site. They provide clear guidelines which must be followed for grading a site at the completion of a project.

- Where downspouts are provided, extensions shall be provided to carry rainwater away from the building in a manner that will prevent soil erosion.
- The site shall be graded so that water will not accumulate at or near the building and will not adversely affect adjacent properties.

# 5.9 Agricultural Buildings

Accessory buildings such as barns, implement sheds and other farm buildings of low human occupancy must be constructed in accordance with the National Farm Building Code of Canada, however, where the proposed building does not exceed 600 square metres (6458 square feet) and is not more than 3 storeys in building height, it can be deemed to comply with the structural requirements of the National Farm Building Code of Canada if it is designed and constructed in conformance with Supplementary Standard SB-11 of the Ontario Building Code. Please contact the Building Official to discuss the applicability of Supplementary Standard SB-11.



#### **NOTES**

- Minimum lintel bearing of 38mm for lintels spans of 3m or less. Minimum bearing of 76mm for lintel spans greater than 3m.
- Wall studs to be continuous (gable end walls).
- Roof can be framed with pre-engineered trusses (require stamped and sealed truss designs at permit submission)

# Information Only

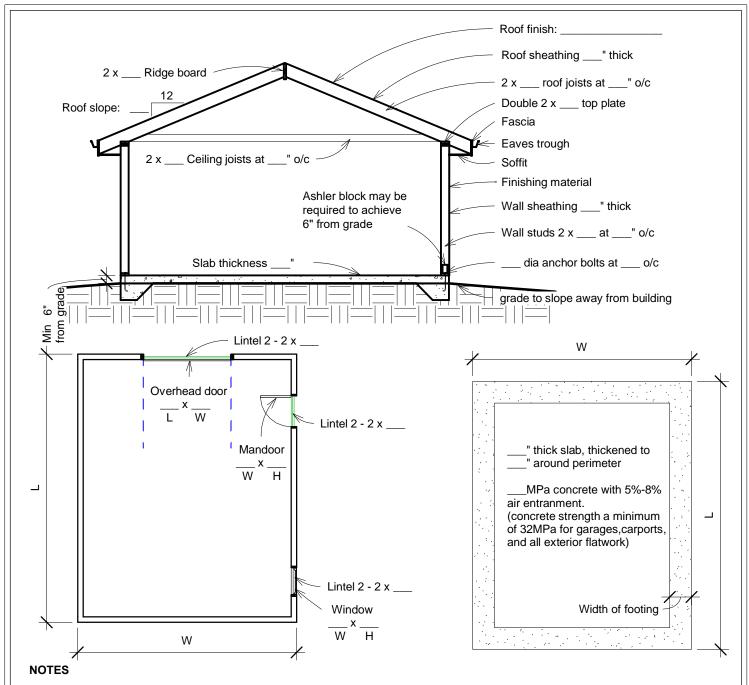


Accessory Structure Example- Footings

City of Port Colborne

Sample Drawing

www.portcolborne.ca



- Minimum lintel bearing of 38mm for lintels spans of 3m or less. Minimum bearing of 76mm for lintel spans greater than 3m.
- Slab greater than 55 sq.m (592 sq.ft.) requires an engineered design (stamped and sealed).
- Wall studs to be continuous (gable end walls).
- Roof can be framed with pre-engineered trusses (require stamped and sealed truss designs at permit submission)

# Information Only



Accessory Structure Example- Slab

City of Port Colborne

Sample Drawing

www.portcolborne.ca