

HEAT RECOVERY UNITS

MARK	TYPE	SERVICE	CFM	MAX OA & EA CFM	MIN OA & EA CFM	SUPPLY FAN				EXHAUST FAN				HEATING				COOLING			POWER	VOLTAGE	MOTOR CONTROLLER TYPE	DISCONNECT TYPE	MAXIMUM WEIGHT-WITH CURB #	MAXIMUM DIMENSIONS LENGTH X WIDTH X HEIGHT (IN)	DESIGN BASIS		
						ESP (N. WG)	TOTAL SP (N. WG)	FAN TYPE	HP	ESP (N. WG)	TOTAL SP (N. WG)	FAN TYPE	HP	EAT DB/WB (F)	LAT DB/WB (F)	HEAT TRANSFERRED (BTU/HR)	FUEL	OUTPUT(MBH)	INPUT(MBH)	EAT DB/WB (F)								LAT DB/WB (F)	NET TOTAL/SENS CAPACITY (BTU/HR)
HRU-1	ROOFTOP AIR HANDLER WITH HEAT WHEEL	CLASSROOM VENTILATION	2800	2800	2800	1.9	3.83	PLENUM	5	1.0	2.1	PLENUM	2	51.6/40.4	92	154240	NAT GAS	120	150	78/65	54/54	83/68	50/57/80	208/3/60	BUILT IN VFD	BUILT-IN	3400	169 X 88 X 60	TRANE HORIZON D084
HRU-2	ROOFTOP AIR HANDLER WITH HEAT WHEEL	CLASSROOM VENTILATION	8500	8500	3622	2.5	3.98	PLENUM	10	1.0	2.3	PLENUM	7.5	54/42	93	208070	NAT GAS	280	350	79/65	51/51	301/247	168/181/225	208/3/60	BUILT IN VFD	BUILT-IN	7650	260 X 101 X 93	TRANE HORIZON N360
HRU-3	ROOFTOP AIR HANDLER WITH HEAT WHEEL	CLASSROOM VENTILATION	1700	1700	1700	2.0	3.41	PLENUM	2.5	1.0	1.99	PLENUM	2.5	50.7/39.8	73.8	86160	NAT GAS	40	50	78.1/64.7	57.2/55.8	38/32	27.5/30.4/40	208/3/60	BUILT IN VFD	BUILT-IN	2000	161 X 52 X 55	TRANE HORIZON (B/G-B036)

ROOFTOP UNIT SCHEDULE

TAG	SERVICE	AIR FLOW (CFM)	COOLING CAPACITY NOMINAL TONS	TOTAL COOLING LOAD (MBH)	SENSIBLE COOLING LOAD (MBH)	EXT. S.P.	TOTAL S.P.	FUEL	HEATING CAPACITY INPUT (MBH)	HEATING CAPACITY OUTPUT (MBH)	ENTERING AIR		OUTSIDE AIR		LEAVING AIR DB(F)		SUPPLY FAN			EXHAUST FAN		MAXIMUM WEIGHT	MAXIMUM DIMENSIONS LENGTH X WIDTH X HEIGHT (IN)	POWER MCA / MAX FUSE AMPS	DESIGN BASIS	
											HEATING DB(F)	COOLING DB(F)	SUMMER DB(F)	CFM (MIN)	HEATING	COOLING DB/WB	FAN HP	VOLT/PH/HZ	FAN STARTER	FAN HP	VOLT/PH/HZ					
											DB(F)	DB(F)	WB(F)	HEATING	COOLING	HEATING	COOLING									
RTU-1/RTU-2	GYM	6140	20	229.19	165.81	3.5	4	NG	500	400	32	81.9	66.3	95	1700	92	53.28/52.3	15	208/3/60	VFD	3	208/3/60	6100	289 X 93 X 87	144.68 / 175	TRANE 20T INTELLIPAK MODEL: SFHLF20E

