Building Permit
Application Requirements

Building permits are required for any new construction, alteration, addition, or demolition of a structure in the Town of Lake Cowichan. Only complete applications will be accepted for processing, the following document lists building permit application requirements. This is comprehensive list.

BUILDING PERMIT APPLICATION FORM

- Building permit application form is required for all properties

Site Plan

- The corresponding Street & Avenue
- The dimensions of the site (property lines)
- The location of existing and proposed access to the site
- The north arrow

Floor Plans

- The size (dimensions) of the house
- The number of floors & square footage to each floor
- The dimensioned room layouts indicating all uses
- The location of walls, doorways & windows (sizes)
- complete construction details
- seismic design for lateral bracing requirements or Structural Engineered Plans

Building Elevations

- showing all sides of the house
- the building height from average grade to midpoint of roof
- the finished ground level
- the exterior finishing materials

Miscellaneous

1. Two copies of all plans must be submitted.
2. Home Protection Office forms (H.P.O.) for new homes, must have HPO Seal approval
3. Each contractor and sub-trade must have valid business license
4. Seismic design for lateral bracing requirements / Duncan
5. Snow load design 2.8kPa, 59.4 psf / Youbou
6. Flood plain building height @ 167.33 metres
7. Insulation requirements to Zone 4 standards
8. Type of heating system to be installed
9. Mechanical ventilation system designed by qualified professional
10. Windows and doors to NAFS standards / Duncan
11. All new construction drawings must include low water consumption plumbing fixtures

Town of Lake Cowichan
39 South Shore Rd Box 860 Lake Cowichan BC V0R 2G0
250-749-6681
inspections@lakecowichan.ca

Inspections (to follow after Permit is issued)	
EXCAVATION	Soil bearing capacity evidence.
FOUNDATION FORMWORK	Footings, walls and reinforcing steel. Certification of a professional engineer may be requested before the pouring of concrete.
DRAINAGE	Perimeter drain ground footings 4" Ø per pipe 6" coverage of drain rock, down spouts 3" Ø solid P.V.C. subject to discharge damp proofing, pre backfill inspection, floor drains in basement or sloped crawl space connected to perimeter drain with trap.
FRAMING	Site survey of land and building foundation before inspection; A professional certification of engineered products structural framing, roof framing and sheeting fire stops, roofing, window, and door installation etc. fireplace & chimney clearances.
PLUMBING	Under slab plumbing; Waste and water rough-in; Sewer, water and storm hook-up; Receipt of plumbing authorization form; Installations of H.V.A. units shall conform to the requirements of B.C.B.C. Art. 6.2.15 installation standards.
INSTALLATION OF VAPOUR BARRIER AND INSULATION	Throughout building.
FINAL	Interior and exterior of building.

Note: Please contact the Building Official 72 hours prior to and required Inspection.

Town of Lake Cowichan

Application for Permit to Build

Folio No.:	Date:	Permit No.:

☐ Building Permit ☐ Demolition Permit

☐ Other (specify) _____
(e.g. chimney installation, service connection, building re-location)

APPLICANT INFORMATION		OWNER INFORMATION	
Name(s)		Name(s)	
Address		Address	
City		City	
Postal Code		Postal Code	
Phone		Phone	
Fax		Fax	

BUILDER / CONTRACTOR INFORMATION			
Name		Business License #	
Address			
City		Phone	
Postal Code		Fax	

SUB-TRADE LISTING as required by the Town of Lake Cowichan Business License Bylaw	
NAME	BUSINESS LICENSE #

A building/construction contractor shall supply to the License Inspector a written list of the names, addresses and telephone numbers of his or her sub trades in the form prescribed.

PROPERTY INFORMATION

Civic Address of Property:

_____

Legal Description of Property:

_____

Complete this section if application is for erection of a new or alteration of a building structure:

Zoning of Property: _____

BUILDING DETAILS

Building Type:

_____

(Commercial / Single-Family Dwelling / Two-Family Dwelling / Garage / Addition / etc.)

Area of Building _____ m^2 Height of building _____ m Highway access obtained: YES / NO

Setbacks

Principal Building

Front Yard _____ m Side Yard _____ m Side Yard _____ m Rear Yard _____ m

Accessory Building

Front Yard _____ m Side Yard _____ m Side Yard _____ m Rear Yard _____

Construction Information:

Footings size	
Depth of Foundation	
Size of beams under Main floor:	

Size of Joists Under:

1st floor	
2nd floor	
3rd floor	

Building Materials:

Foundation Walls:	
Foundation Footings:	
Exterior Surface:	
Interior Wall Finish:	
Interior Ceiling Finish:	
Roof:	

Roof Type: ☐ Flat ☐ Mansard ☑ Peaked ☐ Domed

SIGNATURE

This permit confirms that the Town of Lake Cowichan has reviewed plans and the application form in respect of the subject building pursuant to the Corporation of the Town of Lake Cowichan Building Bylaw. This permit is not a warranty that the subject building will comply with all Town of lake Cowichan and provincial regulations governing building construction nor that it is without defect.

The undersigned applicant, developer, contractor, or owner agrees to conform with all the bylaws of the Town of Lake Cowichan and to all the statutes and regulations in force in the Town of Lake Cowichan and to save the Town harmless from any action or cost whatsoever arising out of or incident to, the granting of this permit.

The undersigned recognizes that within the boundaries of the Town of Lake Cowichan there are areas of “problem soils”, poor drainage and flooding, and that these are widely distributed as to location. I affirm that it is my responsibility to identify foundation condition generally on which the intended construction is to be placed and take all action required to ensure the adequacy of the foundation, and ultimately the safe and sound use and occupancy of the proposed structure.

I have read and agree with the aforementioned. I also understand that no building structure is to be sold or occupied prior to an approved final inspection and the subsequent issuance of an occupancy certificate.

Where the applicant is not the REGISTERED OWNER, the application must also be signed by the REGISTERED OWNER.

_____ _____

Applicant’s Signature Date

THIS APPLICATION IS MADE WITH MY FULL KNOWLEDGE AND CONSENT

_____ _____

Registered Owner of Subject Property Date

CALCULATION OF BUILDING VALUES AND APPLICABLE FEES

PERMIT NO.	Area (Sq. ft)	Value ($)	OFFICE USE ONLY Calculated Value		
Main Floor with full basement				Building Permit Fees	$
Main floor with crawlspace / slab on grade				Plumbing Permit Fees	$
Second Floor				Sanitary Connection Inspection Fees	$ 95.00
Garage - finished (attached / detached)				Storm Connection Inspection Fees	$ 95.00
Garage - unfinished (attached / detached)				Water Connection Inspection Fees	$ 1,180.00
Carport (attached / detached).				Garbage Service	$ 180.00
Deck				**Damage Deposit $3,000 Demo Deposit $5,000 Bldg. Move Dep. $10,000	$
Finished basement				Miscellaneous (Deposits / Credits) _____	$
Totals		$	$	Total Fees Payable	$

**** All deposits will only be refundable to the property owner on title at the time of refund.**

*** Damage deposit will be released upon completion of paved driveway.**

APPROVED BY:

_____ _____

Date Planning Officer / Chief Administrative Officer

_____ _____

Date Building Inspector

THIS PERMIT AUTHORIZING COMMENCEMENT OF WORK IS ONLY VALID UPON SIGNATURE BY THE BUILDING INSPECTOR

COMMENTS:

_____

_____

_____

_____

BUILDING INSPECTION								
Permit No.	**DATE**	**R**	**P**	**INSP**	**DATE**	**R**	**P**	**INSP**
Site excavation / footing pre-concrete								
Foundation damp proofing / dual drains								
Service connections								
U. S. Plumbing								
U. S. Insulation & VB								
Plumbing rough-in								
Framing								
Fireplace & w/stove W.E.T.T. Certified								
Insulation / VB								
Final								

REMARKS

_____

_____

_____

CERTIFICATE OF OCCUPANCY

No building shall be occupied until a Certificate of Occupancy has been obtained.

Certificate of Occupancy Issued to: _____

_____ _____

Building Inspector Date

TOWN OF LAKE COWICHAN
HAZARDOUS MATERIALS DECLARATION

Building Permit #: _____

This form must be completed and submitted in conjunction with an application for a Building Permit where the proposed works require **alterations or renovations to any structure or the demolition of a structure**.

The information provided here is intended to assist the Building Official in determining if a Hazardous Material Survey (HMS) in accordance with WorkSafeBC guidelines has been completed. If a HMS has not been completed, the Building Official will request further information regarding the scope of the project and the presence of any potential asbestos-containing or other hazardous materials prior to entry into the building. The Building Official may request that a HMS be produced where home exists. If one cannot be produced the Building Official will cease all inspections for safety reasons.

APPLICANT INFORMATION (Please print)
Name of property owner:
Legal Description for the Property:
Project Address:

Proposed Work

☐ Alterations/Renovations to Structure ☐ Demolition of Structure

Was the building constructed prior to 1990?

☑ Yes ☐ No

Has a Hazardous Material Survey (HMS) as per WorkSafeBC Guideline 20.112 been completed for this project?

☑ Yes ☐ No

If you answered yes to either if the above, please attach documentation including the hazardous materials survey and evidence (clearance letter certificate) that any hazardous material was removed and disposed of properly.

☐ Clearance letter certificate attached ☐ Hazardous Materials Survey conducted by a qualified agent attached

Please note, if an HMS has not been completed, documentation included the survey and evidence that the material was removed and disposed of properly must be made available and produced upon request for inspection purposes. Once the hazardous materials are removed, a Clearance Certificate must be posted, which signifies the structure is safe to enter. The owner is responsible for ensuring that WorkSafeBC guidelines and the Asbestos Awareness document are complied with.

Name (print):	
Signature :	Date:

The onus is on the owner of the property to ensure the validity of all documentation required under this declaration.

