

GENERAL NOTES

MECHANICAL DRAWINGS MUST MAINTAIN THEIR SCALE AND REFERENCE ARCHITECTURAL DRAWINGS FOR DIMENSIONS. SPECIFIC NOTES AND DETAILS ON DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. IN THE ABSENCE OF DETAILS, CONSTRUCTION SHOULD CONFORM TO ACCEPTED INDUSTRY PRACTICES AND MANUFACTURER INSTALLATION REQUIREMENTS.

MANUFACTURERS, PRODUCTS, AND EQUIPMENT LISTED CANNOT BE SUBSTITUTED OR MODIFIED WITHOUT APPROVAL FROM THE DESIGNING FIRM.

SUBCONTRACTORS ARE RESPONSIBLE FOR ALL RELEVANT DIMENSIONS AND SITE CONDITIONS. ANY DISCREPANCIES MUST BE REPORTED TO THE DESIGNING FIRM.

SUBCONTRACTORS MUST NOTIFY THE DESIGNER AND OBTAIN APPROVAL FROM LOCAL AUTHORITIES BEFORE IMPLEMENTING ANY CHANGES DURING CONSTRUCTION.

ALL MATERIALS, PRODUCTS, AND EQUIPMENT MUST BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS/SPECIFICATIONS UNLESS OTHERWISE NOTED.

ALL GENERAL WORK, INCLUDING CREATING CHASES AND FURRING AROUND MECHANICAL SERVICES, TO BE PROVIDED BY GENERAL TRADES UNLESS OTHERWISE INDICATED.

ALL DUCT DIMENSIONS REPRESENT THE INTERNAL FREE SPACE DIMENSION. I.E. IF INTERNAL LINING IS REQUIRED, SHEET METAL SIZE MUST INCREASE TO MAINTAIN SPECIFIED FREE SPACE WITHIN LINING. COORDINATE ALL SERVICES WITH EACH DIVISION PRIOR TO INSTALLATION OF DUCTWORK, GRILLES/DIFFUSERS, PIPING, ETC. ALL WORK MUST BE COORDINATED ON SITE TO ACCOMMODATE BUILDING STRUCTURE AND SERVICES.

ALL DUCTS RUNNING PARALLEL TO JOISTS SHALL BE RUN CONCEALED IN JOIST SPACE WHERE POSSIBLE TO MINIMIZE BULKHEADS.

KNOWN BULKHEAD AND DROPPED CEILING LOCATIONS HAVE BEEN IDENTIFIED ON DRAWINGS. SITE VERIFY JOIST ORIENTATION AND COORDINATE DUCTWORK ROUTING WITH GENERAL TRADES. ALERT GENERAL CONTRACTOR OF ANY AREAS REQUIRING BULKHEADS TO ACCOMMODATE STRUCTURE OR OTHER BUILDING SERVICES.

CONSULT WITH STRUCTURAL ENGINEER AND GENERAL CONTRACTOR PRIOR TO CUTTING PENETRATIONS THROUGH STRUCTURAL MEMBERS.

READ MECHANICAL DWGS IN CONJUNCTION, VERIFY AND COMPLY WITH, ALL REQUIREMENTS PERTAINING TO FIRE SEPARATIONS AS OUTLINED IN THE ARCHITECTURAL / STRUCTURAL

SCOPE OF WORK:
PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INDICATED WORK. COORDINATE POWER REQUIREMENTS WITH THE ELECTRICIAN.

OBTAIN AND PAY FOR ALL PERMITS RELATED TO MECHANICAL WORK, ENSURING COMPLIANCE WITH THE ONTARIO BUILDING CODE AND LOCAL AUTHORITIES.

SUBCONTRACTORS ARE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, AND PROCEDURES TO COMPLETE THE WORK AS OUTLINED IN THE PROJECT DOCUMENTS AND INDUSTRY STANDARDS.

MECHANICAL, ELECTRICAL, AND PLUMBING WORK MUST BE PERFORMED BY SUBCONTRACTORS LICENSED IN ONTARIO. ENSURE ADEQUATE SPACE AND ACCESS FOR MAINTENANCE, SERVICING, AND OPERATION REQUIREMENTS OF ALL EQUIPMENT.

SUBMITTALS:
SUBMIT DATA SHEETS FOR REVIEW AND APPROVAL BY THE PROJECT MANAGER/CONSTRUCTION ADMINISTRATOR. MAINTAIN AND SUBMIT A SET OF AS-BUILT DRAWINGS INDICATING ANY DEVIATIONS FROM THE CONTRACT DOCUMENTS. PROVIDE WARRANTIES, INSTRUCTIONS, AND MAINTENANCE GUIDANCE FOR ALL EQUIPMENT.

PIPE INSULATION:
INSTALL INSULATION DIRECTLY OVER PIPES, ENSURING CONTINUOUS COVERAGE. REPAIR ANY DAMAGED INSULATION CAUSED BY NEW MECHANICAL WORK. TERMINATE INSULATION NEATLY AT VALVES, EQUIPMENT, ETC., USING APPROPRIATE COVERS. ENSURE PROPER FIT AND TRIM AROUND INTERFERENCE WITH INSULATION.

EXECUTION:
INSTALL MECHANICAL EQUIPMENT AND FIXTURES AS PER DRAWINGS, ENSURING PROPER SUPPORT AND ACCESS FOR MAINTENANCE.

BALANCE AIR FLOWS AND PROVIDE A WRITTEN REPORT. DUCTS, FITTINGS, ETC., MUST BE ARRANGED TO MINIMIZE AIRFLOW RESISTANCE. PROVIDE NECESSARY FLEXIBLE CONNECTIONS AND ISOLATION FOR DUCTS CONNECTED TO FANS.

INSTALL MANUAL BALANCING DAMPERS AND ACCESS DOORS AS REQUIRED. KITCHEN RANGE HOOD INSTALLATION MUST COMPLY WITH SPECIFIED GUIDELINES.

QUALITY ASSURANCE:
ENSURE INSPECTIONS ARE CONDUCTED TO VERIFY COMPLIANCE WITH DRAWINGS AND SPECIFICATIONS. CORRECT ANY DEFICIENCIES FOUND DURING INSPECTIONS BEFORE FINAL ACCEPTANCE. SUBMIT OPERATION AND MAINTENANCE MANUALS FOR ALL MECHANICAL SYSTEMS AND EQUIPMENT UPON COMPLETION.

