

# Radiant Panel Summary



Project #: 2014-035

Date: Aug 29, 2014

Prepared For: Optimal Building Systems LLC  
David Butler

Bluewater Mechanical Inc 1048 Cox Cro Rd Toms River, NJ 08755  
Prepared By: Richard McGrath Phone: 732-581-3833 Email: dmcgrath40@comcast.net

Total Area: 3,824 ft<sup>2</sup>

Total Heat Load: 35,406 Btu/hr

Total Flowrate: 7.1 USGPM

Maximum Head Loss: 1.2 ft(H<sub>2</sub>O)

## Floorplan 1

Room	Heating	Zone #	Heated Area	Unheated Area	Construction	Attachment Method	Tube Type	Tube Spacing	Ldr. Len	Loop Length	# Loops	Room Load per ft <sup>2</sup>	Surface Temp	Design Temp Drop	Flowrate (Total)	Head Loss	Fluid Temp Req.	Fluid Temp Supplied
Kitchen	Floor	13	542	86	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	20	221	4	8.4	69.2	10	0.89	0.58	78	104
Great Room	Floor	2	329	75	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	15	250	2	11.2	70.6	10	0.64	1.2	82	104
Sun Room	Floor	11	152	35	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	15	132	2	25.1	77.6	10	0.67	0.68	104	104
Sauna Bath	Floor	3	160	13	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	20	147	2	12.9	76.4	10	0.45	0.39	90	104
Laundry	Floor	4	152	25	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	20	243	1	6.1	68.1	10	0.17	0.41	74	104
Utility Room	Floor	1	97	0	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	2	134	1	11.1	75.6	10	0.26	0.47	87	104
Garage	Floor	1	770	240	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	5	216	5	10.4	55.2	10	1.3	0.71	66	104
Dining Room	Floor	5	168	30	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	30	172	2	11	70.5	10	0.34	0.29	82	104
Foyer / Powder Room	Floor	14	145	7	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	15	224	1	8.6	69.3	10	0.27	0.81	78	104
Library	Floor	8	179	42	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	30	180	2	9.9	69.9	10	0.31	0.25	80	104
Bed Room 2	Floor	9	183	43	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	30	182	2	9.5	69.8	10	0.31	0.25	80	104

Area = ft<sup>2</sup>; Spacing = in; Length = ft; Unit Heat = Btu/hr/ft<sup>2</sup>; Temperature = °F; Flow Rate = USGPM; Head Loss = ft(H<sub>2</sub>O)

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Bed 2 Bath	Floor	12	38	5	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	30	111	1	3.6	69.8	10	0.03	0.01	74	104
Bed Room 3	Floor	10	183	43	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	30	182	2	9.4	69.7	10	0.30	0.25	80	104
Bed 3 Bath	Floor	12	38	5	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	30	111	1	3.6	69.8	10	0.03	0.01	74	104
Interior Hall	Floor	12	129	0	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	30	232	1	3	66.5	10	0.08	0.12	70	104
Master Bath	Floor	6	241	34	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	30	221	2	10.3	75.1	10	0.51	0.71	86	104
Master Bedroom	Floor	7	309	67	Slab OG / Concrete	Embedded	MultiCor 1/2"	9	20	246	2	10.1	70	10	0.57	0.97	80	104

Area = ft²; Spacing = in; Length = ft; Unit Heat = Btu/hr/ft²; Temperature = °F; Flow Rate = USGPM; Head Loss = ft(H2O)