Note: a copy of this form may be forwarded by the Town of Lake Cowichan to WorkSafeBC and the Ministry of the Environment for BC

TOWN OF LAKE COWICHAN

PLUMBING INSPECTION AUTHORIZATION FORM

FOLIO NO.:	PERMIT NO.:

CONTRACTOR INFORMATION			
NAME:		TRADE QUALIFICATION NUMBER #:	
ADDRESS:			
CITY:	POSTAL CODE:	PHONE:	FAX:

PROPERTY INFORMATION	
NAME OF OWNER / AGENT:	
ADDRESS:	
CITY:	POSTAL CODE:

CERTIFICATION AND SIGNATURE

This is to confirm that I have personally completed the plumbing installation at _____
Street Address of Property

and declare the following:

1. That I am registered as a plumber with the Town of Lake Cowichan (or a photocopy of my BC Tradesman's qualification certificate is attached).

2. That I have installed the plumbing and conducted all the required test in accordance with the current BC Plumbing Code of which I possess a copy.

3. That I have reviewed and followed the building plan accompanying the building permit described herein.

I further declare that the following plumbing is completed and ready for inspection.

	DATE TESTED		**DATE TESTED**
1. Underslab plumbing		**5. Sanitary connection**	
2. Water Connection		**6. Sprinkler system – Fire Suppression**	
3. Storm Drain Connection		**7. Sprinkler system – Irrigation**	
4. Plumbing rough-in			

_____ _____

Signature Date

Town of Lake Cowichan

Final Inspection Checklist for Occupancy

	Yes	No	Date:
REPORT			Survey
REPORT			Electrical Final
REPORT			Previous Inspection called for and recorded
REPORT			P. Engineer's Reports and Schedule C-a or C-b
REPORT			Truss Certification or Engineer's Inspection Approval
REPORT			Ventilation System Design Specifications
REPORT			Plumbing Authorization Form
REPORT			Gas Certification Form
REPORT			Woodstove Certification
			Fuel Burning Appliance and Chimney C/W Combustion air
			Interconnect 110 volt of all smoke detectors
			A smoke detector on each floor and each bedroom
			Interior Handrails 34" to 38" high
			Metal pan and drain under hot water tank and seismic straps
			Floor drain in basement
			Shut off on all plumbing fixture supply line
			Potable water details – vacuum relief, pressure reducing valve & check valve
			180 degree viewer or approved window at door
			Wired or tempered glass in door and/or side light
			20" x 28" attic access
			20" x 28" crawl space access
			Interior finish complete
			Garage dwelling door weather stripped and c/w self-closure
			All flashing as required
			Exterior hand railing 42" high (min) and non-climbable
			Cap with drip edge on masonry chimney
			Exterior openings caulked
			Exterior finish complete
			Exterior landing, stairs and handrail complete
			Civic address (house number) posted
			Final grading 8" clear of siding and sloped away from building
			Backflow preventer on hose bib
			Down spouts installed to gutters

Lateral Load Information

New Construction Only

Lateral Load information required on plans submitted for Building Permits.

1. Indicate Seismic Region where proposed construction is located –From BCBC Table C-2 Appendix C Division B.
2. Indicate whether it is light or heavy construction. 9.23.13.2. and 9.23.12.3. Heavy construction is defined as buildings with tile roofs or concrete topping on floors.
3. Indicate whether the design standard is BCBC Part 9, Part 4, or the CWC Guide.
    a. Part 4 or the CWC Guide requires design by Structural Engineer; not compliance with the specific requirements from Part 9 as noted below.
4. On floor plans:
    a. suggest the use of grid lines to help confirm braced wall band alignment on each floor level, as well as cross sections;
    b. all braced wall bands must be indicated and dimensioned, (for example: by light shading);
    c. centerline of all braced wall bands must be indicated.
    d. all braced wall panels must be indicated and dimensioned, (for example, by darker shading, as per Table 9.23.13.5.).
5. Cross sectional view must indicate:
    a. braced wall bands are full storey in height and must be aligned with bands on the storeys below and above, as required by code;
    b. the type of braced wall panel – wood or gypsum. For example, if wood sheathed braced wall panels are used on any floor, including basement, then wood sheathed panels are required throughout that brace wall band 9.13.13.6.(4).
    c. fastener size and spacing for all sheathing, braced wall panels and non-braced walls, as per 9.23.3.5;
    d. anchorage size and spacing, for braced wall panels and non-braced wall panels areas (9.23.6.1.). Anchoring a braced wall panel to a slab is not considered adequate anchorage. BCBC 9.23.6.1. requires anchorage to be fastened to a foundation, even for interior braced wall panels.
6. Note any exceptions or trade-offs used in the design complete with dimensions. See 9.23.13.5. (3), 9.23.13.5. (4), 9.23.13.5. (4), 9.23.13.7. for options.

    If the above steps are followed time required for plan review will be reduced.

Calculations Required

1. The Percentage of braced wall panels in each braced wall band is required, 9.23.13.4.(1) & 9.23.13.5.(1);

1 Ventilation Checklist 1—Forced Air Systems SENTENCE 9.32.3.4(6)

Use this Checklist where **forced air heating system ducts intake and distribute** ventilation air.

Civic Address_____ Permit No._____

Climate Zone: ____ Number of Bedrooms [ ] (A) A bedroom is a room with an openable window (minimum dimensions apply), a closet and a closing interior door.

Total Floor area of conditioned space [ ] ft^2 (B)

Total Interior Volume of Dwelling [ ] ft^3 Total volume includes all heated interior spaces

.5 ACH (air changes/hr) = Volume x 0.5 ÷ 60 = [ ] cfm (C) Exhaust appliances exceeding .5 ACH may require make-up air.

1. Principal Ventilation System Exhaust Fan Minimum Air-flow Rate

Use the bedroom count from Box (A) and Total square footage from Box (B) above and Table 9.32.3.5. to determine

Minimum Required Prinicpal Exhaust System Capacity [ ] cfm (D)

2. Principal System Fan Choice

a) Exhaust Fan continuous running Make_____Model_____ Sone Rating ____

Location: _____ **Capacity at 0.2 ESP** [ ] cfm (E) Must be ≥ than Box (D)

If CEV, capacity @0.4ESP

3. Fan Duct Size and Equivalent Length

Use actual fan cfm in Box(E) above and Table 9.32.3.8 (3) [See note at bottom of page for larger fan duct sizing].

a) Length of duct_____ft + Exterior hood 30ft + number of 90° elbows ____X 10 ft = _____**Equivalent Length**

Maximum Equivalent Length allowed in Table 9.32.3.8(3) = _____

b) Fan Duct size: _____inches Ø Duct type: ___Rigid ___Flex

4. Required Kitchen and Bathroom Exhaust Fans: Re-list below if Principal Exhaust Fan meets all or part of Kitchen/Bathroom spot Exhaust requirements.

ROOM	REQUIRED EXHAUST RATE **Table 9.32.3.6**	EXHAUST EQUIPMENT						
		Spot Exhaust Kitchen & Bath WALL/CEILING FANS						Ex.Fan/CEV
		Fan Make & Model	CFM @ 0.2 ESP Manf. Rated	*Duct Sizing per Table 9.32.3.8.(3)				Principal System CFM
				Duct Dia (in Ø) rigid	Duct Dia (in Ø) flex	Max. Equiv. Length per table	Installed Equiv. Length	
							TOTAL (must = Box E)	

* For fan capacities **exceeding** 175cfm in Table 9.32.3.8(3), follow manufacturer's installation instructions or use good engineering practice to size duct.

See *Ventilation Guidelines* Appendix page 16-A

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5. Fresh Air must be ducted from outside to Return Air of furnace for distribution.

a) Duct length from this connection to furnace cabinet must be 15 ft maximum and 10 ft minimum unless a flow control device is used. Duct length confirmed at _____ feet.

b) Duct Size for Fresh Air intake to RA:

4" Ø minimum for Rigid Duct. Must be insulated & vapour barriered for full length. ___ confirmed.

5"Ø minimum for insulated, vapour barriered Flex Duct ___ confirmed.

6. Forced Air Furnace system ducted to supply air to every bedroom and any level without a bedroom___ confirmed.

7. If Heated Crawlspace present, state method of ventilating_____

MAKE-UP AIR Requirements

1. NAFFVA (Naturally Aspirated Fuel Fired Vented Appliance) **or radon present in dwelling unit? Sentence 9.32.4.1**

☐ **Yes, Proceed to Step 2** ☐ **No**, Omit Steps 2 & 3

2. Exhaust Appliance present which exceeds Box C 0.5 ACH:

☐ **Yes, Proceed to Step 3** ☐ **Yes, Commit to Depressurization Test** (See **CAUTION**, TECA Vent Manual pg 24) ☐ **No such appliance**. Omit Step 3

3. Use Active Make-up Air for Exhaust Appliance.

Make-up Air Fan required: **Exhaust Appliance Actual Installed Cfm** _____

Fan Make _____ Model _____ **Make-up Air Fan Cfm** _____

Duct diameter _____inches

Fan Location _____ Fan ducted to _____

a) Active Make-up Air delivered to an Unoccupied Area first (not directly to room containing the appliance).

i) Tempering Required per 9.32.4.1.(4)(a):

Show calculation & describe how make-up air will be tempered to at least 34°F (1°C) before entering unoccupied area.

_____

ii) **Transfer Grill Required:** Size 1 sq in of gross area per 2 cfm):

Transfer grill size _____ sq. in. Location _____

iii) **Additional Tempering Required per 9.32.4.1.(4)(b) before transfer to occupied area:** Show calculation and describe how make-up air will be further tempered to at least 54°F (12°C).

_____

OR b) Active Make-up Air delivered to an Occupied Area: Tempering Required. Show calculation and describe how make-up air will be tempered to at least 54°F (12°C).

_____

Installer Certification: Date _____

I hereby certify that the design and installation of the ventilation system complies with the 2012 B.C. Building Code, 2014 Section 9.32 Amendment.

2014 TECA Ventilation Certification Stamp

Print Name_____

Signature_____

Company_____

Phone _____

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2 Ventilation Checklist 2—HRV Systems SENTENCE 9.32.3.4 (3) & (4)

Use this checklist when a centrally ducted HRV (heat recovery ventilator) is used alone or in combination with a Forced Air furnace to meet principal ventilation system requirements.

