

Renovation - Specifications for:

Name: _____

Address: _____

Legal Land Location: _____

Phone: _____ Cell: _____

Email: _____

Contractor: _____ Ph: _____

Specifications

Structural Changes Affecting:

Walls:

Stud size & spacing: _____

Wall height: _____

Windows: _____

Note: For bedroom windows - No dimension less than 380mm (15") of unobstructed opening for openable portion of window (e.g. 15" x 36") Hardware or sash must not have to be removed for egress; sash must not be supported.

Roof & Floor Joists/Trusses:

Type: Vaulted/Cathedral: _____ 8 foot: _____ Other: _____

Ceiling Insulation: _____

Engineered Trusses (for roof and/or floor joists): _____ Other: _____
(If engineered, provide a detail/layout stamped by a Structural Engineer that is site specific)

Venting of Roof (soffits & roof): _____

Foundation/Beams:

Specifications & plans require a Structural Engineer stamp and must be site specific.

Permit # _____

Town/Village/RM of _____

Date: _____



Health & Safety Requirements:

- GFI in the bathroom
- Bathroom ventilation
- Smoke alarms interconnected with other floors
(Smoke alarms are required in each bedroom and on each level)
- Carbon monoxide (CO) alarms
(CO alarms are required to be within 5 m of each bedroom door)

Other:

Fireplace: ___ None ___ Gas ___ Electric ___ Wood
(Provide fireplace manufacturer's installation specifications and combustion air source specifications, if applicable.)

Describe the renovation: _____

Attach a floor plan sketch showing work to be done.

Residential Mechanical Ventilation Design Summary *(For systems serving one dwelling)*



Professional Building Inspections, Inc.
 Phone: (306) 536-1799
 Fax: (306) 781-2112

The owner is required to have this form filled out (both pages) by the contractor to show the ventilation system has been designed in accordance with the requirements of the current edition of the National Building Code.
IT IS THE BUILDER'S RESPONSIBILITY TO ENSURE THAT THE ACTUAL INSTALLATION MEETS THE DESIGN.

Builder	Location
Builder Name:	Jobsite Address:
Builder Address:	Ventilation Contractor (if known)
Total Ventilation Capacity (TVC)	Name:
Required (see page 2) _____ L/s /01	Address:
Principal Ventilation Capacity (PEC)	System Design SHBA Design Sheet # _____
Minimum Capacity Required = TVC x 50% (or x 0.5) = _____ L/s /02	CMHC Design Option # _____
Maximum Capacity Permitted = TVC x 75% (or x 0.75) = _____ L/s /03	Designed to CSA-F326-M91 _____
Without controlling volume	
Actual Principal Exhaust Capacity (PEC) (see page 2) = _____ L/s /04	Exhaust fans with outdoor air supply to forced air furnace return 1
Line /04 must be > line /02 and < line /03 or go to variable Flow control	Exhaust fans with outdoor air supply fan to forced air furnace return 2
	HRV - supply to forced air furnace return, exhaust inlets from rooms 3
If line /04 > line /03 and you do not want variable flow, it may be necessary to place a damper in the duct to lower the flow to an acceptable range	HRV - supply and exhaust ducts to forced air furnace return 4
Principal Outdoor Supply Capacity (PSC)	Exhaust and supply fans to and from rooms (not connected to furnace) 5
Actual Principal Supply Capacity (PSC) (see page 2) = _____ L/s /05	HRV not coupled to a forced air furnace 6
If supply fan is provided the principal supply capacity must match the principal exhaust capacity - Line /05 must = Line /04 and /09 must = line /08	CAN/CSA - F326-M91 7
Variable Flow Control for (PEC) or (PSC)	Make-up Air for Exhaust Vents > 75 L/s
Reduced Minimum Capacity Required = 0.9 x (line /02) _____ L/s /06	Appliance/Vent (Max) Capacity (Min) Capacity > 75 L/s 1
Reduced Maximum Capacity Permitted = 1.1 x (line /02) _____ L/s /07	Make-up air must be provided between min. and max. capacity above Actual Make-up air provided = _____ L/s
Reduced Actual Principal Exhaust Capacity = (line /08 must be > than line /06 and < than line /07) /08	Appliance/Vent (Max) Capacity (Min) Capacity > 75 L/s 2
Reduced Actual Principal Exhaust Capacity = (line /09 must = line /08) /09	Make-up air must be provided between min. and max. capacity above Actual Make-up air provided = _____ L/s
Supplement Exhaust Capacity (SEC)	Kitchen Exhaust Inlet is not the (PEC)
Minimum SEC = TVC - PEC = (line /01 - line /04) _____ L/s /10	Minimum capacity for separate exhaust fan for each kitchen = 50 L/s Kitchen exhaust supplementary fan capacity = _____ L/s
Actual Total SEC meeting some rating (see page 2) _____ L/s /11	Bathroom Exhaust Inlet is not part of (PEC)
HRV (Balance check)	Minimum capacity for separate exhaust fan in each bathroom = 25L/s Bathroom exhaust supplementary fan capacity = _____ L/s
If PEC (line /04 > PSC (line /05) then PSC/PEC x 100 must be >= 90% If PSC (line /05 > PEC (line /04) then PEC/PSC x 100 must be >= 90%	Combustion Air / CO Alarm
Actual HRV Balance = _____ %	For all indirect vented appliances and solid fuel burning appliances Combustion air provided? Y N n/a CO alarm provided? Y N n/a