PROJECT INFORMATION

PROJECT ADDRESS	CLIENT NAME:	
124 MAIN , TORONTO		
OUTDOOR DESIGN TEMP: COOLING 0 F HEATING 88 F	INDOOR DESIGN TEMP: COOLING 75 F HEATING 72 F	
FUEL TYPE: NATURAL GAS	FURNACE LOCATION: MECH	NUMBER OF ZONES: MULTI ZONE

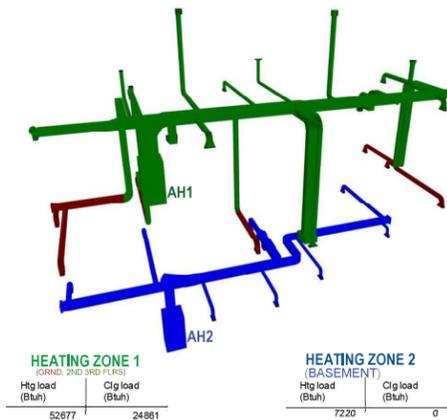
DRAWING SHEET INDEX

SHEET NAME	PAGE NUMBER
TITLE PAGE	M01
BASEMENT LAYOUT	M02
MAIN FLR	M03
2ND FLR	M04
3RD FLR	M05
DUCT DETAILS	M06
PRODUCT SPECS I	M07
VENTILATION NOTES	M08
SIMP HRV	M09

SUPPLEMENTAL DOCUMENTATION PROVIDED:

HL&HG CALCULATIONS, MVDS, COMPLIANCE NOTES, ONTARIO SCHEDULE 1,

ZONE INFORMATION



UNIT 1 - HEATING ZONE 1 (GRND, 2ND, 3RD FLRS)	UNIT 2 - ZONE 2 (BASEMENT)
FORCED AIR FURNACE HEATING EQUIPMENT	FORCED AIR FURNACE HEATING EQUIPMENT
AH1	AH2
Make: Keprite Trade: KEPRITE Model: G96CTN0601714A	Make: Trane Trade: TRANE Model: S9V2B04003V5*** AHR1 ref: 21581571

AH1 & AH2 MUST NOT BE INTERCONNECTED

MECHANICAL SERVICES, DEVICES &/OR EQUIPMENT PENETRATING FIRE SEPARATION(S), INCLUDING THOSE REQUIRED TO HAVE A FIRE RESISTANCE RATING (45 MIN, 1 HR, 2 HR, OR SIMILAR) AND THOSE NOT REQUIRED TO HAVE A FIRE RESISTANCE RATING, (ZERO-RATED, NON-RATED OR SIMILAR), SHALL BE TIGHTLY FITTED & CAULKED TO CONTROL SMOKE SPREAD IN COMPLIANCE W/ NBC & ASSOCIATED STANDARDS AND TO THE APPROVAL OF LOCAL AUTHORITY(S) HAVING JURISDICTION. FOR FIRE DAMPERS / FIRE FLAPS, INSTALL RETAINING ANGLES TIGHT TO WALL / FLOOR / CEILING SO AS TO RETARD THE PASSAGE OF SMOKE BUT DO NOT CAULK AROUND ANGLES UNLESS APPROVED BY DAMPER MANUFACTURER.

MECHANICAL SERVICES, DEVICES &/OR EQUIPMENT PENETRATING FIRE SEPARATIONS REQUIRED TO HAVE FIRE RESISTANT RATING, (45 MIN, 1 HR, 2 HR, OR OTHERWISE), SHALL BE PROVIDED W/ APPROVED FIRE STOP DEVICES & METHODS IN COMPLIANCE W/ NBC & ASSOCIATED STANDARDS AND TO THE APPROVAL OF LOCAL AUTHORITY(S) HAVING JURISDICTION.

PROVIDE WATER PIPING TO FIXTURES AND EQUIPMENT COMPLETE WITH ISOLATION VALVES, ETC. AND SIZE WATER BRANCH PIPING TO INDIVIDUAL FIXTURES ACCORDING TO PLUMBING FIXTURE SCHEDULE & TO ONTARIO BUILDING CODE.

PIPING, INSULATION & OTHER MATERIALS INSTALLED WITHIN AIR DUCTS, CEILING RETURN AIR PLENUMS AND DUCT CHASES USED AS AIR PLENUMS SHALL HAVE A MAXIMUM FLAMESPREAD AND SMOKE DEVELOPED RATINGS OF 25 AND 50 RESPECTIVELY. ABS/PVC PIPING, WOOD FRAMING, FT-4/CMR WIRING & SIMILAR MATERIALS ARE NOT PERMITTED AND SHALL BE SEPARATED FROM PLENUM BY DRYWALL OR SIMILAR MEANS (TYPICAL).

GENERAL WORK INCLUDING FURRED IN PIPE & DUCT SPACES TO BE PROVIDED BY ARCH TRADES UNLESS OTHERWISE INDICATED.

DRAWING LEGEND & PRODUCT DETAILS

TAG	DESCRIPTION	DETAILS & MODEL INFO	TAG	DESCRIPTION	DETAILS & MODEL INFO
	FURNACE 50 SUPPLY PLENUM CONNECTION	KEPRITE G96CTN0601714A Heating input 60000 Btu/h Heating output 58000 Btu/h Goodman Mfg. GOODMAN Cond GV6SA3010A Coil AHVE36CP1300A Efficiency 10.0 EER2,17.5 SEER2		EXHAUST FAN	PRIMARY EXHAUST FAN. SEE MVDS AND SUPPLEMENTAL SHEETS FOR SPECS, DESIGNS, AND DETAIL DRAWINGS, (SIMPLIFIED CONNECTION.)
	KITCHEN EXHAUST FAN	MIN. 100 CFM, CW 6" SMOOTH PIPE, DIRECTLY DUCTED TO THE EXTERIOR.		EXHAUST FAN	LENGTH OF 6" 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 TO BE RATED IN ACCORDANCE WITH CAN/CSA-C260-M OR HVI 916 OR HVI 915, 3.5 SONES OR LESS
	RETURN GRILL	4A/4B STUD SPACE TO JOIST LINING		DOUBLE WALL RETURN GRILL	RECTANGULAR GRILLE SUITABLE FOR CEILING OR HIGH WALL FEATURES 8MM FIN SPACING SET AT 20 DEGREES AND 8MM MARGIN TURNBACK, FINISHED IN WHITE ENAMEL. SIZES AS NOTED ON DRAWINGS.
	SUPPLY REGISTER	NOTE: MIN. 80% FREE AREA OF GRILL, SEE CUSTOMER'S SELECTION FOR STYLES		SINGLE WALL RETURN GRILL	RECTANGULAR GRILLE SUITABLE FOR CEILING OR HIGH WALL FEATURES 8MM FIN SPACING SET AT 20 DEGREES AND 8MM MARGIN TURNBACK, FINISHED IN WHITE ENAMEL. SIZES AS NOTED ON DRAWINGS.
	SUPPLY BOOT	8B ANGLE BOOT, (BROADWAY)		TOP TAKEOFF	7A TOP TAKEOFF (SUPPLY TRUNK TO BRANCH CONNECTION)
	WALL SUPPLY REGISTER	NOTE: MIN. 80% FREE AREA OF GRILL, SEE CUSTOMER'S SELECTION FOR STYLES		SINGLE LINE REDUCER	6K/2K STANDARD REDUCER/TRANSITION
	RETURN AIR CUTOUT	3A1/3A1 JOIST LINING TO TRUNK		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
	ASHP	CONSULT MANUFACTURER'S DIRECTIONS. CONSULT ESA FOR WIRING AND CODE RELATED DETAILS. SEE ATTACH SPEC SHEET(S)		ELECTRIC HEAT SUPPLEMENTAL HEAT	TOWEL WARMER ELECTRIC COMBO TOWEL WARMER/HEATER BASEBOARD HEATER STANDARD ELECTRIC BOARD HEATER IN WATTS
	SUPPLY DUCT SINGLE LINE			RETURN DUCT SINGLE LINE	
	SUPPLY RISER (ROUND)			EXHAUST GRILL FLEX EXHAUST DUCT 150mm	
	SUPPLY GRILL C/W FLEX SUPPLY DUCT 150mm			DUCTLESS HRV SEE ATTACH SPEC SHEET(S)	