Civic Address_____ Permit No._____

Climate Zone: ____ Number of Bedrooms _____ (A) A bedroom is a room with an openable window (minimum dimensions apply), a closet and a closing interior door.

Total Floor area of conditioned space _____ ft^2 (B)

Total Interior Volume of Dwelling _____ ft^3 Total volume includes all heated interior spaces

.5 ACH (air changes/hr) = Volume x 0.5 ÷ 60 = _____ cfm (C) Exhaust appliances exceeding .5 ACH may require make-up air.

1. Use the bedroom count (Box A above) and total square footage (Box B above) to determine the minimum principal Air Flow rate required by Table 9.32.3.5

Minimum Required Rate _____ cfm (D)

2. HRV Make _____ Model _____

3. HRV Capacity: CFM @ 0.4 ESP. Box E must meet Box D requirement. _____ cfm (E)

4. List Exhaust Grilles Locations: 1 minimum @ 6ft or higher from floor of uppermost level.

_____

_____

_____

5. Required Kitchen and Bathroom Exhaust

If HRV used to meet all or part of Kitchen/Bathroom spot exhuast requirements list below.

ROOM	REQUIRED EXHAUST RATE **Table 9.32.3.6**	EXHAUST EQUIPMENT						
		Spot Exhaust Kitchen & Bath WALL/CEILING FANS						HRV
		Fan Make & Model	CFM @ 0.2 ESP Manf. Rated	*Duct Sizing per Table 9.32.3.8.(3)				Principal System CFM
				Duct Dia (in Ø)		Max. Equiv. Length per table	Installed Equiv. Length	
				rigid	flex			
							TOTAL (must = Box E)	

* For fan capacities **exceeding** 175cfm in Table 9.32.3.8(3), follow manufacturer's installation instructions or use good engineering practice to size duct.

See *Ventilation Guidelines* Appendix page 16-A

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6. HRV Fresh Air Distribution (choose A or B option)

A) Supply Air from HRV direct connect to Return Air of a Forced Air Furnace system:
Furnace Fan continuous operation: yes ☐ and Forced Air system ducted to supply air to every bedroom and any level without a bedroom: yes ☐ and heated crawlsapce: yes ☐

B) Supply Air from HRV distrubuted independently to every bedroom and any level without a bedroom and to a heated crawlspace. **List distribution grille locations:** _____

_____

_____

MAKE-UP AIR Requirements

1. NAFFVA (Naturally Aspirated Fuel Fired Vented Appliance) **or radon present in dwelling unit? Sentence 9.32.4.1**

☐ **Yes, Proceed to Step 2** ☐ **No**, Omit Steps 2 & 3

2. Exhaust Appliance present which exceeds Box C 0.5 ACH:

☐ **Yes, Proceed to Step 3** ☐ **Yes, Commit to Depressurization Test** (See **CAUTION**, TECA Vent Manual pg 24) ☐ **No such appliance**. Omit Step 3

3. Use Active Make-up Air for Exhaust Appliance.

Make-up Air Fan required: **Exhaust Appliance Actual Installed Cfm** _____

Fan Make _____ Model _____ **Make-up Air Fan Cfm** _____

Duct diameter _____inches

Fan Location _____ Fan ducted to _____

a) Active Make-up Air delivered to an Unoccupied Area first (not directly to room containing the appliance).

i) Tempering Required per 9.32.4.1.(4)(a):
Show calculation & describe how make-up air will be tempered to at least 34°F (1°C) before entering unoccupied area.

_____

ii) **Transfer Grill Required:** Size 1 sq in of gross area per 2 cfm):

Transfer grill size _____ sq. in. Location _____

iii) **Additional Tempering Required per 9.32.4.1.(4)(b) before transfer to occupied area:** Show calculation and describe how make-up air will be further tempered to at least 54°F (12°C).

_____

OR b) Active Make-up Air delivered to an Occupied Area: Tempering Required. Show calculation and describe how make-up air will be tempered to at least 54°F (12°C).

_____

Installer Certification: Date _____

I hereby certify that the design and installation of the ventilation system complies with the 2012 B.C. Building Code, 2014 Section 9.32 Amendment.

2014 TECA Ventilation Certification Stamp

Print Name_____

Signature_____

Company_____

Phone _____

Checklist 2, pg2of2

3 Ventilation Checklist 3—Distributed CRV Systems SENTENCE 9.32.3.4(5)

Use this Checklist when a ducted Central Recirculating Ventilator (CRV) is used to meet the fresh air intake and distribution requirements and a Principal Exhaust fan meets the exhaust requirements.

Civic Address_____ Permit No._____

Climate Zone: ____ Number of Bedrooms [ ] (A) — A bedroom is a room with an openable window (minimum dimensions apply), a closet and a closing interior door.

Total Floor area of conditioned space [ ] ft^2 (B)

Total Interior Volume of Dwelling [ ] ft^3 — Total volume includes all heated interior spaces

.5 ACH (air changes/hr) = Volume x 0.5 ÷ 60 = [ ] cfm (C) — Exhaust appliances exceeding .5 ACH may require make-up air.

1. Principal Ventilation System Exhaust Fan Minimum Air-flow Rate

Use the bedroom count from Box (A) and Total square footage from Box (B) above and Table 9.32.3.5. to determine

Minimum Required Prinicpal Exhaust System Capacity [ ] cfm (D)

2. Principal System Fan Choice

a) Exhaust Fan continuous running Make_____Model_____ Sone Rating ____

Location: _____ Must be ≥ than Box (D)

Capacity at 0.2 ESP [ ] cfm (E) Must be ≥ than Box (D)

If CEV, capacity @0.4ESP

3. Fan Duct Size and Equivalent Length

Use actual fan cfm in Box(E) above and Table 9.32.3.8 (3) [See note at bottom of page for larger fan duct sizing].

a) Length of duct_____ft + Exterior hood 30ft + number of 90° elbows ____X 10 ft = _____**Equivalent Length**

Maximum Equivalent Length allowed in Table 9.32.3.8(3) = _____

b) Fan Duct size: _____inches Ø Duct type:___Smooth___Flex

4. Required Kitchen and Bathroom Exhaust Fans: Re-list below if Principal Exhaust Fan meets all or part of Kitchen/Bathroom spot Exhaust requirements.

ROOM	Required Exhaust Rate **Table 9.32.3.6**	EXHAUST EQUIPMENT						
		Spot Exhaust Kitchen & Bath WALL/CEILING FANS						Ex.Fan/CEV
		Fan Make & Model	CFM @ 0.2 ESP Manf. Rated	*Duct Sizing per Table 9.32.3.8.(3)				Principal System CFM
				Duct Dia (in Ø) rigid	Duct Dia (in Ø) flex	Max. Equiv. Length per table	Installed Equiv. Length	

TOTAL (must = Box E) [ ]

* For fan capacities **exceeding** 175cfm in Table 9.32.3.8(3), follow manufacturer's installation instructions or use good engineering practice to size duct.

See *Ventilation Guidelines* Appendix page 16-A

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5. CRV Recirculation and Fresh Air Intake Fan

Capacity @ 0.4 ESP ____ cfm (F)

Make_____ Model_____

Box F CFM: minimum 2 times Box D cfm for +5°F and warmer winter design temperature. Confirmed ☐
minimum 3 times Box D for less than +5°F winter design temperature. Confirmed ☐

Duct Size for Fresh Air intake into return air of CRV: Min 4"Ø rigid duct___, or 5", flex duct_____.

6. CRV Fresh Air circulation (Choose option a or b)

a) Draw air from bedrooms and Supply air to common area.
List location of supply grille _____ and location of each bedroom return grille

_____

b) Draw air from common area and Supply air to bedrooms.
List location of return grille _____ and location of each bedroom supply grille

_____

_____

7. If Heated Crawlspace present, state method of ventilating_____

MAKE-UP AIR Requirements

1. NAFFVA (Naturally Aspirated Fuel Fired Vented Appliance) **or radon present in dwelling unit? Sentence 9.32.4.1**

☐ **Yes, Proceed to Step 2** ☐ **No**, Omit Steps 2 & 3

2. Exhaust Appliance present which exceeds Box C 0.5 ACH:

☐ **Yes, Proceed to Step 3** ☐ **Yes, Commit to Depressurization Test** (See **CAUTION**, TECA Vent Manual pg 24) ☐ **No such appliance**. Omit Step 3

3. Use Active Make-up Air for Exhaust Appliance.

Make-up Air Fan required: **Exhaust Appliance Actual Installed Cfm** _____

Fan Make _____ Model _____ **Make-up Air Fan Cfm** _____

Duct diameter _____inches

Fan Location _____ Fan ducted to _____

a) Active Make-up Air delivered to an Unoccupied Area first (not directly to room containing the appliance).

i) Tempering Required per 9.32.4.1.(4)(a):

Show calculation & describe how make-up air will be tempered to at least 34°F (1°C) before entering unoccupied area.

_____

ii) **Transfer Grill Required:** Size 1 sq in of gross area per 2 cfm):

Transfer grill size _____ sq. in. Location _____

iii) **Additional Tempering Required per 9.32.4.1.(4)(b) before transfer to occupied area:** Show calculation and describe how make-up air will be further tempered to at least 54°F (12°C).

_____

OR b) Active Make-up Air delivered to an Occupied Area: Tempering Required. Show calculation and describe how make-up air will be tempered to at least 54°F (12°C).

_____

Installer Certification: Date _____

I hereby certify that the design and installation of the ventilation system complies with the 2012 B.C. Building Code, 2014 Section 9.32 Amendment.

2014 TECA Ventilation Certification Stamp

Print Name_____

Signature_____

Company_____

Phone _____

Checklist 3, pg2of2

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4 Ventilation Checklist 4—Exhaust Fan & Passive Inlets SENTENCE 9.32.3.4(6)

Use this checklist for small (≤ 1800 sqft), single level, non-forced air heated dwellings located in coastal climate areas where winter design temperature is warmer than -13°F.

