

***CENTERLINE NOTE:** To mark where loops will be placed (Tip: use different colors of spray marker paint), begin at centerline of the area and mark outward toward the edge of area to determine Pex spacing. Estimate based on the plan how far the first run of Pex is from either side of the center line, then mark every 12" thereafter. Determine if more or less spacing is needed at the edge and adjust spacing accordingly. Also mark where turns will be made.

PEX SPACING: Circuits A-1 thru A-4: 1/2" lines at 12" on center unless otherwise noted or obvious. Circuits A-5 thru A-11: 5/8" lines at 16" on center unless otherwise noted or obvious.

GRADE PREPARATION: Compacted grade below the top of slab should be the thickness of the slab plus 2" for the radiant floor foam. Grade should be level to 1/4" between panels.

UV PROTECTION: Pex is protected from UV radiation for 60 days from the time it is exposed to direct or indirect sunlight. If the tubing will not be covered within that time, a temporary covering should be used to protect the lines. If the tubing will continue to be exposed to UV radiation after installation, the exposed lines should be coated with a UV protecting coating capable of withstanding the temperatures that will be used in the tubes.

PEX OVER OPENINGS AND FOOTERS: If the Pex lines cross over open areas without floor foam such as thickened slabs or across a footer to be topped by a slab, the lines can span short distances if they run straight across the span. For wider areas or areas where the Pex lines need to make turns when over the span, use rebar or wire mesh either resting on the foam or placed under the floor foam to support the Pex lines and secure with Zip or wire ties.

THERMOSTAT WIRE RUNS: If using wired thermostats, a run of 2- or 3-conductor 18 gauge solid thermostat wire is to be run from each thermostat location in each zone back to the panel through the building's framing. Customer is responsible for having thermostat wires sourced and installed. (2-conductor is for battery operated models like those provided by DIWH Heating; 3-conductor is for models that need external power from the controller such as smart or WiFi models.) Contact us for placement ideas.

LINE SPACING FROM WALLS: The ideal line distance from walls is one half the regular spacing. For 12" spacing that would be 6". For 16" spacing that would be 8". However, sometimes obstacles or the design itself will prevent lines from getting that close or will require them to be closer. Follow the Centerline Note instructions to mark the placement of the lines prior to installing the lines.

BARRIER FOAM: Prior to installing EZ Floor foam, line inside perimeter of exterior stem wall (or permanent form board for a monopour) with 1" EPS barrier foam starting 1" below top of slab and resting on grade. Use 5" tall barrier foam for 4" slab using 2" EZ Floor and 7" tall barrier foam for 6" slab using 2" EZ Floor. For different slab and EZ Floor thicknesses, adjust height of barrier foam.

STAPLES: A quantity of foam staples is supplied* with your order for locations where the number of foam knobs may be limited such as around a manifold or where the knobs may have been crushed and cannot hold the Pex line. Insert staples by hand where appropriate.

LARGE PEX ROLLS: If a Pex decoiler is not used for unrolling the Pex lines during installation, large rolls can be pre-cut to individual circuit (loop) lengths using the lengths from the provided* cut sheet.

