	EXHAUST FAN VENTILATOR SCHEDULE														
MARK	CFM	RPM	S.P.	ELECTRICAL	CONTROLS	MODEL NO./DESCRIPTION	NOTES								
EF-A	100	1,053	0.250	115V / 0.18A	LOCAL OCCUPANCY SENSOR	GREENHECK NO. SP-A125 PREMIUM CEILING EXHAUST FAN	1,2,3,7								
EF-B	150	708	0.250	115V / 0.46A	THERMOSTAT	GREENHECK NO. SP-A200 PREMIUM CEILING EXHAUST FAN	1,2,3,7								
EF-C	200	836	0.250	115V / 0.46A	LOCAL SWITCH	GREENHECK NO. SP-A200 PREMIUM CEILING EXHAUST FAN	1,2,3,7								
EF-D	250	999	0.250	115V / 0.56A	LOCAL SWITCH	GREENHECK NO. SP-A250 PREMIUM CEILING EXHAUST FAN	1,2,4,7								
EF-E	300	907	0.250	115V / 1.7A	BMS	GREENHECK NO. SP-A410 PREMIUM CEILING EXHAUST FAN	1,2,4,7								
EF-F	350	998	0.250	115V / 1.7A	BMS	GREENHECK NO. SP-A410 PREMIUM CEILING EXHAUST FAN	1,2,4,7								
EF-G	350	777	0.250	115V / 4.9A	24/7 CONTINUOUS	GREENHECK NO. CSP-A710 DIRECT DRIVE INLINE EXHAUST FAN	1,2,4,7,8								
EF-H	1,500	1,515	0.250	115V / 8.4A	LOCAL EMERGENCY SWITCH	GREENHECK NO. CSP-A1550 DIRECT DRIVE INLINE EXHAUST FAN	1,2,4,7								
EF-I	150	1,298	0.250	115V / 1.3A	BMS	GREENHECK NO. CUE-070-VG DIRECT DRIVE UPBLAST CENTRIFUGAL ROOF EXHAUST FAN	1,2,7								
EF-J	200	1,384	0.250	115V / 1.3A	BMS	GREENHECK NO. CUE-070-VG DIRECT DRIVE UPBLAST CENTRIFUGAL ROOF EXHAUST FAN	1,2,7								
EF-K	250	1,504	0.250	115V / 1.3A	BMS	GREENHECK NO. CUE-070-VG DIRECT DRIVE UPBLAST CENTRIFUGAL ROOF EXHAUST FAN	1,2,7								
EF-L	250	1,504	0.250	115V / 1.3A	LOCAL SWITCH	GREENHECK NO. CUE-070-VG DIRECT DRIVE UPBLAST CENTRIFUGAL ROOF EXHAUST FAN	1,2,7								
EF-M	275	1,566	0.250	115V / 1.3A	BMS	GREENHECK NO. CUE-070-VG DIRECT DRIVE UPBLAST CENTRIFUGAL ROOF EXHAUST FAN	1,2,7								
EF-N	300	1,643	0.250	115V / 1.3A	BMS	GREENHECK NO. CUE-070-VG DIRECT DRIVE UPBLAST CENTRIFUGAL ROOF EXHAUST FAN	1,2,7								
EF-0	350	1,092	0.250	115V / 1.5A	BMS	GREENHECK NO. CUE-090-VG DIRECT DRIVE UPBLAST CENTRIFUGAL ROOF EXHAUST FAN	1,2,7								
EF-P	375	1,118	0.250	115V / 1.5A	-	GREENHECK NO. CUE-090-VG DIRECT DRIVE UPBLAST CENTRIFUGAL ROOF EXHAUST FAN	1,2,7								

NOTES:

(1) MODEL NUMBERS NOTED ARE GREENHECK EQUIPMENT, UNLESS OTHERWISE NOTED. EXHAUST
FANS MEETING OR EXCEEDING PERFORMANCE DATA MANUFACTURED BY COOK OR CARNES
ARE ACCEPTABLE SUBSTITUTES. ALL FANS SHALL HAVE UL LISTED LABELS AND OPTIONAL MOTOR COVERS.

(2) FURNISH AND INSTALL MFR'S SPEED CONTROLLER OR EQUIVALENT & ALL ACCESSORIES
INDICATED ON DETAILS

(3) FURNISH AND INSTALL 10"x3" HOODED WALL CAP WITH INTEGRAL FLASHING, BDD, AND BIRD SCREEN,
GREENHECK MODEL NO. WC OR EQUIVALENT.

(6) PROVIDE MANUFACTURER'S WALL MOUNT HOUSING W/ OSHA APPROVED MOTOR GUARD, INSTALLATION

(8) CHEMISTRY STORAGE AND PREP ROOM FAN SHALL OPERATE 24/7 CONTINUOUSLY.
(9) EF-Q SHALL BE ORIENTED SUCH THAT AIR IS SUPPLIED TO THE MAKE-UP AIR GRILLES ON FOODS

COLLAR, AND BDD
(7) SEE INSTALLATION DETAIL; SEE ALSO CONTROL SEQUENCE IN SPECIFICATIONS

INTERLOCKED WITH HOOD

ABBREVIATIONS:
BDD: BACK DRAFT DAMPER
DPST: DOUBLE POLE SINGLE THROW SWITCH BY E.C.
CFM: AIR FLOW (cu ft/min)
NC : NOISE CRITERIA (sones)
EMS: ENERGY MANAGMENT SYSTEM

GREENHECK NO. CSP-A1750 DIRECT DRIVE INLINE EXHAUST FAN

TCL = TOTAL COOLING LOAD (MBtuH)
SC = SENSIBLE COOLING (MBtuH)

HEAT= HEAT LOAD (MBtuH)

AUX= ELECTRIC HEAT STRIP (kW)