PUMP SCHEDULE

TAG	SERVICE	TYPE	FLUID	GPM	HEAD	RPM	IMPELLER SIZE	MINIMUM PUMP EFFICIENCY	ELECTRICAL		MOTOR CONTROLLER			SIZE	DESIGN BASIS
									HP	VOLTS/PH/HZ	TYPE	FURNISHED BY	INSTALLED BY		
EP-1	EXIST MAIN PUMP	VERTICAL IN-LINE	WATER	480	75	1750	-	-	15	208/3/60	VFD	EXIST	EXIST	6X6	ARMSTRONG 4300 WITH INTELLIGENT VARIABLE SPEED CONTROL
EP-2	EXIST BACK-UP PUMP	VERTICAL IN-LINE	WATER	480	75	1750	-	-	15	208/3/60	VFD	EXIST	EXIST	6X6	ARMSTRONG 4300 WITH INTELLIGENT VARIABLE SPEED CONTROL
P-3	MAIN PUMP	VERTICAL IN-LINE	WATER	240	85	1750	-	77	10	208/3/60	VFD	MC	MC	2X2	ARMSTRONG 4380 WITH INTELLIGENT VARIABLE SPEED CONTROL
P-4	BACK-UP PUMP	VERTICAL IN-LINE	WATER	240	85	1750	-	77	10	208/3/60	VFD	MC	MC	2X2	ARMSTRONG 4380 WITH INTELLIGENT VARIABLE SPEED CONTROL

FINNED TUBE RADIATION SCHEDULE

MARK	FLUID	OUTPUT BTU/LF ACTIVE LENGTH	STEAM PRESS. (PSIG)	AVG WATER TEMP (F)	ACTIVE ELEMENT			ENCLOSURE				REMARKS	
					FIN SIZE (IN)	TUBE SIZE (IN)	TIERS	FINS/FT.	STYLE	HEIGHT (IN)	DEPTH (IN)		MTG. HGT. (IN)
FTR-1	WATER	980	NA	170	3/8 X 4 1/4	3/4	1	50	BARE ELEMENT B	-	-	-	NO ENCLOSURE
* FTR-2	-	-	NA	-	-	-	-	-	SLOPED TOP	24	5-5/16	30	ENCLOSURE ONLY, WITH FULL BACKPLATE, PIPE SUPPORTS.
FTR-3	WATER	1,380	NA	170	3/8 X 4 1/4	3/4	1	50	SLOPED TOP	24	5-5/16	30	ENCLOSURE WALL TO WALL

AIR COOLED CONDENSING UNIT SCHEDULE

MARK	LOCATION	SERVICE	REFRIG. TYPE	ARI NET CAPACITY (MBH)	EER	AMBIENT TEMP DEG F.	SUCTION TEMP DEG F.	ELECTRICAL					DISCONNECT			DESIGN BASIS
								VOLTS/PH/HZ	COMPRESSOR NUMBER/HP	COND. FAN NUMBER/HP	MINIMUM CIRCUIT AMPACITY	MAXIMUM FUSE SIZE	TYPE	FURNISHED BY	INSTALLED BY	
ACCU-1	ROOF	BC-1	R410A	60	12.5	95	48	208/3/60	1	1 / .2	32	50	-	EC	EC	TRANE 4TTR60