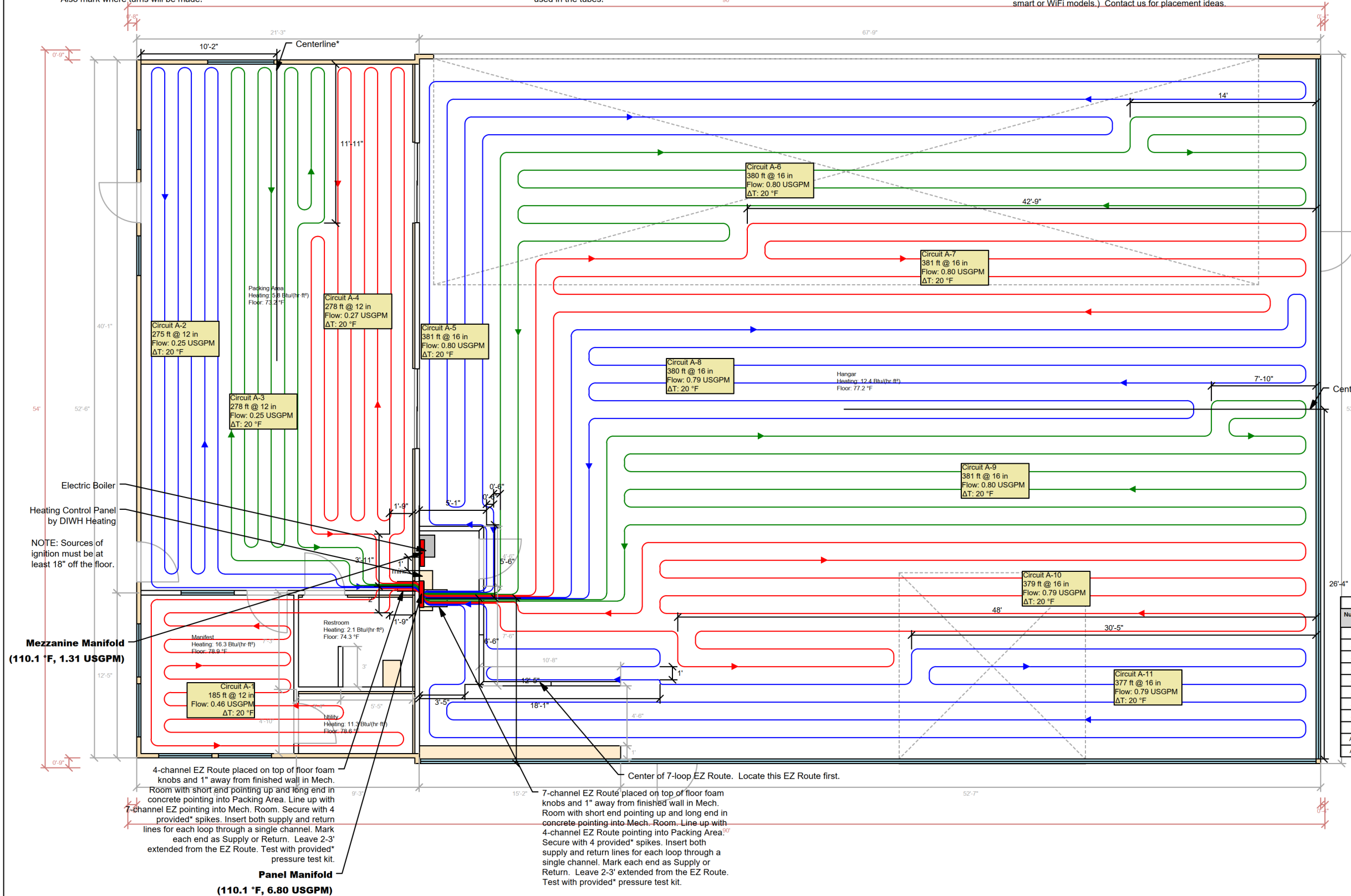
WAX RING: Maintain a minimum of 6" away from toilet wax ring.

PRESSURE TESTING: Use provided* pressure test gauge to pressure test lines prior to installing flooring. Test at 100 PSI and leave under pressure until system is purged and filled.

INTERIOR WALL INSULATION: This plan assumes all interior walls to be insulated with a min. R-19 value.

FOAM INSULATION PANELS AND STRIPS: Creatherm EPS foam panels, EZ Floor EPS foam panels and Barrier Foam EPS foam perimeter strips do not replace common and accepted practices for pouring concrete slabs, footers and stem walls. Consult a concrete professional to determine the best practices for use with your project.

*Items supplied/provided with full Concrete phase purchase.



Circuit Information						
Number	Length [ft]	Tube Size	Flow [USGPM]	Head Loss [ft water]	Total Load [Btu/hr]	Rooms
A-1	165	1/2"	0.46	2.6	4,085	Zone 201 Restroom, Utility, Manifest
A-2	275	1/2"	0.25	1.7	2,318	Zone 202 Packing Area
A-3	278	1/2"	0.25	1.7	2,296	Zone 202 Packing Area
A-4	278	1/2"	0.27	1.9	2,464	Zone 202 Packing Area
A-5	381	5/8"	0.80	5.7	7,340	Zone 203 Hangar
A-6	380	5/8"	0.80	5.7	7,341	Zone 203 Hangar
A-7	381	5/8"	0.80	5.7	7,330	Zone 203 Hangar
A-8	380	5/8"	0.79	5.7	7,317	Zone 203 Hangar
A-9	381	5/8"	0.80	5.7	7,356	Zone 203 Hangar
A-10	379	5/8"	0.79	5.6	7,315	Zone 203 Hangar
A-11	377	5/8"	0.79	5.6	7,279	Zone 203 Hangar

4-channel EZ Route placed on top of floor foam knobs and 1" away from finished wall in Mech. Room with short end pointing up and long end in concrete pointing into Packing Area. Line up with 7-channel EZ pointing into Mech. Room. Secure with 4 provided* spikes. Insert both supply and return lines for each loop through a single channel. Mark each end as Supply or Return. Leave 2-3' extended from the EZ Route. Test with provided* pressure test kit.

Panel Manifold (110.1 °F, 6.80 USGPM)

7-channel EZ Route placed on top of floor foam knobs and 1" away from finished wall in Mech. Room with short end pointing up and long end in concrete pointing into Mech. Room. Line up with 4-channel EZ Route pointing into Packing Area. Secure with 4 provided* spikes. Insert both supply and return lines for each loop through a single channel. Mark each end as Supply or Return. Leave 2-3' extended from the EZ Route. Test with provided* pressure test kit.

Note: Details of the tubing bend radius have been simplified for clarity. Consult tubing manufacturer for specific bend radius recommendations.

Project Number: _____ Scale: 1/8"=1'

Drawing: _____ Page: 1

Main Floor