Civic Address_____ Permit No._____

Climate Zone: ____ Number of Bedrooms [ ] (A) A bedroom is a room with an openable window (minimum dimensions apply), a closet and a closing interior door.

Total Floor area of conditioned space [ ] ft^2 (B)

Total Interior Volume of Dwelling [ ] ft^3 Total volume includes all heated interior spaces

.5 ACH (air changes/hr) = Volume x 0.5 ÷ 60 = [ ] cfm (C) Exhaust appliances exceeding .5 ACH may require make-up air.

1. Principal Ventilation System Exhaust Fan Minimum Air-flow Rate

Use the bedroom count from Box (A) and Total square footage from Box (B) above and Table 9.32.3.5. to determine

Minimum Required Prinicpal Exhaust System Capacity [ ] cfm (D)

2. Principal System Fan Choice

a) Exhaust Fan continuous running Make_____Model_____ Sone Rating ____

Location: _____ **Capacity at 0.2 ESP** [ ] cfm (E) Must be ≥ than Box (D)

If CEV, capacity @0.4ESP

3. Fan Duct Size and Equivalent Length

Use actual fan cfm in Box(E) above and Table 9.32.3.8 (3) [See note at bottom of page for larger fan duct sizing].

a) Length of duct_____ft + Exterior hood 30ft + number of 90° elbows ____X 10 ft = _____**Equivalent Length**

Maximum Equivalent Length allowed in Table 9.32.3.8(3) = _____

b) Fan Duct size: _____inches Ø Duct type:___Smooth___Flex

4. Required Kitchen and Bathroom Exhaust Fans: Re-list below if Principal Exhaust Fan meets all or part of Kitchen/Bathroom spot Exhaust requirements.

ROOM	REQUIRED EXHAUST RATE **Table 9.32.3.6**	EXHAUST EQUIPMENT						
		Spot Exhaust Kitchen & Bath WALL/CEILING FANS						Ex.Fan/CEV
		Fan Make & Model	CFM @ 0.2 ESP Manf. Rated	*Duct Sizing per Table 9.32.3.8.(3)				Principal System CFM
				Duct Dia (in Ø) rigid	Duct Dia (in Ø) flex	Max. Equiv. Length per table	Installed Equiv. Length	

TOTAL (must = Box E) [ ]

* For fan capacities **exceeding** 175cfm in Table 9.32.3.8(3), follow manufacturer's installation instructions or use good engineering practice to size duct.

See *Ventilation Guidelines* Appendix page 16-A

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5. Required Inlets for passive Ventilation Air Supply

a) Location: High wall (minimum 6 ft above floor) ____

List all rooms with inlets: Required in each bedroom, and at least one common area

_____

_____

b) Inlet Size: Free Area must be greater than or equal to 4 Sq In

6. If Heated Crawlspace present, state method of ventilating_____

MAKE-UP AIR Requirements

1. NAFFVA (Naturally Aspirated Fuel Fired Vented Appliance) **or radon present in dwelling unit? Sentence 9.32.4.1**

☐ **Yes, Proceed to Step 2** ☐ **No**, Omit Steps 2 & 3

2. Exhaust Appliance present which exceeds Box C 0.5 ACH:

☐ **Yes, Proceed to Step 3** ☐ **Yes, Commit to Depressurization Test** (See **CAUTION**, TECA Vent Manual pg 24) ☐ **No such appliance**. Omit Step 3

3. Use Active Make-up Air for Exhaust Appliance.

Make-up Air Fan required: **Exhaust Appliance Actual Installed Cfm** _____

Fan Make _____ Model _____ **Make-up Air Fan Cfm** _____

Duct diameter _____inches

Fan Location _____ Fan ducted to _____

a) Active Make-up Air delivered to an Unoccupied Area first (not directly to room containing the appliance).

i) Tempering Required per 9.32.4.1.(4)(a):

Show calculation & describe how make-up air will be tempered to at least 34°F (1°C) before entering unoccupied area.

_____

ii) **Transfer Grill Required:** Size 1 sq in of gross area per 2 cfm):

Transfer grill size _____ sq. in. Location _____

iii) **Additional Tempering Required per 9.32.4.1.(4)(b) before transfer to occupied area:** Show calculation and describe how make-up air will be further tempered to at least 54°F (12°C).

_____

OR b) Active Make-up Air delivered to an Occupied Area: Tempering Required. Show calculation and describe how make-up air will be tempered to at least 54°F (12°C).

_____

_____

Installer Certification: Date _____

I hereby certify that the design and installation of the ventilation system complies with the 2012 B.C. Building Code, 2014 Section 9.32 Amendment.

2014 TECA Ventilation Certification Stamp

Print Name_____

Signature_____

Company_____

Phone _____

Checklist 4, pg2 of 2

Regulatory Bulletin

Information for Owner Builders

Constructing an Owner-built Home

An owner builder is an individual authorized by BC Housing, to build a new home for their personal use. An owner builder is not required to be licensed to build a new home or arrange for third-party home warranty insurance on that home.

Under the Homeowner Protection Act (the Act) and Regulation, individuals wanting to be an owner builder of a new home are required to obtain an Owner Builder Authorization prior to commencing construction of that new home. This requirement is in effect for all areas of British Columbia, regardless of whether building permits are required.

Before You Start…

Owner builders must build or directly manage the construction of their new home themselves. If an owner builder engages a builder, construction manager, project manager, or any third party to perform these functions, both the owner builder and the hired construction manager/builder are committing offence(s) under the Act and could face monetary penalties of up to $25,000 and/or prosecution. Unlike homeowners who hire a Licensed Residential Builder to construct their new home, an owner builder usually does not have home warranty insurance to rely on should construction defects occur, nor would any subsequent purchaser. Although an owner builder may be able to look to tradespersons to deal with some problems that occur, it is the owner builder who is ultimately responsible for the overall construction of the home for a period of 10 years.

This is particularly important should an owner builder sell their new home within 10 years of first occupancy. The owner builder must provide a disclosure notice obtained from the Licensing Department to any prospective purchasers. The disclosure notice will inform the purchaser that the home was built by the owner builder and whether or not there is a policy of home warranty insurance in place for the home. In addition, unless they have arranged for home warranty insurance coverage, owner builders are personally liable for construction defects in the new home during this 10-year period to any and all subsequent purchasers during this same period.

The statutory protection provision of the Act outlines the specific obligations of the owner builder during this period. These obligations are similar to the protection from defects under a policy of home warranty insurance. That is, two years against defects in material and labour, five years against defects in the building envelope, and 10 years against structural defects. Please refer to section 23 of the Act for details.

BC HOUSING

No 4 | Revised Sept 2018

Regulatory Bulletins are a series of publications developed by BC Housing to provide information on the Homeowner Protection Act. All Regulatory Bulletins can be viewed at www.bchousing.org.

This bulletin and the website are for convenience only, they do not constitute legal advice. For complete details consult the Act and its regulations.
For more information contact:

Licensing and Consumer Services | Branch of BC Housing

Phone: **604-646-7050**
Toll-free: **1-800-407-7757**
Fax: **604-646-7051**
E: **licensinginfo@bchousing.org**
W: **www.bchousing.org**
@RegistrarBCH

Statutory protection enables subsequent purchasers to take legal action against an owner builder to correct defects as set out in the provision and is a liability that cannot be waived by agreement or contract. Owner builders who opt to arrange for a voluntary policy of home warranty insurance, however, are not subject to the statutory protection provision of the legislation.

Eligibility Checklist for Owner Builder Authorization

An individual who wishes to build a new home as an owner builder must apply for an Owner Builder Authorization and meet the following criteria:

- ☑ Must be an individual (not a company, except a director of a family farm corporation) with a registered interest (fee simple, life interest or long-term lease of at least 15 years) in the land upon which the new home is to be built
- ☑ Must intend to build a single dwelling unit which is either a detached home, attached to a pre-existing building older than 10 years, or attached to a new non-residential building
- ☑ Must not offer to sell, or sell, or otherwise transfer their interest in the land either during construction or for at least one year after the new home has been built
- ☑ Must intend to use the home for personal use for at least one year after first occupancy
- ☑ Must not have previously been issued an Owner Builder Authorization for a period of at least 18 months from first occupancy of last owner-built home (period increases for repeat owner builders)
- ☑ Must not be ordinarily resident with an individual who was issued an Owner Builder Authorization for a period of at least 18 months (or increased period for repeat owner builders)
- ☑ Must intend to build, or directly manage the construction of, all or substantially all of the new home
- ☑ Must not have been in non-compliance with previous owner builder requirements
- ☑ Must successfully complete the Owner Builder Authorization Examination with a passing grade of 70 per cent or greater overall
- ☑ Must pay the $425 Owner Builder Authorization fee (including a $50 non-refundable application fee)

Step-By-Step Guide

STEP 1 – Pre-screening

Complete the Application for an Owner Builder Authorization online at www.bchousing.org. You can find the application under the Licensing and Consumer Services section of the BC Housing website. Individuals who do not have access to the internet should contact Licensing and Consumer Services for a manual application. Applicants will be pre-screened online with a series of questions to determine their eligibility for an Owner Builder Authorization.

STEP 2 – Completing the application

If pre-screening is successful, you will be invited to create a unique login ID. Next, complete your personal contact information, details of the proposed site of the new home and information about any previous owner-built homes you have been involved with. The application for an Owner Builder Authorization will be created for you to download, print, sign and send in (by email, mail, courier or by person) to the Licensing Department for review. You can pay the $425 Owner Builder Authorization fee online when you make your application or send a cheque with your signed application or pay in person by debit or credit card. We must receive your signed application and application fee before the Licensing Department can start reviewing it.

Please note that $50 of the $425 fee is non-refundable should the application be rejected or withdrawn prior to a building permit being issued.

STEP 3 – Invitation to write the Owner Builder Exam

Once the Licensing Department confirms that you meet the eligibility requirements, we will send you details of where to take the exam and what to expect at the exam centre. There is no additional cost to take the exam, which is included as part

of the application process. All owner builder applicants must pass the exam, which evaluates your knowledge and understanding of homebuilding basics in two areas: construction basics and the statutory obligations and requirements that owner builders must meet under the Act.