SALT BERRY DESIGN
WWW.SALT BERRYDESIGN.COM

ORIENTATION



BCIN QUALIFICATION

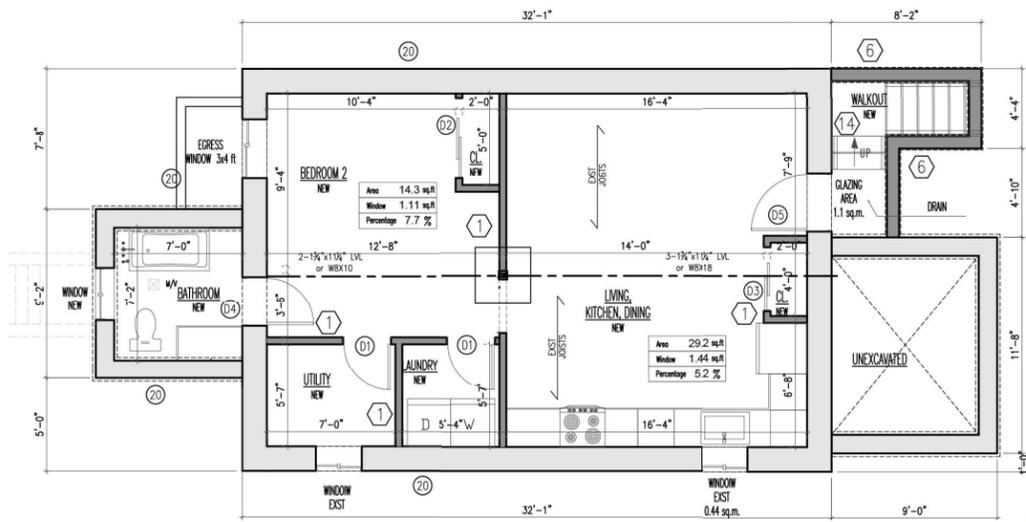
THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN, AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE ONTARIO BUILDING CODE TO BE A DESIGNER.

Feb. 5, 26
Jan 14, 2026

CURTIS SALT BERRY 31364

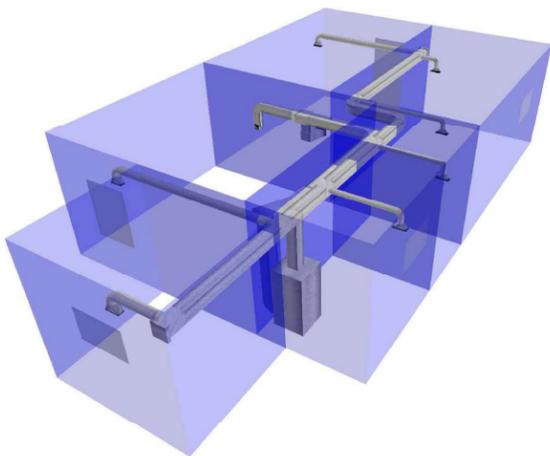
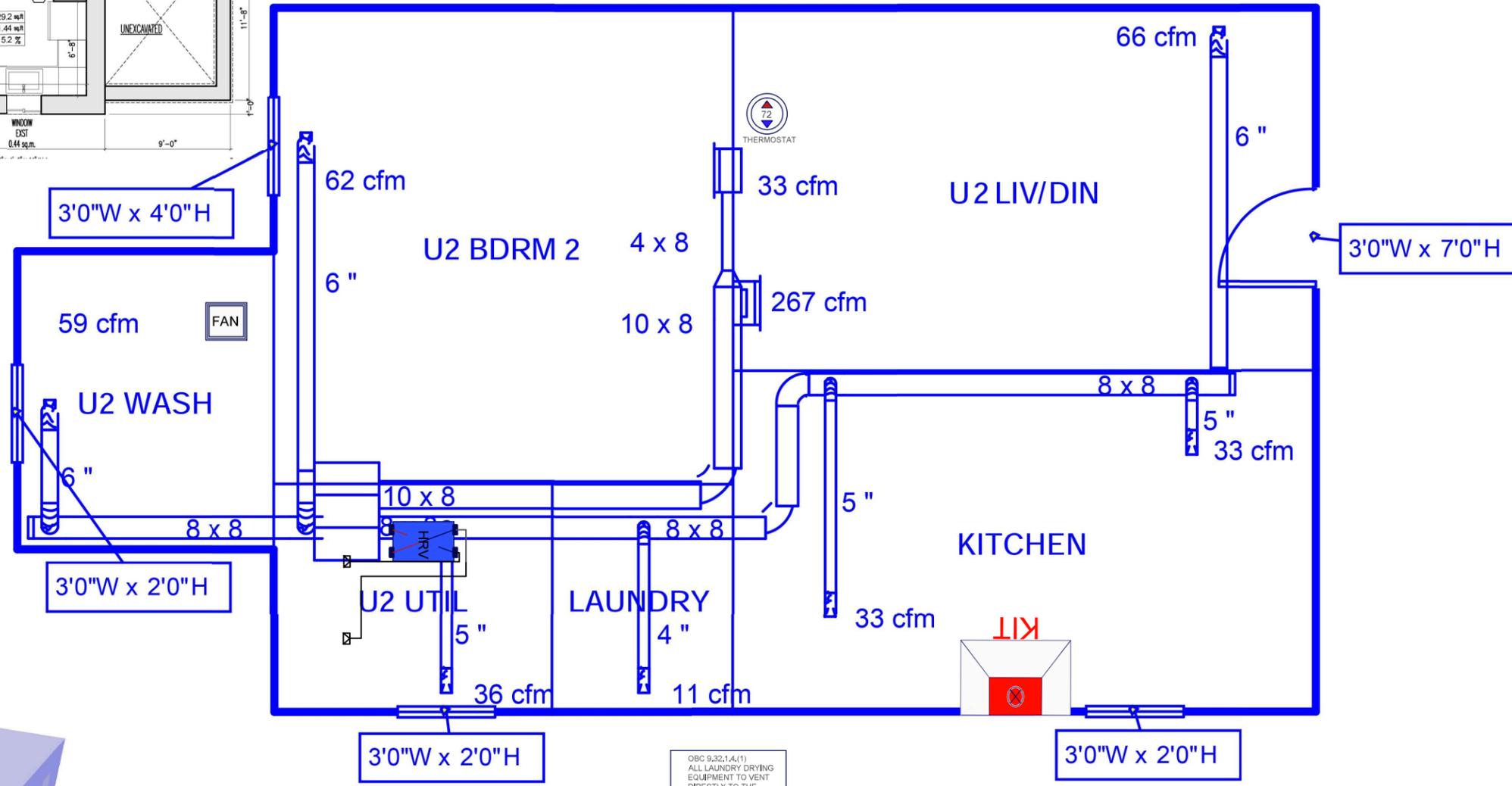
TITLE PAGE

M01



ARCHITECTURAL REFERENCE DRAWING

BASEMENT



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.

BRANCH DUCTS SHALL BE SUPPORTED AT SUITABLE SPACINGS TO MAINTAIN ALIGNMENT AND PREVENT SAGGING.

