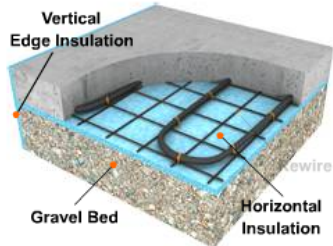


Zone 2 (Slab Application)

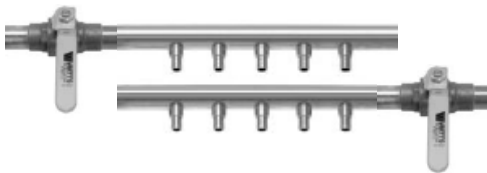
Room Specifications							
Room Name	Primary Spacing [in]	Primary Area [ft ²]	Banded Spacing [in]	Banded Area [ft ²]	Heating Intensity [Btuh/ft ²]	Required Heat [Btuh]	Radiant Capacity [Btuh]
GUEST BATH 4	12	90	---	---	7.3	657	2,360
BATH 3	12	66	---	---	13.7	904	2,027
WALK IN CLOSET	12	92	---	---	3.9	362	1,243
GUEST BEDROOM	12	295	---	---	14.8	3,779	3,795

Zone Specifications							
Supply Fluid [°F]	Delta T [°F]	GPM	Head [ft]	Radiant Panel Load [Btuh]	Product Type	Tube Length [ft]	No. of Circuits
105	20	0.7	0.6	9,913	1/2" RadiantPE X	200	3

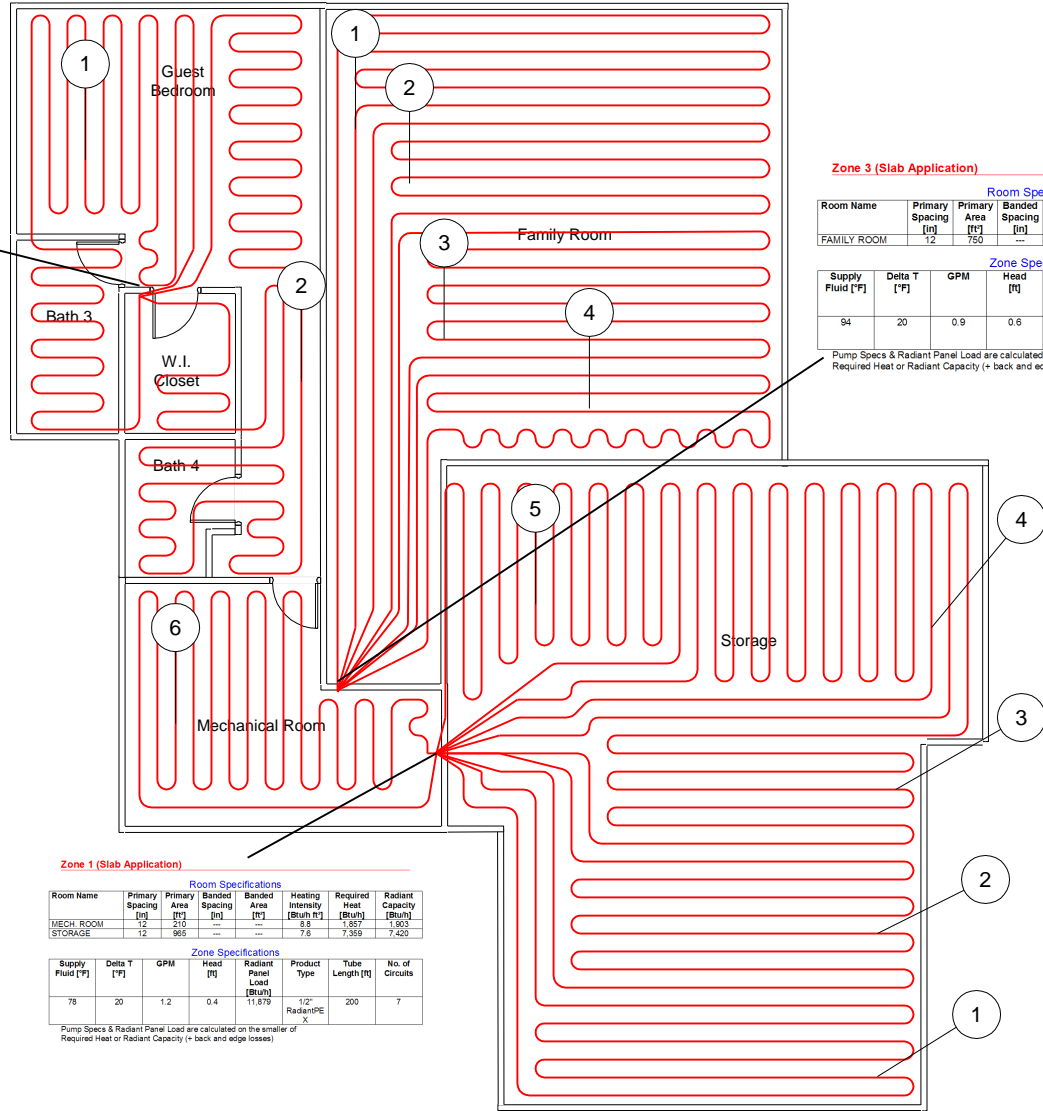
Pump Specs & Radiant Panel Load are calculated on the smaller of Required Heat or Radiant Capacity (+ back and edge losses)
Thermostat should be located in the room in which the radiant capacity is closest to the required heat.



