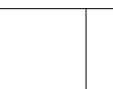



three inches = one foot
one and one half inch = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one eighth inch = one foot

HEAT RECOVERY UNIT

	BASIS OF DESIGN MANUFACTURER & MODEL NO.	SERVICE	LOCATION	AIRFLOW CFM	MIN. OA CFM	MAX. HEIGHT (IN)	MAX. WIDTH (IN)	MAX. TOTAL LENGTH (IN)	MAX. OPER. WT. (LBS)	SUPPLY FAN CHARACTERISTICS								EXHAUST FAN CHARACTERISTICS								FILTERS									
										WHEEL TYPE	SIZE	ESP (IN WG)	TSP (IN WG)	RPM	MOTOR DATA			VFD (Y/N)	WHEEL TYPE	SIZE	ESP (IN WG)	TSP (IN WG)	RPM	MOTOR DATA			VFD (Y/N)	OUTSIDE AIR PRE-FILTER				EXHAUST AIR PRE-FILTER			
															BHP	HP	V/PH/Hz							BHP	HP	V/PH/Hz		THICK	EFF.	CLEAN APD (IN WG)	DIRTY APD (IN WG)	THICK	EFF.	CLEAN APD (IN WG)	DIRTY APD (IN WG)
1	JCI SOLUTION 60X84	SPS	ROOF	11,000	11,000	126	91	195	10,400	AF	20-20	4.0	6.00	2168	14.66	20	460/3/60	Y	AF	20-20	2.0	3.58	1811	9.0	15	460/3/60	Y	2"	8	0.13	-	2"	8	0.13	-

HEAT RECOVERY UNIT (CONT.)

	AIR-TO-AIR PLATE HEAT EXCHANGER																				ELECTRICAL		NOTES					
	AIRFLOW	LENGTH	SUPPLY SP	EXHAUST SP	SUMMER DATA								WINTER DATA															
					SENSIBLE EFFECTIVENESS	TOTAL CAPACITY	EXHAUST AIR EAT (°F)		EXHAUST AIR LAT (°F)		OUTSIDE AIR EAT (°F)		OUTSIDE AIR LAT (°F)		SENSIBLE EFFECTIVENESS	TOTAL CAPACITY	EXHAUST AIR EAT (°F)		EXHAUST AIR LAT (°F)		OUTSIDE AIR EAT (°F)			OUTSIDE AIR LAT (°F)				
							DB	WB	DB	WB	DB	WB	DB	WB			DB	WB	DB	WB	DB	WB		DB	WB			
	CFM	IN	IN WG	IN WG	%	TONS	DB	WB	DB	WB	DB	WB	DB	WB	%	MBH	DB	WB	DB	WB	DB	WB	DB	WB	DB	WB	EMER. POWER (Y/N)	V/PH/Hz
1	11,000	60	1.23	1.23	54.0	6.7	74.0	61.6	80.7	63.9	86.4	75.3	79.7	73.5	57.3	560.9	72.0	54.2	30.8	30.8	-10.0	-11.0	37.0	25.2	N	460/3/60		
NOTES: 1. SELECT UNIT AT 738 FT ABOVE SEA LEVEL. 2. REFER TO DETAIL SHEET H501 FOR AHU AND HRU CONFIGURATION. 3. PROVIDE FACTORY FABRICATED RAIL. RAIL SHALL BE 12" TALL AND MOUNTED ON EXISTING STEEL FRAME. 4. PROVIDE WITH DOUBLE WALL CONSTRUCTION THROUGHOUT WITH SOLID INNER LINER. 5. STANDARD COLOR UNIT. 6. PROVIDE SINGLE POINT ELECTRICAL CONNECTION. 7. PROVIDE LIGHTS/RECEPTACLES PREWIRED PER SPECIFICATIONS AND DETAIL SHEET. FACTORY WIRE BOTH TO SEPARATE 120V DISCONNECT. 8. PROVIDE WITH OUTSIDE AIR BYPASS FOR ECONOMIZER OPERATION.																												