After you have taken the exam, your answers automatically go to the Licensing Department for assessment. You need a score of 70 per cent or higher on the exam to be successful.

STEP 4 – Notifying you of decision

After you have completed the exam, our Licensing Department will conduct a final review of your application. We will then notify you if your application for an Owner Builder Authorization has been approved. If it is approved, we will provide you with a New Home Registration Form, sealed by BC Housing (see sample form). You'll need the form before you start construction of your new home.

If your application is denied, you will be notified of the reasons for denial in writing by mail. A refund will be provided, however, please note that $50 of the $425 fee is non-refundable

STEP 5 – Obtaining a building permit

As the owner builder, you then take the New Home Registration Form to the municipality or regional district responsible for the area where your new home will be located in order to obtain a building permit and commence construction. If there are no building permits required, you will need to have the New Home Registration Form in your possession before commencing construction.

STEP 6 – Completion of construction

When the new home is complete and first occupied, you (the owner builder) must supply BC Housing with the occupancy date and a list of the tradespersons used in the construction of the new home. The easiest way to do this is to log in to your account and complete the information online.

STEP 7 – Sale of owner-built homes

An owner builder who wishes to sell their home within 10 years after first occupancy must obtain a disclosure notice for their home from the Licensing Department and provide it to any prospective purchasers. An owner-built home may not be offered for sale, sold or rented any earlier than one year after the new home has been built, except in special circumstances, and only when pre-approved by the Registrar.

Important Note About Occupancy Permits

If you build your new home in a jurisdiction that issues occupancy permits, it is the occupancy permit that is used to determine the start of the:

- 10-year statutory protection liability
- minimum one-year personal use of the home requirement
- waiting period for future Owner Builder Authorizations

For this reason, we encourage owner builders not to delay in obtaining an occupancy permit for the new home.

Terminology

"Registered interest in land": includes an interest in fee simple, a life interest, or a lease of at least 15 years, all of which must be registered with the Land Title Office in the applicant's name.

"Persons ordinarily resident": A person is ordinarily resident if they are normally residing in the home (apart from temporary or occasional absences), and their residence has been adopted voluntarily and for settled purposes as part of the regular order of their life for the time being. Decisions about whether a person is ordinarily resident will need to be based on all the circumstances of the particular case. In homes containing a suite, the residents of the suite are considered to be ordinarily resident for the purpose of the Homeowner Protection Act.

"First occupancy" means:

(a) the date an occupancy permit has been issued with respect to the new home, or

(b) if no occupancy permit has been issued with respect to the new home, the date the new home was first occupied.

"Personal use" in relation to an owner builder, means residential occupancy by the owner builder and does not include rental use.

10 simple steps to complying with asbestos abatement

Many homes built up until 1990 used products containing asbestos. Before you begin renovations or start demolishing an older home, follow these guidelines below to ensure the safe detection and removal of asbestos.

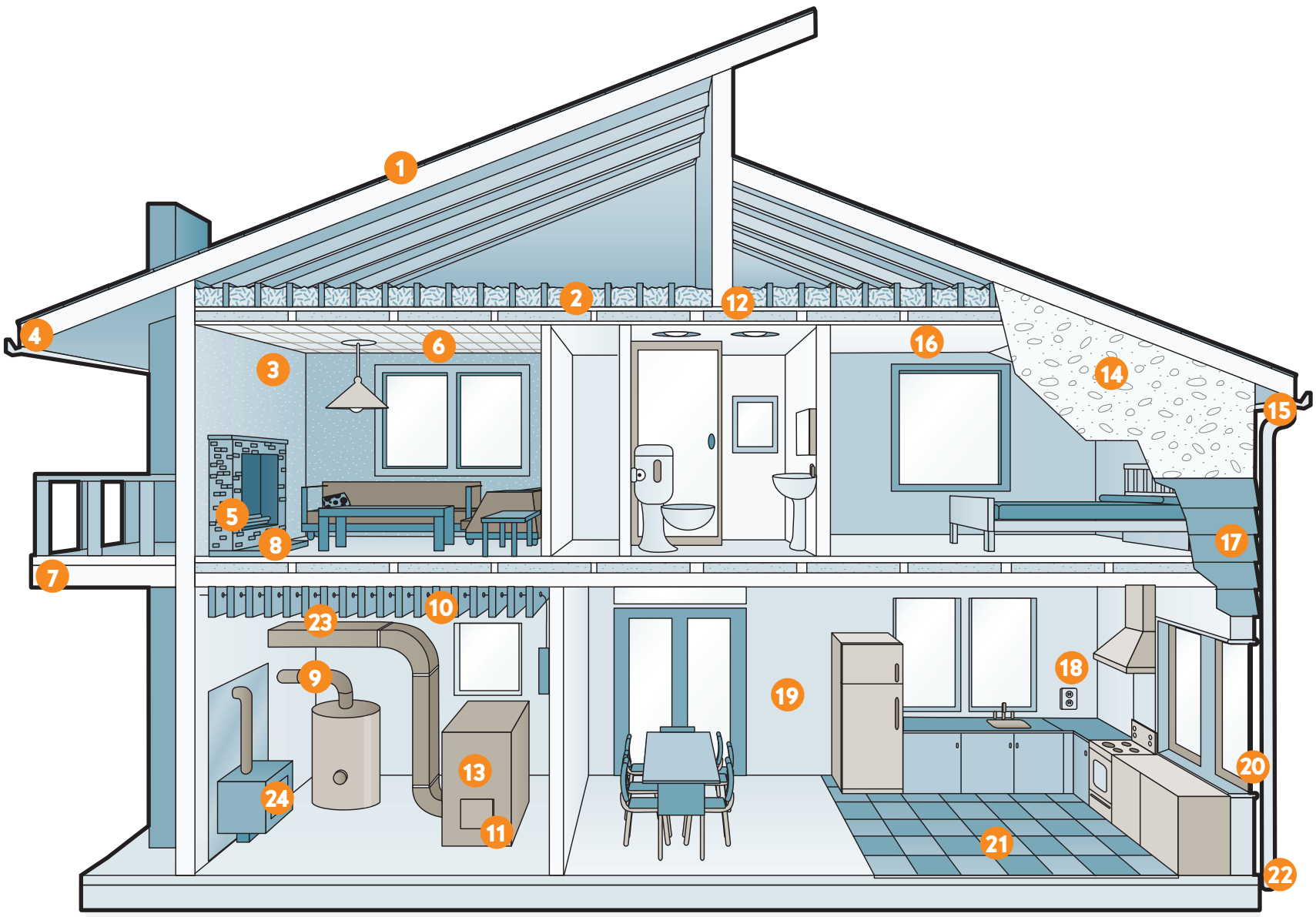
1. A pre-1990 house/building is to be demolished or renovated.
2. The building owner (or owner's representative) or the employer (e.g., builder, demolition contractor) retains a qualified person (usually a consultant) to perform a risk assessment and asbestos survey before conducting work where asbestos may be disturbed.
3. The qualified person inspects the house/building, collects representative bulk samples, and has the samples analyzed by a qualified laboratory.
4. The qualified person prepares a report that identifies all inspection results (including drawings, plans, or specifications), risk assessment, and scope of work for the abatement of the asbestos.
5. The report containing the inspection results is provided to the owner/employer. The inspection results must be available at the worksite whenever workers are on site.
6. The owner or employer retains trained asbestos abatement workers. A notice of project (NOP) with written work procedures is submitted to WorkSafeBC before commencement of asbestos removal work.

7. Safe removal and disposal of identified asbestos occurs.
8. After the asbestos removal the owner or employer receives written confirmation that the asbestos specified for removal on the NOP has been removed. A copy of the inspection results is on site.
9. The owner authorizes demolition of the house/building to proceed. The demolition employer proceeds to demolish house using safe work procedures. Copies of inspection results and post-abatement reports are on site.
10. If any asbestos is found during demolition, all work is to cease until a risk assessment is done and the asbestos is safely contained or removed. In this case, go back to step 7.

Find additional industry resources at worksafebc.com/safetyatwork.

WorkSafeBC

Potential sources of asbestos in the home



1. Roof felt and shingles
2. Loose, blown-in insulation, such as vermiculite
3. Incandescent light fixture backing
4. Roof gutters can be made of asbestos cement
5. Artificial fireplace logs and ashes
6. Acoustic tiles
7. Deck undersheeting
8. Asbestos pad under the fireplace hearth
9. Pipe insulation
10. Main panel and fuse box; each fuse wire has an individual asbestos flash guard
11. Door and gasket covers
12. Backing behind recessed lighting
13. Boiler and furnace insulation
14. Asbestos can be found in stucco
15. Soffit boards can be made of asbestos cement or asbestos insulating board
16. Textured or stipple-coated walls and ceilings
17. Asbestos cement (transite) board siding and undersheeting
18. Outlets and switches
19. Gypsum board filling compound, and patching and joint compound for walls and ceilings
20. Window putty
21. Flooring: vinyl tiles and linoleum sheet flooring; flooring adhesive
22. Downpipes can be made of asbestos cement
23. Insulation on electrical wires
24. Heat reflector for wood stove

Please note: This floor plan depicts a typical older home. Asbestos use has declined significantly; homes built before 1990 are more likely to contain asbestos products.

WorkSafeBC

Overview of safety requirements for general construction.

This checklist aims to assist homeowners, builders, and contractors to comply with the Workers Compensation Act (the Act) and the Occupational Health and Safety Regulation (OHSR) prior to and during construction. The full OHSR and excerpts from the Act are available online at **WorkSafeBC.com** or by contacting WorkSafeBC.

Other construction health and safety information, including the booklet Safe Work Practices for House Construction, may be downloaded free of charge at **WorkSafeBC.com/publications**. Pre job meetings with local WorkSafeBC prevention officers may be arranged (see contact information on page 4).

