



THE CITY OF THUNDER BAY
DEVELOPMENT SERVICES
DEPARTMENT
BUILDING DIVISION

MECHANICAL VENTILATION DESIGN REVIEW FORM

Heat Recovery Ventilator Systems

NOTE: Use Permanent Markings to Complete this Form

LOCATION OF INSTALLATION

Name _____
Address _____
City & Province _____
Postal Code _____
Telephone No. _____

INSTALLING CONTRACTOR

Name _____
Address _____
City & Province _____
Postal Code _____
Telephone No. _____

CERTIFIED DESIGNER

Name _____
Registration/Cert. # _____
Address _____
City & Province _____
Telephone No. _____

TYPE OF BUILDING

- 1.) Detached
- 2.) Row
- 3.) Multi-Residential
- 4.) Other

TYPE OF HEATING SYSTEM(S)

- Forced Air
- Baseboard
- Other
- Solid Fuel Appliance⁽²⁾
- Oil
- Gas
- Other
- Type I⁽¹⁾
- Type II⁽¹⁾
- Type III⁽¹⁾

HOT WATER SOURCE

- Gas
- Other
- Type I⁽¹⁾
- Type II⁽¹⁾
- Type III⁽¹⁾

COMBUSTION AIR

Provide Details

TYPE OF EQUIPMENT APPLIED

H.R.V. (Certified to C.S.A. - C.22.2 No.113 and Performance Tested to CSA c439/H.V.I.)

Manufacturer _____
Brand Name _____

Model No. _____

TYPE OF CONTROLS

Dehumidistat With

- 1.) Interval Timers
- 2.) Manually Operated Switch
- 3.) HRV Control(s) - must be centrally located adjacent to "circulation fan" control and identified. NOTE: Manufacturers remote control unit acceptable

TYPE OF DEFROST

- 1.) Preheat
- 2.) Bypass
- 3.) Recirculation
- 4.) Other

DISTRIBUTION SYSTEM

- 1.) Separate/Dedicated (Duct Size and Layout Drawing Required)⁽³⁾
- 2.) Integrated with Furnace (Direct Connection to R/A System Required)⁽⁴⁾

Manufacturer _____ Model No. _____

BTU/1000 Output _____ Design Static PressureDiff. _____
of R/A Plenum (Pa)

- Multi Speed Fan Yes No
- *Continuous Operation Yes No
- Preheating Required Yes (_____ Watts) No

*Control switch for systems which utilize the forced air heating/cooling systems must be centrally located and identified as the "CIRCULATION FAN")

SUPPLY VENTILATION (Greater of A or B Below)

A) 'ROOMS'	L/s	cfm
Bsmt. & Master Bdrm. _____ @ 10 L/s (20 cfm)	_____	_____
Other Bedrooms _____ @ 5 L/s (10 cfm)	_____	_____
Bathrooms & Kitchen _____ @ 5 L/s (10 cfm)	_____	_____
Other Habitable Rooms _____ @ 5 L/s (10 cfm)	_____	_____
TOTAL	_____	_____

OUTSIDE VENTED MECHANICAL EXHAUST SYSTEM

	L/s	cfm
<input type="checkbox"/> Clothes Dryer (Default 160 cfm)	_____	_____
<input type="checkbox"/> Central Vacuum	_____	_____
<input type="checkbox"/> Kitchen Range Hood (Default 100 cfm)	_____	_____
<input type="checkbox"/> Bathroom (Default 50 cfm)	_____	_____
<input type="checkbox"/> Other	_____	_____
TOTAL	_____	_____

OR

B) EXHAUST VENTILATION

CONTINUOUS

	L/s	cfm
Kitchens _____ @ 30 L/s (60 cfm)	_____	_____
Bathrooms _____ @ 15 L/s (20 cfm)	_____	_____
TOTAL	_____	_____

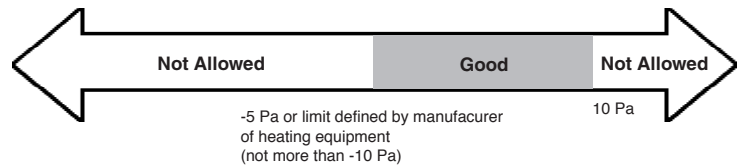
Minimum Supply Required ⁽⁵⁾

RELIEF/MAKEUP AIR REQUIRED ⁽⁶⁾

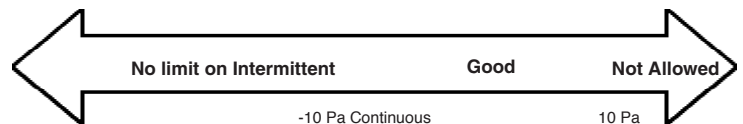
Provide details how Relief/Makeup Air is achieved.

CSA F326 HOUSE PRESSURE LIMITS

1. For houses with non-direct vent combustion appliances



2. For houses with only direct vent combustion appliances



ADDENDUM TO APPLICATION

Note (1) Combustion Appliance Category

- Type I - Natural Draft Type
- Type II - Induced Draft Type
- Type III - Sealed Unit or Non-Fuel Burning Appliances

Note (2) Solid fuel appliance must have provisions for combustion air.

Note (3) Part 9 of The Ontario Building Code has duct sizing provisions for dedicated systems.

Note (4) This Department assumes that all furnaces/ductwork are sized in accordance with good engineering practice. As per Part 6 of the Ontario Building Code.

Note (5) Must include low temperature ventilation correction rate for HRV.

Note (6) This Department strongly recommends that each project is field tested to determine relief/make-up air requirements.

NOTE: - Include all ventilation fans in test
 - Also include the dryer and the next largest fan for intermittent (Reference Exhaust) pressure measurement