

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY
 For systems serving one dwelling unit and conforming to the Ontario Building Code

This form is for convenience only, Chatsworth shall not be responsible for errors or omissions alleged to be the result of the use of this form.

COMBUSTION APPLIANCES	9.32.3.1.(1)
<input type="checkbox"/> A) Direct vent (sealed combustion) only	
<input type="checkbox"/> B) Positive venting induced draft to dedicated sealed vent (except fireplaces)	
<input type="checkbox"/> C) Natural draft, B-vent or induced draft gas fireplace	
<input type="checkbox"/> D) Solid Fuel (Including fireplaces)	
<input type="checkbox"/> E) No Combustion Appliances	

SUPPLEMENTAL VENTILATION CAPACITY	9.32.3.5
Total Ventilation Capacity	_____ cfm
Less Principal Ventilation Capacity	_____ cfm
Required Supplemental Ventilation Capacity	_____ cfm

HEATING SYSTEM
<input type="checkbox"/> Forced Air <input type="checkbox"/> Non Forced Air
<input type="checkbox"/> Electric Space Heat

PRINCIPAL EXHAUST FAN CAPACITY
Make & Model: _____
Location: _____
Sone Rating: _____ <input type="checkbox"/> HVI Approved

HOUSE TYPE	9.32.3.1.(2)
<input type="checkbox"/> I) Type A) or B) appliances only, no solid fuel	
<input type="checkbox"/> II) Type I) except with solid fuel (including fireplaces)	
<input type="checkbox"/> III) Any Type C) appliance	
<input type="checkbox"/> IV) Type I) or II) with electric space heat	
<input type="checkbox"/> Other: Type I) or II) or IV) no forced air	

SUPPLEMENTAL FANS (Make & Model)				9.32.3.5
LOCATION	MODEL	CFM	SONES	

SYSTEM DESIGN OPTIONS
<input type="checkbox"/> 1) Exhaust only/ Forced Air System
<input type="checkbox"/> 2) HRV with extended Exhaust Ducts/Forced Air System
<input type="checkbox"/> 3) HRV Simplified Exhaust Connection to Forced Air System
<input type="checkbox"/> 4) HRV-Full Ducting/ Not Coupled to Forced Air System
<input type="checkbox"/> Part 6 Design

HEAT RECOVERY VENTILATOR	9.32.3.11
Make & Model: _____	
_____ cfm high _____ cfm low	
_____ % Sensible Efficiency @ -25°	
<input type="checkbox"/> HVI Approved	

TOTAL VENTILATION CAPACITY	9.32.3.3 (1)
Basement & _____ @ 20 cfm _____ cfm	
Master Bedroom	
Other Bedrooms _____ @10 cfm _____ cfm	
Bathrooms & Kitchen _____ @10 cfm _____ cfm	
Other Rooms _____ @10 cfm _____ cfm	
Table 9.32.3.3 Total _____ cfm	

LOCATION OF INSTALLATION
Civic Address: _____

PRINCIPAL VENTILATION CAPACITY REQUIRED	9.32.3.4 (1)
One Bedroom (Master)	31 cfm
Two Bedrooms	47 cfm
Three Bedrooms	63 cfm
Four Bedrooms	79 cfm
Table 9.32.3.4.A	
More than 4 - Part 6	PROPOSED

BUILDER
Name: _____

INSTALLATION CONTRACTOR/ DESIGNER CERTIFICATION
I hereby certify that this ventilation system has been designed in accordance with the Ontario Building Code. (Current Version)
Name: _____
Address: _____

City: _____
Phone: _____
Signature: _____
HRAI No. _____ Date: _____

Table 3.32.3.4.B
Forming Part Sentence 9.32.3.4.(9)

PRINCIPAL EXHAUST DUCT SIZE				
Number of Bedrooms in Dwelling Unit	Minimum Exhaust Duct Diameter			
	Ducts Connected to Inlet and Outlet of Principal Exhaust Fan		Ducts Connected to One Side Only of Principal Exhaust Fan	
	Smooth Duct, mm (in)	Flexible Duct mm (in)	Smooth Duct, mm (in)	Flexible Duct mm (in)
1	100 (4")	125 (5")	100 (4")	125 (5")
2	125 (5")	150 (6")	125 (5")	150 (6")
3	125 (5")	150 (6")	150 (6")	175 (7")
4	150 (6")	175 (7")	150 (6")	176 (7")
More than 4	Part 6 Design	Part 6 Design	Part 6 Design	Part 6 Design

Table 9.32.3.5
Forming Part of Sentence 9.32.3.5.(4)

Kitchen, Bathroom and Water Closet Room Exhaust Duct Size		
Fan Capacity cfm	Minimum Exhaust Duct Diameter	
	Ducts Connected to Inlet & Outlet of Exhaust Fan, mm (in)	Ducts Connected to One Side Only of Exhaust Fan mm (in)
53	125 (5")	125 (5")
106	150 (6")	150 (6")

Note to Table 9.32.3(5):

- 1) Where flexible duct is used, the duct diameter shall be increased by 25mm (1 in.)

Exhaust jacks & grills must NOT be smaller than the required size of the ducts they are attached to as required in Sentence 9.32.3.12(14)

Table 9.32.3.9
Forming Part of Sentence 9.32.3.9 (4)

Fan Sound Rating		
Fan Application	Maximum Sound Ratings, sones	
	Rated according to CAN/CSA -C260-M	Rated according to HVI 915
Principal Exhaust	2.5	2.5
Supplemental exhaust fans installed in bathrooms and water closet rooms and their make-up air fans	2.5	3.5
Supplemental exhaust fans installed in kitchens and their make-up air fans	No rating required	no rating required

Table 9.32.3.10.B
Forming Part of Sentence 9.32.3.10.(10)

Equivalent Duct Size				
Required Round Duct Size mm (in)	Permitted Equivalent Rectangular Duct Size, mm (in)			
	Stack Duct	100 mm (4") Depth	125 mm (5") Depth	150 mm (6") Depth
75 (3")	82 x 250 (3 ¼ x 10")	57 x 100 (2 ¼ x 4")		
100 (4")	82 x 250 (3 ¼ x 10")	89 x 100 (3 ½ x 4")	75 x 125 (3" x 5")	75 x 150 (3" x 6")
125 (5")	82 x 250 (3 ¼ x 10")	125 x 100 (5" x 4")	100 x 125 (3" x 5")	85 x 150 (3 ½" x 6")
150 (6")	82 x 300 (3 ¼ x 12")	200 x 100 (8" x 4")	150 x 125 (6" x 5")	125 x 150 (5" x 6")
175 (7")	82 x 350 (3 ¼ x 14")	275 x 100 (11" x 4")	200 x 125 (8" x 5")	175 x 150 (7" x 6")
More than 175 (7")	Part 6 Design	Part 6 Design	Part 6 Design	Part 6 Design

9.32.3.8(2) Where a solid fuel-fired combustion appliance is installed, the ventilation system shall include a heat recovery ventilator that is designed to operate so that the flow of exhaust air does not exceed the flow of intake air in any operating mode, and that complies with the requirements of Article 9.32.3.11.