



Water Supply Summary

Project #: 1121

March 25, 2017

Project Information

Project #: 1121
Name: 1121
Location: Gardnerville, NV

Notes:

The project contains circuits that are not connected to a manifold. The results presented in this report may not be valid.

Note that this project has rooms that may require a supplemental heat supply to meet the design load.

Supply Summary

Name	Temp	Total Flow	Head Loss ¹	Load	# Circuits	# Zones
Water Temperature	130.0	2.78	2.7	26,349	10	5
Water Temperature		0.00	0.0	0	0	0
Water Temperature		0.00	0.0	0	0	0
Water Temperature		0.00	0.0	0	0	0

(1) Head loss includes manifolds, circuits, and supply/return piping if specified, may also contain control valve losses.

Manifold Summary

Manifold Name	Circuits	Flowrate	Required Temp.	Supplied Temp.	Manifold Type	S/R Length ¹	S/R Pipe	Manifold Head Loss	Circuit Head Loss	S/R Head Loss	Total Head Loss ²
Header Z-102	2	0.61	142	130	1-1/2" Stainless Steel	5	Mr PEX® Barrier 3/4"	1.0	0.9	0.0	2.0
Header Z-103	3	0.63	133	130	1-1/2" Stainless Steel	15	Mr PEX® Barrier 3/4"	1.0	0.4	0.1	1.5
Header Z-107	3	0.85	147	130	1-1/2" Stainless Steel	25	Mr PEX® Barrier 3/4"	1.0	0.7	0.3	2.0
Main Manifold	2	0.69	132	130	Composite Manifold	50	Mr PEX® Barrier 1"	1.0	1.6	0.1	2.7
Total	10	2.78	147	-	-	-	-				2.7

(1) S/R Length = one way, (2) Total Head loss includes manifold, circuits and supply/return piping if specified.

Water Temperature (130 °F)

Header Z-102 (130 °F, 1-1/2" Stainless Steel, 2 Circuits)

Circuit	Rooms Served	Total Length	Tube Spacing	Area Covered	Tubing	Flowrate	Head Loss ¹	Temp Drop ²	Load ³	Actuator
A-13	Great Room	169	8 - 12	184	Mr PEX® Barrier 1/2"	0.35	0.9	20 (17)	3,007	Yes
A-14	Great Room	169	8 - 12	142	Mr PEX® Barrier 1/2"	0.27	0.6	20 (19)	2,543	Yes
Total	-	338		327	-	0.61	0.9		5,551	2

(1) Head loss for circuit tubing only. (2) Design Temp Drop (Estimated Actual Drop). (3) Load includes circuit back loss.

Header Z-103 (130 °F, 1-1/2" Stainless Steel, 3 Circuits)

Circuit	Rooms Served	Total Length	Tube Spacing	Area Covered	Tubing	Flowrate	Head Loss ¹	Temp Drop ²	Load ³	Actuator
A-8	Master BR	121	8 - 12	78	Mr PEX® Barrier 1/2"	0.18	0.2	20 (19)	1,726	Yes
A-9	Master Bath	132	8 - 12	110	Mr PEX® Barrier 1/2"	0.24	0.4	20 (23)	2,518	Yes
A-15	Master WIC	134	8	116	Mr PEX® Barrier 1/2"	0.21	0.3	20 (25)	2,284	Yes
Total	-	386		304	-	0.63	0.4		6,528	3

(1) Head loss for circuit tubing only. (2) Design Temp Drop (Estimated Actual Drop). (3) Load includes circuit back loss.

Header Z-107 (130 °F, 1-1/2" Stainless Steel, 3 Circuits)

Circuit	Rooms Served	Total Length	Tube Spacing	Area Covered	Tubing	Flowrate	Head Loss ¹	Temp Drop ²	Load ³	Actuator
A-2	Kitchen-Dining	125	8 - 10	104	Mr PEX® Barrier 1/2"	0.35	0.7	20 (16)	2,829	Yes
A-3	Kitchen-Dining	119	8 - 10	77	Mr PEX® Barrier 1/2"	0.26	0.4	20 (19)	2,402	Yes
A-6	Kitchen-Dining	125	8 - 12	70	Mr PEX® Barrier 1/2"	0.24	0.3	20 (20)	2,336	Yes
Total	-	368		252	-	0.85	0.7		7,566	3

(1) Head loss for circuit tubing only. (2) Design Temp Drop (Estimated Actual Drop). (3) Load includes circuit back loss.

Main Manifold (130 °F, Composite Manifold, 2 Circuits)

Circuit	Rooms Served	Total Length	Tube Spacing	Area Covered	Tubing	Flowrate	Head Loss ¹	Temp Drop ²	Load ³	Actuator
A-5	Guest Bedroom	143	12 - 16	147	Mr PEX® Barrier 1/2"	0.25	0.5	20 (25)	2,519	Yes
A-7	Ben's Bedroom	201	8 - 12	152	Mr PEX® Barrier 1/2"	0.44	1.6	20 (19)	4,185	Yes
Total	-	344		299	-	0.69	1.6		6,704	2

(1) Head loss for circuit tubing only. (2) Design Temp Drop (Estimated Actual Drop). (3) Load includes circuit back loss.

Water Temperature ()

Water Temperature ()

Water Temperature ()

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