HP= MAXIMUM MOTOR HORSEPOWER

RLA = RATED LOAD AMPS FLA = FAN MOTOR FULL LOAD AMPS

MCA = MINIMUM CKT CAPACITY

n/a = NOT APPLICABLE STAGE= # OF HEAT STRIP STAGES

ROOFTOP DOAS EQUIPMENT SCHEDULE

																				1	
							AIRFLC)W/FAN	DATA			EQUIPMENT MODEL NO.	ELECTR	RICAL DA	TA		HEATING DAT	TA .			
SYS	ZONE	CFM	O.A.	ESP	TCL	SC	EAdb	EAwb	LAdb (COIL)	LAwb (COIL)	LAdb (REHEAT)	MODEL NUMBER	VOLT/PH	MCA	MOCP	HEATING INPUT	HEATING OUTPUT	FUEL	EER	NOTES	WEIGHT
RTU-3		1,600	1,050	0.5	98.5	57.6	88.1	73.2	54.8	54.5	80.6	TRANE OABD108A4	460V/3PH	20.7	30	100.0	80.0	NATURAL GAS	12.6	1-8,12,13	1,472 LBS
RTU-4		3,100	1,350	0.5	155.1	97.7	83.8	69.9	54.3	53.8	84.2	TRANE OADG012C3	460V/3PH	30.0	35	150.0	120.0	NATURAL GAS	13.7	1-8,10,12,13	3,102 LBS
RTU-5		2,650	1,375	0.5	153.7	91.7	85.4	71.2	53.3	52.8	85.3	TRANE OADG012C3	460V/3PH	29.4	35	150.0	120.0	NATURAL GAS	13.9	1-8,10,12,13	3,110 LBS
VSU-1		3,920	3,920	0.5	341.8	179.2	95.0	78.0	53.3	52.7	78.8	TRANE OAKD360E4	460V/3PH	63.3	80	300.0	240.0	NATURAL GAS	12.4	1-8,12,13	3,635 LB
VSU-2		4,430	4,430	0.5	394.8	204.3	95.0	78.0	52.9	52.0	85.1	TRANE OAND420E4	460V/3PH	65.4	80	350.0	280.0	NATURAL GAS	12.3	1-8,12,13	5,369 LB
VSU-3		1,435	1,435	0.5	128.0	66.9	95.0	78.0	52.6	52.0	89.1	TRANE OADG010A3	460V/3PH	24.9	30	150.0	120.0	NATURAL GAS	13.7	1-8,12,13	3,007 LB
VSU-4		1,535	1,535	0.5	131.2	69.0	95.0	78.0	54.0	53.4	89.1	TRANE OADG010A3	460V/3PH	24.9	30	150.0	120.0	NATURAL GAS	14.0	1-8,12,13	3,007 LB
VSU-5		2,185	2,185	0.5	192.5	100.5	95.0	78.0	53.0	52.4	88.6	TRANE OADG015A3	460V/3PH	34.8	45	200.0	160.0	NATURAL GAS	14.2	1-8,12,13	3,062 LBS
VSU-6		1,885	1,885	0.5	181.9	94.0	95.0	78.0	49.6	49.1	88.7	TRANE OADG015A3	460V/3PH	34.8	45	150.0	120.0	NATURAL GAS	13.5	1-8,12,13	3,059 LB
VSU-7		2,770	2,770	0.5	244.5	127.4	95.0	78.0	53.0	52.3	88.4	TRANE OADG020A3	460V/3PH	40.7	50	250.0	200.0	NATURAL GAS	13.8	1-8,12,13	3,287 LB
VSU-8		3,325	3,325	0.5	283.4	149.6	95.0	78.0	53.9	53.4	78.6	TRANE OAKD264E4	460V/3PH	46.3	60	250.0	200.0	NATURAL GAS	13.2	1-8,12,13	3,491 LB
VSU-12		3,000	3,000	0.5	237.0	127.2	95.0	78.0	53.8	53.8	87.9	TRANE OAND600E4	460V/3PH	40.7	50	250.0	200.0	NATURAL GAS	13.8	1-8,12,13	3,350 LB

88.8 TRANE OADGO12A3 460V/3PH 28.6 35

NOTES:

1) TOTAL COOLING LOAD, SENSIBLE COOLING LOAD, AND HEATING LOAD UNITS ARE MBtu COOLING LOADS INCLUDES VENTILATION, HEAT FAN, & PLENUM HEAT GAIN DURING NON-SIMULTANEOUS PEAK OPERATION w/o INCLUSION OF ZONE DIVERSITY.

2) SEE ALSO EQUIPMENT INSTALLATION DETAILS FOR ACCESSORIES, OPTIONS, ETC.
3) PROVIDE UNIT MFR'S CONDENSER COIL GUARD (METAL GRILLE W/PVC COATING).
4) HEATING LOAD UNITS ARE MBtuh. EXTERIOR DESIGN CONDITIONS: WINTER DRY BULB = 18°F, SUMMER DRY BULB = 95 °F, SUMMER WET BULB = 75 °F
5) CONTRACTOR RESPONSIBLE FOR LEFT OR RIGHT HAND MOTOR/BLOWER ASS'Y SELECTION

1,800 | 1,800 | 0.5 | 154.7 | 81.2 | 95.0 | 78.0 | 53.8 | 53.2

) PROVIDE UNITS WITH EQUAL STAGES OF HEATING AND COOLING. (EX: 15 TON = 7.5 TON x 2)
) PROVIDE UNIT WITH POWERED CONVENIENCE OUTLET.
) PROVIDE UNIT WITH MODULATING HOT GAS REHEAT.
) PROVIDE UNIT WITH DEMAND CONTROLLED VENTILATION AND MOTORIZED OUTSIDE AIR DAMPER.