✓	TOPIC	OHSR/ACT SECTION
	1. General responsibilities for safety and health The prime contractor is responsible to do everything that is reasonably practicable to ensure compliance with all requirements of the OHSR and theAct. Owners are considered the prime (general) contractor unless a written agreement with the directing contractor, employer, or other person is in place.	**Act 118** **Act 119**
○	Primary contractor registered	
○	Subcontractors registered	
○	Clearance letters obtained	
	2. Notice of project (nop) The owner or prime contractor must submit a Notice of Project form before any construction project (including demolition or excavation) begins where the total construction costs exceed $100,000; or the project includes an excavation more than 1.2m (4ft.) in depth, in which a worker may be required to enter; or the construction activity involves other criteria listed in OHSR section 20.2. NOPs are available from WorkSafeBC offices or may be completed at **WorkSafeBC.com**. To simplify paperwork, more than one site of a contractor in a subdivision can be entered on an NOP.	**OHSR 20.2** **NOP Number:**
○	Notice of Project obtained	
	3. Training, instruction, and supervision of workers	**Act 115** **Act 117**
○	Workers provided with the information, instruction, training, and supervision necessary to ensure their safety and the safety of any other workers at the workplace. This requirement applies to each contractor on site.	
	4. Hazard assessment	**OHSR 19.24** **OHSR 19.25**
○	Voltage of overhead power lines in the work area determined through the authority controlling the system (e.g., BC Hydro) and the minimum distance of approach.	
○	Power authority contacted and Form 30M33 obtained if the minimum distance from the electrical conductors cannot be maintained, and movement by a worker or equipment may result in entering the minimum distances	
○	Underground services identified	
○	Reference number	
	BC One Call: 1 800 474-6886 or *6886 from a mobile phone	

✓	TOPIC	OHSR/ACT SECTION
	5. DEMOLITION and RENOVATIONS	
○	Hazardous materials assessed (asbestos, lead, mercury, flammables, mould, etc.)	
	Hazard assessment report available on site	
○	Notice of Project for Asbestos (NOPA) for asbestos/lead work NOPA number _____	
○	Integrity of structure maintained (professional engineer may be required)	
○	Walls and free-standing chimneys stabilized	**OHSR 20.111** **OHSR 20.121**
○	Stairways and handrails maintained	
○	Electrical, gas, water services disconnected	
○	Glass removed safely	
○	Load limit for floors maintained	
○	Access areas protected from falling/thrown materials	
○	Procedures established for dismantling buildings	
○	Housekeeping maintained	
	6. CHEMICAL AND PHYSICAL HAZARDS	
○	WHMIS education and training; ensure MSDS within past 3 years	
○	Safe work procedures developed for: use, storage, and disposal of chemicals and designated substances (e.g., roofing tar, damp proofing, isocyanates, glues, coatings); concrete grinding, drywall sanding	**OHSR parts 5, 6, 7**
○	Heat and cold stress	
○	Use of internal combustion engines indoors: venting, service and maintenance, emission control system (e.g., gas-powered cutoff saws, skid steer loaders, excavators, soil compactors)	
	7. FIRST AID SUPPLIES AND EQUIPMENT	**OHSR 3.16** **OHSR 3.17**
○	First aid services and equipment provided	
○	Written first aid procedures developed	
	8. PERSONAL PROTECTIVE EQUIPMENT (PPE)	
○	Safety footwear worn, in good repair, and has the green CSA triangle	
○	Clothing worn that protects against abrasion where applicable (e.g., long pants and minimum of T-shirt with suitable sleeve length)	**OHSR Part 8**
○	Safety eyewear worn when applicable	
○	Safety headgear worn when applicable	
○	High visibility apparel when applicable	
○	Respirators used in accordance with OHSR where applicable (e.g., exposure to asbestos fibres or silica dust)	
	9. HEARING CONSERVATION	
○	Construction workers' hearing tested every year. A list of mobile hearing test contractors and facilities authorized by WorkSafeBC to do hearing tests is available online or by calling 1 888 621-7233.	**OHSR 7.7** **OHSR 7.8**

✓	TOPIC	OHSR/ACT SECTION
	10. TRENCHES, EXCAVATIONS, AND UNDERGROUND SERVICES	
○	Excavation work carried out in accordance with the instructions of a professional engineer or the requirements of the OHSR. Workers shall not enter any trench or bulk excavation more than 1.2 m (4 feet) in depth unless: • The sides are sloped to a safe angle at least 3 horizontal to 4 vertical, or • The sides have been supported by use of shoring and bracing, or • A combination of both sloping and shoring is used, or • There are written instructions for safe worker entry available on site by a registered professional engineer (engineering documentation must be stamped and sealed and available on site)	OHSR 20.78 to 20.95
○	Excavations sloped/shored or evaluated by professional engineer	
	11. ELECTRICAL SAFETY	
○	Overhead high-voltage electricity	OHSR 19.5
○	General limits of approach reviewed with all workers in pre-job safety meeting.	OHSR 19.15
○	Electrical power tools and cords	OHSR 19.24
○	Electrical cords inspected. Cords with broken/frayed insulation or missing ground prongs not in use.	OHSR 19.25
○	Class A ground fault circuit interrupters (GFCI) used for portable electrical tools when working outdoors or in wet or damp conditions.	
	12. SAFE ACCESS, OPENINGS, AND LADDERS	
○	Elevated walkways at least 50 cm (20 in.) wide.	OHSR 4.61
○	Stairway complete with handrails installed before beginning work on the next floor level.	OHSR 13.3
○	Floor and roof openings effectively covered or guarded.	OHSR 13.5
○	Suitable access openings for the safe delivery of drywall from the boom truck or forklift into the structure.	OHSR 13.6
○	Suitable ladders, work platforms, and scaffolds provided for activities requiring positioning at elevations above a floor or grade. For example, use bracket scaffolds with double-wide 2" x 10"s when placing concrete in a wall form or other suitable work platforms or scaffolds.	OHSR 20.4 OHSR 20.5
○	Ladders in good condition and secured from slipping.	
○	Ladders project at least 1 m (3 ft.) above the upper landing to which they provide access.	
○	Job constructed wood ladders built to WCB Standard LDR 1-2004.	
	13. SCAFFOLDS	OHSR 13.2
○	Job constructed wood scaffolds built to WCB Standard WPL 1-2004	OHSR 13.14
○	Major components of scaffolds used in accordance with technical data provided by the manufacturer, or written instructions of a professional engineer	OHSR 13.15 OHSR 13.17
○	Documentation on site	OHSR 13.18

continued on back...

Construction Project Checklist

✓	TOPIC	OHSR/ACT SECTION
	14. FALL PROTECTION Pre-planning for fall protection is required for all contractors and subcontractors. The following particular requirements apply to trades working at height (e.g., framers, roofers, gutter installers, and rooftop equipment installers such as HVAC or solar collector installers):	OHSR 4.55 OHSR 4.58 OHSR 4.59 OHSR 4.61 OHSR 11.2 OHSR 11.5 OHSR 20.75
○	Workers must not walk the top plate of any walls at any time; walkways must be at least 50 cm (20 in.) wide.	
○	Fall protection must be used when work is being done at a height of 3 m (10 ft.) or more above the ground, or if a fall from a height of less than 3 m involves a risk of injury greater than the risk of injury from the impact on a flat surface.	
○	On steep roofs (8:12 pitch or greater), 2" x 6" toe-holds (slide guards) must be used in addition to a personal fall protection system.	
	15. YOUNG AND NEW WORKERS	OHSR 3.23 to 3.25
○	Health and safety orientation and training (specific to the workplace) provided to young and new workers before starting work in the workplace	
○	Orientation documented	
○	Sample orientation available at http://www2.worksafebc.com/PDFs/YoungWorker/training_orientation_construction_employers.pdf	

Completed by _____ Date _____

Contact information

Lower Mainland

Abbotsford: 1 800 292-2219
Burnaby: 1 888 621-7233
Coquitlam: 1 888 967-5377
North Vancouver: 1 888 875-6999
Surrey: 1 800 621-7233
Vancouver: 1 888 621-7233

Interior/North offices

Kamloops: 1 800 663-3935
Kelowna: 1 888 922-4466
Nelson: 1 800 663-4962
Fort St. John: 1 800 663-4630
Prince George: 1 800 663-6623
Terrace: 1 800 663-3871

Vancouver Island

Courtenay: 1 800 663-7921
Nanaimo: 1 800 663-7382
Victoria: 1 800 663-7593

WorkSafeBC Prevention Information Line: 604 276-3100 or toll-free 1 888 621-SAFE (7233)

WORKSAFE BC

Renovation and restoration projects:

Low bid may not meet environmental or workplace safety requirements

Whenever a renovation or restoration project is undertaken, it is the joint responsibility of the insurance company, property manager, building owner, and/or the contractor to meet all legal and legislated requirements.

In today's competitive world, there is overwhelming pressure to take low bids. But low bids may not take into account the contractor's legal requirements. The *Workers Compensation Act of BC* mandates that employers in B.C. provide a safe workplace and protect their workers against exposure to hazardous materials. Contractors who fail to meet these requirements may have their worksites closed or projects delayed to bring about compliance with the Occupational Health and Safety Regulation.

Many building owners, property managers, and insurance representatives don't realize that, under law, contractors are required to ensure that all hazardous materials such as asbestos or lead are identified and abated in a safe manner. This could have the effect of adding costs to the project; but failure to do so could expose workers, occupants, and the general public to hazardous materials with significant potential liability issues for all involved.

Know what's required of you and your contractor . . .

- You are responsible for contracting with firms that meet the legislated and legal requirements to protect the health and safety of workers employed on the project site.
- You should ensure that your contractor has a qualified person inspect the site to identify any onsite hazards such as lead and asbestos, or other hazardous materials that may be present. The survey should include any of the following materials that may be removed or disturbed during the project:
  - **Taped and mudded drywall**
  - **Texture coated ceilings**
  - **Asbestos cement shingles, roofing, or siding**
  - **Tape or paper covering forced air ductwork**
  - **Vinyl asbestos tile or sheet flooring**
  - **Asphalt roofing material**
- If onsite hazards are present, removal must be done by trained and qualified workers using operating procedures that meet legislated requirements.
- A Notice of Project (NOP) form must be filed at least 24 hours in advance of any project:
  - That exceeds $100,000 for labour and material costs, or
  - Involves permanent or temporary works designed by a professional engineer, or
  - Involves the removal of hazardous materials such as lead and asbestos. (Note that employers can now complete and file the NOP online, and print the hard copy necessary for posting at the worksite. In the case of emergencies that require immediate abatement of hazardous materials, filing online will allow the work to proceed immediately rather than waiting 24 hours.)