INLET AND OUTLET SCHEDULE

MARK	TYPE	DESCRIPTION	DESIGN BASIS
S1	CEILING SUPPLY DIFFUSER	48" LONG, LAY-IN WITH INSULATED PLENUM, FLANGED BORDER, ROUND NECK, 1-WAY ADJUSTABLE DISCHARGE, ALUMINUM CONSTRUCTION, 10" Ø INLET, WHITE FINISH, DAMPER. 2 SLOTS, 1", 40 CFM/FT. TITUS ML-39 SERIES OR EQUAL.	TOTAL PRESSURE: 0.04 INCHES W.G., NOISE CRITERIA(NC): 23
S2	CEILING SUPPLY DIFFUSER	48" LONG, LAY-IN WITH INSULATED PLENUM, FLANGED BORDER, ROUND NECK, 1-WAY ADJUSTABLE DISCHARGE, ALUMINUM CONSTRUCTION, 12" Ø INLET, WHITE FINISH, DAMPER. 3 SLOT, 1" 62.5 CFM/FT. TITUS ML-39 SERIES OR EQUAL.	TOTAL PRESSURE: 0.04 INCHES W.G., NOISE CRITERIA(NC): 24
S3	DUCT MOUNTED SUPPLY DIFFUSER	DIRECT SPIRAL DUCT MOUNTED, RECTANGULAR FACE SUPPLY GRILLE WITH EXTRACTOR, DOUBLE DEFLECTION, AND ADJUSTABLE BLADES, ALUMINUM, WHITE. TITUS MODEL S300FS OR EQUAL.	TOTAL PRESSURE: 0.11 INCHES W.G., NOISE CRITERIA(NC): 19
S4	CEILING SUPPLY DIFFUSER	24"x24" LAY-IN WITH PLAQUE FACE, ROUND NECK, 4-WAY FIXED DISCHARGE, STEEL CONSTRUCTION WHITE FINISH, BUTTERFLY DAMPER. TITUS MODEL OMNI OR EQUAL.	NECK VELOCITY 600FPM MAX, NOISE CRITERIA(NC): <20
S5	CEILING SUPPLY DIFFUSER	DRUM LOUVER, HIGH CAPACITY, LONG THROW, WHITE FINISH, PLASTER FRAME, OBD DAMPER, TITUS DL OR EQUAL	TOTAL PRESSURE: 0.18 INCHES W.G., NOISE CRITERIA(NC): 23
S6	WALL SUPPLY DIFFUSER	FACE SIZED PER PLAN, HEAVY DUTY, LOUVERED FACE, FLUSH FACE, SQUARE NECK, WHITE, STEEL CONSTRUCTION, 3/4" BLADE SPACING, FRONT PARALLEL IN LONG DIRECTION, DOUBLE DEFLECTION, OPPOSED BLADE DAMPER, FRAME FOR MOUNTING IN BLOCK OR SHEETROCK WALL, TITUS MODEL 300RLH OR EQUAL.	NECK VELOCITY 600FPM MAX, NOISE CRITERIA(NC): <20
S7	CEILING SUPPLY DIFFUSER	ROUND DIFFUSER WITH ADJUSTABLE DISCHARGE PATTERNS, STEEL, WHITE, BUTTERFLY DAMPER, SAFETY CHAIN. TITUS TMRA TYPE 3.	TOTAL PRESSURE: 0.083 INCHES W.G., NOISE CRITERIA(NC): 28
R1	CEILING RETURN GRILLE	SURFACE MOUNT 24x24 LOUVERED FACE, FLUSH FACE, RECTANGULAR NECK SIZE INDICATED ON PLANS, STEEL CONSTRUCTION, WHITE, 3/4" BLADE SPACING, PARALLEL IN LONG DIRECTION, OPPOSED BLADE DAMPER, TITUS MODEL 301RL OR EQUAL.	NECK VELOCITY 600FPM MAX, NOISE CRITERIA(NC): <24
E1	CEILING EXHAUST GRILLE	24"x24", LOUVERED FACE, FLUSH FACE, SQUARE NECK SIZE INDICATED ON PLANS, ALUMINUM CONSTRUCTION, WHITE, 3/4" BLADE SPACING, PARALLEL IN LONG DIRECTION, OPPOSED BLADE DAMPER, TITUS MODEL 301RL OR EQUAL.	NECK VELOCITY 600FPM MAX, NOISE CRITERIA(NC): <24
E2	CEILING EXHAUST GRILLE	FACE SIZED PER PLAN, LOUVERED FACE, FLUSH FACE, SQUARE NECK, STAINLESS STEEL CONSTRUCTION, 3/4" BLADE SPACING, PARALLEL IN LONG DIRECTION, OPPOSED BLADE DAMPER, TITUS MODEL 301RL OR EQUAL.	NECK VELOCITY 600FPM MAX, NOISE CRITERIA(NC): <24