Certification	
I certify that this ventilation system has been designed in accordance with the requirements of the 2010 National Building Code, section 9.32.3 or to CSA-F326-M91	Name:
	Company:
	Address:
	Telephone:
	Signature:

Ventilation Specification Sheet (continued from page 1)

Capacity	# of Rooms	Total Capacity Required L/s (9.32.3.3)
5 L/s		
10 L/s		
Total (TVC)		

Note: You may wish to design the (TVC) to include capacity for future basement development.

Principal Exhaust Fan(s)					
Fan #	Sone	Location of Inlet	Capacity (L/s)		Duct (size/type)
			(Actual)	(Min line /02)	
Total (PEC)					

The duct size and type can be sized according to Table 9.32.3.11 provided -
 (a) The longest total duct length from intake grille to outdoor hood does not exceed 12m but is not less than 6m, and
 (b) The number of elbows does not exceed 4 but is not less than 2.
Note: See clauses 9, 10 and 11 of sentence 9.32.3.4

N

Specify pre-heat coil for furnace if provided -

Outdoor Air Supply					
Fan #	Sone	Capacity (L/s)		Duct (size)	Duct (type)
		(Actual)	(Min line /02)		
Total (PSC)					

The duct size and type can be sized according to Table 9.32.3.6.A for supply air with no fan provided the total duct length <= 6m and # of elbows <= 2, or sized to Table 9.32.3.6.B for supply air with a fan where the total duct length <= 8m, # of elbows <= 3, and auxiliary supply fan <= 150% of line /02 supply ducts to rooms from HRV; the main trunk and branch ducts may be sized according to 9.32.3.7.B and 9.32.3.7.C where the total duct length from outside hood to register <= 21m and total number of fittings <= 8.

Y

HRV?

WARNING: The design of outdoor air does not guarantee that more air won't be drawn into the furnace causing damage to the heat exchanger. It is the builder's responsibility to do a flow test, if necessary, to ensure the installation meets the design criteria.

Supplemental Exhaust Fan(s)					
Fan #	Sone	Location of Inlet	Capacity (L/s)		Duct (size/type)
			(Actual)	(Min line /02)	
Total (SEC)					

The duct size and type can be sized according to Table 9.32.3.5 provided total duct length <= 9m and # of elbows <= 4.
Note: An intake and exhaust hood and sleeve (minimum 900mm apart) must be provided for a future dryer. If the dryer model number & size is known then a fan may be required as well.
Warning: Exhaust fans can cause a back draft down undirected vented chimneys. It is the builder's responsibility to ensure all systems are properly interconnected and to ensure the actual flows meet those submitted with the design.

Include all supplemental fans here but only add up the fans making up the (TVC). Where a supplemental exhaust fan has a capacity exceeding 75 L/s a makeup fan must be installed. Specify the makeup air fan under the "Outdoor Air Supply" table above. Where the inlet duct size varies from the discharge duct size, both must be shown.

Abbreviations: Main Header or Distribution - MN / Branch Line - BR / Smooth Duct - SD / Flexible Duct - FD