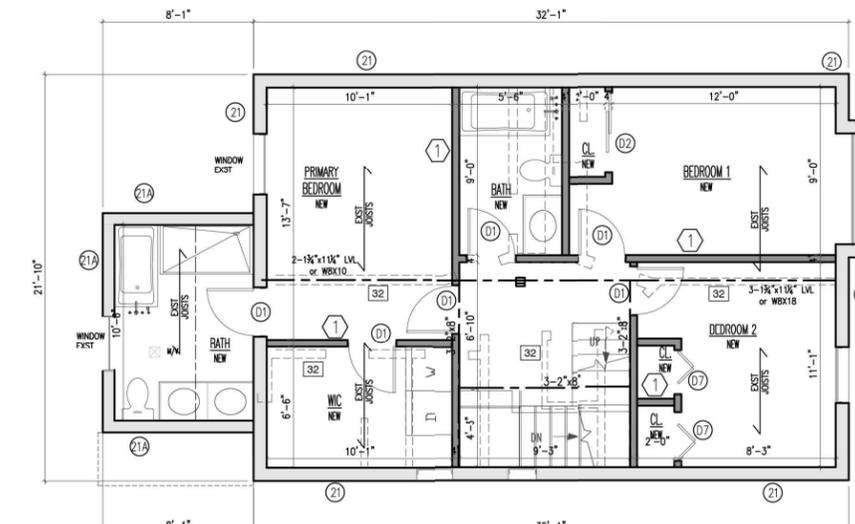
BCIN QUALIFICATION

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.

CURTIS SALT BERRY 31364

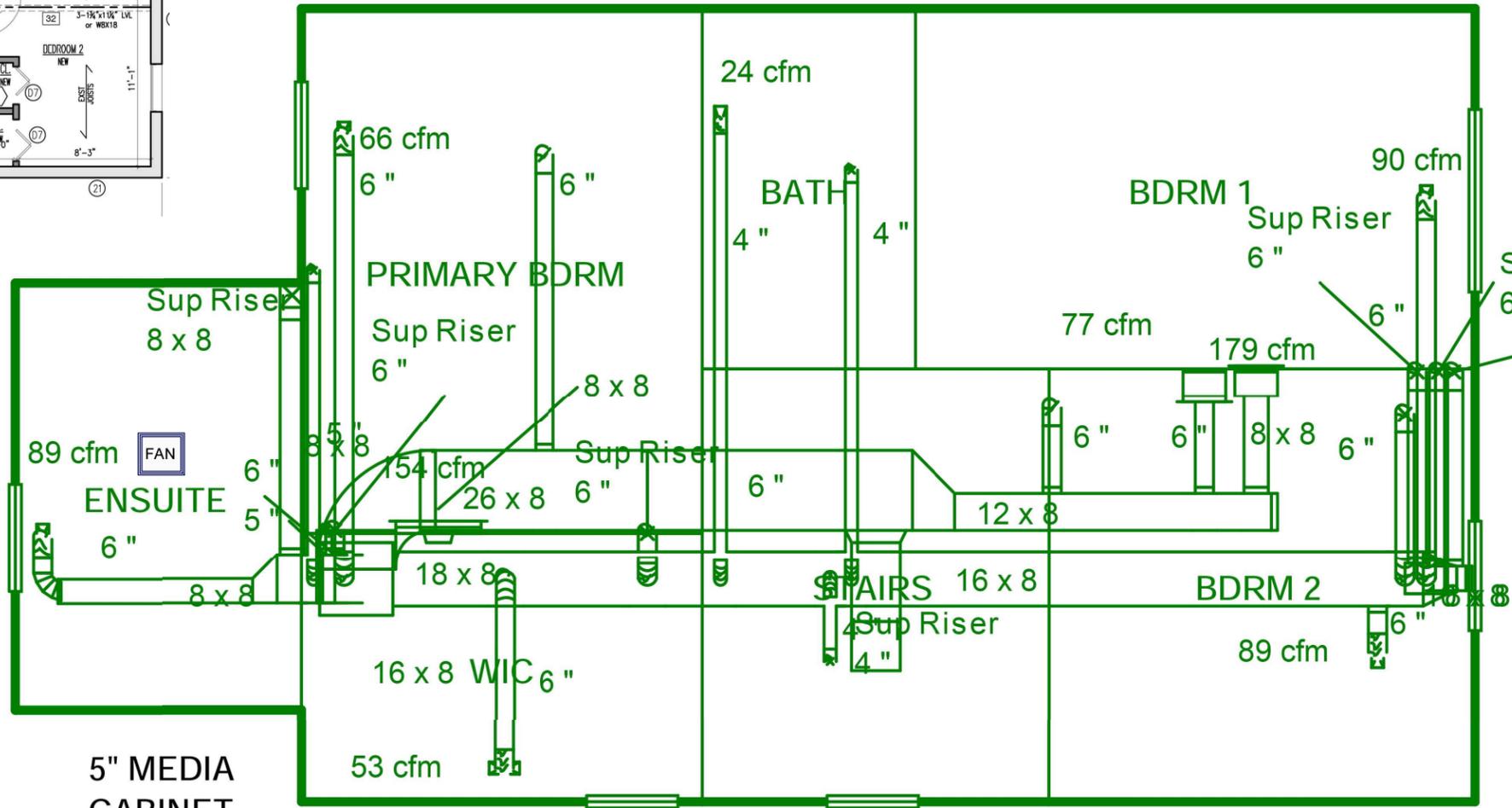
BASEMENT LAYOUT

M02

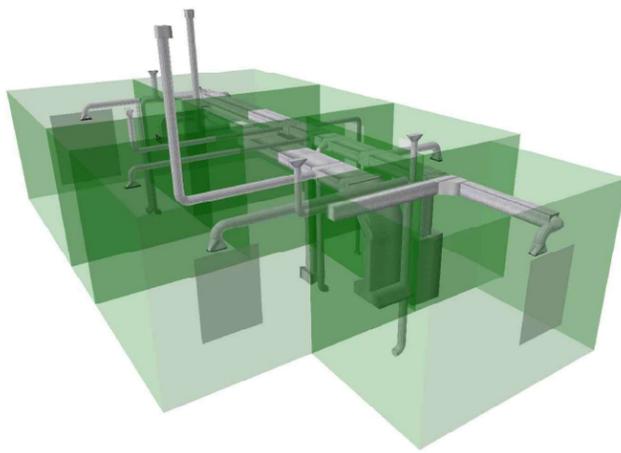


ARCHITECTURAL REFERENCE DRAWING

2ND



5" MEDIA CABINET (FILTER)



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.

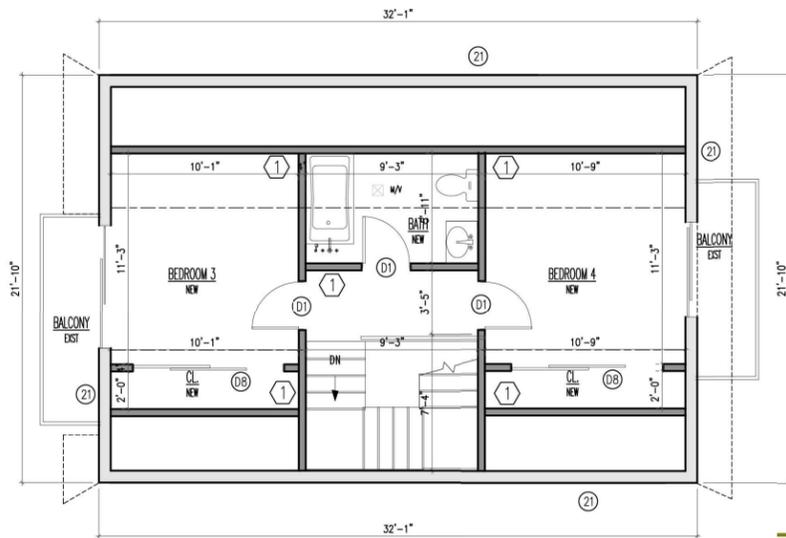
BRANCH DUCTS SHALL BE SUPPORTED AT SUITABLE SPACINGS TO MAINTAIN ALIGNMENT AND PREVENT SAGGING.