AIR TERMINAL SCHEDULE

TAG	SERVICE	INLET SIZE (IN)	CFM	AIRSIDE				WATERSIDE						DISCONNECT			
				MIN CFM	EAT (F)	LAT (F)	PRIMARY AIR PD (N. WG) INCLUD'G COIL	RADIATED NC MAX.	CAPACITY (MBH)	EWT (F)	LWT (F)	GPM	WPD (FT)	# ROWS	TYPE	FURNISHED BY	INSTALLED BY
AT-1	ROOM 027	12	1200	500	55	109	0.23	20	29.7	180	139	1.5	0.23	2	BUILT-IN	MC	MC
AT-2	ROOM 028	10	900	500	55	102	0.24	22	25.7	180	143	1.4	0.19	2	BUILT-IN	MC	MC
AT-3	ROOM 029	7	400	200	55	108	0.12	19	11.6	180	141	0.6	0.1	2	BUILT-IN	MC	MC
AT-4	ROOM 29A	4	150	75	55	107	0.01	22	4.3	180	159	0.4	0.12	1	BUILT-IN	MC	MC
AT-5	ROOM 027B	4	150	75	55	107	0.01	22	4.3	180	159	0.4	0.12	1	BUILT-IN	MC	MC
AT-6	ROOM 024	5	425	115	55	108	0.12	19	6.5	180	141	0.4	0.1	2	BUILT-IN	MC	MC
AT-7	ROOM 025	10	900	500	55	101	0.24	22	25.7	180	143	1.4	0.19	2	BUILT-IN	MC	MC
AT-8	ROOM 015	9	790	400	55	105	0.19	19	22.0	180	143	1.2	0.16	2	BUILT-IN	MC	MC
AT-9	ROOM 118A	5	200	100	55	102	0.02	18	5.2	180	159	0.5	0.14	1	BUILT-IN	MC	MC
AT-10	ROOM 120	5	150	75	55	107	0.01	14	4.3	180	159	0.4	0.12	1	BUILT-IN	MC	MC
AT-11	ROOM 118	10	1000	450	55	103	0.29	22	23.9	180	143	1.3	0.17	2	BUILT-IN	MC	MC
AT-12	ROOM 119	9	800	450	55	103	0.20	19	23.9	180	143	1.3	0.17	2	BUILT-IN	MC	MC
AT-13	ROOM 121	10	1000	450	55	103	0.29	22	23.9	180	143	1.3	0.17	2	BUILT-IN	MC	MC
AT-14	ROOM 122	10	1000	450	55	103	0.29	22	23.9	180	143	1.3	0.17	2	BUILT-IN	MC	MC
AT-15	CORRIDOR	7	400	200	55	108	0.12	19	11.6	180	141	0.6	0.1	2	BUILT-IN	MC	MC
AT-16	ROOM 217	10	1000	450	55	103	0.29	22	23.9	180	143	1.3	0.17	2	BUILT-IN	MC	MC
AT-17	ROOM 218	9	800	400	55	105	0.20	19	22.0	180	143	1.2	0.16	2	BUILT-IN	MC	MC
AT-18	ROOM 219	4	150	75	55	107	0.01	22	4.3	180	159	0.4	0.12	1	BUILT-IN	MC	MC
AT-19	ROOM 220	10	1000	450	55	103	0.29	22	23.9	180	143	1.3	0.17	2	BUILT-IN	MC	MC
AT-20	ROOM 221	10	1000	450	55	103	0.29	22	23.9	180	143	1.3	0.17	2	BUILT-IN	MC	MC
AT-21	CORRIDOR	7	400	200	55	108	0.12	19	11.6	180	141	0.6	0.1	2	BUILT-IN	MC	MC
AT-22	ROOM 024A	4	150	75	55	107	0.01	22	4.3	180	159	0.4	0.12	1	BUILT-IN	MC	MC

SINGLE DUCT, 24V CLASS II CONTROL TRANSFORMER, FACTORY MOUNTING OF DDC CONTROLS BY OTHERS, FIBRE-FREE LINER. CONTROL COVER, DOOR INTERLOCK DISCONNECT, HOT WATER COIL. TITUS OR APPROVED EQUAL

NJ Certificate of Authorization
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Revisions:

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HVAC SCHEDULES
 ADDITION TO WOODBRIDGE MIDDLE SCHOOL
 WOODBRIDGE BOE
 525 BARRON AVENUE
 WOODBRIDGE, NJ 07095

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