9.32.3.7. Ventilation Systems Not Coupled with Forced Air Heating Systems

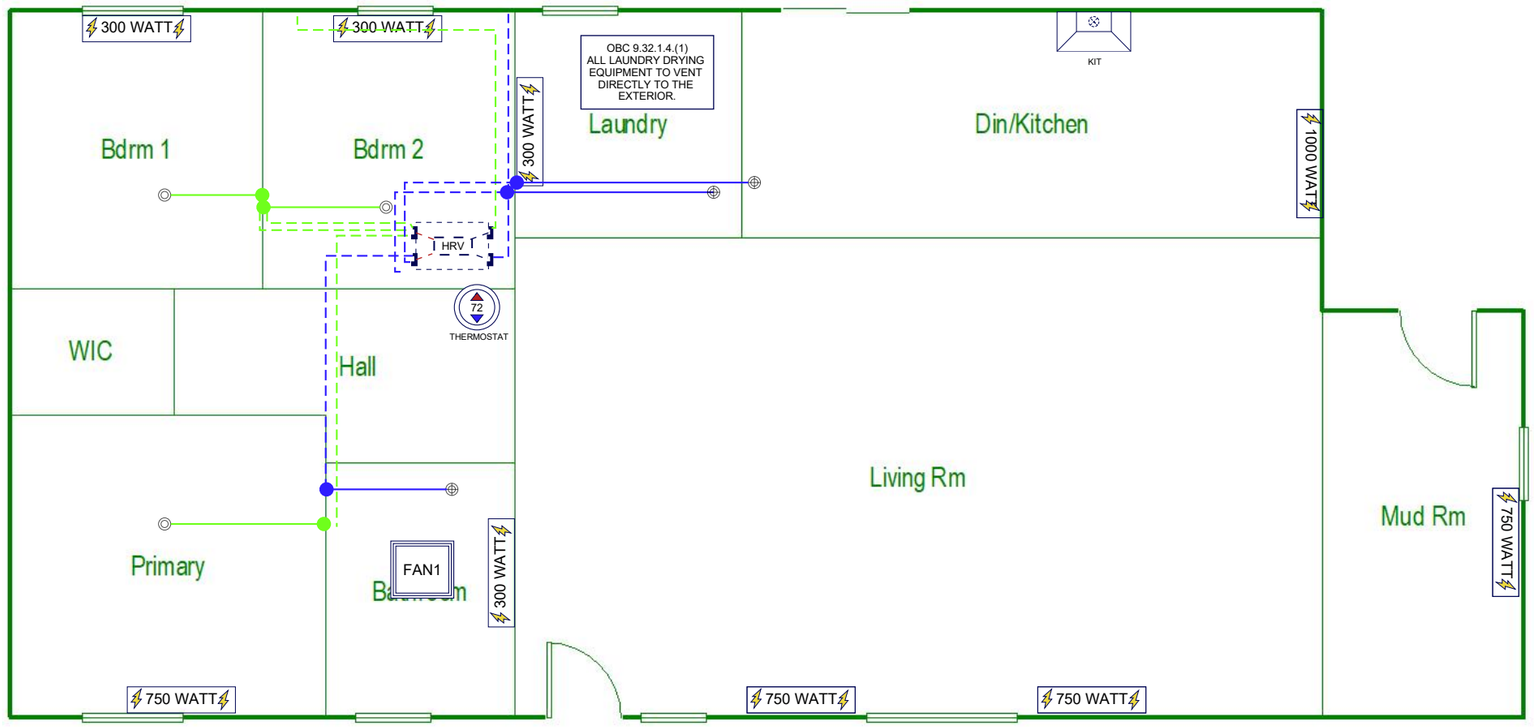
(1) This Article applies to a mechanical ventilation system in a dwelling unit that,
(a) does not contain a forced air heating system, or
(b) contains a forced air heating system which is not used for circulation of the ventilation air.

(2) The mechanical ventilation system shall introduce air to and circulate air throughout the dwelling unit in compliance with this Article.

(3) The mechanical system in this Article shall include a heat recovery ventilator installed in accordance with Article 9.32.3.11.

(4) Outdoor air shall be distributed by a ductwork system from the heat recovery ventilator required in Sentence (3) to each bedroom, to any storey without a bedroom and, if there is no storey without a bedroom, to the principal living area.

(5) A supply duct from the outdoors to the heat recovery ventilator required in Sentence (3) and a main distribution trunk duct shall be provided and shall be sized according to Part 6, except that the supply duct and the main distribution trunk duct may be sized according to Table 9.32.3.7.A. where,
(a) the total duct length from the outdoor hood to any supply register does not exceed 21 m, and
(b) the total number of fittings does not exceed 8.



EXHAUST GRILL
FLEX EXHAUST DUCT 150mm
FLEX SUPPLY DUCT 150mm
SUPPLY GRILL
FLOOR BELOW (DASHED)

MAIN FLOOR DUCT DESIGN
NTS

RECTANGULAR PANELS IN PLENUMS AND DUCTS MORE THAN 300 MM WIDE SHALL BE SHAPED TO PROVIDE SUFFICIENT STIFFNESS.

