

ALTERATION REPAIR

4015 WOODLEA AVE

BALTIMORE, 21206 MD

SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE																												
UNIT NO.	SERVING THE AREA	E.A.T.	CFM	O.A.T. DB/WB	E.S.P.	INDOOR UNIT										OUTDOOR UNIT						MANUFACTURER AND MODEL		S.E.E.R.	HSPF	REMARKS		
						FAN		COOLING CAP.			AUXILIARY HEATING DATA		ACTUAL MCA	ACTUAL MCOP	W.T. IN LBS (APPROX)	COMPRESSOR			FAN FLA	MCA	MCOP	WT IN LBS	OUTDOOR UNIT				INDOOR UNIT	
						VOLTAGE	H.P.	FLA	TOTAL M.B.H.	SENSIBLE M.B.H.	E.A.T.	VOLTAGE				NOMINAL KW	VOLTAGE	L.R.A.										R.L.A.
AHU-1 (downflow)	SEE FLOOR PLAN	90/67	840	95/76	0.4	208/1/60	3/4	5.7	23.9	18.3	ARI	208/1/60	8.0	38.0	40.0	122	208/1/60	62.9	10.9	1.1	14.7	25	200	GOODMAN GSZ16 025	GOODMAN ARUF25 (DOWNFLOW)	16	8.7	

- ACCESSORIES: ① TIME DELAY RELAY ② INDOOR AHU CIRCUIT BREAKER(S) PROVIDED BY MANUFACTURER. OUTDOOR HP CIRCUIT BREAKER PROVIDED BY ELECTRICAL CONTRACTOR ③ LIQUID LINE SOLENOID VALVE
 ④ HEATING & COOLING PROGRAMMABLE T'STAT W/EM. HEAT/FAN ON/OFF SWITCH/AUTO SWITCH ⑤ CRANKCASE HEATER ⑥ COMPRESSOR START ASSIST RELAY
 ⑦ SINGLE POINT POWER CONNECTION FOR INDOOR AIR HANDLING UNIT. ⑧ 2 POINTS OF POWER CONNECTION FOR INDOOR AHU ⑨ CORROSION RESISTANT DRAIN PAN.
 ⑩ PROVIDE CONDENSATE DRAIN WITH "EZ" TRAP. ⑪ CONDENSATE OVERFLOW SWITCH. ⑫ REFRIGERANT 410A. ⑬ 5 YEAR COMPRESSOR WARRANTY BY MANUFACTURER.
 ⑭ AUXILIARY ELECTRIC HEATING WILL NOT ENERGIZED WHEN THE HEATING LOAD CAN BE MET BY THE HEAT PUMP. ⑮ ECM MOTOR W/O VARIABLE SPEED. ⑯ ECM MOTOR WITH VARIABLE SPEED.

IECC REQUIREMENTS PER IECC R402.4.1.2 - CONTRACTOR IS REQUIRE SHALL SUBMIT AT FINAL INSPECTION A WHOLE-BUILDING BLOWER DOOR TEST SHOWING A PASSING RATING OF <= 5 AIR CHANGES PER HOUR AT A PRESSURE OF 50 PASCAL. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL UPON REQUEST.
 PER IECC R403.2.2 - CONTRACTOR IS REQUIRE TO SUBMIT AT FINAL INSPECTION A DUCT LEAKAGE TEST SHOWING A PASSING RATING OF <= 8 CFM PER 100 SQUARE FEET CONDITIONED FLOOR AREA AT A PRESSURE OF 25 PASCAL. A WRITTEN REPORT OF THE RESULTS OF THE TEST SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE CODE OFFICIAL UPON REQUEST.