10) PROVIDE MANUFACTURER'S ROOF CURB.
11) WEIGHT LISTED ABOVE DOES NOT INCLUDE ROOF CURB.
12) PROVIDE UNIT WITH MANUFACTURER'S CORROSION RESISTANCE COATING.
13) DX COOLING COIL LEAVING AIR CONDITIONS SHALL BE ACHIEVED AT MINIMUM AND MAXIMUM OUTSIDE AIR FLOW CONDITIONS AND AT ALL FOUR AHRI 920—2020 STANDARD PART LOAD CONDITIONS. UNIT SHALL BE TESTED TO AHRI 920—2020 AND PERFORMANCE DATA PROVIDED WITH UNIT SUBMITTALS.

TONS: SYS = SYSTEM

TCL = TOTAL COOLING LOAD (MBtuH)

SC = SENSIBLE COOLING (MBtuH)

HEAT= HEAT LOAD (MBtuH)

AUX= ELECTRIC HEAT STRIP (kW)

HP= MAXIMUM MOTOR HORSEPOWER

RLA = RATED LOAD AMPS

FLA = FAN MOTOR FULL LOAD AMPS

MCA = MINIMUM CKT CAPACITY

n/a = NOT APPLICABLE

STAGE= # OF HEAT STRIP STAGES

EADD = ENTERING AIR DRY BULB

EAWD = ENTERING AIR WET BULB

LADD (COIL) = COIL LEAVING AIR DRY BULB

LAWD (COIL) = COIL LEAVING AIR WET BULB

LADD (REHEAT) = REHEAT LEAVING AIR DRY BULB

NATURAL GAS | 14.4 | 1-8,10,12,13 | 3,058 LBS

120.0

	SPLIT SYSTEM HEAT PUMP EQUIPMENT SCHEDULE (ALT. BID)																					
	O.A. ELECTRICAL DATA																					
SYSTEM	ZONE	CFM	MIN MAX ESP TCL SC EATdb		OUTDOOR	INDOOR	OUTDOOR	МСА	МОСР	WEIGHT	INDOOR	МСА	МОСР	AUX	STAGE	EER	NOTES	WEIGHT				
AHU-1/HP-1	AUX GYM	6,000	250	2,500	0.5	180.0	126.0	_	TRANE TWA18044D	TRANE TWE18044B	460V/3PH	32.0	40	762 LBS	460V/3PH	51.0	60	29.92 KW	2	10.8	1-10	688 LB
AHU-2/HP-2	AUX GYM	6,000	250	2,500	0.5	180.0	126.0	_	TRANE TWA18044D	TRANE TWE18044B	460V/3PH	32.0	40	762 LBS	460V/3PH	51.0	60	29.92 KW	2	10.8	1-10	688 LB
AHU-3/HP-3	AUX GYM	1,200	200	_	0.5	36.0	25.2	_	TRANE 4TWA036A4000A	TRANE GAM5B0B36M31SB	460V/3PH	6.0	15	208 LBS	208V/1PH	48.0	50	7.2 KW	1	14 SEER	1-8	142 LB
AHU-4/HP-4	AUX GYM	4,000	450	_	0.5	120.0	84.0	_	TRANE TWA12044D	TRANE TWE12044B	460V/3PH	18.0	25	433 LBS	460V/3PH	44.0	45	24.92 KW	2	11.2	1-10	408 LB

EF-Q 1,600 1,158 0.250 115V / 10.3A

GREENHECK MODEL NO. WC OR EQUIVALENT.

(5) SEE LOUVER SCHEDULE.

NOTES:

1) TOTAL COOLING LOAD, SENSIBLE COOLING LOAD, AND HEATING LOAD UNITS ARE MBtuh.

COOLING LOADS INCLUDES VENTILATION, HEAT FAN, & PLENUM HEAT GAIN DURING

NON-SIMULTANEOUS PEAK OPERATION W/O INCLUSION OF ZONE DIVERSITY.

2) SEE ALSO EQUIPMENT INSTALLATION DETAILS FOR ACCESSORIES, OPTIONS, ETC.

3) PROVIDE UNIT MFR'S CONDENSER COIL GUARD (METAL GRILLE W/PVC COATING).
4) HEATING LOAD UNITS ARE MBtuh. EXTERIOR DESIGN CONDITIONS: WINTER DRY BULB = 18^F, SUMMER DRY BULB = 93 ^F, SUMMER WET BULB = 75 ^F
5) CONTRACTOR RESPONSIBLE FOR LEFT OR RIGHT HAND MOTOR/BLOWER ASS'Y SELECTION

6) PROVIDE UNIT WITH 7-DAY PROGRAMMABLE THERMOSTAT.
7) PROVIDE UNIT WITH BACNET CARD OR BACNET THERMOSTAT FOR CONNECTING TO BUILDING CONTROL SYSTEM..
8) PROVIDE UNIT WITH AUXILIARY EMERGENCY DRAIN PAN AND CONDENSATE FLOAT SWITCH MOUNTED TO DRAIN PAN. FLOAT SWITCH SHALL

SHUT DOWN UNIT FAN AND CONDENSER UPON ACTIVATION.

9) PROVIDE UNIT WITH DEMAND CONTROLLED VENTILATION AND MOTORIZED OUTSIDE AIR DAMPER. PROVIDE AND INSTALL CARBON DIOXIDE SENSOR IN ZONE (WHERE INDICATED ON DRAWINGS) AND CONNECT BACK TO BUILDING CONTROL SYSTEM.

ZONE (WHERE INDICATED ON DRAWINGS) AND CONNECT BACK TO BUILDING CONTROL SYSTEM.

10) PROVIDE UNIT WITH DUAL REFRIGERANT CIRCUITS AND VARIABLE SPEED AIR HANDLING UNIT.

11) PROVIDE UNIT WITH MANUFACTURER'S CORROSION RESISTANCE COATING.

