

EXISTING PACKAGED ROOFTOP AIR HANDLING UNIT WITH HOT WATER HEAT																												
TAG	SUPPLY FAN DATA				EXHAUST FAN		COOLING DATA					CONDENSER DATA					HOT WATER COIL AT 12.870CFM					ELECTRICAL				REMARKS / ACCESSORIES	BASED ON MFRMODEL	
	CFM	BHP	ESP	MIN OA CFM	CFM	POWER BHP	EDB DEG F	EWB DEG F	LDB DEG F	NOM TONS	TOTAL MBH	EER	AMB DEG F	IEER	COMP QTY	FAN QTY	FAN HP	GPM	OUTPUT MBH	EAT DEG F	LAT DEG F	V	PH	HZ	MCA			MOP
HVAC-E2	18700	4.86	1.5	4800	17420	14.2	78.2	64.9	58.2	44.3	531	NA	95	NA	4	6	1	30	165.5	43	55	460	3	60	192.2	223.7	SEE NOTES	TRANE-SLHFC554C77E8AD6

AIR COOLED CHILLER SCHEDULE																																				
MARK	LOCATION	AREA AND/OR BLDG SERVED	TYPE	CAPACITY		# OF COMP	MAX KW/TON	MIN COP	MAX IPLV (kW/TON)	EVAPORATOR (40% PROPYLENE GLYCOL AND WATER)					CONDENSER		SINGLE POINT POWER				COMPRESSOR MOTOR				CONDENSER FAN MOTORS		MULTISTACK CHILLER									
				TONS	[kW]					FLOW GPM	EWT [°F]	LWT [°F]	MAX WPD [FT]	FOULING FACTOR	AMBIENT OA TEMP [°F]	[°C]	MCA	MOP	PHASE	VOLT	HERTZ	# COMP	RLA	[kW]	PHASE	VOLT		# FANS	NOMINAL POWER HP	[W]	PHASE	VOLT				
CH-4	Grade	ACU 1ST FLR	SCROLL	37.2	[130]	4	1.18	3	0.936	85	[5]	55	[13]	42	[6]	63.1	[190]	0.0001	95	[35]	103	125	3	460	60	4	15.5	[12]	3	460	4	2	[1800]	3	460	(2)ASP020X22H2AL1AA5N-410A (2)FCP2HBA5

AIR HANDLING UNIT SCHEDULE																						
MARK	LOCATION	AREA AND/OR BLDG SERVED	TYPE	AIR FLOW	AIR FLOW			SUPPLY FAN MARK	RETURN OR RELIEF FAN MARK	EXHAUST FAN MARK	PREFILTER	AFTER FILTER	FINAL FILTER	HEAT RECOVERY MARK	PREHEAT COIL MARK	COOLING COIL MARK	REHEAT COIL	HUMIDIFIER MARK	REMARKS			
					CFM	[L/s]	MIN OA CFM													RETURN CFM	[L/s]	
HVAC-4	GRADE	ACU 1ST FLR	MODULAR	VAV	15000	[7100]	3600	[1700]	12500	[5900]	SF-4	RF-4	N/A	2" MERV 8	NA	12" MERV 15 CARTRIDGE	N/A	HW-4	CC-4	VAV BOX	H-4	---

CHILLED AND HOT WATER COIL SCHEDULE																										
MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	AIR FLOW		MAX FACE VELOCITY		APD		EAT		LAT		TOTAL CAPACITY MBH	SENSIBLE CAPACITY		CHILLED WATER				REMARKS					
				CFM	[L/s]	FPM	[m/s]	IN WG [Pa]	Wb [°F]	[°C]	Wb [°F]	[°C]	Wb [°F]		[°C]	MBH	[kW]	FLOW GPM	[L/s]	EWT [°F]		[°C]	LWT [°F]	[°C]	WPD [FT]	[M]
CC-4	HVAC-4	ACU 1ST FLR	HVAC-4	15000	[7100]	502	[3]	24	[140]	60.9	51.8	[11]	51.3	[11]	401.8	373.5	[110]	75	[5]	43	[6]	55	[13]	20	[6]	CHILLED WATER CONTAINS 40% PROPYLENE GLYCOL
HW-4	HVAC-4	ACU 1ST FLR	HVAC-4	15000	[7100]	523	[3]	0.08	[20]	55	[13]	NA	79	[26]	NA	392.5	[120]	26	[2]	180	[82]	150	[66]	1.5	[1]	