For more information on ***Notice of Project Form for Construction, Asbestos, or Lead***, look for "Forms" on www.WorkSafeBC.com. (Notice of Project is Form 52E49.)

. . . and the people you hire

Finding a competent and reliable contractor is the first step to a successful project. The more time you spend *now* prior to any construction or restoration project to check prospective contractor backgrounds and references, the more likely it will be that the repair goes smoothly and that the job will be done right.

When hiring contractors or subcontractors, be sure to protect your interests. If the business you hire is not meeting the requirements under law, you could be liable for the costs associated with any injuries plus additional costs for delays. When reviewing the bids submitted, ask whether or not abatement of hazardous materials is included in the price or whether a survey by a qualified person (as defined by the OH&S Regulation) has been completed. A qualified bid gives you peace of mind and in the long run ensures that you are not facing delays and increased costs. It is good business to ensure that the bids received are qualified and complete.

Contact WorkSafeBC for assistance

Contact the WorkSafeBC Prevention Information Line: 604 276-3100 or toll-free 1 888 621-SAFE (7233) for assistance. You can also contact the WorkSafeBC Employer Service Centre at 1 888 922-2768 or 604 244-6181. You can also find information about WorkSafeBC requirements at www.worksafebc.com.

To check a contractor or firm's record with WorkSafeBC, follow these simple steps:

1. Ask the firm for its WorkSafeBC account number.
2. Get a letter of clearance from WorkSafeBC in less than a minute at www.worksafebc.com. Select "Obtain clearance letter" from the home page.
3. Follow the prompts on the screen to obtain the clearance letter, which measures the status of your contractor's account – telling you whether the contractor is in fact registered and paying premiums to WorkSafeBC. Be sure to do this at least twice: before hiring the firm and then again before making your final payment to the firm. If you don't have Internet access, contact our Clearance Section at 604 244-6380, or toll-free at 1 888 922-2768. Our representatives will send you the letter by fax or mail.

For information regarding the Occupational Health and Safety Regulation, go online to http://regulation.healthandsafetycentre.org/s/Home.asp.

Work-related death, injury, illness, and disease are not, and should not be, an inevitable and acceptable cost of doing business.

WORK SAFE BC

WORKING TO MAKE A DIFFERENCE

worksafebc.com

WorkSafeBC

worksafebc.com

Renovating or building your home? You may need to register with WorkSafeBC

Shelter your investment

Renovating your home is an investment in your future. As with any investment, you should protect yourself against loss in every way possible. So, if you hire an individual or business to work in or around your home, be sure to check your registration requirements with WorkSafeBC or it could end up costing you more than you had planned.

Homeowners can be employers

Many home renovators don't realize that, under law, they may have to register and pay for workers' compensation coverage when they hire someone to work at their home for a certain period of time. The reason is simple: if someone you hire gets injured on the job, the costs can be extremely expensive — sometimes more expensive than the renovation itself.

Once registered, you are required to pay premiums that go towards funding B.C.'s workers' compensation costs — such as medical and vocational rehabilitation services, and wage loss for injured workers — and to provide a safe and healthy working environment for your workers.

In exchange, you are protected against expensive lawsuits from workers who are injured at your home — lawsuits which could put your renovation costs through the roof, or worse, be financially devastating.

Measure once, check twice

Many contractors are already registered with WorkSafeBC. If this is the case with your contractor, you may not need to be registered as well. However, you should check the contractor or firm's record with WorkSafeBC to protect yourself against liability for any unpaid premiums or workers' compensation costs related to your home project.
To do so, follow these simple steps:

1. Ask the firm for its WorkSafeBC account number.
2. Get a letter of clearance from WorkSafeBC. You can obtain one online in less than a minute on WorkSafeBC's website at **WorkSafeBC.com**. Select "Obtain clearance letter" from the home page.
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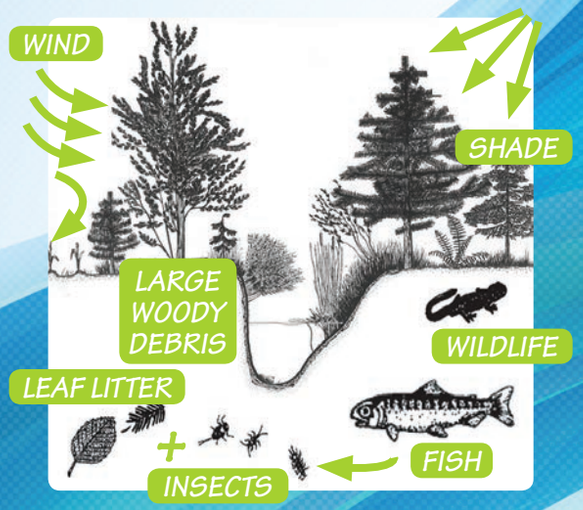
What to do if your contractor is not registered

Contact WorkSafeBC's Employer Service Centre at **1 888 922-2768** or **604 244-6181**. Our representatives will help you determine who needs to be registered with WorkSafeBC — you or your contractor. You can also find information about WorkSafeBC registration requirements at **WorkSafeBC.com**.

What is a Riparian Area?

Riparian areas are the areas bordering on streams, lakes, and wetlands that link water to land. The blend of streambed, water, trees, shrubs and grasses directly influences and provides fish habitat.



The Riparian Area is Fish Habitat

Riparian areas provide shade and shelter from predators, as well as a home and food for the insects that are food for fish. These areas provide wood to the stream that in turn provides shelter and nutrients. A healthy riparian area acts as a buffer to changes in weather, temperature, flooding and pollution. This resilience is critical to the survival of fish in a developing landscape.

Protecting Riparian Areas is Important

Preventing damage to riparian fish habitat is easier than restoring it if damage has occurred. Waterfront land owners have a direct role to play in ensuring the health of their local watercourse. For example, land owners can contribute to the restoration of riparian areas by allowing natural re-vegetation to take its course and re-establishing native plants.

Value for Fish & Your Community

A healthy riparian area has both economical and ecological benefits. Protected natural areas make neighbourhoods desirable and can have a positive impact on your property values.

Protected riparian areas mean:

- Improved water quality
- Decreased flood hazard
- Lower stormwater management costs
- Higher aesthetic values
- Increased shoreline stability
- Decreased heating and cooling costs
- Better air quality

It will take all of us working cooperatively in our communities and with all levels of government to keep riparian areas healthy.

For More Information

Consult your local government to learn about the permit and approval process for developments in your riparian area.

Visit the provincial Riparian Areas Regulation website for more information.

Riparian areas are highly productive ecosystems and are a critical source of British Columbia's biodiversity.

Quick Guide for Waterfront Land Owners & Developers

If you have a stream, lake, wetland or ditch on or beside your property, there are things you need to know.

Provincial and, or Federal legislation may apply to you. This brochure is intended to assist land owners & property developers who are planning development activities in riparian areas adjacent to streams or other water bodies.

This pamphlet is a guide only. It is not a substitute for the Federal *Fisheries Act*, the *Riparian Areas Regulation*, or your local government's bylaws.

BRITISH COLUMBIA
Ministry of Forests, Lands and Natural Resource Operations

Standards are in Place to Protect Fish

You need to follow local standards to protect riparian habitat when your development project is near a stream, river, creek, pond, lake, ditch, spring or wetland, if it provides fish habitat or nutrients to fish habitat.

Fish habitats are areas on which fish depend directly or indirectly for a variety of needs including spawning, nursery, rearing, food supply and migration.

If Your Project is…

a residential, commercial or industrial **activity** within 30 metres of a watercourse, even if that watercourse is not on your property,

AND you are planning ANY of the following:

- Removing or altering plants
- Disturbing soils
- Constructing buildings and structures
- Constructing roads, trails, docks, wharves, bridges
- Creating hard surfaces such as decks and pavement
- Installing works for flood protection
- Developing drainage systems and utility corridors
- Servicing sewage and water systems
- Subdivisions

…the Riparian Areas Regulation may apply to your development. The regulation helps you conduct your activities responsibly to avoid degrading valuable riparian fish habitat.

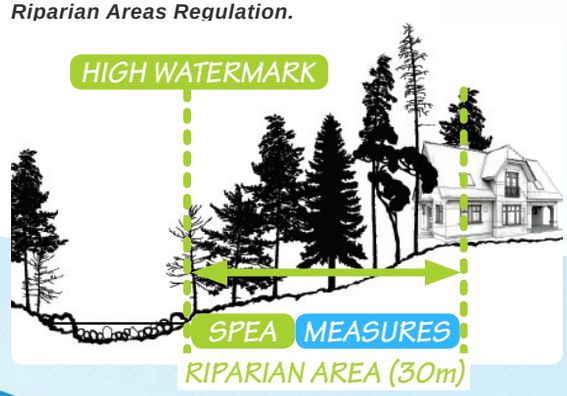
About the Regulation

The Riparian Areas Regulation is **provincial legislation** that requires **local governments** to enact bylaws that protect riparian areas during residential, commercial, and industrial development.

If the Regulation Applies to You

If the Riparian Areas Regulation applies to your development, you may need to have your property assessed by a **Qualified Environmental Professional**. The assessment will determine the width of the **Streamside Protection and Enhancement Area** (SPEA) on your property. Development may be restricted in this area if it has the potential to damage vegetation and/or interfere with the ability of the riparian area to provide fish habitat. Additional measures to maintain riparian habitat such as sediment and erosion control, may be included in the assessment.

DIAGRAM 1: ***Illustration of the 30m Riparian Assessment Area requiring compliance with the Riparian Areas Regulation.***



Qualified Environmental Professionals (QEPs) include agrologists, biologists, foresters, geoscientists, and technologists who are in good standing with their respective professional organizations working in their area of expertise.