WHERE THE INSTALLATION OF HEATING SUPPLY DUCTS IN WALLS AND FLOORS CREATES A SPACE BETWEEN THE DUCT AND CONSTRUCTION MATERIAL, THE SPACE SHALL BE FIRE STOPPED WITH NONCOMBUSTIBLE MATERIAL AT EACH END.

(DUCTS SHALL BE SECURELY SUPPORTED BY METAL HANGERS, STRAPS, LUGS OR BRACKETS, EXCEPT THAT WHERE ZERO CLEARANCE IS PERMITTED, WOODEN BRACKETS MAY BE USED.

ALL ROUND DUCT JOINTS SHALL BE TIGHT-FITTING AND LAPPED NOT LESS THAN 25 MM. RECTANGULAR DUCT CONNECTIONS SHALL BE MADE WITH S AND DRIVE CLEATS.

TRUNK SUPPLY DUCTS SHALL NOT BE NAILED DIRECTLY TO WOOD MEMBERS.

LEGEND
STUD SPACE (TO JOIST LINING)
RETURN GRILL
SUPPLY BOOT
SUPPLY REGISTER
JOIST TO DUCT OPENNING
TOP TAKEOFF
FURNACE

KEYED NOTES LEGEND

SN1	see EQUIPMENT HLHG CALCS- P1
SN1A	EXT. HVAC SYSTEM TO SERVE BOTH UNITS. (PROVIDED BOTH ARE EQUIPPED WITH SMOKE ALARMS, AND A SMOKE DETECTOR IS INSTALL IN SUPPLY OR R/A DUCT WHICH WOULD TURN OFF THE FUEL UPON ACTIVATION
HRV	PRIMARY EXHAUST FAN. SEE MVDS AND SUPPLEMENTAL SHEETS FOR SPECS, DESIGNS, AND DETAIL DRAWINGS. (SIMPLIFIED CONNECTION.)
THERMOSTAT	CONTROL TO BE CENTRALLY LOCATED, IT SHOULD NOT SEE DIRECT SUNLIGHT, BE KEPT AWAY FROM SOURCES OF HEAT AND MOUNT LEVEL AT A HEIGHT OF NO MORE THAN 3'-11" IT SHALL BE MARKED "CIRCULATION FAN", WIRING PER ESA/TSSA STANDARDS

LEF	OBC 9.32.1.4.(1) ALL LAUNDRY DRYING EQUIPMENT TO VENT DIRECTLY TO THE EXTERIOR.
KIT	"NEW" EXHAUST FAN MIN. 100 CFM, C/W 6" SMOOTH PIPE, DIRECTLY DUCTED TO THE EXTERIOR.
FAN1	"NEW" EXHAUST FAN TOTAL LENGTH OF 5" PIPE NOT TO EXCEED 39' AND FOUR(4) ELBOWS. DUCTWORK TO BE; TIGHT FITTING, LAPPED A MIN. OF 1", AND PERMANENTLY SUPPORTED. TAPE ALL JOINTS AND SLOPE PIPE TO EXHAUST OUTLET. FAN(S) TO BE RATED IN ACCORDANCE WITH CAN/CSA-C260-M OR HVI 916 AND CAN/CSA-C260-M OR HVI915. 3.5 SONES OR LESS SEE MVDS FOR MODEL INFO (FAN MODEL SHOWN ON MVDS)

PROVISION SHALL BE MADE FOR THE FREE FLOW OF AIR TO ALL ROOMS BY LEAVING GAPS BENEATH DOORS, USING LOUVRED DOORS OR INSTALLING GRILLES IN DOORS

ORIENTATION

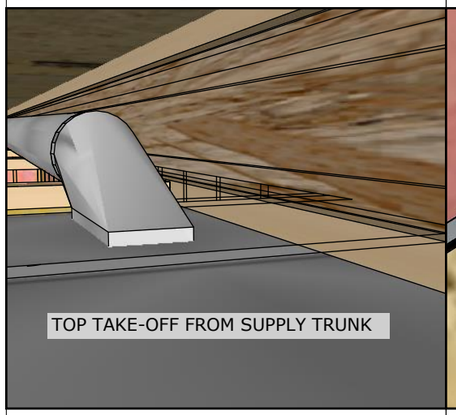
THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN, AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.