Slab Detail



Manifold Detail



Zone 3 (Slab Application)

Room Specifications							
Room Name	Primary Spacing [in]	Primary Area [ft ²]	Banded Spacing [in]	Banded Area [ft ²]	Heating Intensity [Btuh/ft ²]	Required Heat [Btuh]	Radiant Capacity [Btuh]
FAMILY ROOM	12	750	---	---	9.9	7,419	7,467

Zone Specifications							
Supply Fluid [°F]	Delta T [°F]	GPM	Head [ft]	Radiant Panel Load [Btuh]	Product Type	Tube Length [ft]	No. of Circuits
94	20	0.9	0.6	9,346	1/2" RadiantPE X	200	4

Pump Specs & Radiant Panel Load are calculated on the smaller of Required Heat or Radiant Capacity (+ back and edge losses)

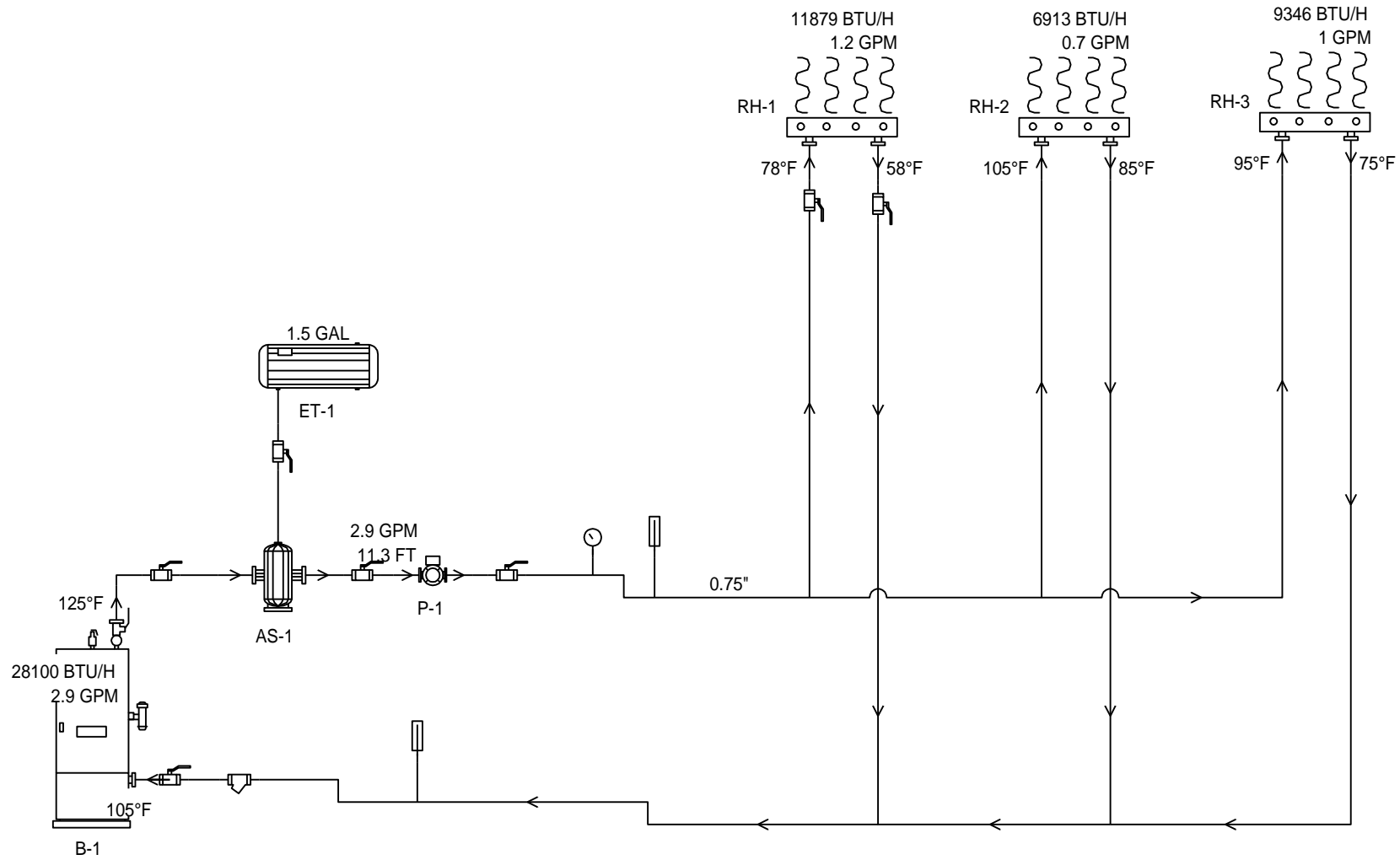
Zone 1 (Slab Application)

