

REVISIONS

DUCTLESS SPLIT SYSTEM UNIT SCHEDULE														
DESIGNATION	SUPPLY AIR TOTAL CFM	MINIMUM OUTSIDE AIR CFM	ESP ("W.G.)	COOLING CAPACITY		HEATING OUTPUT (MBH)	AUXILIARY HEATER (KW)	SUPPLY FAN HP	FAN COIL UNIT ELECTRICAL DATA		CONDENSING UNIT ELECTRICAL DATA		MANUFACTURER AND MODEL NUMBER	
				SENS (MBH)	TOTAL (MBH)				MCA/FLA	VOLTS/PHASE	MCA/MOCP	VOLTS/PHASE	FAN COIL UNIT	CONDENSING UNIT
DSFC-1/DSHP-1	470	-	-	-	15	18	-	-	1/.62	208/1	23.1/25	208/1	MITSUBISHI MFZ-KJ15NA-U1	MITSUBISHI MXZ-4C36NA
DSFC-2/DSHP-1	470	-	-	-	15	18	-	-	1/.62	208/1	23.1/25	208/1	MITSUBISHI MFZ-KJ15NA-U1	MITSUBISHI MXZ-4C36NA
DSFC-3/DSHP-2	470	-	-	-	15	18	-	-	.62	208/1	23.1/25	208/1	MITSUBISHI MFZ-KJ15NA-U1	MITSUBISHI MXZ-4C36NA
DSFC-4/DSHP-2	470	-	-	-	15	18	-	-	.62	208/1	23.1/25	208/1	MITSUBISHI MFZ-KJ15NA-U1	MITSUBISHI MXZ-4C36NA

SCHEDULE NOTES:

- COOLING DESIGN BASED ON 95°FDB/78°FWB AMBIENT OUTDOOR CONDITION, 45°F SUCTION TEMPERATURE, AND 75°F 50% RH SPACE CONDITION.
- CONTRACTOR TO FURNISH AND INSTALL INSULATED REFRIGERANT PIPING BETWEEN AHU'S AND CONDENSING UNITS. REFER TO PIPING MANUAL PUBLICATION OF MANUFACTURER. SIZE AND CHARGE REFRIGERANT PER MANUFACTURER'S RECOMMENDATIONS FOR SUCH APPLICATION.
- PROVIDE LIQUID LINE SOLENOID VALVES WITH OUTDOOR UNITS. PROVIDE ALL UNITS WITH FILTERS, LOW AMBIENT CONTROL TO 055DF.
- HEATING VALUES SHOWN ARE AMBIENT TEMP OF 47°F.
- VRF SYSTEM SHALL BE INSTALLED PER MANUFACTURE RECOMMENDATIONS. ALL FITTING, ADAPTER, REFRIGERANT PIPING SHALL BE INCLUDED AND SIZED BY MANUFACTURER.

FLEXIBLE DUCT SIZING SCHEDULE	
CFM RANGE	FLEXIBLE DUCT DIAMETER
0 TO 100	6"
101 TO 200	8"
201 TO 350	10"
351 TO 550	12"

SCHEDULE NOTES:

- SCHEDULE SHALL APPLY TO ALL FLEXIBLE DUCT SERVING DIFFUSERS UNLESS OTHERWISE INDICATED.
- ROUND RIGID RUNOUTS FROM TRUNK DUCTS TO DIFFUSERS SHALL BE SAME SIZE AS FLEXIBLE DUCT FOR THE APPROPRIATE CFM IDENTIFIED.
- PROVIDE VOLUME DAMPER WITH SPIN-IN COLLAR OR FLAT OVAL CONNECTOR FOR EACH BRANCH CONNECTION.
- WHERE DUCTWORK DEPTH DOES NOT PERMIT A SPIN-IN COLLAR FITTING, EQUAL FLAT OVAL CONNECTION WITH MANUAL DAMPER SHALL BE PROVIDED WITH OVAL TO ROUND TRANSITION.

ROOFTOP UNIT SCHEDULE																
DESIGNATION	SUPPLY AIR TOTAL CFM	MINIMUM OUTSIDE AIR CFM	ESP ("W.G.)	SUPPLY FAN HP	COOLING CAPACITY		GAS HEATING CAPACITY		POWER EXHAUST FAN		UNIT POWER SUPPLY		UNIT EER	UNIT WEIGHT (LBS)	MANUFACTURER AND MODEL	
					TOTAL (MBH)	SENSIBLE (MBH)	INPUT STAGE 1&2	OUTPUT STAGE 1&2	HP	FLA	MCA	MOCP				VOLTS/PHASE
RTU-1	6125	1270	1.4	5.0	214.8	185.6	250/350	200/280	-	-	41	50	460/3	11.8	2900	TRANE YHH210
RTU-2	3500	955	1.4	2.75	117	110	250	202.5	-	-	31	45	460/3	12.2	1600	TRANE YZC120
RTU-3	5250	1520	1.4	3.0	180.5	154.7	250/350	200/280	-	-	33	45	460/3	12.1	3089	TRANE YHD180
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