STEAM HUMIDIFIER SCHEDULE																					
MARK	LOCATION	SYSTEM AND/OR SERVICE	HUMIDIFIER TYPE	AIR FLOW		# OF MANIFOLDS	EAT		LAT		SOURCE	STEAM FLOW		CONTROL TYPE	NAT GAS		MANUFACTURER AND MODEL	REMARKS			
				CFM	[L/s]		Wb [°F]	[°C]	Wb [°F]	[°C]		LB/HR	[kg/HR]		INPUT MBH						
HUM-3	ROOF	HVAC-3	GAS-FIRED STEAM / UNIT MOUNTED DISPERSION TUBE	12000	[5700]	PANEL	54.7	[13]	43.5	[6]	27.5	[-3]	35	[2]	TAP WATER	75	[34]	VAPOR/LOG	100	DRI-STEEM-GTS-100	HEATED ROOFTOP ENCLOSURE WITH CURB. DISPERSION PANEL IN ARI.

FAN SCHEDULE																										
MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	AIR FLOW		TSP		FAN					MOTOR ELECTRICAL					CONTROL SEQUENCE	REMARKS							
				CFM	[L/s]	IN	[Pa]	TYPE	WHEEL	CLASS	ARRANGEMENT, ROTATION, AND DISCHARGE	DIAMETER IN	[mm]	MIN % EFF	DRIVE	FAN MAX RPM	NOMINAL POWER BHP			HP	[kW]	PHASE	VOLT	RPM	SPEED CONTROL	
EF-1																										NOT USED
EF-2	ROOF	PRACTICE 1ST AND 2ND FLR	GENERAL EXHAUST	2800	[1300]	0.8	[200]	CENTRIFUGAL	BW	I	ROOF - DOWN DISCHARGE	18.0	[450]	55%	BELT	989	0.71	1.0	[1]	1	208	1725	CONSTANT	CONSTANT VOLUME	BASED ON GREENHECK GB-180, NOTE 2	
EF-3	ROOF	ACU 1ST FLR	EXHAUST	2700	[1300]	1.1	[280]	CENTRIFUGAL	BW	I	ROOF DOWN - DISCHARGE	18.0	[450]	59%	BELT	1072	0.9	1.0	[1]	1	208	1725	CONSTANT	CONSTANT VOLUME	BASED ON GREENHECK GB-180, NOTE 3	
EF-4	ROOF	MED GAS STORAGE RMS	EXHAUST	300	[140]	0.7	[180]	CENTRIFUGAL	BW	I	ROOF DOWN - DISCHARGE	12.0	[300]	39%	BELT	1439	0.12	0.25	[1]	1	120	1725	CONSTANT	CONSTANT VOLUME	BASED ON GREENHECK GB-101HP, NOTE 4	

NOTE 1: NOT USED
 NOTE 2: PROVIDE WITH NEMA 1 TOGGLE SWITCH JUNCTION BOX MOUNTED AND WIRED PREMIUM EFFICIENT MOTOR (ODP), 16" ROOF CURB, 20.5" ROOF OPENING, 208V DAMPER, 61 DBA, 8.8 FLA AMPS, 110LBS.
 NOTE 3: PROVIDE WITH NEMA 1 TOGGLE SWITCH JUNCTION BOX MOUNTED AND WIRED PREMIUM EFFICIENT MOTOR (ODP), 12" ROOF CURB, 20.5" ROOF OPENING, 208V DAMPER, 64 DBA, 8.8 FLA AMPS, 120LBS.
 NOTE 4: (PRELIMINARY SIZING) PROVIDE WITH NEMA 1 TOGGLE SWITCH JUNCTION BOX MOUNTED AND WIRED PREMIUM EFFICIENT MOTOR (ODP), 16" ROOF CURB, 14.5" ROOF OPENING, 120V DAMPER, 51 DBA, 5.8 FLA AMPS, 70LBS.
 ALL SELECTIONS ARE BASED ON AN ALTITUDE OF 0 FT.

