

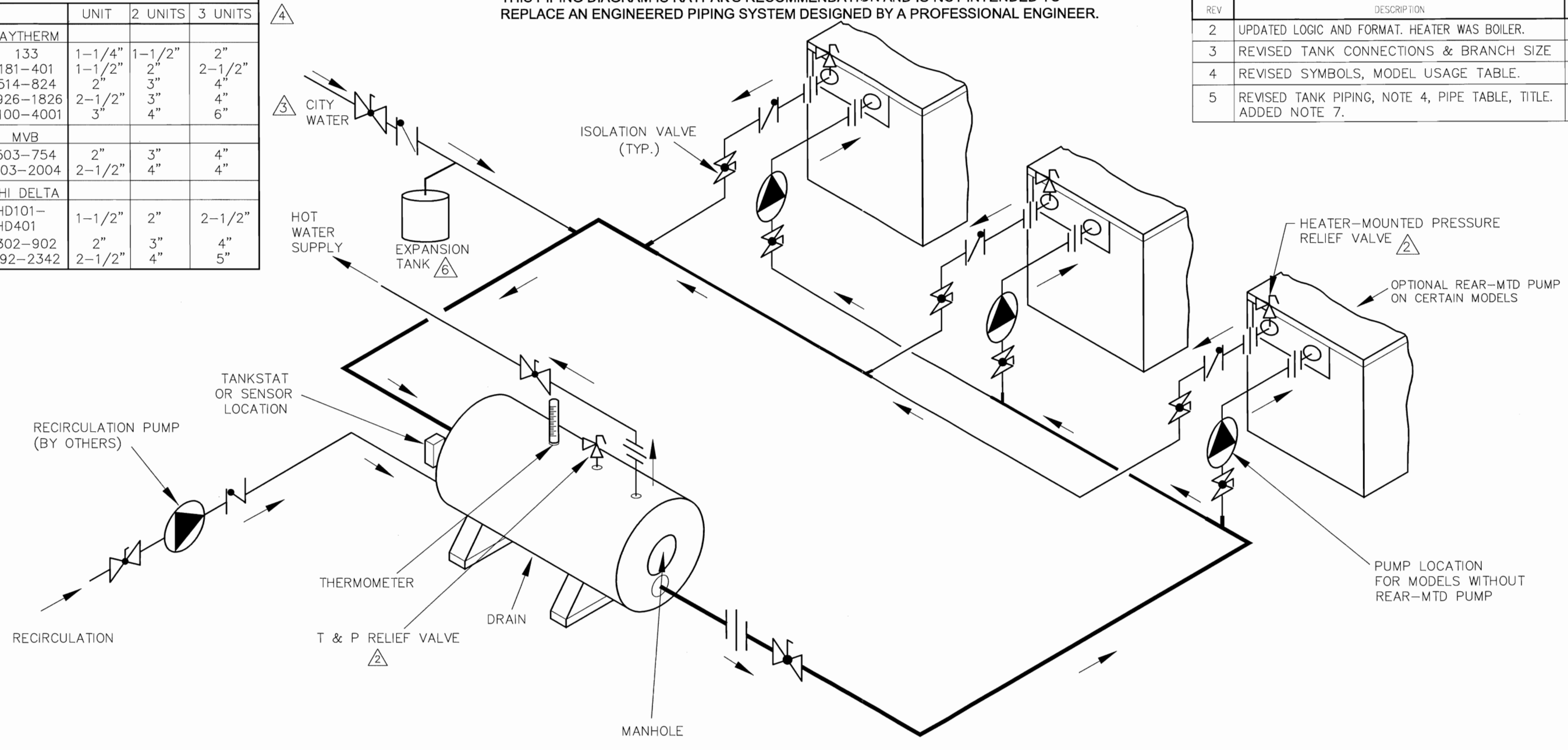
PIPE SIZES			
	UNIT	2 UNITS	3 UNITS
RAYTHERM			
133	1-1/4"	1-1/2"	2"
181-401	1-1/2"	2"	2-1/2"
514-824	2"	3"	4"
926-1826	2-1/2"	3"	4"
2100-4001	3"	4"	6"
MVB			
503-754	2"	3"	4"
1003-2004	2-1/2"	4"	4"
HI DELTA			
HD101-HD401	1-1/2"	2"	2-1/2"
302-902	2"	3"	4"
992-2342	2-1/2"	4"	5"

THIS PIPING DIAGRAM IS RAYPAK'S RECOMMENDATION AND IS NOT INTENDED TO REPLACE AN ENGINEERED PIPING SYSTEM DESIGNED BY A PROFESSIONAL ENGINEER.

