RM of Elton & Cornwallis – Brandon & Area Planning District

RESIDENTIAL MECHANICAL VENTILATION DESIGN SUMMARY

**For systems serving one dwelling unit and conforming to the NBC 2010*

LOCATION OF WORK

Roll #

Permit # 2015/123

Sec/Township/Range: SW 15-10-18W

Town: Forest

BUILDER/OWNER

Name: Jane Doe

Telephone: (204) 555-5555

INSTALLING CONTRACTOR

Name: Jon Doe

City: Brandon

Address: Somewhere

Province: M.B

Phone: (204) 555-5555

Postal Code: R2A 6B8

COMBUSTION APPLIANCES

- ☐ Chimney-connected non-solid fuel
- ☐ Combustion Appliances Non-Spillage Susceptible
- ☐ Solid Fuel Chimney-Connected
- ☐ Combustion Appliances Direct Vent
- ☐ No combustion appliances

HEATING SYSTEMS

__ Gas ✓ Electric __ Geothermal

__ Boiler __ Furnace ✓ Baseboard

__ Hydronic (In floor) __ Hydronic(Forced Air) __ Forced Air

SYSTEM DESIGN OPTION 9.32.3

- ☐ HRV – Supply Connected to Forced Air Return with Extended Exhaust Ducts
- ☐ HRV – Supply and Exhaust Connected to Forced Air Return (Simplified System)
- ☑ HRV – Not Connected Forced Air System (Stand-alone)
- ☐ Design to CSA-F326-M91

PRINCIPAL VENTILATION FAN/HRV 9.32.2.3

Make: Van E E

Model: 60 H

VENTILATION PERFORMANCE

Number of Bedrooms = CFM

Choose 1 of the following options

1=32-48CFM (2=36-56CFM) 3=44-64CFM 4=52-76CFM 5=60-90CFM

*More than 5 = Design CSA-F326-M90 or engineer design

Design Airflow: 56 CFM High 36 CFM Low

Sensible Recovery Efficiency: 55 Tested at -25C

with a minimum Net Airflow of 64 CFM

External Static Pressure in In. wg: 1.2 in. wg

Pressure Loss: 0.4 In. Wg

Available Static Pressure : 0.8 In. wg

Net Supply Airflow: 61 Gross Air Flow: 62 CFM

Gross HRV Exhaust capacity: 68 CFM

***Heat or Energy Recovery Ventilators shall be designed to provide a minimum 55% sensible heat recovery efficiency when tested to the low temperature thermal and ventilation performance test method set out in CAN/CSA-C439, "Rating the Performance of Heat/Energy-Recovery Ventilator", at a test temperature of -25 C and at airflow not less than 60 CFM as per NBC 9.32.1.2 MB Amendment.**

***All start-up procedures recommended by the manufacturer, including air balancing and airflow determination, shall be followed as per NBC 9.32.3.12 (4)**

SUPPLEMENTAL FANS 9.32.3.7

1. Location: Kitchen
   Fan Make: Broan
   Model: BR130 WHN
   Design Air Flow: 180 CFM
2. Location:
   Fan Make:
   Model:
   Design Air Flow: _____ CFM
3. Location:
   Fan Make:
   Model:
   Design Air Flow: _____ CFM
4. Location:
   Fan Make:
   Model:
   Design Air Flow: _____ CFM

***Supplemental exhaust is required for every kitchen not less than 50 L/S or 100 CFM. Where an exhaust air intake for the principal ventilation fan is not located in a bathroom or water closet room, a supplemental exhaust fan with a rated capacity not less than 25 L/S or 50 CFM shall be installed in that room or water closet room as per NBC 9.32.3.7 (1) & (4)**

CERTIFICATION

Signature: Jon Doe

HRAI # (if applicable):

System Schematic Drawing

Note: *Drawing shall include locations, pipe sizes and duct run lengths.*