DIFFUSER AND GRILLE SCHEDULE														
TAG	FUNCTION	TYPE	MOUNTING	CFM RANGE	NECK SIZE	DUCT CONNECTION	MAX NC	STYLE					REMARKS	BASED ON MFRMODEL
								FACE TYPE	FACE BAR	DAMPER	MTL	FINISH		
S-1	SUPPLY	CEILING DIFFUSER	LAY-IN	0-125	6x6	6" DIA	25	SQUARE	LOUVERED	N	AL	WHITE	1.2,3,4,5	TITUS TDV-AA
S-2	SUPPLY	CEILING DIFFUSER	LAY-IN	128-225	9x9	8" DIA	25	SQUARE	LOUVERED	N	AL	WHITE	1.2,3,4,5	TITUS TDV-AA
S-3	SUPPLY	CEILING DIFFUSER	LAY-IN	226-350	12x12	10" DIA	25	SQUARE	LOUVERED	N	AL	WHITE	1.2,3,4,5	TITUS TDV-AA
S-4	SUPPLY	CEILING DIFFUSER	LAY-IN	351-475	15x15	12" DIA	25	SQUARE	LOUVERED	N	AL	WHITE	1.2,3,4,5	TITUS TDV-AA
S-5	SUPPLY	CEILING DIFFUSER	LAY-IN	476-875	18x18	14" DIA	25	SQUARE	LOUVERED	N	AL	WHITE	1.2,3,4,5	TITUS TDV-AA
LS-1	SUPPLY	LINEAR SLOT	SURFACE	221	6"-6"	30x6	20	RECTANGLE	15deg FIXED	Y	AL	EXT AL	1.2,4,5,6	PRICE HORD-CT
LS-2	SUPPLY	LINEAR SLOT	SURFACE	374	11"-0"	NONE	20	RECTANGLE	15deg FIXED	Y	AL	EXTRUD	1.2,4,5,6	PRICE HORD-CT
LD-1	SUPPLY	LAMINAR DIFFUSER	SURFACE	255	24x48	8"	20	RECTANGLE	PERFORATED	Y	AL	EXTRUD	1.2,4,5,7	PRICE-LFD3
LD-2	SUPPLY	LAMINAR DIFFUSER	SURFACE	100	24x24	8"	20	SQUARE	PERFORATED	Y	AL	EXTRUD	1.2,4,5,7	PRICE-LFD3
R-1	RETURN	CEILING GRILLE	SURFACE	0-100	8x8	8x8	25	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
R-2	RETURN	CEILING GRILLE	SURFACE	101-300	10x10	10x10	25	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
R-3	RETURN	CEILING GRILLE	SURFACE	301-450	12x12	12x12	25	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
R-4	RETURN	CEILING GRILLE	SURFACE	451-750	18x12	18x12	25	RECTANGLE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
R-5	RETURN	CEILING GRILLE	LAY-IN	751-900	18x16	18x16	25	RECTANGLE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
R-6	RETURN	CEILING GRILLE	LAY-IN	901-1250	20x20	20x20	25	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
R-7	RETURN	WALL GRILLE	SURFACE	510	12x12	12x12	25	SQUARE	45deg FIXED	N	SS	MILL	1.2,4,5,8	PRICE 730H
R-8	RETURN	WALL GRILLE	SURFACE	723	16x16	16x16	25	SQUARE	45deg FIXED	N	SS	MILL	1.2,4,5,8	PRICE 730H
E-1	EXHAUST	CEILING GRILLE	SURFACE	0-100	8x8	8x8	35	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
E-2	EXHAUST	CEILING GRILLE	SURFACE	101-300	10x10	10x10	25	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
E-3	EXHAUST	CEILING GRILLE	SURFACE	301-450	12x12	12x12	25	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
E-4	EXHAUST	CEILING GRILLE	SURFACE	451-750	18x12	18x12	25	RECTANGLE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
E-5	EXHAUST	CEILING GRILLE	LAY-IN	751-900	18x16	18x16	25	RECTANGLE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
E-6	EXHAUST	CEILING GRILLE	LAY-IN	901-1250	20x20	20x20	25	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
E-7	EXHAUST	SIDEWALL	SURFACE	0-100	12x6	12x6	25	RECTANGLE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
T-1	TRANSFER	CEILING GRILLE	SURFACE	0-100	8x8	8x8	25	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
T-2	TRANSFER	CEILING GRILLE	SURFACE	101-300	10x10	10x10	25	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
T-3	TRANSFER	CEILING GRILLE	SURFACE	301-450	12x12	12x12	25	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
T-4	TRANSFER	CEILING GRILLE	SURFACE	451-750	18x12	18x12	25	RECTANGLE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL
T-5	TRANSFER	SIDEWALL GRILLE	SURFACE	301-450	12x12	12x12	25	SQUARE	35deg FIXED	N	AL	WHITE	1.2,4,5	TITUS 350-FL

