

BOILER SCHEDULE			
TYPE	B-1	B-2	B-3
MANUFACTURER	CONDENSING	CONDENSING	CONDENSING
BOILER MODEL	VISSMANN VISSMANN	VISSMANN VISSMANN	VISSMANN VISSMANN
GROSS INPUT (MBH)	1,112	1,112	1,112
GROSS OUTPUT (MBH)	1,078	1,078	1,078
NET AHR RATING, MBH	937	937	937
COMBUSTION EFFICIENCY (%)	95.0%	95.0%	95.0%
TEMP RISE, DEG F	28.7	28.7	28.7
FLOW, GPM	75	75	75
MAX P.D.	2.0 FT	2.0 FT	2.0 FT
FLUID	WATER	WATER	WATER
MAX OPERATING PRESSURE	75 PSIG	75 PSIG	75 PSIG
SHIPPING WEIGHT (LBS)	800	800	800
WATER CONTENT, U.S. GAL	74	74	74
OVERALL LENGTH (IN.)	73"	73"	73"
WIDTH (IN.)	36-1/2"	36-1/2"	36-1/2"
HEIGHT (IN.)	66"	66"	66"
VENT CONN. DIA (IN.)	8"	8"	8"
VENT CATEGORY	IV	IV	IV
AIR INLET CONN. (IN.)	8"	8"	8"
WATER CONN. (IN.)	2-1/2"	2-1/2"	2-1/2"
BOILER DRAIN	1"	1"	1"
CONDENSATE DRAIN	3/4"	3/4"	3/4"
FUEL GAS CONN. (IN.)	NATURAL GAS	NATURAL GAS	NATURAL GAS
GAS CONN. (IN.)	1-1/4"	1-1/4"	1-1/4"
GAS PRESSURE, NATURAL	4" TO 14" WC	4" TO 14" WC	4" TO 14" WC
2-STAGE or FULL MOD.	FULL MOD - 20% - 100%	FULL MOD - 20% - 100%	FULL MOD - 20% - 100%
ELECTRICAL	120/160	120/160	120/160
MAX POWER CONSUMPTION	368 W	368 W	368 W

NOTES:  
 1. PROVIDE DIRECT PIPED COMBUSTION AIR AND COMMON VENTED FLUE.  
 2. BOILERS SHALL BE SUITABLE FOR ZERO GPM - NO FLOW SWITCH REQUIRED.  
 3. PROVIDE CONDENSATE NEUTRALIZATION KITS.

AIR CONTROL SCHEDULE			
SECONDARY SYSTEM	HEATING	DHW	
AIR & DIRT SEPARATOR	AS-1	----	----
MFR-MODEL	TACO 4904D-125	----	----
INLET/OUTLET	4"	----	----
PRESSURE DROP	2.0'	----	----
STRAINER	YES	----	----
BLADDER-TYPE EXPANSION TANK	ET-1	ET-2	
MFR-MODEL	TACO CA-500-125	TACO PAX-130	
SYSTEM HEIGHT, FT	60	----	----
STATIC PRESSURE AT TANK, PSI	26.0	----	----
PSI REQ'D. AT HIGHEST TERM UNIT	5	----	----
TANK PRE-CHARGE PRESSURE	31.0	----	----
TANK DIAMETER	24"	16"	
TANK HEIGHT	85.75"	52.5"	
ACCEPTANCE VOLUME	132 GAL	19 GAL	
ASME PRESSURE RATING	125	125	

FINTUBE SCHEDULE - APARTMENTS												
TAG	STERLING MODEL #	TYPE	MOUNTING HEIGHT, TOP OF ENCLOSURE	ENCLOSURE HEIGHT	DEPTH FROM WALL	No. OF TIERS	BTU / FT. WITH 1.0 GPM FLOW	AWT	EAT	ELEMENT	FIN DIMENSIONS	FINS/FT
FT-X	STERLING SYNERGY SG-500	LOW TEMP RESIDENTIAL FINTUBE	9-1/16"	9-1/16"	3-13/16"	1	567	150	70	3/4"	3-1/4" SQ.	51

  