SCHEDULE NOTES:

- COOLING DESIGN BASED ON 95°FDB/78°FWB AMBIENT OUTDOOR CONDITION, 45°F SUCTION TEMPERATURE, AND 75°F 50% RH SPACE CONDITION.
- UNIT POWER SUPPLY DOES NOT INCLUDE POWER EXHAUST FAN. EACH UNIT SHALL HAVE SINGLE POINT ELECTRICAL CONNECTION.
- PROVIDE ROOF CURB AND INTEGRAL VIBRATION ISOLATION RAIL WITH EACH UNIT.
- EXTERNAL STATIC PRESSURE IS EXCLUSIVE OF FILTERS, CASING LOSSES WET COIL, AND HEATING COIL.
- PROVIDE WITH ECONOMIZER OPERATION INCLUDING DAMPER AND ENTHALPY CONTROLS FOR EACH UNIT.
- SUPPLY FAN SHALL BE DIRECT CONSTANT VOLUME FAN.
- EER IS ENERGY EFFICIENCY RATING.
- ROOFTOP UNITS SHALL BE INSTALLED WITH A ECONOMIZER KIT.
- SMOKE DAMPERS SHALL BE INSTALLED ON ROOFTOP UNIT PER CODE.
- RTU-1 & RTU-3 SHALL BE INSTALLED WITH HIGH STATIC DRIVE ACCESSORY.
- EQUIPMENT SHALL BE INSTALLED WITH STANDARDS CONTROLS.

FAN SCHEDULE									
DESIGNATION	CFM	E.S.P. ("W.G.)	VOLTS/PHASE	RPM	POWER	DRIVE TYPE	FAN TYPE	CONTROL	MANUFACTURER AND MODEL
EF-1	75	.1	120/1	-	24.5W	DIRECT	CEILING	LIGHT SWITCH	PANASONIC FV-08VF2

SCHEDULE NOTES:

- PROVIDE ALL FANS WITH BACKDRAFT DAMPERS.
- PROVIDE ALL FANS WITH ADJUSTABLE SPEED CONTROLS.

ELECTRIC HEATER SCHEDULE						
DESIGNATION	MAXIMUM CFM	OUTPUT (KW)	VOLTS/PHASE	MOUNTING TYPE	CONTROL TYPE	MANUFACTURER AND MODEL
ECH-1	300	3.0	208/1	RECESSED	THERMOSTAT	QMARK FFCH-542

SCHEDULE NOTES:

- EACH HEATER SHALL BE PROVIDED WITH INTERNAL DISCONNECT AND THERMAL OVERLOAD PROTECTION.

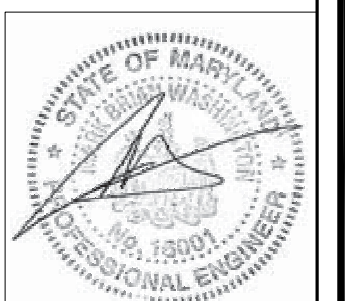
DIFFUSER, REGISTER, AND GRILLE SCHEDULE											
ID NO.	SERVICE	MOUNTING	FACE SIZE (IN.)	NECK SIZE (IN.)	LINEAR			CFM RANGE	MAX NC	NOTES	REMARKS
					SLOT LENGTH (IN.)	SLOT WIDTH (IN.)	QTY OF SLOTS				
D-2	SUPPLY	SURFACE MOUNTED	-	-	48	1.0	1	80-160	30	-	PRICE AS ADJUSTA SLOT T-BAR LINEAR SLOT DIFFUSER. DIFFUSER SHALL BE INSTALLED WITH A SUPPLY PLENUM MODEL AS. BORDER SHALL MATCH ARCHITECTURAL CEILING TYPE. SEE FLEXIBLE DUCT SCHEDULE FOR DUCT CONNECTION.
D-1	SUPPLY	SURFACE MOUNTED	24x24	-	6"	-	-	0-118	30	-	PRICE SCD SQUARE CONE DIFFUSER. BORDER SHALL MATCH ARCHITECTURAL CEILING TYPE. SEE FLEXIBLE DUCT SCHEDULE FOR DUCT CONNECTION.
		8"			-	-	120-210	30	-		
		10"			-	-	211-327	30	-		
		12"			-	-	330-470	30	-		

NOTES:

- ALL DIFFUSERS SHALL BE STEEL UNLESS NOTED OTHERWISE.

MODIFICATIONS TO WALDORF SENIOR &
 RECREATIONAL CENTER
 CHARLES COUNTY, MARYLAND

R.L. LITTEN & ASSOCIATES, ARCHITECTS, LLC
 300 CHARLES STREET, SUITE 4
 P.O. BOX 1920, LAPLATA, MD 20646 (301) 934-1471



PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 16001, Expiration Date: 4/26/20

Johnson Consulting Engineers, Inc.
 130 W. 25th Street Baltimore, Maryland 21218
 Tel: (410) 235-0057, Fax: (410) 235-0946
 Email: info@jceengineers.net

DRAWN BY: TAM
 CHK'D BY: TAM
 PROJECT NO:

M4