SYSTEM AIR DATA			DATA				COOL	ING DA	ГА						HEAT	NG DATA	·				N	/IOTOR	DATA			EQUIPMENT DATA	ı.		
TAG	ZONE	CFM	OA	TCL	SC	EATdb	LATdb	ΔTwb	GPM	LWT CON	I PD	CFM	HEAT	EAT	LAT	LWT	GPM	CONN	PD	ESP	НР	MCA	МОСР	ELECT	DESCRIPTION	MFR./MODEL NO.	ROWS	NOTES	WEIGHT
AHU-100A	DINING ROOM 100	8000	2800	402	228.7	7 81.4	55.0	26.4	57.5	56.0 2-1/2	10	6000	382.4	46.3	105.0	160.1	38.5	2"	10	1.25	10	17.7	30	460/3ф	VERTICAL AHU	TRANE/UCCA-17	6/2	1-14	1,732 LBS
AHU-100B	DINING ROOM 100	8000	2800	402	228.7	7 81.4	55.0	26.4	57.5	56.0 2-1/2	10	6000	382.4	46.3	105.0	160.1	38.5	2"	10	1.25	10	17.7	30	460/3ф	VERTICAL AHU	TRANE/UCCA-17	6/2	1-14	1,732 LBS
AHU-164A	BAND ROOM 164	3000	700	114	77.8	78.9	55.0	23.9	16.5	55.8 1-1/2	10	2250	123.3	54.5	105.0	160.3	12.5	1-1/4"	10	1.25	5	28	50	208/3ф	HORIZONTAL AHU	TRANE/UCCA-08	6/2	1-14	762 LBS
AHU-164B	BAND ROOM 164	3000	700	114	77.8	78.9	55.0	23.9	16.5	55.8 1-1/2	10	2250	123.3	54.5	105.0	160.3	12.5	1-1/4"	10	1.25	5	28	50	208/3ф	HORIZONTAL AHU	TRANE/UCCA-08	6/2	1-14	762 LBS

NOTES:

1) TOTAL COOLING LOAD, SENSIBLE COOLING LOAD, AND HEATING LOAD UNITS ARE MBtuh.

COOLING LOADS INCLUDES VENTILATION, HEAT FAN, & PLENUM HEAT GAIN DURING

NON-SIMULTANEOUS PEAK OPERATION w/o INCLUSION OF ZONE DIVERSITY.

EXTERIOR DESIGN CONDITIONS: WINTER DRY BULB = 18°F; SUMMER DRY BULB = 93°F; MEAN

COINCIDENT WET BULB = 75°F

SHUT DOWN UNIT FAN AND CLOSE HYDRONIC VALVES UPON ACTIVATION.

14) CONTROLS CONTRACTOR SHALL PROVIDE FAN STATUS INPUTS.

2) REFERENCE SPECIFICATION SECTIONS 15850 FOR EQUIPMENT AND ACCESSORIES.
 3) M.C. SHALL PROVIDE MANUFACTURERS COMBINATION STARTER WITH INTEGRAL DISCONNECT; SEE ALSO EQUIPMENT INSTALLATION DETAILS FOR ACCESSORIES, OPTIONS, ETC.
 4) CHILLED WATER: EWT = 42.0, LWT = 56.0
 5) HOT WATER: EWT = 180.0, LWT = 160.0, ENTERING AIR TEMP. = 55 F (AVG.) (INSTALL IN REHEAT POSITION)

VSU-13

1,2,5,7

6) CONTRACTOR RESPONSIBLE FOR LEFT OR RIGHT HAND MOTOR/BLOWER ASS'Y SELECTION
7) PROVIDE MIXING BOX FOR THIS UNIT
8) M.C. SHALL PROVIDE SPARE BLOWER MOTORS FOR AIR HANDLING UNITS; QTY. (1)—5HP, (1)—10HP
9) CHILLED WATER VALVES PROVIDED AS MODULATING, HOT WATER VALVES PROVIDED AS MODULATING FOR RE—HEAT.
10) SEE FORM OF PROPOSAL FOR ALTERNATE BIDS.
11) PROVIDE UNIT WITH DEMAND CONTROLLED VENTILATION AND WALL MOUNTED CARBON DIOXIDE SENSOR. CO2 SENSOR SHALL BE INSTALLED ON WALL NEXT TO THERMOSTAT.
12) PROVIDE UNIT WITH MODULATING MOTORIZED DAMPER FOR OUTSIDE AIR.
13) PROVIDE UNIT WITH AUXILIARY EMERGENCY DRAIN PAN AND CONDENSATE FLOAT SWITCH MOUNTED TO DRAIN PAN. FLOAT SWITCH SHALL

TCL = TOTAL COOLING LOAD (MBtuH)

SC = SENSIBLE COOLING (MBtuH)

HEAT = HEAT LOAD (MBtuH)

GPM = GALLONS PER MINUTE

CONN = PIPE SIZE (in.) / SEE MANUF. FOR FINAL CONN SIZE

RLA = RATED LOAD AMPS

LRA = LOCKED ROTOR AMPS

FLA = FAN MOTOR FULL LOAD AMPS

CFM = CUBIC FOOT PER MINUTE

OA = OUTSIDE AIR (cfm)

MCA = MINIMUM CIRCUIT AMPACITY (AMPS)

MOCP = MAXIMUM OVERCURRENT PROTECTION (AMPS)

AIR DISTRIBUTION SCHEDULE

150.0

LATDD = LEAVING DRY BULB AIR TEMP (F)
LATWD = LEAVING WET BULB AIR TEMP (F)
EATDD = ENTERING DRY BULB AIR TEMP (F)
EATWD = ENTERING WET BULB AIR TEMP. (F
FC = FAN COIL UNIT
AHU = AIR HANDLER UNIT
ESP = EXTERNAL STATIC PRESSURE (IN WG)
LWT = ESTIMATED LEAVING WATER TEMP (F)
HP = AHU MFR STD MOTOR
ROWS = No. COIL ROWS C/HW
HORIZ.= HORIZONTAL UNIT POSITION
KW = POWER INPUT (WATTS X 1000)