RUN REFRIGERANT LINES FROM CONDENSING UNIT VERTICALLY ALONG BUILDING EXTERIOR THROUGH PENETRATION AT THE FIRST FLOOR CEILING ELEVATION. PROVIDE LINESSET COVER COLOUR MATCHED TO EXTERIOR CLADDING. VERIFY COLOUR WITH ARCHITECT/BUILDER AND COORDINATE PENETRATION LOCATION (TYP.)

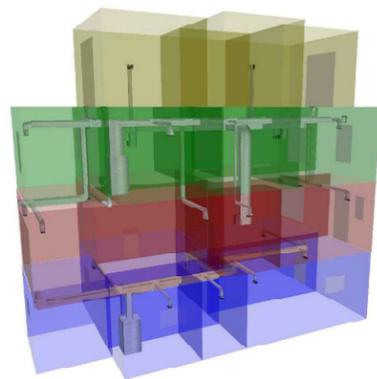
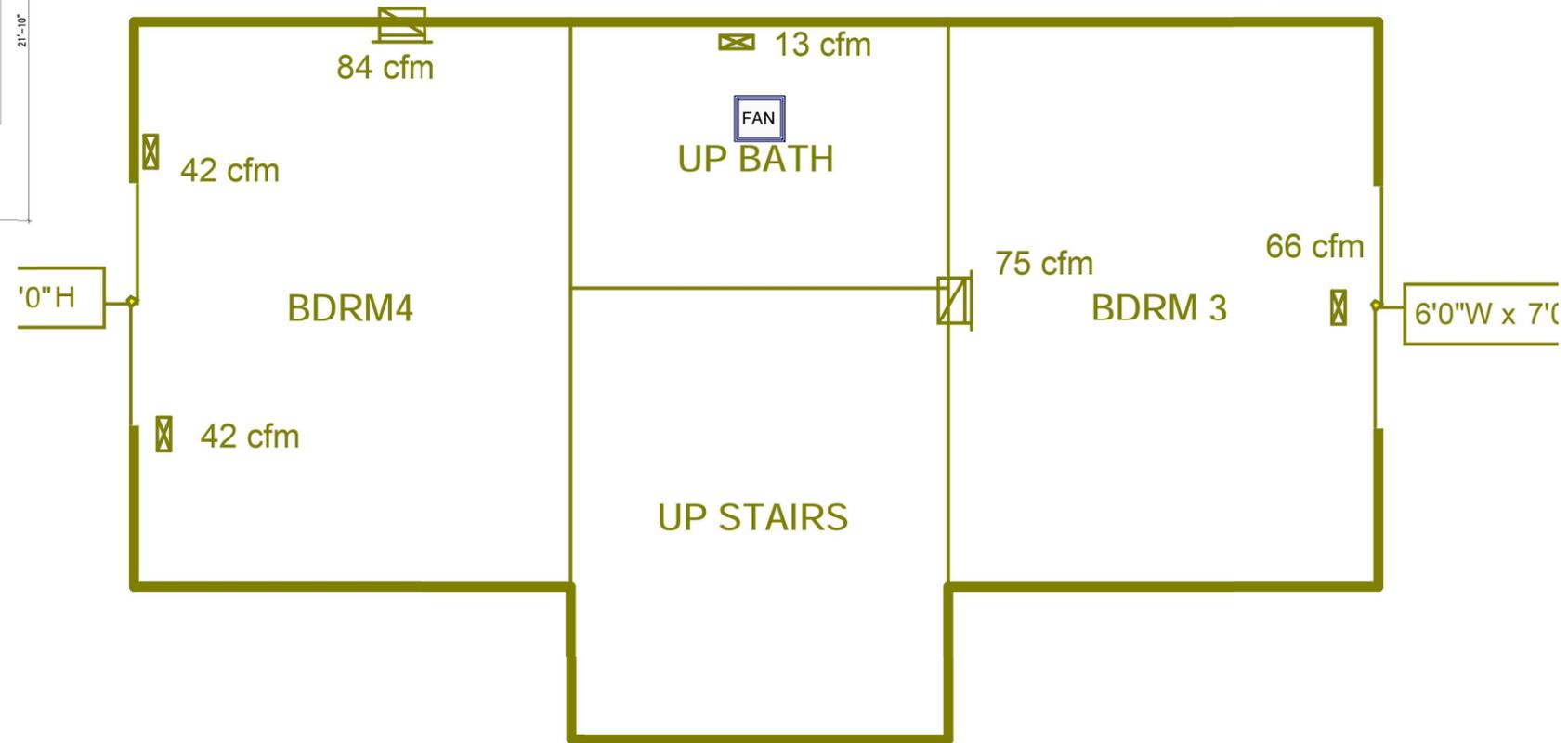
BCIN QUALIFICATION

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.

CURTIS SALTZBERRY 31364



ARCHITECTURAL REFERENCE DRAWING



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

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.

BRANCH DUCTS SHALL BE SUPPORTED AT SUITABLE SPACINGS TO MAINTAIN ALIGNMENT AND PREVENT SAGGING.

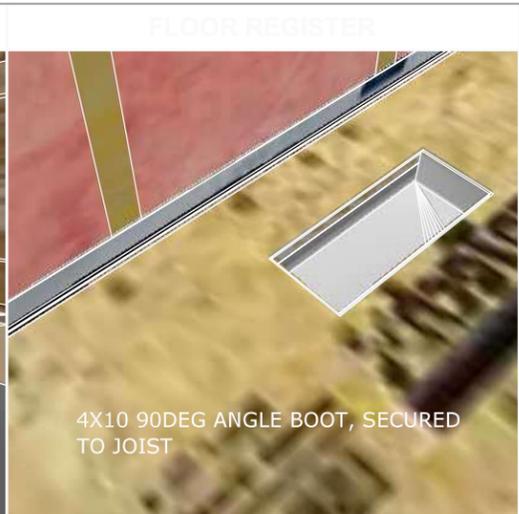
BCIN QUALIFICATION

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.



SUPPLY TRUNK TO BRANCH

TOP TAKE-OFF FROM SUPPLY TRUNK



FLOOR REGISTER

4X10 90DEG ANGLE BOOT, SECURED TO JOIST

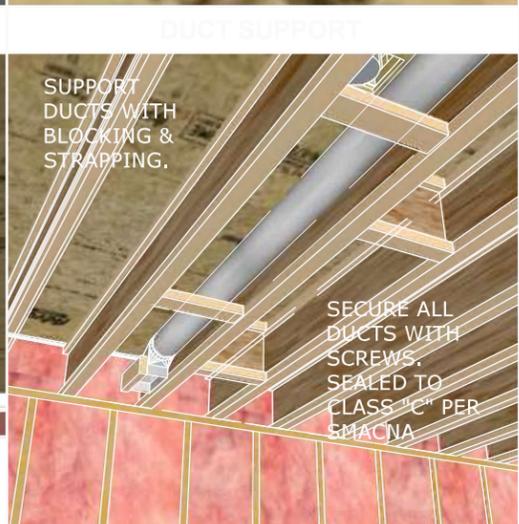


DUCT THROUGH PLATE

REINFORCE ALL PLATES CUT OR NOTCHED



JOIST ENDS-RETURN AIR



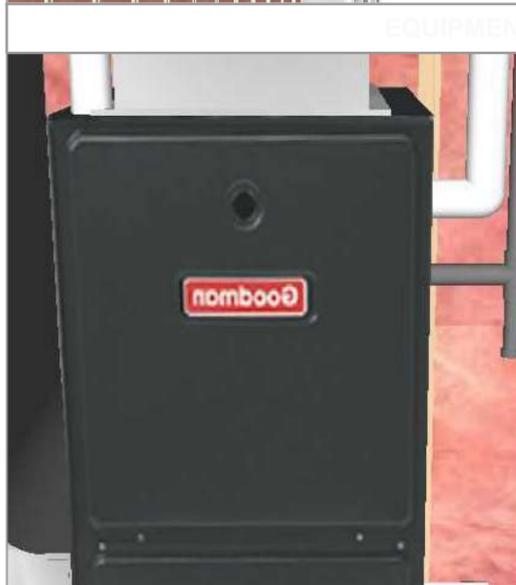
DUCT SUPPORT

SUPPORT DUCTS WITH BLOCKING & STRAPPING.