QUALIFICATION INFORMATION
CURTIS SALTZBERRY 31364

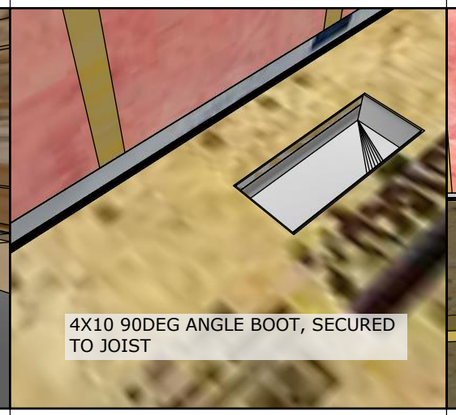
MAIN LAYOUT

M01.0

SUPPLY TRUNK TO BRANCH



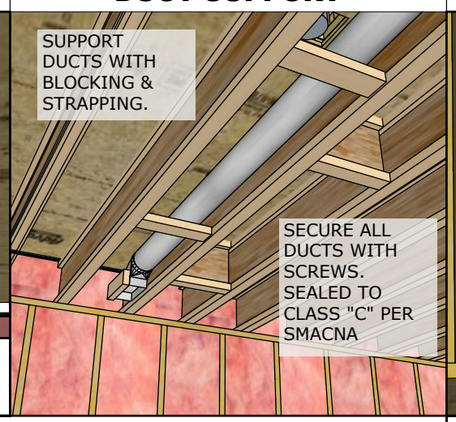
FLOOR REGISTER



DUCT THROUGH PLATE

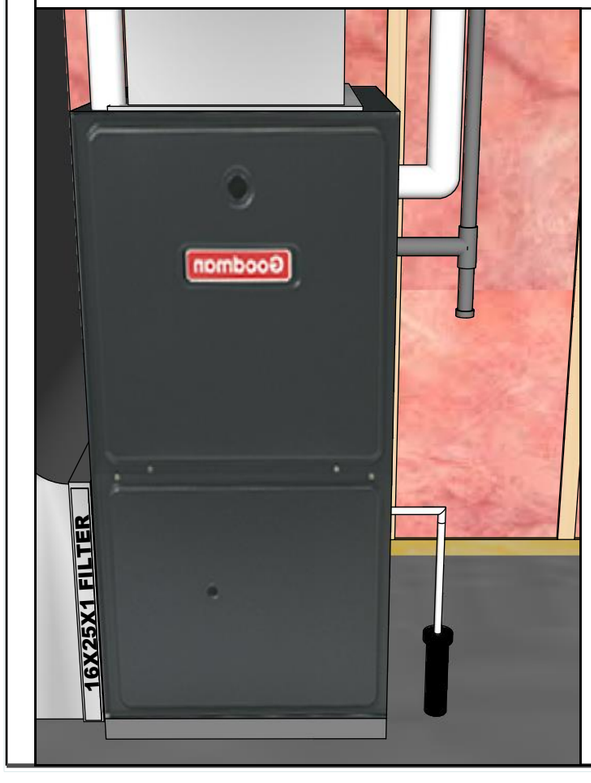
JOIST ENDS- RETURN AIR

DUCT SUPPORT



RETURN AIR

EQUIPMENT DETAILS



GAS PIPING AND VENTING PER:CAN/CSA-B149.1-10

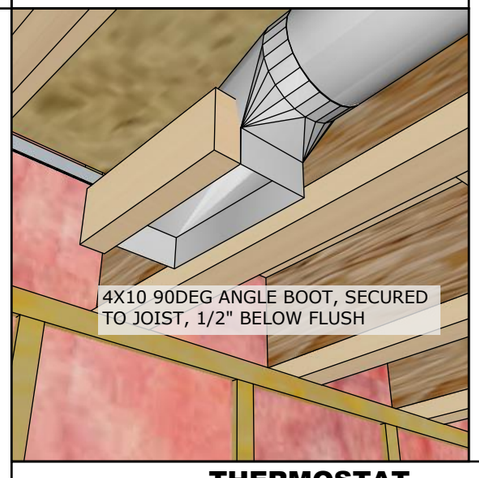
CONDENSATE DRAIN PER EQUIPMENT MANUFACTURER INSTRUCTIONS. AND PLUMBING PER OBC.

CLEARLY MARK FILTER SIZE ON COVER.

DO NOT PLACE EQUIPMENT DIRECTLY ON CONCRETE FLOOR

WIRING PER ESA REQUIRMENTS

CEILING SUPPLY



H.R.V. SHALL BE INSTALLED TO MANUFACTURER'S INSTALLATION INSTRUCTIONS. THE CONDENSATE DRAIN SHALL DISCHARGE TO A HUB DRAIN OR LEAD TO A CONDENSATE PUMP.

RETURN AIR SYSTEM TO BE UNOBSTRUCTED AND CAPABLE OF RETURNING THE ENTIRE AIR SUPPLY

VENTILATION AND SUPPLY AIR FAN SWITCHES TO BE CENTRALLY LOCATED AND SO IDENTIFIED

DO NOT COVER ANY DUCTWORK PRIOR TO INSPECTION

CARBON MONOXIDE AND SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE O.B.C.