	ELEC.	TRI	CL	JNI	T HEATER S	CHEDU	LE	
TAG(S)	SERVICE	HEAT	мвн	CFM	MFR / MODEL NO.	ELECT	NOTES	٧

 UH-1
 SPR 842
 3.3 kW
 11.2
 400
 MARKEL NO. G1G5103N
 277V/1PH/11.9A
 1-3
 25 LBS

 UH-2
 SPR 521
 3.3 kW
 11.2
 400
 MARKEL NO. G1G5103N
 277V/1PH/11.9A
 1-3
 25 LBS

 NOTES:

 (1) PROVIDE MFR'S DISCONNECT AND LOW VOLTAGE THERMOSTAT.

NOTES:

(1) PROVIDE MFR'S DISCONNECT AND LOW VOLTAGE THERMOSTAT.

(2) UL LISTED ELECTRIC HEATERS MEETING OR EXCEEDING SPECIFICATIONS MANUFACTURED BY STERLING SHALL BE CONSIDERED EQUAL

(3) M.C. SHALL PROVIDE MANUFACTURER'S WALL MOUNTED BRACKET WITH DUST SHIELD

DX CONDENSING/HEAT PUMP EQUIPMENT SCHEDULE

				AIRFLO	W/FAN [DATA		HEATIN	IG COIL	EQUIPMENT MO	ODEL NO.						ELECTR	RICAL DA	TA				
SYS	ZONE	CFM	O.A.	ESP	TCL	SC	EATdb	HEAT	GPM	OUTDOOR	INDOOR	OUTDOOR	MCA	МОСР	WEIGHT	INDOOR	MCA	МОСР	AUX	STAGE	EER	NOTES	WEIGHT
CU-2/AHU-2	15 TON	6000	1500	0.5	180.0	126.0	_	285.0	20.0	TRANE TTA18043D	TRANE TWE18043B	208V/3PH	65.0	80	705 LBS	208V/3PH	13.0	20	-	_	11.2		900 LBS
HP-2/AHU-2	7.5 TON	3000	750	0.5	90.0	63.0	_	_	_	TRANE TWA09044D	TRANE TWE09044B	460V/3PH	15.0	20	421 LBS	460V/3PH	42.0	45	24.92 KW	2	11.2		380 LBS
CU-1/AHU-1	5 TON	2000	_	0.5	60.0	42.0	_	_	_	TRANE 4TWA4060A4000A	TRANE GAM5B0C60	460V/3PH	9.0	15	274 LBS	208V/3PH	46.0	50	10.8 KW	1	15 SEER		170 LBS
CU-3/AHU-3	3/AHU-3 3.5 TON 1400 - 0.5 42.0 29.4				_	TRANE 4TWA4042A4000A	TRANE GAM5B0C42	460V/3PH	8.0	15	208 LBS	208V/3PH	42.0	45	10.8 KW	1	15 SEER		153 LBS				
NOTES.	_	_					-	_		_	•					_			ADDDD	MATIONIC: C	vc – cvetev		

NOTES:

1) TOTAL COOLING LOAD, SENSIBLE COOLING LOAD, AND HEATING LOAD UNITS ARE MBtuh.

COOLING LOADS INCLUDES VENTILATION, HEAT FAN, & PLENUM HEAT GAIN DURING

NON-SIMULTANEOUS PEAK OPERATION w/o INCLUSION OF ZONE DIVERSITY.

2) SEE ALSO EQUIPMENT INSTALLATION DETAILS FOR ACCESSORIES, OPTIONS, ETC.
3) PROVIDE UNIT MFR'S CONDENSER COIL GUARD (METAL GRILLE W/PVC COATING).
4) HEATING LOAD UNITS ARE MBtuh. EXTERIOR DESIGN CONDITIONS: WINTER DRY BULB = 18^F, SUMMER DRY BULB = 93 ^F, SUMMER WET BULB = 75 ^F
5) CONTRACTOR RESPONSIBLE FOR LEFT OR RIGHT HAND MOTOR/BLOWER ASS'Y SELECTION

6) PROVIDE UNIT WITH 7-DAY PROGRAMMABLE THERMOSTAT.
7) PROVIDE UNIT WITH BACNET CARD FOR CONNECTING TO BUILDING AUTOMATION SYSTEM.
8) PROVIDE UNIT WITH AUXILIARY EMERGENCY DRAIN PAN AND CONDENSATE FLOAT SWITCH MOUNTED TO DRAIN PAN. FLOAT SWITCH SH

8) PROVIDE UNIT WITH AUXILIARY EMERGENCY DRAIN PAN AND CONDENSATE FLOAT SWITCH MOUNTED TO DRAIN PAN. FLOAT SWITCH SHALL SHUT DOWN UNIT FAN AND CONDENSER UPON ACTIVATION.
 9) PROVIDE UNIT WITH DUAL REFRIGERANT CIRCUITS AND VARIABLE SPEED AIR HANDLING UNIT.

9) PROVIDE UNIT WITH DUAL REFRIGERANT CIRCUITS AND VARIABLE SPEED AIR HANDLING UNIT.

10) PROVIDE UNIT WITH MANUFACTURER'S CORROSION RESISTANCE COATING.