SPLIT SYSTEM GAS FURNACE INDOOR UNIT SCHEDULE																												
UNIT NO.	LOCATION	AIR FLOW		INDOOR FAN DATA		COOLING COIL DATA				GAS HEATING DATA				ELECTRICAL DATA				DIMENSIONS HxWxD (INCHES)	APPR. WEIGHT LBS	MODEL & MANUFACTURER	REMARKS							
		SUPPLY AIR CFM	OUTSIDE AIR CFM	ESP (N WC)	HP	RPM	EAT °F	SENSIBLE °F	TOTAL MBH	SEER	TOTAL MBH	EAT °F	LAT °F	INPUT CFH	OUTPUT CFH	NUMBER STAGES	FAN DATA FLA					LRA	MCA	MCOP	VOLTS	PH	CYCLE	
		DB °F	WB °F	MBH	DB °F	WB °F	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH	CFH			
GF-1	SEE PLAN	800	60	0.5	1/2	ECM	77	64	21.8	24.0	15.5	80.0	85	111	42/60	40/58	2	-	-	7.8	15	120	1	60	---	180	GOODMAN:GMVC96-080 VERTICAL	SEE NOTES

NOTES:
 1) UNIT TO BE PROVIDED WITH 3/4" CONDENSATE DRAIN PIPE.
 2) REFRIGERANT SHALL BE R-410A.
 3) PROVIDE 1 INCH SUPER THICK INSULATION FOR UNIT.
 4) PROVIDE FACTORY 1 INCH FILTER SECTION IN RETURN AIR DUCTWORK ADJACENT TO UNIT.
 5) PROVIDE 7-DAY PROGRAMMABLE THERMOSTAT WITH ALL UNITS. COORDINATE COLOR WITH ARCHITECT.
 6) PROVIDE CONTROL WIRING FOR THERMOSTAT.
 7) UNITS SHALL INCLUDE DISCONNECT SWITCH.
 8) PROVIDE WITH FACTORY EVAPORATOR COIL AND HOUSING TO UNIT.

AIR DEVICE SCHEDULE				
AIRFLOW (CFM)	INLET SIZE	REGISTER/GRILLE SIZE	TYPE	NOTES
0 - 60	5"	10x4	SUPPLY REGISTER	1,2,3,4,6,7,8
61 - 100	6"	10x4	SUPPLY REGISTER	1,2,3,4,6,7,8
105 - 125	7"	12x4	SUPPLY REGISTER	1,2,3,4,6,7,8
130 - 150	7"	10x6	SUPPLY REGISTER	1,2,3,4,6,7,8
155 - 200	8"	12x6	SUPPLY REGISTER	1,2,3,4,6,7,8
0-400	10"	12x12	RETURN GRILLE	4,5,6,7,8
405-600	12"	14x14	RETURN GRILLE	4,5,6,7,8
605-1000	14"	16x16	RETURN GRILLE	4,5,6,7,8

NOTE:
 1. FLOOR REGISTERS SHALL BE HART & COOLEY MODEL 210 OR EQUAL.
 2. CEILING REGISTERS SHALL BE HART & COOLEY MODEL A611 OR EQUAL.
 3. SIDEWALL REGISTERS SHALL BE HART & COOLEY MODEL A618 OR EQUAL.
 4. FACE VELOCITY SHALL BE 500 FPM FOR MAX CFM SHOWN.
 5. RETURN GRILLE SHALL BE TITUS MODEL 355, 1/2" BAR SPACING.
 6. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER.
 7. ALTERNATE SIZES ARE ACCEPTABLE WITH SAME VELOCITY AND PRESSURE DROP.
 8. ROUND INLET SIZE AS INDICATED OR EQUIVALENT RECTANGULAR.
 9. PROVIDE RADIATION DAMPER ON ALL THE REGISTERS OR GRILLES.