REVISIONS					
REV	DESCRIPTION	E.O.	BY	DATE	CHECK
2	UPDATED LOGIC AND FORMAT. HEATER WAS BOILER.		EA	6-24-04	DRB
3	REVISED TANK CONNECTIONS & BRANCH SIZE		RDN	8-14-07	DRB
4	REVISED SYMBOLS, MODEL USAGE TABLE.		RAN	2-12-09	DRB
5	REVISED TANK PIPING, NOTE 4, PIPE TABLE, TITLE. ADDED NOTE 7.		KA	11-19-12	

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KEY	
	PRESSURE RELIEF VALVE
	PUMP
	UNION
	CHECK VALVE
	BALL VALVE
	THERMOMETER

GUARANTEED 60% DRAW WITHOUT TEMPERATURE DROP, USE RAYPAK BOILER, TANK, SIZING TABLE AND HOOK-UP DATA

- NOTES:
1. PLUMB SWING CHECK VALVE IN GRAVITY-CLOSED POSITION.
 2. PIPE ALL RELIEF VALVES TO DRAIN, OR AS LOCAL CODES REQUIRE.
 3. INSTALL COLD WATER BETWEEN HEATER OUTLET AND TANK.
 4. SEE CHART "PIPE SIZES" FOR PIPE SIZES, CALCULATED AT MAXIMUM FLOW, NOT TO EXCEED 7.5 FT/SEC.
 5. STANDARD PUMP SIZING BASED ON 75 EQUIVALENT FEET OF PIPING. IF DISTANCE IS GREATER, THE PUMP MUST BE SIZED TO ACCOMMODATE INCREASE IN PIPING-RELATED LOSSES.
 6. PROVIDE FOR THERMAL EXPANSION OF HOT WATER IF A BACKFLOW PREVENTER, CHECK VALVE, WATER METER OR PRESSURE-REDUCING VALVE IS INSTALLED IN THE COLD WATER LINE.
 7. IF HOT WATER SETPOINT EXCEEDS 160°F WITH MAX FLOW, SPECIFY "H" BOILERS INSTEAD OF "WH" WATER HEATERS.

ACAD: 8141.DWG
HEATERS SHOWN REPRESENT VARIOUS MODELS. BECAUSE INDIVIDUAL MODELS WILL VARY IN DESIGN AND SIZING, SEE EACH SPECIFIC HEATER TYPE FOR DETAILS.

8141	UNLESS OTHERWISE SPECIFIED: ALL UNITS ARE IN INCHES FRACTIONS ±1/32 ANGLES ±1° X. = ±.12 X.X = ±.06 X.XX = ±.03 X.XXX = ±.010 DRAFT ___ WALL ___ RADII ___ CONCENTRICITIES .020 DIA. SQUARENESS .015 IN./IN. BREAK EDGES .015 MAX. SURFACE FINISH PER ASME Y14.36M-1996	APPROVED CHECKED D BALDWIN	DATE 2/13/14 DATE 7-28-98		OXNARD, CALIFORNIA
		DRAWN D BALDWIN	DATE 7-28-98	E.O. SPR	SCALE NONE
			SIZE B	THIS DRAWING SUBMITTED UNDER CONFIDENTIAL RELATIONSHIP, AS IT EMBODIES PROPRIETARY INFORMATION, WITH ALL RIGHTS RESERVED BY RAYPAK, INC.	
TITLE PIPING, UNI-TEMP 60: 3 HEATERS, 1 H TANK					
5	MAT'L.	SERIES/MODEL WH	DWG. NO. 8141	REV 5	

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