W 1 15 SEER 170 LBS W 1 15 SEER 153 LBS BREVIATIONS: SYS = SYSTEM TCL = TOTAL COOLING LOAD (MBtuH) SC = SENSIBLE COOLING (MBtuH) HEAT= HEAT LOAD (MBtuH) AUX= ELECTRIC HEAT STRIP (kW) HP= MAXIMUM MOTOR HORSEPOWER RLA = RATED LOAD AMPS FLA = FAN MOTOR FULL LOAD AMPS MCA = MINIMUM CKT CAPACITY n/a = NOT APPLICABLE STAGE= # OF HEAT STRIP STAGES

ROOFTOP GASPACK EQUIPMENT SCHEDULE

EQUIPMENT MODEL AIRFLOW/FAN DATA ELECTRICAL DATA HEATING DATA VOLT/PH MCA MOCP HEATING INPUT | HEATING OUTPUT FUEL EER NOTES CFM O.A. ESP MODEL NUMBER EXIST. GYM 14,000 3,900 0.5 384.7 286.8 TRANE YCH420C4 460V/3PH 100.7 NATURAL GAS 5,116 LBS EXIST. GYM | 14,000 | 3,900 | 0.5 | 384.7 | 286.8 | TRANE YCH420C4 RTU-2 460V/3PH 100.7 125 486.0 NATURAL GAS | 10.7

1) TOTAL COOLING LOAD, SENSIBLE COOLING LOAD, AND HEATING LOAD UNITS ARE MBtuh.

COOLING LOADS INCLUDES VENTILATION, HEAT FAN, & PLENUM HEAT GAIN DURING

NON-SIMULTANEOUS PEAK OPERATION w/o INCLUSION OF ZONE DIVERSITY.

2) SEE ALSO EQUIPMENT INSTALLATION DETAILS FOR ACCESSORIES, OPTIONS, ETC.

3) PROVIDE UNIT MFR'S CONDENSER COIL GUARD (METAL GRILLE w/PVC COATING).

4) HEATING LOAD UNITS ARE MBtuh. EXTERIOR DESIGN CONDITIONS: WINTER DRY BULB = 18°F, SUMMER DRY BULB = 95 °F, SUMMER WET BULB = 75 °F

4) HEATING LOAD UNITS ARE MBYLH. EXTERIOR DESIGN CONDITIONS: WINTER DRY BULB = 18°F, SUMMER DR
5) CONTRACTOR RESPONSIBLE FOR LEFT OR RIGHT HAND MOTOR/BLOWER ASS'Y SELECTION
6) PROVIDE UNIT WITH DEMAND CONTROLLED VENTILATION AND MOTORIZED OUTSIDE AIR DAMPER.
7) PROVIDE UNITS WITH EQUAL STAGES OF HEATING AND COOLING. (EX: 15 TON = 7.5 TON x 2)
8) PROVIDE UNIT WITH POWERED CONVENIENCE OUTLET.
9) PROVIDE UNIT WITH BACNET CARD FOR CONNECTING TO BUILDING CONTROL SYSTEM.
10) PROVIDE UNIT WITH MANUFACTURER'S CORROSION RESISTANCE COATING.

ATURAL GAS 10.7 - 5,116 LBS

ATIONS: SYS = SYSTEM

TCL = TOTAL COOLING LOAD (MBtuH)

SC = SENSIBLE COOLING (MBtuH)

HEAT= HEAT LOAD (MBtuH)

AUX= ELECTRIC HEAT STRIP (kW)

HP= MAXIMUM MOTOR HORSEPOWER

RLA = RATED LOAD AMPS

FLA = FAN MOTOR FULL LOAD AMPS

MCA = MINIMUM CKT CAPACITY

n/a = NOT APPLICABLE

STAGE= # OF HEAT STRIP STAGES

DUCT-FREE SPLIT SYSTEM EQUIPMENT SCHEDULE

 SYSTEM/TAG(S)
 SERVES
 SER
 CFM
 TCL
 OUTDOOR
 INDOOR
 OUTDOOR
 MCA
 MCA
 MCP
 WEIGHT
 NOTES

 DHP-1/DS-1
 IDF ROOM 522B
 23.1
 399
 12.0
 TRANE NTXSST12A112A
 TRANE NTXWST12A112A
 208V/1PH
 10.0
 15
 29 LBS INDOOR/97 LBS OUTDOOR
 1-5

 DHP-2/DS-2
 KITCHEN DRY STORAGE
 23.1
 399
 12.0
 TRANE NTXSST12A112A
 TRANE NTXWST12A112A
 208V/1PH
 10.0
 15
 29 LBS INDOOR/97 LBS OUTDOOR
 1-5

NOTES:

1) TOTAL COOLING LOAD AND SENSIBLE COOLING LOAD ARE MBtuh.

2) MC SHALL WIRE INDOOR UNIT FROM OUTDOOR UNIT.

3) PROVIDE REMOTE CONTROL THERMOSTAT & SET FOR 80^F.

4) OUTDOOR UNITS MOUNTED ON PLATFORM FLOOR ADJACENT TO IDF ROOM.

5) PROVIDE UNIT WITH BACNET CARD FOR CONNECTING TO AND CONTROL BY THE BUILDING ENERGY MANAGEMENT SYSTEM (SEE SEQ OF OP)

6) PROVIDE UNIT WITH MANUFACTURER'S CORROSION RESISTANCE COATING.