TYPE	APARTMENT	APARTMENT GPM	FINNED ELEMENT LENGTHS					LOOP SIZE	BTUH	
			LIVING ROOM	BEDROOM	MBR	KITCHEN	CLOSET			TOTAL FT
1 BR	TYPE A	1.5	8 FT + 8 FT	12 FT				28	3/4"	15,876
2 BR	TYPE B	2.0	11 FT + 8 FT	12 FT	10 FT	TH-1	39	3/4"	22,113	
1 BR - LARGE	TYPE C - 1ST	2.0	12 FT	8 FT + 8 FT			3 FT	35	3/4"	19,845
1 BR - LARGE	TYPE C - 2, 3, 4, 5	2.0	12 FT + 2FT, 2FT + 5FT	8 FT + 8 FT			3 FT	35	3/4"	19,845
1 BR	TYPE D	1.5	8 FT + 8 FT	12 FT			28	3/4"	15,876	
1 BR	TYPE E	1.5	8 FT + 8 FT	12 FT			28	3/4"	15,876	
1 BR	TYPE F	1.5	8 FT + 8 FT	12 FT			28	3/4"	15,876	
1 BR	TYPE G	1.5	8 FT + 8 FT	12 FT			28	3/4"	15,876	
1 BR	TYPE H	1.5	8 FT + 8 FT	12 FT		TH-1	28	3/4"	15,876	
1 BR	TYPE J	1.5	8 FT + 8 FT	12 FT			28	3/4"	15,876	
2 BR	TYPE K	2.0	11 FT + 6 FT	12 FT	10 FT	TH-1	39	3/4"	22,113	
1 BR	TYPE L	1.5	8 FT + 8 FT	12 FT			28	3/4"	15,876	
1 BR	TYPE M	1.5	8 FT + 8 FT	12 FT			28	3/4"	15,876	

NOTES:  
 1. "TH-1" IN KITCHENS - SEE 238239  
 2. PROVIDE EXTENSION SETS, CORNERS, AND WALL JOINERS TO MINIMIZE FLOOR PENETRATIONS. EXTEND PIPING THROUGH THESE SECTIONS.  
 3. SEE HEATING DISTRIBUTION MANIFOLD SCHEDULE.

HYDRONIC PUMP SCHEDULE																			
TAG	SYSTEM	MFR.	MODEL	SUCTION SIZE	TYPE	PUMPED FLUID	PERFORMANCE				ELECTRICAL			ELECTRICAL COORDINATION					
							GPM	HEAD	RPM	NPSH	BHP	NOL HP	MOTOR HP	VOLTS/PH (60 Hz)	VFD FURN. BY	STARTER FURN. BY	BOTH PUMPS FURN. BY	DISC. SWITCH	NOTES
P-1A	HEATING	TACO	SKV-3000S-1760-7.5	3 X 3	INTEGRAL VARIABLE SPEED	WATER	225	65	3,600	15	5.7	7.5	7.5	208/3	INTEGRAL	----	NO LEAD-LAG	DIV 26	1, 2
P-1B	HEATING	TACO	SKV-3000S-1760-7.5	3 X 3	INTEGRAL VARIABLE SPEED	WATER	225	65	3,600	15	5.7	7.5	7.5	208/3	INTEGRAL	----	NO LEAD-LAG	DIV 26	1, 2
P-2A	DHW	TACO	1635	1.5 x 1.5	VERTICAL	WATER	26.4	20	1,760	2	0.4	0.52	3/4	208/3	----	DIV 26	NO LEAD-LAG	DIV 26	
P-2B	DHW	TACO	1635	1.5 x 1.5	VERTICAL	WATER	26.4	20	1,760	2	0.4	0.52	3/4	208/3	----	DIV 26	NO LEAD-LAG	DIV 26	