SPLIT SYSTEM CONDENSING UNIT SCHEDULE																			
UNIT NO.	LOCATION	NOMINAL TONS	OUTDOOR FAN DATA				COMPRESSOR DATA				ELECTRICAL DATA				DIMENSIONS HxWxD (INCHES)	APPR. WEIGHT LBS	MODEL & MANUFACTURER	REMARKS	
			DRIVE TYPE	QTY	HP	RPM	FLA	QTY	RLA	LRA	MCA	MCOP	VOLTS	PH					CYCLE
CU-1	SEE PLAN	2.0	DIRECT	1	1/6	-	0.9	1	10.3	52.0	14.0	20	230	1	60	----	200	GOODMAN: DSXC16024	SEE NOTES

NOTES:
 1) UNIT CASING SHALL BE CONSTRUCTED OF HEAVY GAUGE, G90 GALVANIZED STEEL AND PAINTABLE WITH WEATHER RESISTANT POWDER PAINT ON ALL LOUVERS, PANELS, PREPAINT ON ALL OTHER PANELS.
 2) REFRIGERANT SYSTEM CONTROLS INCLUDE CONDENSER FAN AND COMPRESSOR CONTACTOR.
 3) TWO STAGE COMPRESSOR

FAN SCHEDULE							
NO.	SERVICE	TYPE	CFM	MAX SONES	V/PH	HP	MODEL
EF-1	ALL BATHROOMS	CEILING EXHAUST	80	0.8	115/1	1/10	BROAN - QTRE880
HF-1	KITCHEN HOOD	DUCTED HOOD FAN	160	1.7	115/1	1/8	BROAN

NOTE:
 OTHER MANUFACTURERS: FAN: EQUAL BY NUTONE, DELTA BREEZ
 KITCHEN HOOD: EQUAL BY NUTONE, WHIRLPOOL

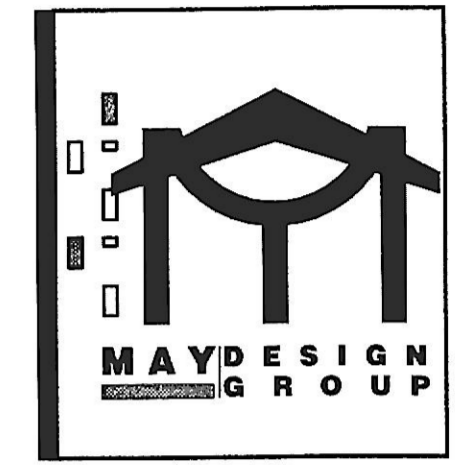
TABLE M1507.3.3(1) CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS

DWELLING UNIT FLOOR AREA (Square Feet)	NUMBER OF BEDROOMS				
	0 & 1	2	3	4	> 7
< 1,500	30	45	60	75	90
1,501 & 3,000	45	60	75	90	105
3,001 & 4,500	60	75	90	105	120
4,501 & 6,000	75	90	105	120	135
6,001 & 7,500	90	105	120	135	150
> 7,500	105	120	135	150	165

PER IMC 2015

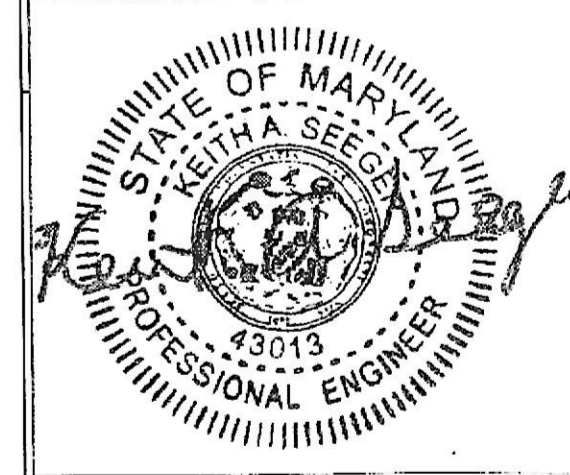
SUMMER: INSIDE: 75°F DB, 50% RH
 OUTSIDE: 95°F DB, 78°F WB

WINTER: INSIDE: 72°F DB
 OUTSIDE: 10°F DB



4015 WOODLEA AVE
BALTIMORE, 21206 MD
SQ. 6,996 LOT: 016

PROFESSIONAL CERTIFICATION:
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER LAWS OF THE STATE OF MARYLAND.
 LICENSE NO.: 43013 EXPIRATION DATE: 12-11-2020



SCALE: AS NOTED
 DATE:
 PROJECT NUMBER:

COVER SHEET

M000