29 LBS INDOOR/97 LBS OUTDOOR 1-5

ABBREVIATIONS: SYS = SYSTEM
TCL = TOTAL COOLING LOAD (MBtuH)
SC = SENSIBLE COOLING (MBtuH)
RLA = RATED LOAD AMPS
FLA = FAN MOTOR FULL LOAD AMPS
MCA = MINIMUM CKT CAPACITY

MARK	FACE SIZE	NECK SIZE	MFR/MODEL	CFM/FPM	NC	REMARKS
Α	24"x24"	12"x12"/12"ø	PRICE/AMD	500/500	<30	LAY-IN CEILING DIFFUSER WITH 4-WAY DEFLECTION; ALUMINUM CONSTRUCTION
В	24"x24"	9"x9"/10"ø	PRICE/AMD	275/500	<25	LAY-IN CEILING DIFFUSER WITH 4-WAY DEFLECTION; ALUMINUM CONSTRUCTION
B2	24"x24"	9"x9"/10"ø	PRICE/AMD	275/500	<25	SURFACE MOUNTED CEILING DIFFUSER WITH 4-WAY DEFLECTION; ALUMINUM CONSTRUCTION
BG	24"x24"	9"x9"/10"ø	PRICE/AMD	275/500	<25	SURFACE MOUNTED CEILING DIFFUSER WITH 4-WAY DEFLECTION; ALUMINUM CONSTRUCTION. PROVIDE WITH INTEGRAL DAMPER.
С	24"x24"	6"x6"/8"ø	PRICE/AMD	125/500	<20	LAY-IN CEILING DIFFUSER WITH 4-WAY DEFLECTION; ALUMINUM CONSTRUCTION
D	18"×18"	15"x15"	PRICE/AMD	500/400	<20	DUCT MOUNTED DIFFUSER WITH 4-WAY DEFLECTION; ALUMINUM CONSTRUCTION
E	10"x8"	8"×6"/8"ø	PRICE/620DAL	175/700	<30	SIDEWALL REGISTER WITH DOUBLE DEFLECTION, INTEGRAL DAMPER, AND 3/4" BLADE SPACING; ALUMINUM CONSTRUCTION
F	16"x8"	14"x6"/10"ø	PRICE/620DAL	300/700	<30	SIDEWALL REGISTER WITH DOUBLE DEFLECTION, INTEGRAL DAMPER, AND 3/4" BLADE SPACING; ALUMINUM CONSTRUCTION
G	16"x8"	14"x6"/10"ø	PRICE/620DAL	300/700	<30	DUCT MOUNTED REGISTER WITH DOUBLE DEFLECTION, INTEGRAL DAMPER, AND 3/4" BLADE SPACING; ALUMINUM CONSTRUCTION
S	8"x18"	6"x15"	PRICE/AHCD1D	300/500	<20	DUCT MOUNTED DRUM LOUVER WITH OPPOSED BLADE DAMPER AND POLE OPERATOR; ALUMINUM CONSTRUCTION
Т	8"x27"	6"x24"	PRICE/AHCD1D	500/500	<25	DUCT MOUNTED DRUM LOUVER WITH OPPOSED BLADE DAMPER AND POLE OPERATOR; ALUMINUM CONSTRUCTION
R1	24"x24"	12"x12"	PRICE/80TB	550/650	<20	LAY-IN EGG CRATE FACE RETURN WITH BLADES @ 1/2" O.C. ALUMINUM CONSTRUCTION
R1G	24"x24"	12"x12"	PRICE/80DAL	550/650	<20	SURFACE MOUNTED EGG CRATE FACE RETURN WITH BLADES @ 1/2" O.C. ALUMINUM CONSTRUCTION. PROVIDE WITH INTEGRAL DAMPER.
R2	24"x24"	22"x22"	PRICE/80TB	2000/700	<20	LAY-IN EGG CRATE FACE RETURN WITH BLADES @ 1/2" O.C. ALUMINUM CONSTRUCTION
R2G	24"x24"	22"x22"	PRICE/80DAL	2000/700	<20	SURFACE MOUNTED EGG CRATE FACE RETURN WITH BLADES @ 1/2" O.C. ALUMINUM CONSTRUCTION. PROVIDE WITH INTEGRAL DAMPER.
R3	10"x8"	8"x6"	PRICE/80DAL	200/800	<20	DUCT MOUNTED EGG CRATE FACE REGISTER WITH BLADES @ 1/2" O.C. ALUMINUM CONSTRUCTION. PROVIDE WITH INTEGRAL DAMPER.
R4	16"×10"	14"x8"	PRICE/80DAL	450/700	<20	DUCT MOUNTED EGG CRATE FACE REGISTER WITH BLADES @ 1/2" O.C. ALUMINUM CONSTRUCTION. PROVIDE WITH INTEGRAL DAMPER.
R5	16"x12"	14"x10"	PRICE/80DAL	600/800	<20	DUCT MOUNTED EGG CRATE FACE REGISTER WITH BLADES © 1/2" O.C. ALUMINUM CONSTRUCTION. PROVIDE WITH INTEGRAL DAMPER.
R6	20"x16"	18"x14"	PRICE/80DAL	1000/700	<20	DUCT MOUNTED EGG CRATE FACE REGISTER WITH BLADES © 1/2" O.C. ALUMINUM CONSTRUCTION. PROVIDE WITH INTEGRAL DAMPER.
-		 		†	 	

NOTES:

(1) ALL FINISHES TO BE WHITE EXCEPT WHERE NOTED.

(2) KRUEGER, METAL*AIRE, TUTTLE & BAILEY, TITUS & CARNES ARE CONSIDERED EQUIVALENTS.

(3) PROVIDE SQUARE TO ROUND TRANSITIONS WHERE REQUIRED.

(4) PROVIDE WHITE FINISH FASTENERS AS REQUIRED.

PRICE/80DAL

1800/600

5) PROVIDE MANUFACTURER'S LEVER OPERATED GRILLE MOUNTED DAMPER FOR ALL SUPPLY GRILLES/DIFFUSERS
THAT ARE INDICATED TO BE PROVIDED WITH INTEGRAL DAMPER.
6) PROVIDE 2" FOIL FACED INSULATION OVER ALL SUPPLY REGISTER BACKS.
7) M.C. SHALL PROVIDE RADIATION DAMPERS WHERE REQUIRED.
8) VALUES LISTED ARE MAXIMUM VALUES.