HEATING EQUIPMENT AND H.R.V. TO HAVE A SENSIBLE EFFICIENCY AS DESCRIBED IN THE ENERGY EFFICIENCY DESIGN SUMMARY

ALL CONNECTIONS AND OPENINGS IN THE AIR DUCT SYSTEM SHALL BE TIGHT-FITTING & SEALED TO CLASS "C", AND NO OTHER OPENINGS OTHER THAN REQUIRED FOR PROPER OPERATION, INSPECTION AND MAINTENANCE. CLEARANCES OF DUCTS AND PLENUMS TO ADHERE TO THE O.B.C

HVAC DESIGNS AND CALCULATIONS BASED UPON ARCHITECTURAL PLANS AND INFORMATION AS PROVIDED. CHANGES TO THESE PLANS WILL AFFECT CALCULATIONS AND DESIGNS, AND WILL REQUIRE REVISIONS. ENSURE ARCHITECTURAL PLANS AND SPECIFICATIONS PROVIDED MATCH THOSE THAT ARE SUBMITTED TO CODE AGENCY

DUCTWORK DESIGN FOR ADDITION ONLY. HEAT LOSS AND DUCTWORK ON EXISTING HOUSE FOR REFERENCE ONLY. LIMITATIONS OF HOUSE DESIGN MAY EFFECT SYSTEM PERFORMANCE

MECHANICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.

PROVIDE MECHANICAL EXHAUST IN EACH KITCHEN, BATHROOM AND TWO PC WASHROOM.

BRANCH OUTLETS SHALL BE EQUIPPED WITH A VOLUME CONTROL DAMPER AT THE BOOT OR A LOCKABLE DIFFUSER.

ALL SUPPLY, RETURN AND EXHAUST DUCTS EXPOSED TO UNHEATED SPACE TO BE INSULATED PER OBC 6.2.4.3 (10)
AND CLASS "A" SEAL PER SMACNA

OUTDOOR AIR INTAKES SHALL BE LOCATED TO AVOID POSSIBLE SOUCES OF CONTAMINATION, ALLOW ACCESS FOR SERVICE AND BE EQUIPPED WITH A SCREEN. EXHAUST OUTLETS SHALL BE LOCATED TO AVOID CONTAMINATION OF INTAKE AIR.

REGISTER LOCATIONS ARE APPROXIMATE.

ALL MATERIALS AND INSTALLATIONS SHALL BE APPROVED AND INSTALLED IN ACCORDANCE WITH THE OBC AND OTHER APPLICABLE CODES.

ALL HRV STARTUP/INSTALLATION PROCEDURES RECOMMENDED BY THE MANUFACTURER SHALL BE FOLLOWED

HRV INTAKES SHALL BE CLEARLY MARKED AS SUCH FOR IDENTIFICATION FROM LOCATIONS OUTSIDE THE DWELLING.

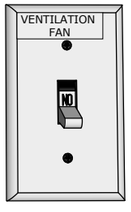
THERMOSTAT

CONTROL TO BE CENTRALLY LOCATED, IT SHOULD NOT SEE DIRECT SUNLIGHT, BE KEPT AWAY FROM SOURCES OF HEAT AND MOUNT LEVEL AT A HEIGHT OF NO MORE THAN 3'-11"

IT SHALL BE MARKED "CIRCULATION FAN "

WIRING PER ESA/TSSA STANDARDS

VENTILATION FAN



PRIMARY EXHAUST FAN TO BE CENTRALLY LOCATED AND MARKED "VENTILATION FAN"

FAN CONTROL TO INSTALLED AT A HEIGHT OF NO MORE THAN 3'-11"

SALTZBERRY 20 06 DESIGN

All work shall be designed, installed, tested and commissioned in accordance with the latest edition of the Ontario Building Code (OBC), applicable standards including HRAI Digest, and SB-12 compliance.

Equipment and ductwork shall be sized in accordance with ACCA Manuals J and D or approved equivalent methods.

Outdoor design conditions shall be based on a 2.5% winter design temperature in accordance with Table C-2 of the OBC. Indoor design conditions shall be 21°C for living spaces and 18°C for all other occupied spaces.

HVAC equipment shall have a minimum AFUE/ASE rating as specified in Sentence 9.36.3.10.(2) of the OBC.

All ductwork and mechanical equipment in unconditioned spaces shall be insulated to the levels specified in Tables 9.36.3.10, 9.33.5.2 and 9.33.5.3 of the OBC.

Each bedroom and living space shall be provided with ventilation as per Article 9.32.1.2 of the OBC and SB-12 by a central HVAC system or dedicated supply and exhaust fans.

Outdoor air intakes and exhaust terminals shall be located in accordance with good engineering practice such as minimum distances from contaminant sources and proximity to adjacent buildings or property lines.

Laundry equipment located within suites shall be provided with either local exhaust directly to the outdoors as per Sentence 9.32.3.8 or provision for future connection.

Domestic kitchen range hoods shall be connected to independent exhaust directly to the outdoors capable of minimum 100 cfm in accordance with Sentence 9.32.3.8.

HVAC equipment and ductwork shall have minimum sound ratings when installed in accordance with the equipment manufacturer's recommendations to not exceed sound level limits specified in Section 9.33 of the OBC.