How Do I Proceed?

STEP 1

CHECK LOCAL BYLAWS
check with your local government for the rules that apply to developing property within the riparian area (within 30m of a stream, shore or ravine bank *see diagram 1*).

STEP 2B

IF LOCAL BYLAWS DO NOT STIPULATE SETBACKS
you will require an assessment from a Qualified Environmental Professional in order to determine the setbacks and protection measures. It is strongly advised that you conduct this assessment before actual site development.

STEP 2A

ABIDE BY SETBACKS
layed out in local bylaws. Go to Step 6.

STEP 3

USING STANDARD PROCEDURE
the assessment determines which measures must be taken before, during and after development, in order to comply with the Riparian Areas Regulation.

STEP 4

IF THE DEVELOPMENT PROPOSAL DOES NOT COMPLY
with the stipulations in the assessment, the development proposal must be redesigned to occur outside the riparian area.

STEP 5

A RECORD OF THE ASSESSMENT
is reviewed and filed with the provincial government.

STEP 6

AFTER THE ASSESSMENT
the local government may proceed with their approval process.

Consult your local government for bylaws that apply to your development.

Safety Authority

Do it right. Stay safe.

When do I apply for an operating permit?

- **Before** operating equipment or performing maintenance work.
- When you acquire a property which has a current operating permit. Existing permits become invalid when properties change ownership.
- As part of an ongoing renewal process as long as the equipment remains in service.

How do I apply for an operating permit?

1. Fill out an application form, available through BCSA offices or online on our website.
2. Submit the completed application form to a BCSA office or your local Safety Officer.
3. Once your application is approved and payment is received, your operating permit will be sent to you.

About the BC Safety Authority

At the BC Safety Authority, we promote the safe installation and use of technical equipment. As the Province's delegated authority, we administer safety standards and enforce compliance. We also issue permits and licences, educate, and conduct assessments - particularly inspections in high-risk situations.We continuously advance the standards of safe practices in BC.

Our vision

Safe Technical Systems. Everywhere.

Contact us

For more information on how to obtain an operating permit or other questions, please contact us:

www.safetyauthority.ca/operatingpermits

operatingpermits@safetyauthority.ca

1.866.566.7233 (Toll-free)

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BRC-7015-00 (2012-09-13)

Safety Authority

Operating Permits

Know your obligation

Operating Permits

Know your obligation

Who needs an operating permit?

An operating permit is required by law in British Columbia if you are operating or maintaining specific types of equipment that fall within the requirements of the Safety Standards General Regulation (B.C. Reg. 105/2004). If you are the owner or managing agent of one of the following types of premises it is likely you require an operating permit for one or more technologies:

- Commercial properties
- Industrial plants
- Multi-unit office or residential buildings
- Schools, hospitals and municipal facilities

Why do I need an operating permit?

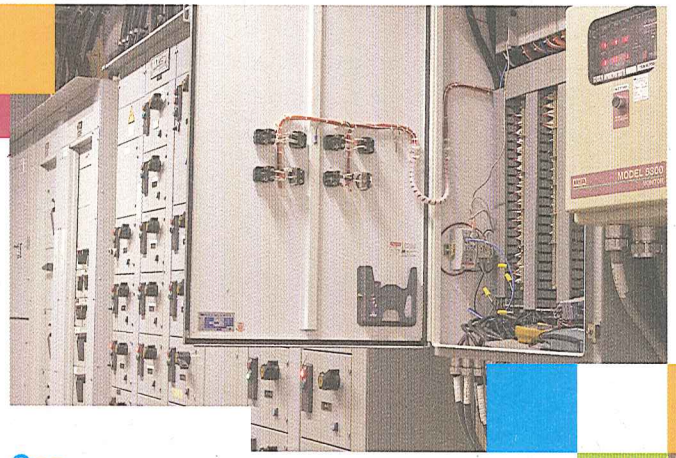
Operating permits confirm that maintenance of your equipment is monitored or performed by qualified individuals. These individuals are responsible for technical safety inspection, operation and maintenance requirements, while ensuring that work records for equipment are kept up to date.

Having qualified individuals responsible for the operation and maintenance of your property's technical equipment protects your investment by providing oversight of your site's safety.

If your building uses equipment that meets these conditions, it is your legal obligation to have an operating permit:

Electrical

- The supply is greater than 250 kVA
- The supply is greater than 750 V

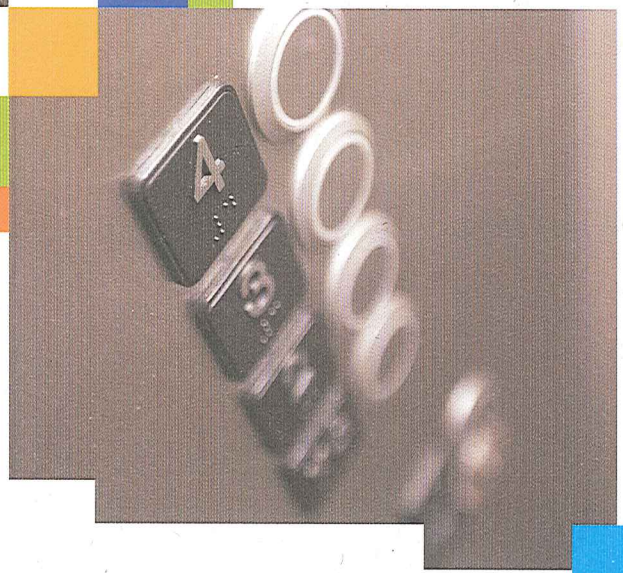


Gas

- Appliances used for processing or process water heating with a total input greater than 1,500 kW (excludes space heating or domestic water heating)
- An establishment for filling cylinders or vehicle tanks with gas
- An establishment where regulated products are installed on vehicles
- An establishment that maintains portable heating appliances of input ≤300 kW
- A portable appliance with an input greater than 300 kW that can be transported from site to site

Boilers and Pressure Vessels

- Heating boilers (hot water or low pressure steam <15 psig) with a heating surface >3 m²
- All other boilers with a heating surface >2 m²
- Pressure vessels
- A refrigeration plant with a prime mover nameplate capacity rating:
  >125 kW using Group A1, A2 or B1 refrigerants
  >25 kW using Group A3, B2 or B3 refrigerants



Elevating

- All escalators and elevating devices

Think permit.

Renovations done without permits can seriously hurt the resale value of your home... or worse, your family's safety.

The best way to protect your family and your home is to hire a BCSA licensed contractor with the appropriate permits.

BRITISH COLUMBIA SAFETY AUTHORITY

Home renovation checklist:

Thinking ahead about your renovation

- ☐ Review your home owner's insurance policy. Damages caused by improperly installed electrical or gas upgrades will likely not be covered by your insurer. The best way to ensure renovations are completed safely, legally, and up to code is to hire a BCSA licensed contractor with the appropriate permits.
- ☐ Increase your home's liability insurance for the duration of the renovation.
- ☐ Increase the insured value of your home to include the new upgrades.
- ☐ Review your existing Warranties to ensure that the electrical or gas work you have planned won't limit your coverage.
- ☐ Get approval. If you are in a Strata or Community Association, get approval for electrical or gas upgrades. They may require that the work be completed by a licensed contractor.

Before hiring a contractor, ensure they have:

- ☐ A valid BC Safety Authority Licence
- ☐ References
- ☐ Liability insurance
- ☐ WorkSafeBC coverage
- ☐ Warranties on all work and materials

Written quote includes:

- ☐ Total cost of work
- ☐ Timeline: start and end date of work
- ☐ List of permits and the costs (i.e. electrical, gas, building, etc.)

After hiring a contractor, obtain

- ☐ A copy of each permit before beginning work
- ☐ A copy of the final declaration

Hiring a contractor licensed by the BCSA with the appropriate permits provides peace of mind. You can't put a price on that.

FAQ
thinkpermit.ca

How do I obtain a permit?
Application forms can be picked up at your local BC Safety Authority office, or downloaded from our web site. Application forms can be submitted in person, by fax or over the phone.

Please visit our web site, **www.thinkpermit.ca** to download a permit application form or to find the BC Safety Authority location nearest you.

Call Centre
1.866.566.7233 (SAFE)
7am – 6pm, Monday – Friday.

How long does it take to be issued a permit?
The process takes between 15 – 20 minutes, which includes completing the paperwork required and making the payment.

What sort of documents do I need to provide to get a permit?
No documents are required, as long as you have all the information needed to fill out the application form.

Information required:
- Name and address of installation
- Contractor information (or homeowner)

For gas permits:
- Number and type of units being installed (e.g. Boiler, Heater, Fireplace etc)
- Input (in BTU's)

For electrical permits:
- Installation value of job

How long do I have to complete the work once I have obtained the permit?
Electrical permits expire after 180 days if an inspection isn't requested. Gas permits do not expire.

How much does a permit cost?
Gas permit fees are dependant on the number of appliances being installed. Electrical permit fees are based on the value of the renovation. Price lists can be downloaded from **www.thinkpermit.ca** under *Electrical Permits* and *Gas Permits*.

Are there any special requirements for displaying the permit?
A homeowner doesn't need to display the permit, but it should be kept it in a safe place.

A contractor, when not on-site, must display a copy of the *Contractor Authorization Form* which includes the permit number and job status

Is an inspection by BCSA required once the work is completed?
If it's a DIY job, an inspection is required and will be done by a BCSA Safety Officer to ensure that it's safe. If the work is done by a licensed contractor, the inspection is arranged by them.

Does the permit price include an inspection?
The price of a permit for a homeowner doing the work includes a visit from BCSA.

If I've hired a licensed contractor, do I still need to obtain a permit?
Your BCSA licensed contractor can obtain the permit on your behalf, manage the inspection process, and repair all deficiencies.

They have the training and expertise required to do the job safely, and employ people who are qualified and bonded.

For more information please contact us

BC Safety Authority
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info@thinkpermit.ca

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