SECURE ALL DUCTS WITH SCREWS. SEALED TO CLASS "C" PER SMACNA



RETURN AIR



EQUIPMENT DETAILS

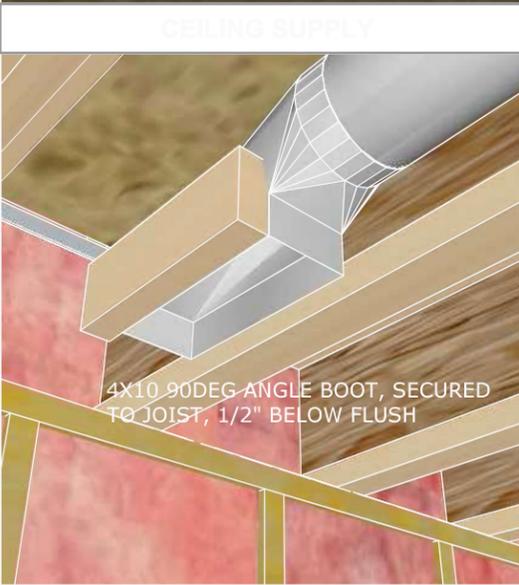
GAS PIPING AND VENTING PER: CAN/CSA-B149.1-10

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

4X10 90DEG ANGLE BOOT, SECURED TO JOIST, 1/2" BELOW FLUSH

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 SOURCES 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.



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.

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"

DUCT CONNECTIONS

M06

KITCHEN RANGEHOOD



Under-Cabinet
ALTA

The sculpted lines of Alta bring an exciting, new choice to typical range hood shapes. With advanced features like, powerful ventilation, Auto-operation, LED lighting and infrared controls make operation enjoyable.

SIZE	STAINLESS	GREASE FILTERS (replacement)	NON-DUCTED FILTERS
30 in.	ALT430SS	SG7020204-002	HPF30

FEATURES

Max. Blower CFM ‡	640 CFM
Control type	3-speed Infrared
Delay off	yes
Auto-operation mode	yes
Filter Clean Reminder	no
ADA Compliant	yes
Lighting	2-level LED module (included)
Grease Filters	Hybrid Baffle (Qty. 2)
Installation Hardware	EZ1 Bracket
ENERGY STAR®	yes
Recirculation	Non-ducted filters sold separately

AC INPUT

120 V, 60 Hz - 2.0 AMPS
Electrical Connection: Direct Wire

OPTIONAL ACCESSORIES

7-in. Round Damper	BP87Q
ADA Wiring Kit	HAWRKS
Make-up Air Dampers	MD6TU, MD8TU and MD10TU
Power Cord Kit	HCK44

MOUNTING HEIGHT

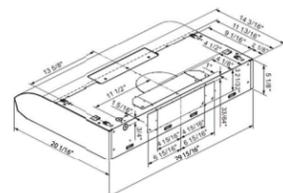
Minimum 18 in. from cooktop to bottom of hood for electrical range
Minimum 26 in. from cooktop to bottom of hood for gas range

LIMITED WARRANTY

1-year
3-year (LED modules only)
(See installation manual for full warranty text.)

FOR INDOOR USE ONLY

‡ Max. blower CFM indicates the performance of the hood blower in open air and is not HVI certified.



Dimensions shown in inches.



1116950C
Broan-NuTone LLC | 926 West State Street, Hartford, Wisconsin, USA 53027 | Broan-NuTone.com | 800-558-1711
Venmar Ventilation ULC | 550 Lemire Blvd., Drummondville, Québec, Canada J2C 7W9 | Broan-NuTone.ca | 800-567-3855

SPECIFICATION SHEET
ALTA - ALT4 SERIES

HRV INFORMATION



Heat Recovery Ventilator - 230 CFM

HRV

Side ports: V230H75RS



PARTS/MOTOR HRV CORE

The industry's most advanced residential fresh air system, created to offer a universal platform specifically designed and improved to make contractors life easier and more profitable while delivering constant superior air quality.

- Thanks to the Virtuo Air Technology™, the airflow calibration and auto-balancing are achieved quickly and maintained throughout the life of the product
- Select the desired CFM using the proven integrated LCD screen
- Integrated electronic airflow measurement device with real time LCD
- Integrated diagnostic tool
- Equipped with PMSM ECM motors for energy efficient operation
- Suspended installation (chains included) OR
- Wall-mount installation (universal brackets included)
 - installation with 2 brackets
 - installation with 4 brackets

CONTROLS



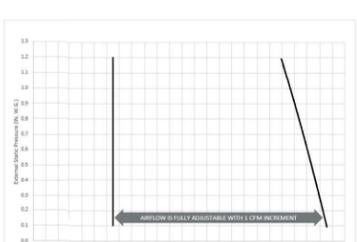
Refer to the Wall Control specification sheet for more information.

*Airflow performances associated with MERV 13 optional filter are not HVI certified. However, from tests performed by the manufacturer, such performances are not affected by the use of this filter.

FAN CURVES WITH VIRTUO

Thanks to Virtuo Air Technology™, no need to balance the unit manually. Both PMSM motors are controlled by an artificial intelligence performing 120 readings per minute then processing this information to maintain the requested airflow. For typical installation, Virtuo will ensure a balanced ventilation at every selected speed regardless of the weather conditions, the type of connection, the variable speed furnace/AHU, the stack effect, the filter clogging and so on. This results in peace of mind for installers and users knowing that the unit will always remain balanced and that it will maintain its maximum heat/energy recovery efficiency.

Static Pressure (in. w.c.)	Static Pressure (in. w.c.)	Net Supply Airflow (CFM)			Clean Airflow Supply (CFM)			Clean Airflow Exhaust (CFM)			
		Low	Med	High	Low	Med	High	Low	Med	High	
25	0.1	110	233	111	235	111	235	111	235	111	235
50	0.2	109	231	110	233	110	233	110	233	110	233
75	0.3	107	227	108	229	108	229	108	229	108	229
100	0.4	106	225	107	227	107	227	107	227	107	227
125	0.5	104	220	105	222	105	222	105	222	105	222
150	0.6	103	218	104	220	104	220	104	220	104	220
175	0.7	102	216	102	216	102	216	102	216	102	216
200	0.8	100	212	101	214	101	214	101	214	101	214
225	0.9	99	210	99	210	99	210	99	210	99	210
250	1.0	97	206	96	206	96	206	96	206	96	206
275	1.1	94	199	95	201	95	201	95	201	95	201
300	1.2	93	197	94	199	94	199	94	199	94	199



ENERGY PERFORMANCE

SUPPLY TEMPERATURE	NET AIRFLOW		POWER CONSUMED (WATTS)	SENSIBLE RECOVERY EFFICIENCY	ADJUSTED SENSIBLE RECOVERY EFFICIENCY	APPARENT SENSIBLE EFFECTIVENESS*	
	°C	°F					L/s
HEATING							
0	32	31	66	25	78%	80%	82%
0	32	38	81	34	75%	77%	79%
0	32	76	161	133	67%	72%	73%
-25	-13	38	81	51	67%	69%	80%

*Data not certified by HVI.