Room Specifications							
Room Name	Primary Spacing [in]	Primary Area [ft ²]	Banded Spacing [in]	Banded Area [ft ²]	Heating Intensity [Btuh/ft ²]	Required Heat [Btuh]	Radiant Capacity [Btuh]
MECH. ROOM STORAGE	12	210	---	---	5.8	1,217	1,903
	12	965	---	---	7.6	7,359	7,420

Zone Specifications							
Supply Fluid [°F]	Delta T [°F]	GPM	Head [ft]	Radiant Panel Load [Btuh]	Product Type	Tube Length [ft]	No. of Circuits
78	20	1.2	0.4	11,676	1/2" RadiantPE X	200	7

Pump Specs & Radiant Panel Load are calculated on the smaller of Required Heat or Radiant Capacity (+ back and edge losses)

Zone 1	Musclow Residence			
	Radiant Circuit Suggested Layout			
	SIZE	FSCM NO	DWG NO	REV
	SCALE	3/32" = 1'-0"	SHEET	1 OF 3



2	Musclow Residence			
	Suggested Mechanical Schematic			
	SIZE	FSCM NO	DWG NO	REV
	SCAL E	3/32" = 1'-0"	SHEE T	2 OF 3

BOILER SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	TYPE	FUEL TYPE	INPUT LOAD (BTU/H)	OUTPUT LOAD (BTU/H)	FLUID				PHYSICAL			NOTES
						FLOW RATE (GPM)	ENTERING/LEAVING (°F)	WORKING FLUID	HEAD LOSS (FT)	CONTROL CIRCUIT VOLT/PH/HZ	STACK DIA. (IN)	LENGTH/WIDTH/HEIGHT (IN)	
B-1	Hydrotherm GX-150	CONDENSING	NAT GAS	28700	28100	2.9	105/125	WATER	5	115/60/1	3	30/13/30	1

1. DHW Tank by others. Heating system to draw from the tank. Provide the system with the following teknet 4 control equipment:

- (2) Model 540 Thermostats
- (1) Model 541 Thermostats
- (1) Model 335 Zone Manager
- (1) Model 420 Universal Reset

AIR SEPARATOR SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID			PHYSICAL		NOTES
				FLOW RATE (GPM)	WORKING FLUID	HEAD LOSS (FT)	DIA./HEIGHT (IN)		
AS-1	Spirotherm VJR075TM		TANK - HIGH EFFICIENCY	2.9	WATER	0.5	11.56/17.75	1	

EXPANSION TANK SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	LOCATION	TYPE	FLUID		PHYSICAL				NOTES
				WORKING FLUID	MIN. TANK/ACCEPTANCE (GAL)	TANK SIZE (GAL)	RELIEF VALVE (PSIG)	DIA./HEIGHT (IN)	NPT FITTING (IN)	
ET-1	Flexcon HTC-30		HORIZ DIAPHRAGM	WATER	1.5/0.6	8	30	14/22	0.75	1

PUMP SCHEDULE

ID	MANUFACTURER AND MODEL NUMBER	TYPE	FLUID			ELECTRICAL				NOTES
			FLOW RATE (GPM)	WORKING FLUID	HEAD LOSS (FT)	MOTOR SIZE (HP)	MOTOR BHP (HP)	MOTOR SPEED (RPM)	VOLT/PH/HZ	
P-1	Grundfos UP26-64F	CIRCULATOR	2.9	WATER	11.3	0.125	N/A	3250	120/1/60	

3	Musclow Residence			
	Equipment Schedules			
	SIZE	FSCM NO	DWG NO	REV
	SCALE	3/32" = 1'-0"	SHEET	3 OF 3