INDOOR AIR HANDLING UNIT

AHU	GENERAL										PRE-HEAT COIL (40% PROPYLENE GLYCOL)										COOLING COIL (40% PROPYLENE GLYCOL)										FILTERS					
	BASIS OF DESIGN MANUFACTURER & MODEL NO.	SERVICE	LOCATION	AIRFLOW CFM	MIN. OA CFM	MAX. HEIGHT (IN)	MAX. WIDTH (IN)	MAX. TOTAL LENGTH (IN)	MAX OPER. WT. (LBS)	TOTAL MBH	MAX FACE VEL (FPM)	AIR SIDE				WATER SIDE						CAP. TOTAL (MBH)	CAP. SENSIBLE (MBH)	MAX FACE VEL. (FPM)	AIR SIDE				WATER SIDE				FINAL FILTER			
												EAT (°F)	LAT (°F)	MAX. AIR PD (IN. WG.)	GPM	EWT (°F)	LWT (°F)	MAX. PD (FT. WG.)	ROWS/ FPI	EAT (°F)	EAT (°F)				LAT (°F)	LAT (°F)	MAX. AIR PD (IN. WG.)	GPM	EWT (°F)	LWT (°F)	MAX. PD (FT. WG.)	ROWS/ FPI	THICK	EFF.	CLEAN APD (IN WG)	DIRTY APD (IN WG)
1	JCI SOLUTION 60x87	SPS	MECH 1S292	11,000	11,000	69	87	120	6,230	1,384.1	373	-10.0	91.7	0.19	100.0	180.0	150.3	3.1	2/10	644.5	226.4	373	71.1	71.1	52.5	52.5	1.01	147.0	44.0	53.5	21.1	10/10	2" & 12"	7 14	0.17 0.34	-

INDOOR AIR HANDLING UNIT (CONT.)

AHU	HEAT PIPE WRAP AROUND COIL (R410a)																							NOTES			
	REFRIG. TYPE	PRE-COOL COIL												REHEAT COIL													
		MAX PD (IN WG)	MAX FACE VELOCITY (FPM)	ROWS	FINS PER INCH	EAT (°F)			LAT (°F)			SENSIBLE EFFECTIVENESS	ENERGY TRANSFERRED	MAX PD (IN WG)	MAX FACE VELOCITY (FPM)	ROWS	FINS PER INCH	EAT (°F)			LAT (°F)				SENSIBLE EFFECTIVENESS	ENERGY TRANSFERRED	
						DB	WB	RH %	DB	WB	RH %							(%)	(MBH)	DB	WB	RH %	(%)				(BTUH)
1	410A	0.14	372.3	2	12	79.7	73.2	75.0	71.0	71.0	100	32.33	107.2	0.13	372.3	2	12	52.73	52.73	100	61.6	56.3	72.6	32.95	107.2		
NOTES: 1. SELECT UNIT AT 738 FT ABOVE SEA LEVEL. 2. REFER TO DETAIL SHEET H501 FOR AHU CONFIGURATION. 3. PROVIDE WITH DOUBLE WALL CONSTRUCTION THROUGHOUT WITH SOLID INNER LINER. 4. PROVIDE WITH SLOPED DOUBLE WALL STAINLESS STEEL DRAIN PANS. 5. STANDARD COLOR UNIT. 6. SINGLE POINT ELECTRICAL CONNECTION. 7. PROVIDE LIGHTS/RECEPTACLES PREWIRED PER SPECIFICATIONS AND DETAIL SHEET. FACTORY WIRE BOTH TO SEPARATE 120V DISCONNECT FOR SEPARATE CONNECTION BY EC.																											

EXISTING VAV TERMINAL BOXES

VAV	MAX AIRFLOW (CFM)	MIN AIRFLOW (CFM)	HEATING AIRFLOW (CFM)	MAX AIR PD (IN. WG.)	CAPACITY (KW)	STEPS	ELECTRIC			EAT (°F)	LAT (°F)	INLET SIZE (IN)	MANUFACTURER
							VOLT	PHASE	HZ				
1-1	190	190	190	0.75	0.5	1	115	1	60	55	72	6	EXISTING
2-1	145	145	145	0.75	0.5	1	115	1	60	55	72	6	EXISTING
3-1	270	270	270	0.75	1.1	1	115	1	60	55	72	8	EXISTING
4-1	1220	1220	1220	0.75	7	3	208	3	60	55	72	14	EXISTING
NOTES: 1. SET ALL EXISTING TO REMAIN VAV TERMINAL BOX TO CONSTANT VOLUME.													