NOTES:  
 1. PROVIDE VARIABLE FLOW MODE.  
 2. PROVIDE SUPPORT STAND

UNIT HEATER SCHEDULE																				
TAG	SERVES	FLOOR	MFR.-MODEL	SIZE	TYPE	MBH	CFM	EAT (DEG.-F)	LAT (DEG.-F)	GPM	FLUID	EWT	LWT	MOTOR TYPE	MOTOR HP	ELECT	MAX VPD	PIPE RUNOUT SIZE	CONTROL VALVE	NOTES
CUH-1	GARDEN CONNECTION	1	TRANE FF-E-B	400	HORIZ RECESSED	22.7	294	70	141.3	1.5	WATER	160	129.6	ECM	0.13	120-160	4.1	3/4"	2-WAY	1
CUH-2	VESTIBULE - 145	1	TRANE FF-N-B	1200	VERTICAL INVERTED RECESSED	62.6	830	70	139.6	4.0	WATER	160	128.6	ECM	0.13 + 0.22	120-160	2.8	1"	2-WAY	1
CUH-3	VESTIBULE - 138	1	TRANE FF-N-B	1200	VERTICAL INVERTED RECESSED	62.6	830	70	139.6	4.0	WATER	160	128.6	ECM	0.13 + 0.22	120-160	2.8	1"	2-WAY	1
CUH-4	STAIR A	1	TRANE FF-E-B	400	HORIZ RECESSED	22.7	294	70	141.3	1.5	WATER	160	129.6	ECM	0.13	120-160	4.1	3/4"	2-WAY	1
CUH-5	STAIR B	1	TRANE FF-E-B	400	HORIZ RECESSED	22.7	294	70	141.3	1.5	WATER	160	129.6	ECM	0.13	120-160	4.1	3/4"	2-WAY	1
CUH-6	NEW BLDG. LOBBY 1010	1	TRANE FF-E-B	800	HORIZ RECESSED	27.8	340	70	145.3	2.0	WATER	160	132.2	ECM	0.22	120-160	2.1	3/4"	2-WAY	1
CUH-7	STAIR A	G	TRANE FF-F-B	800	VERT CAB FLAT-TOP	46.2	610	70	139.8	3.0	WATER	160	129.1	ECM	0.22	120-160	4.3	3/4"	2-WAY	1
CUH-8	STAIR B	G	TRANE FF-F-B	800	VERT CAB FLAT-TOP	46.2	610	70	139.8	3.0	WATER	160	129.1	ECM	0.22	120-160	4.3	3/4"	2-WAY	1
CUH-9	ELEV LOBBY A	G	TRANE FF-N-B	400	VERTICAL INVERTED RECESSED	22.7	294	70	141.3	1.5	WATER	160	129.6	ECM	0.13	120-160	4.1	3/4"	2-WAY	1
CUH-10	ELEV LOBBY B	G	TRANE FF-N-B	400	VERTICAL INVERTED RECESSED	22.7	294	70	141.3	1.5	WATER	160	129.6	ECM	0.13	120-160	4.1	3/4"	2-WAY	1
CUH-11	VESTIBULE - 1019	1	TRANE FF-N-B	1200	VERTICAL INVERTED RECESSED	62.6	830	70	139.6	4.0	WATER	160	128.6	ECM	0.13 + 0.22	120-160	2.8	1"	2-WAY	1
CUH-12	VESTIBULE - 1015	1	TRANE FF-N-B	1200	VERTICAL INVERTED RECESSED	62.6	830	70	139.6	4.0	WATER	160	128.6	ECM	0.13 + 0.22	120-160	2.8	1"	2-WAY	1
CUH-13	STAIR A	1	TRANE FF-N-B	1200	VERTICAL INVERTED RECESSED	62.6	830	70	139.6	4.0	WATER	160	128.6	ECM	0.13 + 0.22	120-160	2.8	1"	2-WAY	1
CUH-14	ELEVATOR LOBBY 3003	3	TRANE FF-E-B	800	HORIZ RECESSED	27.8	340	70	145.3	2.0	WATER	160	132.2	ECM	0.22	120-160	2.1	3/4"	2-WAY	1
UH-1	FIRE PUMP ROOM	G	TRANE UHS	36	HORIZ UH	16.8	550	60	88.3	1.6	WATER	160	130.0	TEAO	1/15	120-160	0.1	3/4"	2-WAY	1
UH-2	ELECTRICAL RM	G	TRANE UHS	36	HORIZ UH	16.8	550	60	88.3	1.6	WATER	160	130.0	TEAO	1/15	120-160	0.1	3/4"	2-WAY	1
UH-3	STORAGE RM G008	G	TRANE UHS	36	HORIZ UH	16.8	550	60	88.3	1.6	WATER	160	130.0	TEAO	1/15	120-160	0.1	3/4"	2-WAY	1
UH-4	TRASH RM G011	G	TRANE UHS	36	HORIZ UH	16.8	550	60	88.3	1.6	WATER	160	130.0	TEAO	1/15	120-160	0.1	3/4"	2-WAY	1
UH-5	GARAGE	G	TRANE UHP	500	VERTICAL UH	240.0	8,020	60	87.7	23.0	WATER	160	130.0	TEAO	1-1/2	208/3/60	2.3	2"	3-WAY	1
UH-6	GARAGE	G	TRANE UHP	500	VERTICAL UH	240.0	8,020	60	87.7	23.0	WATER	160	130.0	TEAO	1-1/2	208/3/60	2.3	2"	3-WAY	1
UH-7	GARAGE	G	TRANE UHS	360	HORIZ UH	195.0	5,500	60	92.8	23.0	WATER	160	130.0	TEAO	1/2	208/3/60	2.1	2"	3-WAY	1
UH-8	STORAGE RM	G	TRANE UHS	36	HORIZ UH	16.8	550	60	88.3	1.6	WATER	160	130.0	TEAO	1/15	120-160	0.1	3/4"	2-WAY	1
UH-9	STORAGE 123B	1	TRANE UHS	36	HORIZ UH	8.0	350	60	81.2	1.0	WATER	160	140.0	TEAO	16W	120-160	0.1	1/2"	2-WAY	1
TH-1	APT. KITCHENS W/OUTSIDE WALL	ALL	BEACON MORRIS	K-84	TOE SPACE HEATER	6.3	103	70	126.6	1.0	WATER	160	147.4	ODP	0.034	120-160	2.0	3/4"	NONE	