Provide Heat Recovery Ventilator (HRV) or Energy Recovery Ventilator (ERV) capable of delivering required ventilation rates as per Sentence 9.32.3.6 of the OBC and SB-12.

System shall be designed, constructed and installed in accordance with SB-12 prescriptive requirements.

Contact City Building/Plumbing officials for any additional local bylaw requirements for permitting, testing or inspections.

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN, AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.

QUALIFICATION INFORMATION
CURTIS SALTZBERRY 31364
CURTIS SALTZBERRY- DESIGN 44567

DESIGN DETAILS

M02.0

BATHROOM FAN DETAILS: ROOF EXHAUST

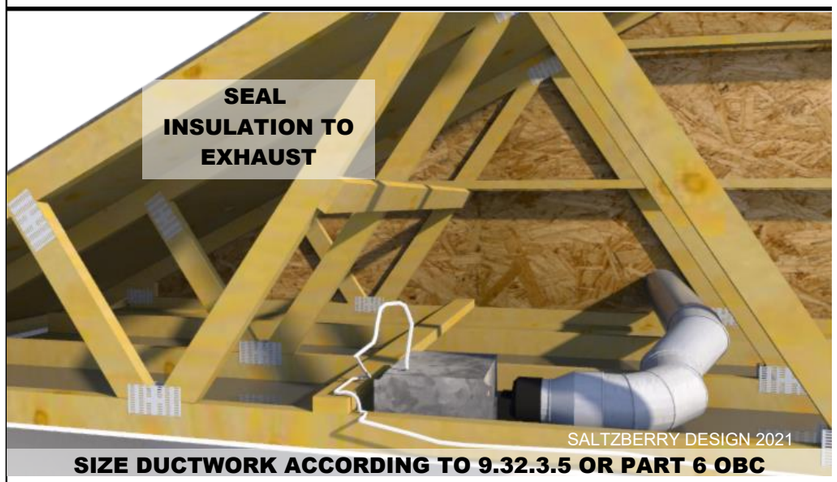
MANUFACTURER'S INSTALLATION INSTRUCTIONS TAKE PRECEDENT OVER THESE NOTES.

TOTAL LENGTH OF PIPE NOT TO EXCEED 39' AND FOUR(4) ELBOWS. DUCTWORK TO BE; TIGHT FITTING, LAPPED A MIN. OF 1", AND PERMANENTLY SUPPORTED. TAPE ALL JOINTS AND SLOPE PIPE TO EXHAUST OUTLET. FAN(S) TO BE RATED IN ACCORDANCE WITH CAN/CSA-C260-M OR HVI 916 AND CAN/CSA-C260-M OR HVI915. 3.5 SONES OR LESS. PIPE TO BE INSULATED TO A MIN. OF R-3. INCREASE PIPE SIZE BY 1" FOR ALL FLEX PIPE.

VENT TO EXTEND UNDER "FULL" SHINGLE AT THE TOP FLANGE. SHINGLES ALONG THE SIDE TO OVER LAP FLANGE. SEAL BETWEEN SHINGLE AND VENT WITH ROOFING CEMENT. SEAL UNDER VENT WILL ROOFING CEMENT. BOTTOM EDGE OF VENT TO OVERLAP SHINGLES. SEAL FASTENERS WITH QUALITY CAULKING OR ROOFING CEMENT. TAKE CARE TO LOCATE AWAY FROM HIPS, VALLEYS, FLAT ROOFS AND EAVES.

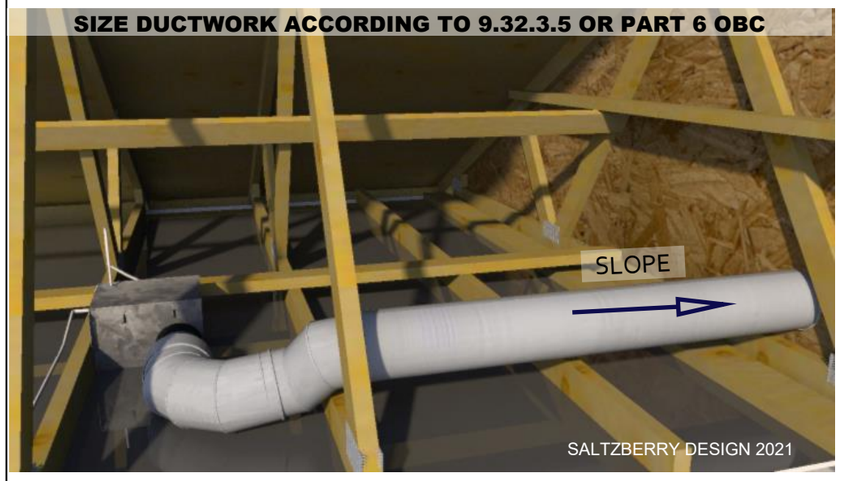
BATHROOM FAN DETAILS: WALL EXHAUST

MANUFACTURER'S INSTALLATION INSTRUCTIONS TAKE PRECEDENT OVER THESE NOTES.