CONTRACTOR TO PROVIDE AND INSTALL RADIATION DAMPER AND THERMAL BLANKET. PROVIDE RETURN GRILLES WITH

ABBREVIATIONS:
BDD: BACK DRAFT DAMPER
OBD: OPPOSED BLADE DAMPER
FPM: VELOCITY (ft/min)
NC: NOISE CRITERIA

<20 DUCT MOUNTED EGG CRATE FACE REGISTER WITH BLADES @ 1/2" O.C. ALUMINUM CONSTRUCTION. PROVIDE WITH INTEGRAL DAMPER.</p>

	PUMP SCHEDULE														
TAG	TYPE	SERVICE	GPM	HEAD	EFF	HP	RPM	ELECT	FLA	MOCP	CONTROL	MFR/MODEL	NOTES		
CWP-1	BASE MOUNTED END SUCTION	BUILDING LOOP	993	65	81.5	25	1800	460V/3PH	34	70	VARIABLE SPEED	B&G SERIES 1510 5EB	1-3		
CWP-2	BASE MOUNTED END SUCTION	BUILDING LOOP	993	65	81.5	25	1800	460V/3PH	34	70	VARIABLE SPEED	B&G SERIES 1510 5EB	1-3		
HWP-SC	BASE MOUNTED END SUCTION	SCIENCE BUILDING	60	60	55.1	2	1800	460V/3PH	3.4	15	VARIABLE SPEED	B&G SERIES 1510 1.25BD	1-3		
HWP-PR	BASE MOUNTED END SUCTION	EXISTING BUILDING	490	115	80.4	20	3600	208V/3PH	62.1	100	VARIABLE SPEED	B&G SERIES 1510 3AD	1-3		
HWP-VO	BASE MOUNTED END SUCTION	VOCATIONAL BUILDING	135	60	72.6	5	1800	208V/3PH	17.5	35	VARIABLE SPEED	B&G SERIES 1510 2BD	1-3		
HWP-CA	BASE MOUNTED END SUCTION	800/900 CLASS ADDITION	121	100	65.6	7.5	3600	208V/3PH	25.3	50	VARIABLE SPEED	B&G SERIES 1510 2AD	1-3		
CP-1	IN-LINE	CHILLER #1	410	30	80.5	5	1800	460V/3PH	7.6	15	CONSTANT SPEED	B&G SERIES e80 5x5x9.5B	1-3		
CP-2	IN-LINE	CHILLER #2	431	30	80.7	5	1800	460V/3PH	7.6	15	CONSTANT SPEED	B&G SERIES e80 5x5x9.5B	1-3		

5 1800 460V/3PH

NOTES:
(1) REFERENCE SPECIFICATION SECTION 15750.
(2) IMPELLER SIZING RESPONSIBILITY OF PUMP MANUFACTURER

REVIATIONS:
D= FRICTION LOSS (ft)
= MIN. PUMP EFFICIENCY (%)
I = FLOW RATE
I = PUMP MOTOR FULL LOAD AMPS

7.6

15 CONSTANT SPEED

B&G SERIES e80 4x4x11B

	LOUVER SCHEDULE														
MARK	SERVICE	SIZE	FREE	CFM	FPM	ELECT	CONTROL	COLOR	MODEL NO./DESCRIPTION	NOTES					
LV-A	EXISTING GYM	60×60	13.99	7,000	500	N/A	N/A	TO BE DETERMINED	RUSKIN ELF375DXH	1-5					
LV-B	NEW BAND BUILDING	24×24	1.92	700	365	N/A	N/A	TO BE DETERMINED	RUSKIN ELF375DXH	1-5					
LV-C	NEW SCIENCE BUILDING	48×48	8.58	3,600	420	N/A	N/A	TO BE DETERMINED	RUSKIN ELF375DXH	1-5					
LV-D	FOODS LAB 404/408	48x24	4.05	1,600	395	N/A	N/A	TO BE DETERMINED	RUSKIN ELF375DXH	1-5					
LV-E	NEW GYM	48X30	5.0	2500	500	N/A	N/A	TO BE DETERMINED	RUSKIN 3LF375DXH	1-5					

NOTES:
(1) LOUVERS AND DAMPERS MEETING OR EXCEEDING SPECIFIED DATA, MANUFACTURED BY VENT PRODUCTS, NCA OR CESCO
(2) PROVIDE EXTENDED SILL, CLIP ANGLES, & INSECT SCREEN.

9) PROVIDE INSECT SCREEN FOR TYPE "XS".

OPTIONAL STEEL FRAME.

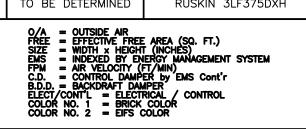
NCA OR CESCO

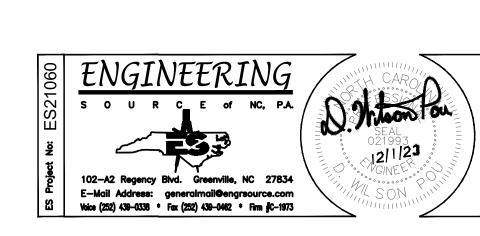
(2) PROVIDE EXTENDED SILL, CLIP ANGLES, & INSECT SCREEN.

(3) SEE DETAILS

(4) PROVIDE FACTORY FINISH AS SPECIFIED — COLOR SELECTED BY ARCHITECT.

(5) PROVIDE WITH MANUFACTURERS B.D.D.





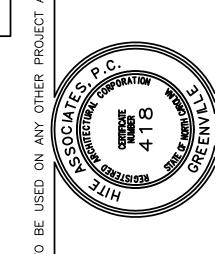
Project No. 22112

Date: 03 Oct 2023

Drawing no.

5 12/01/23 4 11/27/23 3 11/21/23 2 11/14/23

HITCH SOURCE of NC, P.A. UPON REQUEST. DO NOT ARCHITECTURE / PLANNING / TECHNOL



New Additions & Renovations to

eSt Carteret High School

4700 Country Club Road, Morehead City NC 28577