HOT WATER REHEAT COILS

RHC	AIR SIDE					WATER SIDE					COIL		
	CFM	PD (IN. WG)	EAT (°F)	LAT (°F)	CAP MBH	GPM	EWI (°F)	LWT (°F)	PD (FT. WG)	ROWS (MAX)	FINS PER INCH (MAX)		
1	320	0.25	55	85	11.4	1.0	180	160	10.0	2	11		
2	900	0.25	55	85	39.0	3.9	180	160	10.0	2	11		
3	1800	0.25	55	85	78.0	7.8	180	160	10.0	2	11		
4	550	0.25	55	85	17.9	2.0	180	160	10.0	2	11		
5	550	0.25	55	85	17.9	2.0	180	160	10.0	2	11		
6	500	0.25	55	85	16.3	1.5	180	160	10.0	2	11		
7	550	0.25	55	85	17.9	2.0	180	160	10.0	2	11		
8	2060	0.25	55	85	48.8	5.0	180	160	10.0	2	11		
NOTES:													

EXHAUST FANS

EF	SERVICE	AIRFLOW (CFM)	STATIC PRESSURE	BHP	HP	RPM	ELECTRICAL			dBa	SONES	BASIS OF DESIGN MANUFACTURER & MODEL NUMBER	NOTES
							VOLT	PHASE	EMER. POWER (Y/N)				
3E10	CART WASH EXHAUST	500	1.0	0.18	1/2	1942	208	3	N	62	11.0	GREENHECK SWB-208-5	
NOTES: 1. EC (DIVISION 26 CONTRACTOR) TO PROVIDE MOTOR STARTER AND ALL WIRING. 2. ARRANGEMENT 10, ROTATION CLOCKWISE, UPBLAST DISCHARGE. 3. PROVIDE WITH SCROLL DRAIN.													

DIFFUSERS, REGISTERS AND GRILLES

TAG	SYSTEM	AIRFLOW RANGE (CFM)	MODULE SIZE (IN x IN)	NECK SIZE (IN)	MAX NECK VELOCITY (FPM)	MAX NC LEVEL	MAX PD (IN WG)	OPPOSED BLADE DAMPER (Y/N)	MATERIAL	FINISH	NOTES
CD-1	SUPPLY	0-90	24 x 24	6"	500	30	0.1	Y	ALUMINUM, LOUVERED FACE	WHITE	
CD-2	SUPPLY	91-200	24 x 24	8"	500	30	0.1	Y	ALUMINUM, LOUVERED FACE	WHITE	
CD-3	SUPPLY	201-300	24 x 24	10"	500	30	0.1	Y	ALUMINUM, LOUVERED FACE	WHITE	
CD-4	SUPPLY	301-450	24 x 24	12"	500	30	0.1	Y	ALUMINUM, LOUVERED FACE	WHITE	
EG-1	EXHAUST	0-90	24 x 24	6"	500	30	0.1	Y	ALUMINUM, PERFORATED, FLUSH FACE	WHITE	
EG-2	EXHAUST	91-200	24 x 24	8"	500	30	0.1	Y	ALUMINUM, PERFORATED, FLUSH FACE	WHITE	
EG-3	EXHAUST	201-300	24 x 24	10"	500	30	0.1	Y	ALUMINUM, PERFORATED, FLUSH FACE	WHITE	
EG-4	EXHAUST	301-450	24 x 24	12"	500	30	0.1	Y	ALUMINUM, PERFORATED, FLUSH FACE	WHITE	
EG-5	EXHAUST	451-535	24 x 24	14"	500	30	0.1	Y	ALUMINUM, PERFORATED, FLUSH FACE	WHITE	
EG-6	EXHAUST	0-90	12x12	6"	500	30	0.1	Y	ALUMINUM, PERFORATED, FLUSH FACE	WHITE	
EG-7	EXHAUST	91-200	12x12	8"	500	30	0.1	Y	ALUMINUM, PERFORATED, FLUSH FACE	WHITE	
NOTES: 1. PROVIDE LAY-IN MOUNTING FOR ACOUSTIC LAY-IN TILE CEILING AND SURFACE MOUNTING FOR DRYWALL, PLASTER AND OTHER CEILING TYPES OR WALLS. 2. PROVIDE DIRECTIONAL PATTERN DIFFUSERS AS SHOWN ON FLOOR PLANS. 3. COLOR SAMPLES TO BE PROVIDED TO THE ARCHITECT FOR APPROVAL PRIOR TO WORK COMMENCING. 4. CD-XR, RG-XR AND EG-XR REFER TO EXISTING TO REMAIN DIFFUSERS, REGISTERS AND GRILLES. CD-X, RG-X AND EG-X REFER TO DIFFUSERS, REGISTERS AND GRILLES TO BE DEMOLISHED.											

MAX.OCTAVE BAND SOUND POWER LEVEL AT:								
dBsr 1.0 pico-WATTS	63 HZ	125 HZ	250 HZ	500 HZ	1000 HZ	2000 HZ	4000 HZ	8000 HZ
SUPPLY FAN DUCTED DISCHARGE	93	93	95	92	90	83	78	73
EXHAUST FAN DUCTED CONNECTION	93	91	95	88	87	80	74	70