SIZE DUCTWORK ACCORDING TO 9.32.3.5 OR PART 6 OBC

TOTAL LENGTH OF PIPE NOT TO EXCEED 39' AND FOUR(4) ELBOWS. DUCTWORK TO BE; TIGHT FITTING, LAPPED A MIN. OF 1", AND PERMANENTLY SUPPORTED. TAPE ALL JOINTS AND SLOPE PIPE TO EXHAUST OUTLET. FAN(S) TO BE RATED IN ACCORDANCE WITH CAN/CSA-C260-M OR HVI 916 AND CAN/CSA-C260-M OR HVI915. 3.5 SONES OR LESS



PRINCIPLE EXHAUST FAN NOTES

PRINCIPLE EXHAUST FAN TO BE CONTROLLED WITH A MANUAL SWITCH OR DEHUMIDISTAT, CENTRALLY LOCATED AND LABELED “VENTILATION FAN”. CIRCULATION FAN IS REQUIRED WHERE VENTILATION IS COUPLED WITH FORCED AIR HEATING SYSTEM.
HRV TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. OUTDOOR AIR TO BE SUPPLIED TO EACH BEDROOM AND PRINCIPLE LIVING AREA.

Number of Bedrooms	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	Flexible Duct, mm	Smooth Duct, mm	Flexible Duct, mm
1	100	125	100	125
2	125	150	125	150
3	125	150	150	175
4	150	175	150	175
5	150	175	150	175

EXHAUST OUTLETS

A

INTAKE AND EXHAUST OUTLETS SHOULD BE SUFFIENTLY SEPERATED FROM EACH OTHER TO AVOID CONTAMINATION OF VENTILATION AIR.

ENSURE EFFORTS ARE MADE TO SEAL PROTRUSIONS IN AIR BARRIERS AND VAPOUR BARRIERS, WITH PROPER TAPES AND MATERIAL FOR PRODUCTS

PLACE LONG SEAMS IN DUCTING "UP". EXHUAST OUTLET C/W INSECT/RODENT SCREEN AND SELFCLOSING DAMPER. IN AREAS OF HIGH WIND USE BROAN "ECO VENT" OR SIMILIAR EXHAUST VENT WITH BACKFLOW PROTECTION. DO NOT CUT OR REMOVE FRAMING MEMBERS TO INSTALL DUCTWORK. ALL DUCTWORK IN UNCONDITIONED SPACES TO BE A MIN. R-3. (INSULATION OMITTED FOR ILLUSTRATION PURPOSES) SIZE PIPE 1" LARGER FOR FLEX PIPE

THE DISTANCE FROM THE BOTTOM OF AN EXHAUST OUTLET TO FIN. GROUND OR NEARER PERMANENT HORIZONTAL SURFACE SHALL NOT BE LESS THAN 100 MM

THE DISTANCE FROM THE BOTTOM OF AN AIR INTAKE TO FIN. GROUND LEVEL OR ANY NEAR PERMANENT HORIZONTAL SURFACE SHALL NOT BE LESS THAN 450MM OR THE DEPTH OF THE EXPECTED SNOW ACCUMMULATIONS

AIR INSTAKES SHALL BE LOCATED 900MM OR MORE FROM ALL SOURCES OF CONTAMINATION

AIR INTAKES SHALL BE CLEARLY MARKED FOR IDENTIFICATION FROM LOCATIONS OUTSIDE THE BUILDING UNIT.
PROVIDE MECHANICAL EXHAUST IN EACH KITCHEN, BATH AND TWO PC WASHROOM.

ALL REGISTER LOCATIONS ARE APPROXIMATE

ALL VENTILATION BRANCH SUPPLY DUCTS SHALL BE FITTED WITH DIFFUSERS WITH ADJUSTABLE BALANCE STOPS, OR ACCESSIBLE DAMPERS WHICH MAY BE ADJUSTED AND FIXED

ALL HRV START-UP PROPCEDURES RECOMMENDED BY THE MANUFACTURER SHALL BE FOLLOWED.

SALTZBERRY 2006 DESIGN

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN, AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.