REQUIREMENTS AND STANDARDS

- UL 1812 compliant (safety)
- CSA C22.2 No. 113 compliant (safety)
- Could be installed in compliance with CSA F326
- Performance tested as per CSA C439 Standard
- Meets Novoclimat requirements when used in conjunction with wall control Advanced Touchscreen
- Compliant with Prop 65
- This product earned the ENERGY STAR® by meeting strict energy efficiency guidelines set by Natural Resources Canada and the US EPA. This product meets ENERGY STAR requirements only when used in Canada.

Project:	Remarks
Location:	
Part no.:	
Qty.:	
Submitted by:	Date:

EXHAUST FAN 1 & 2

PERFORMANCE RATINGS

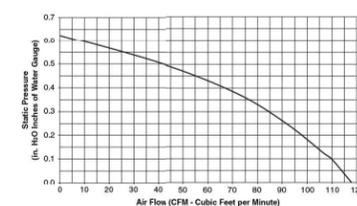
FLEX™ SERIES FAN AE110K

HVI PERFORMANCE

0.1 Ps - Static Pressure (in H2O)				0.25 Ps	
Airflow (CFM)	Sound (Sones)	Power (Watts)	Efficacy (CFM / W)	Airflow (CFM)	
110	1.0	23.4	4.71	92	

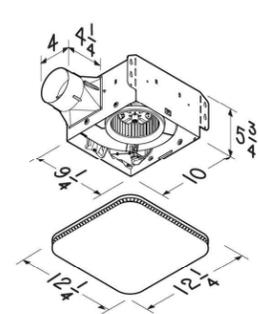
HVI-2100 CERTIFIED RATINGS comply with new testing technologies and procedures prescribed by the Home Ventilating Institute, for off-the-shelf products, as they are available to consumers. Product performance is rated at 0.1 in. static pressure, based on tests conducted in a state-of-the-art test laboratory. Sones are a measure of humanly-perceived loudness, based on laboratory measurements.

AIR FLOW PERFORMANCE



ELECTRICAL & WEIGHT

Volts	Hz	Amps	Shipping Weight
120	60	0.3	10.0



1116950C
Broan-NuTone LLC, 926 West State Street, Hartford, Wisconsin, USA 53027 | Broan-NuTone.com | 800-558-1711
Venmar Ventilation ULC, 550 Lemire Blvd., Drummondville, Québec, Canada J2C 7W9 | Broan-NuTone.ca | 800-567-3855

PERFORMANCE RATINGS

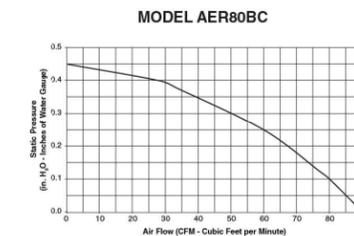
FLEX™ SERIES FAN AER80BC

HVI PERFORMANCE

Model	0.1 Ps - Static Pressure (in. H ₂ O)			0.25 Ps	
	Airflow (CFM)	Sound (Sones)	Power (Watts)	Efficacy (CFM / W)	Airflow (CFM)
AER80BC	80	1.5	24.7	2.97	60

HVI-2100 CERTIFIED RATINGS comply with new testing technologies and procedures prescribed by the Home Ventilating Institute, for off-the-shelf products, as they are available to consumers. Product performance is rated at 0.1 in. static pressure, based on tests conducted in a state-of-the-art test laboratory. Sones are a measure of humanly-perceived loudness, based on laboratory measurements.

AIR FLOW PERFORMANCE



ELECTRICAL & WEIGHT

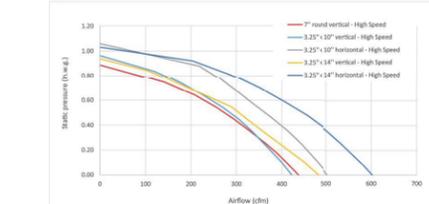
Model	Volts	Hz	Amps	Shipping Weight
AER80BC	120	60	0.3	10.0 lb.



Under-Cabinet
ALTA

Duct Orientation	Size	Damper	Sones			CFM			
			Low	Med	High	Low	Med	High	High
Vertical - Rectangular	3 1/4 x 10 in.	Included	1.5	4.0*	8.5	160	260*	350	400
Horizontal - Rectangular	3 1/4 x 10 in.	Included	1.5	3.0*	8.5	170	260*	440	490
Vertical - Rectangular	3 1/4 x 14 in.	Included	1.4	3.5*	8.5	160	270*	390	450
Horizontal - Rectangular	3 1/4 x 14 in.	Included	0.8	3.0*	8.5	190	310*	620	570
Round - Vertical	7 in.	Sold Separately**	1.5	3.5*	8.5	160	260*	360	410

** 7 in. adaptor plate included



HVI-2100 CERTIFIED RATINGS comply with new testing technologies and procedures prescribed by the Home Ventilating Institute, for off-the-shelf products, as they are available to consumers. Product performance is rated at 0.1 in. static pressure at high speed based on tests conducted in a state-of-the-art test laboratory. Sones are a measure of humanly-perceived loudness, based on laboratory measurements.
*Where noted performance rating is not HVI certified.

ON SHEET
- ALT4 SERIES



PRODUCT SPECIFICATIONS
DETAIL SHEETS

PRODUCT SPECS I

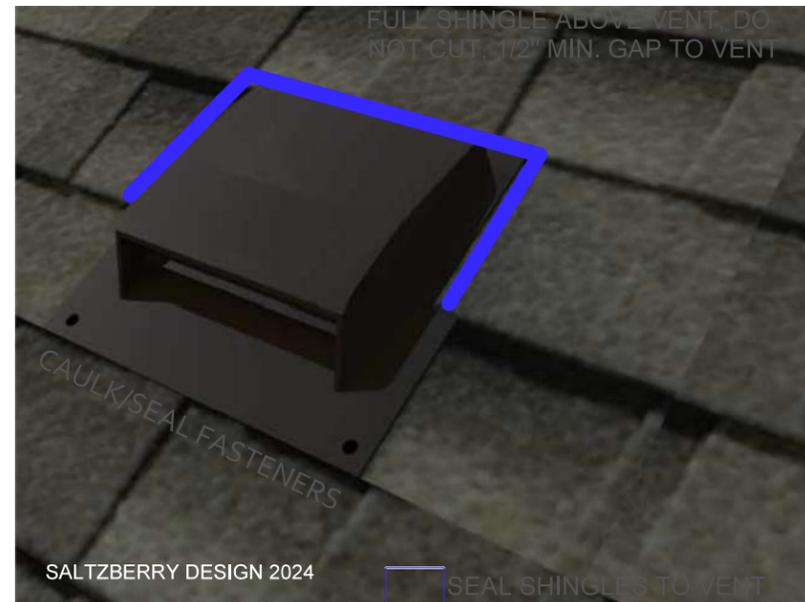
M05

BATHROOM FAN DETAILS: ROOF EXHAUST

MANUFACTURER'S INSTALLATION INSTRUCTIONS TAKE PRECEDENT OVER THESE NOTES.