NOTES:
 1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL REGISTERS, GRILLES & DIFFUSERS
 2. REFER TO FLOOR PLAN DRAWINGS FOR CFMS
 3. SUPPLY DIFFUSERS ARE 4-WAY AIR BLOW PATTERN UNLESS SHOWN OTHERWISE ON PLAN DRAWINGS. USE SURFACE MOUNT WHERE NEEDED.
 4. COORDINATE COLOR AND FINISH WITH ARCHITECT
 5. COORDINATE FINAL MOUNTING TYPE (SURFACE, LAY-IN) WITH ARCHITECTURAL REFLECTED CEILING PLAN.
 6. CONTINUOUS PLENUM AIR CURTAIN, 1/4 GAUGE ALUMINUM WITH PLENUM CORNER ELBOWS, ROOM SIDE SS OBD, EXTRUDE ALUMINUM FACE WITH 2 SLOTS, 15" DISCHARGE SUPPLY PATTERN AWAY FROM SURGICAL ZONE.
 7. LAMINAR FLOW DIFFUSER NON-ASPIRATING, UNIDIRECTIONAL, ALUMINUM CONSTRUCTION, DUAL CHAMBER WITH EQUALIZATION Baffle AND PERFORATED BASKET. REMOVABLE FACE. AIR ADMITTANCE CONE VALVE ADJUSTABLE BY TURNING SCREW FROM THE ROOM SIDE WITHOUT REMOVING DIFFUSER FACE. B12 WHITE POWDER COAT FINISH
 8. STAINLESS STEEL RETURN GRILLE, 45° DEFLECTION FIXED LOUVER WITH BLADE SPACED 3/4" ON CENTER, BLADES SHALL RUN PARALLEL TO THE LONG DIMENSION. THE GRILLE SHALL BE ATTACHED TO THE MOUNTING FRAME BY STAINLESS STEEL 90° QUICK RELEASE FASTENERS. THE GRILLE BORDER SHALL HAVE A #4 FINISH WITH THE BLADES HAVING A MILL FINISH.

RADIANT CEILING PANEL SCHEDULE (HYDRONIC)															
MARK	ROOM LOCATION	MANUF. MODEL	PANEL SIZE		HEATING CAPACITY		HEATING		HOT WATER FLOWRATE		WPD	REMARKS			
			IN	[mm]	BTUH	[W]	EWT [°F]	[°C]	LWT [°F]	[°C]			GPM	[L/m]	FT
RP-1	PRE-OP 108.4	STERLING	24x48	[610 X 1219]	1600	[470]	[180]	[82]	[174]	[79]	0.5	[2]	0.3	[11]	6-PASS, LAY-IN
RP-2	PRE-OP 108.3	STERLING	24x48	[610 X 1219]	1600	[470]	[180]	[82]	[174]	[79]	0.5	[2]	0.3	[11]	6-PASS, LAY-IN
RP-3	PRE-OP 108.2	STERLING	24x48	[610 X 1219]	1600	[470]	[180]	[82]	[174]	[79]	0.5	[2]	0.3	[11]	6-PASS, LAY-IN
RP-4	PRE-OP 108.1	STERLING	24x48	[610 X 1219]	1600	[470]	[180]	[82]	[174]	[79]	0.5	[2]	0.3	[11]	6-PASS, LAY-IN
RP-5	PRE-OP 110.6	STERLING	24x48	[610 X 1219]	1600	[470]	[180]	[82]	[174]	[79]	0.5	[2]	0.3	[11]	6-PASS, LAY-IN
RP-6	PRE-OP 110.5	STERLING	24x48	[610 X 1219]	1600	[470]	[180]	[82]	[174]	[79]	0.5	[2]	0.3	[11]	6-PASS, LAY-IN
RP-7	PRE-OP 110.4	STERLING	24x48	[610 X 1219]	1600	[470]	[180]	[82]	[174]	[79]	0.5	[2]	0.3	[11]	6-PASS, LAY-IN
RP-8	PRE-OP 110.4	STERLING	24x48	[610 X 1219]	1600	[470]	[180]	[82]	[174]	[79]	0.5	[2]	0.3	[11]	6-PASS, LAY-IN
RP-9	PRE-OP 110.3	STERLING	24x48	[610 X 1219]	1600	[470]	[180]	[82]	[174]	[79]	0.5	[2]	0.3	[11]	6-PASS, LAY-IN
RP-10	PRE-OP 110.2	STERLING	24x48	[610 X 1219]	1600	[470]	[180]	[82]	[174]	[79]	0.5	[2]	0.3	[11]	6-PASS, LAY-IN