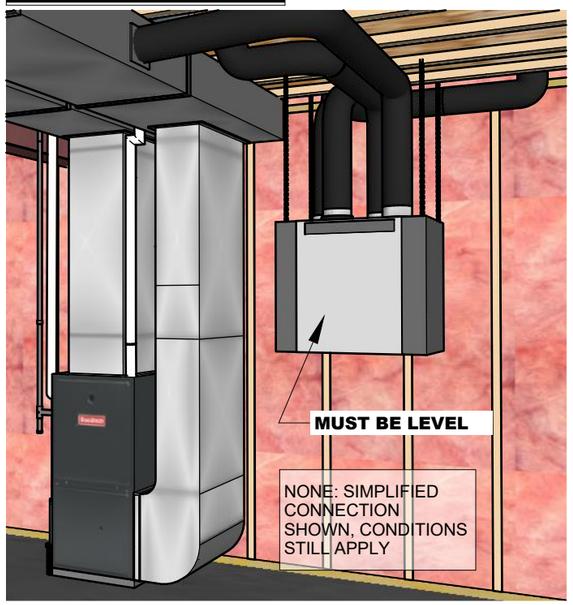
QUALIFICATION INFORMATION
CURTIS SALTZBERRY 31364

VENTILATION DETAILS

M03.0

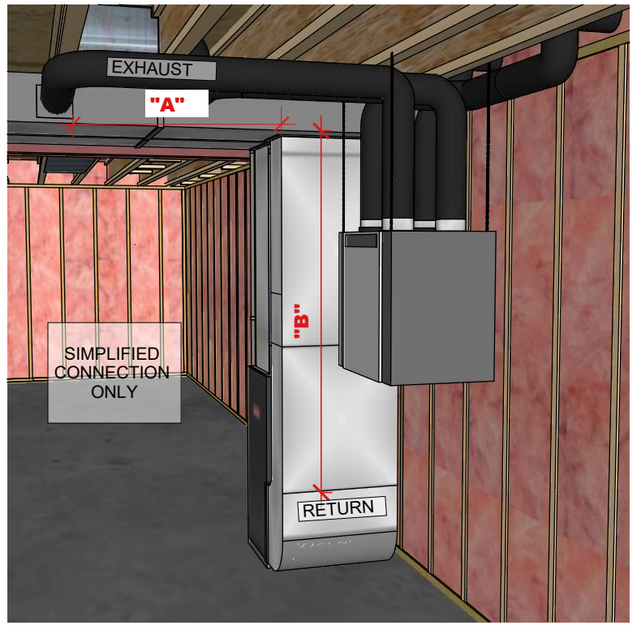
CONSULT THE LASTEST EDITION OF THE ONTARIO BUILDING CODE FOR MORE INFORMATION

UNIT LOCATION



UNIT MUST BE WITHIN AN AREA OF THE HOUSE WHERE THE AMBIENT TEMPERATURE IS BETWEEN 10°C (50°F) AND 40°C (104°F) AWAY FROM LIVING AREAS (DINING ROOM, LIVING ROOM, BEDROOM), WHEN POSSIBLE. HUNG TO PROVIDE EASY ACCESS TO THE INTERIOR CABINET FOR QUARTERLY AND ANNUAL MAINTENANCE, AND TO THE CONTROL PANEL, SHALL BE CLOSE TO AN EXTERIOR WALL, SO AS TO LIMIT THE LENGTH OF THE INSULATED FLEXIBLE DUCT TO AND FROM THE UNIT. PROVIDED WITH A DRAIN. AWAY FROM HOT CHIMNEYS, ELECTRICAL PANEL AND OTHER FIRE HAZARDS. PROVIDED WITH A POWER SOURCE (ELECTRICAL OUTLET). HANG THE UNIT WITH THE PROVIDED CHAINS, SPRINGS TO A STRUCTURALLY SECURE MOUNTING POINTS, WITH APPROPRIATELY RATED FASTENERS. UNIT MUST BE HUNG LEVEL.

EXHAUST AIR



EXHAUST AIR FROM BUILDING DUCTWORK: CUT AN OPENING INTO THE FURNACE RETURN DUCT AT LEAST 10 FEET (3.1 M) (A + B) AWAY FROM THE FURNACE. CONNECT THIS OPENING TO THE EXHAUST AIR FROM BUILDING PORT OF THE HRV/ERV

EXHAUST/FRESH AIR HOODS

MAKE SURE THAT BOTH HOODS ARE AT LEAST 18 INCHES ABOVE THE GROUND AND THAT THE INTAKE HOOD IS AT LEAST 6 FEET (1.8M) AWAY FROM ANY OF THE FOLLOWING: EXHAUST HOOD, DRYER EXHAUST, HIGH EFFICIENCY FURNACE VENT, CENTRAL VACUUM VENT, GAS METER EXHAUST, GAS BARBECUE-GRILL, ANY EXHAUST FROM A COMBUSTION SOURCE GARBAGE BIN AND ANY OTHER SOURCE OF CONTAMINATION