NOTES:  
 1. POWER WIRING TO UNIT HEATER BY DIV 26. ALL LOW VOLTAGE CONTROL WIRING, THERMOSTAT, RELAYS, AND TRANSFORMERS BY DIV 23. DISCONNECT SWITCH PROVIDE BY UNIT HEATER MANUFACTURER.

FINNED TUBE RADIATION SCHEDULE																
TAG	STERLING MODEL #	TYPE	ENCLOSURE LENGTH	MOUNTING HEIGHT, TOP OF ENCLOSURE	ENCLOSURE HEIGHT	DEPTH FROM WALL	No. OF TIERS	BTU / FT	GPM	AWT	EAT	ELEMENT	FIN DIMENSIONS	FINS/FT	PIPE RUNOUT SIZE	NOTES
FT-F	JVB-FT	FRONT & TOP OUTLET, FLAT TOP - STRAIGHT	SEE PLANS	23-15/16"	20"	5-5/16"	1	860	SEE PLANS	150	70	3/4"	4-1/4 X 3-5/8	50	1/2"	
FT-R	JVB-FT	FRONT & TOP OUTLET, FLAT TOP - CUSTOM RADIUS	SEE PLANS	23-15/16"	20"	5-5/16"	1	860	SEE PLANS	150	70	3/4"	4-1/4 X 3-5/8	50	1/2"	1
FT-P	JVB-PM	PEDESTAL	SEE PLANS	10-3/4"	10-3/4"	8-1/16"	1	680	SEE PLANS	150	70	3/4"	4-1/4 X 3-5/8	50	1/2"	

NOTES:  
 1. SEE ARCHITECTURAL PLANS FOR WALL RADIUS  
 2. PROVIDE RETURNS WITHIN ENCLOSURE WHERE APPLICABLE.

"HM" HEATING DISTRIBUTION MANIFOLDS (SEE 23 09 00)										
TAG	MANIFOLD LOCATION	PIPE ROUTING TO FIN TUBE	ZONE 1	ZONE 2	ZONE 3	ZONE 4	ZONE 5	ZONE 6	TOTAL	
1-1	1ST FLOOR CEILING	DOWN IN WALLS	HR	STAFF	COO	FACILITY	BOARD	CORR		
GPM			1.0	1.0	1.0	1.0	1.0	1.0	6.0	
1-2	1ST FLOOR CEILING	DOWN IN WALLS	FINANCE	CFO	ASSIST	CEO	APT F	APT G		
GPM			1.0	1.0	1.0	1.0	1.5	1.5	7.0	
1-3	1ST FLOOR CEILING	DOWN IN WALLS	APT D	APT E	APT A	LOBBY				
GPM			1.5	1.5	1.0	1.0			5.5	
1-4	1ST FLOOR CEILING	DOWN IN WALLS	APT C	APT K	APT M					
GPM			2.0	2.0	1.5				5.5	
2-1	1ST FLOOR CEILING	UPFEED	APT H	APT M						