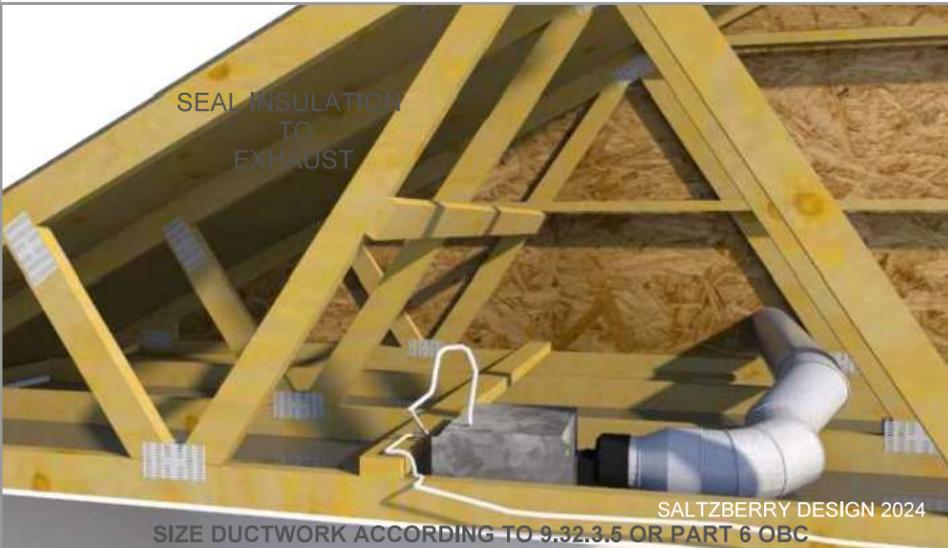
TOTAL LENGTH OF PIPE NOT TO EXCEED 39' AND FOUR(4) ELBOWS. DUCTWORK TO BE; TIGHT FITTING, LAPPED A MIN. OF 1", AND PERMANENTLY SUPPORTED. TAPE ALL JOINTS AND SLOPE PIPE TO EXHAUST OUTLET. FAN(S) TO BE RATED IN ACCORDANCE WITH CAN/CSA-C260-M OR HVI 916 AND CAN/CSA-C260-M OR HVI915. 3.5 SONES OR LESS.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



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

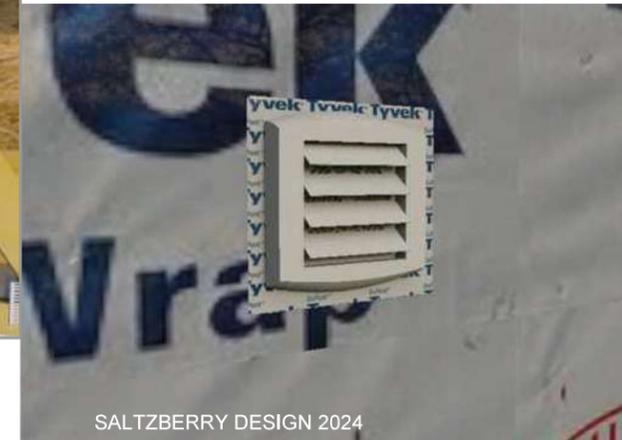
PRINCIPLE EXHAUST FAN TO BE CONTROLLED WITH A MANUAL SWITCH OR DEHUMIDISTAT, CENTRALLY LOCATED AND LABELED "VENTILATION FAN". CIRCULATION FAN IS REQUIRED WHERE VENTILATION IS COUPLED WITH FORCED AIR HEATING SYSTEM. HRV TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS. OUTDOOR AIR TO BE SUPPLIED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

NUMBER BDRMS	MINIMUM EXHAUST DUCT DIAMETER			
	DUCTS CONNECTED TO INLET & OUTLET OF PRINCIPAL EXHAUST FAN		DUCTS CONNECTED TO ONE SIDE ONLY OF PRINCIPAL EXHAUST FAN	
	SMOOTH DUCT	FLEXIBLE DUCT	SMOOTH DUCT	FLEXIBLE DUCT
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

INTAKE AND EXHAUST OUTLETS SHOULD BE SUFFICIENTLY 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". EXHAUST OUTLET C/W INSECT/RODENT SCREEN AND SELFCLOSING DAMPER. IN AREAS OF HIGH WIND USE BROAN "ECO VENT" OR SIMILAR 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.



SALTZBERRY DESIGN
WWW.SALTZBERRYDESIGN.COM

BCIN QUALIFICATION

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.

CURTIS SALTZBERRY 31364

VENTILATION NOTES

M04



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.

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.



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

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).

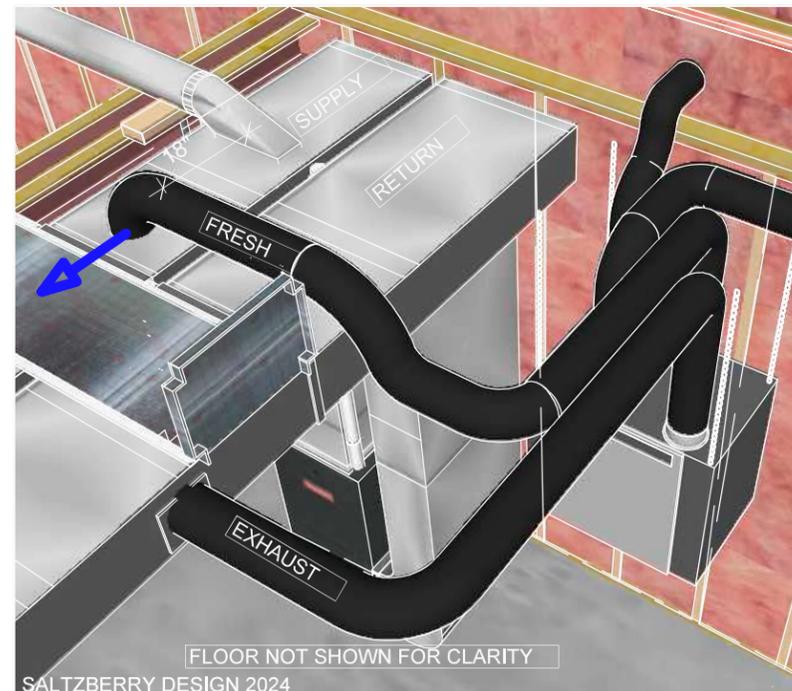


EXHAUST/FRESH AIR HOODS

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

NUMBER BDRMS	MINIMUM EXHAUST DUCT DIAMETER			
	DUCTS CONNECTED TO INLET & OUTLET OF PRINCIPAL EXHAUST FAN		DUCTS CONNECTED TO ONE SIDE ONLY OF PRINCIPAL EXHAUST FAN	
	SMOOTH DUCT	FLEXIBLE DUCT	SMOOTH DUCT	FLEXIBLE DUCT
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

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.
SALTZBERRY DESIGN 2024

FOR SIMPLIFIED CONNECTION SUPPLY/RETURN IT IS RECOMMENDED, (HOWEVER, NOT ESSENTIAL) THAT THE FURNACE BLOWER BE SYNCHRONIZED WITH THE UNIT. ALL MANUFACTUER NOTES TAKE PRECEDENT OVER THESE NOTES WHERE IN CONFORMANCE WITH APPLICABLE CODES & REGULATIONS

BCIN QUALIFICATION
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.
CURTIS SALTZBERRY 31364
SIMPLIFIED HRV PLAN
M07