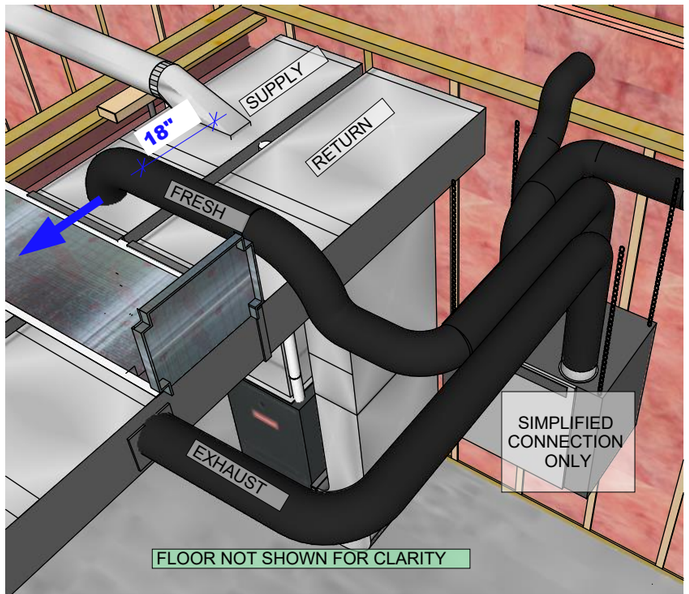
CONTROLS

VIEW MANUFACTURERS INSTRUCTION FOR SELECTING SUITABLE AVAILABLE FAN SPEED AS PRESCRIBED BY SUPPLIED MVDS.
VERIFY COMPATIBILITY WITH EQUIPMENT AND OPTIONAL CONTROLS BEFORE MAKING ANY ELECTRICAL CONNECTIONS. ELECTRICAL CONNECTIONS PER ESA & TSSA GUIDELINES AND PROCEDURES

HRV BALANCING

PREPARATION: SEAL ALL THE DUCTWORK WITH TAPE. CLOSE ALL WINDOWS AND DOORS. TURN OFF ALL EXHAUST DEVICES SUCH AS RANGE HOOD, DRYER AND BATHROOM FANS. MAKE SURE THE BALANCING DAMPERS ARE FULLY OPEN (BOTH BALANCING DAMPER TOOLS ARE SET VERTICAL). IF THE INSTALLATION IS IN ANY WAY CONNECTED TO THE DUCTWORK OF THE COLD AIR RETURN OF A FURNACE/AIR HANDLER, MAKE SURE THAT THE FURNACE/ AIR HANDLER BLOWER IS ON. IF THE OUTSIDE TEMPERATURE IS BELOW 0°C/32°F, MAKE SURE THE UNIT IS NOT RUNNING IN DEFROST WHILE BALANCING BY WAITING 10 MINUTES AFTER PLUGGING THE UNIT IN. SET THE UNIT TO HIGH SPEED.
BALANCING PROCEDURE: PLACE THE MAGNEHELIC GAUGE ON A LEVEL SURFACE AND ADJUST IT TO ZERO. CONNECT TUBING FROM GAUGE TO EXHAUST AIRFLOW PRESSURE TAPS. BE SURE TO CONNECT THE TUBES TO THEIR APPROPRIATE HIGH/LOW FITTINGS. IF THE GAUGE DROPS BELOW ZERO, REVERSE THE TUBING CONNECTIONS. NOTE THE CFM VALUE FROM BALANCING CHART ON THE UNIT. REPEAT FOR FRESH AIRFLOW PRESSURE TAPS. USING THE APPROPRIATE ADJUSTABLE BALANCING DAMPER, LOWER THE HIGHEST VALUE SO IT MATCHES THE LOWEST VALUE. A DIFFERENCE UP TO ±10
CFM IS ACCEPTABLE. SECURE BOTH DAMPERS IN PLACE WITH A FASTENING. WRITE THE REQUIRED AIRFLOW INFORMATION ON A LABEL AND STICK IT NEAR THE UNIT FOR FUTURE REFERENCE (DATE, MAXIMUM SPEED AIR FLOWS, YOUR NAME, PHONE NUMBER AND BUSINESS ADDRESS).

FRESH AIR



CUT AN OPENING INTO THE FURNACE SUPPLY DUCT AT LEAST 18 INCHES (0.5 M) AWAY FROM THE FURNACE. CONNECT THIS OPENING TO THE FRESH AIR TO BUILDING PORT OF THE HRV/ERV. MAKE SURE THAT THE HRV/ERV DUCT FORMS AN ELBOW INSIDE THE FURNACE DUCTWORK WITH DIRECTION OF FLOW.

PRINCIPLE EXHAUST FAN NOTES

PRINCIPLE EXHAUST FAN TO BE CONTROLLED WITH A MANUAL SWITCH OR DEHUMIDISTAT, CENTRALLY LOCATED AND LABELLED “VENTILATION FAN”. CIRCULATION FAN IS REQUIRED WHERE VENTILATION IS COUPLED WITH FORCED AIR HEATING SYSTEM.
HRV TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. OUTDOOR AIR TO BE SUPPLIED TO EACH BEDROOM AND PRINCIPLE LIVING AREA.

Number of Bedrooms	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	Flexible Duct, mm	Smooth Duct, mm	Flexible Duct, mm
1	100	125	100	125
2	125	150	125	150
3	125	150	150	175
4	150	175	150	175
5	150	175	150	175

SALTZBERRY 2006 DESIGN

MECHANICAL VENTILATION DESIGN SUMMARY

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN, AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.

QUALIFICATION INFORMATION
CURTIS SALTZBERRY 31364
CURTIS SALTZBERRY- DESIGN 44567

SIMPLIFIED HRV

M03.1