Mechanical Design Report Low rise residential Ottawa



Address Location of			House Builder PHOENIX		-				
Installation Application Number					House Model (if applicable) PLATINA				
	Name HARDING MECHANCIAL								
Installing	Address 2210 CAVANMORE RD								
Contractor	City OTTAWA				Postal Code KOA 1LO				
	Telephone Number 613-831-2257				010 001 > 011		City of Ottawa		
SYSTEM DESIGN PARAMETERS							Building Services Branch		
Combustion A	appliances 9.3	2.3.1.(1)		Heating	System		REVIEWED By dominique bordage at 4:27 pm, Sep 16, 2022		
a) X Direct vent (sealed combustion) only									
1 1		iced draft (except	fireplaces)	☐ No:	Non-Forced Air (Other -				
c) Natura	ıl draft, B-vent	or induced draft	fireplace	☐ Ele	☐ Electric Space Heat D. Bok DAGE				
d) Solid F	Fuel (including	g fireplaces)		Ra	diant Floor Heat (atta	ach pipe details)	1		
e) No Combustion Appliances					Geothermal (attach loop, pipe & well details) High Velocity Residential (attach duct details)				
House Type 9.	32.3.1.(2)			Ventilat	ion System				
X I Type a) or b) applian	ces only, no solid	fuel	☐ CA	N/CSA-F326				
☐ II Type I	except with so	olid fuel (includin	g fireplace)	☐ HR	HRV - Exhaust Ducts / Forced Air System				
☐ III Any Ty	ype c) appliand	ce = Part 6 Design	ı	X HR					
☐ IV Electric	c space heat			☐ HR	HRV - Full Ducting / Not Coupled to Forced Air System				
Other: No fo	forced air = Op	otion 4		Par	t 6 Design (Other)			
EQUIPMEN	T DESIGN I	REQUIREMEN	NTS						
Total Ventilati	ion Capacity 9	9.32.3.3.(1)				TOT	AL		
Master Bedroon		1	1.0	T /a —	10 L/s				
Masici Deditool	m _	1	x 10	L/s =	10 L/S	_			
Unfinished Bas		1	•	L/s =	10 L/s	_			
	sement _		x 10			- - 95	T.V.C.		
Unfinished Bas	sement e Rooms	1 15	x 10	L/s =	10	- - 95	T.V.C.		
Unfinished Bas Other Habitable	sement e Rooms tilation Capac	1 15	x 10 x 51	L/s =	10	- - _ <u>95</u>	T.V.C.		
Unfinished Bas Other Habitable Principal Vent	sement e Rooms tilation Capac	1 15 city 9.32.3.4.(1)	x 10 x 51 x 15	L/s =	10 75		7.5 P.V.C.		
Unfinished Bas Other Habitable Principal Vent Master Bedroon	sement e Rooms tilation Capac m	1 15 2ity 9.32.3.4.(1) 1 3	x 10 x 51 x 15 x 7.5	L/s = L/s = L/s = L/s =	10 75	3			
Unfinished Bas Other Habitable Principal Vent Master Bedroom Other Bedroom	sement e Rooms tilation Capac m ns Requ	1 15 2ity 9.32.3.4.(1) 1 3 uired Supplemen	x 10 x 51 x 15 x 7.5 atal Ventilati	L/s = L/s = L/s = L/s = on Capacit	10 75 15 22.5 y (T.V.C. less P.V.C.	$C.) = \frac{3}{50}$	7.5 P.V.C.		
Unfinished Bas Other Habitable Principal Vent Master Bedroom Other Bedroom	sement e Rooms tilation Capac m ns Requ	1 15 2ity 9.32.3.4.(1) 1 3 uired Supplement	x 10 x 51 x 15 x 7.5 atal Ventilati	L/s = L/s = L/s = on Capacit	10 75 15 22.5 xy (T.V.C. less P.V.C		7.5 P.V.C.		
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Unfinished Bas Other Habitable Principal Vent Master Bedroom Other Bedroom Furnace size: Air conditione	sement e Rooms tilation Capac m ns RequGME	1 15 2ity 9.32.3.4.(1) 1 3 uired Supplement 3 CC96080 80,000 1	x 10 x 51 x 15 x 7.5 atal Ventilati BTU'S	L/s = L/s = L/s = on Capacit	10 75 15 22.5 xy (T.V.C. less P.V.C		7.5 P.V.C.		
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Unfinished Bas Other Habitable Principal Vent Master Bedroom Other Bedroom Furnace size: Air conditione Heating / Cooli Geothermal Equip Hydronic Equip Duct (and pipe) VENTILATI Heat Recovery	sement	1 15 2ity 9.32.3.4.(1) 1 3 2ired Supplement CC96080 80,000 1 GSX13036 A sized according to according to according to CA ached including s MENT	x 10 x 51 x 15 x 7.5 Atal Ventilation BTU'S to heat loss/gate can/CSA-CAN/CSA-B21 sizes, runs and	L/s = L/s = L/s = L/s = on Capacit ain calculat 448.2:	10 75 15 22.5 y (T.V.C. less P.V.C. KJ	- 3' C.) = 57 KJ (If provided / ap 280: Yes No No	7.5 P.V.C.		
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Jan 2020 Building Code Services

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Exhaust	Fans

	Location	Model	L/s	Sones	Principal or Supplemental
1	PDRM	DX90	45	2.5	PRINCIPAL
2	ENSUITE	EC50	25	3.	SUPPLEMENTAL
3	BATH	EC50	25	3.	SUPPLEMENTAL
4	BATH 2	EC50	25	3.	SUPPLEMENTAL

EQUIPMENT EFFICIENCIES (Please also refer to Energy Efficiency Design Summary)

Heating system:

Cooling system (if applicable):

Water heater:

HRV: 75 % sensible efficiency at 0 degrees:

60 % sensible efficiency at -25 degrees:

DESIGNER CERTIFICATION

I hereby certify that this ventilation system has been designed in accordance with the 2012 Ontario Building Code.

Name: LINDA MCPARLAN Company Name: HARDING MECHANICAL

Signature: Signature: Date: JUNE 23/22 BCIN 24379 HRAI # 6080

City of Ottawa
Building Services Branch

REVIEWED
By dominique bordage at 4:27 pm, Sep 16, 2022

Building Code Reviewed

Spinature

Building Code Services Jan 2020