

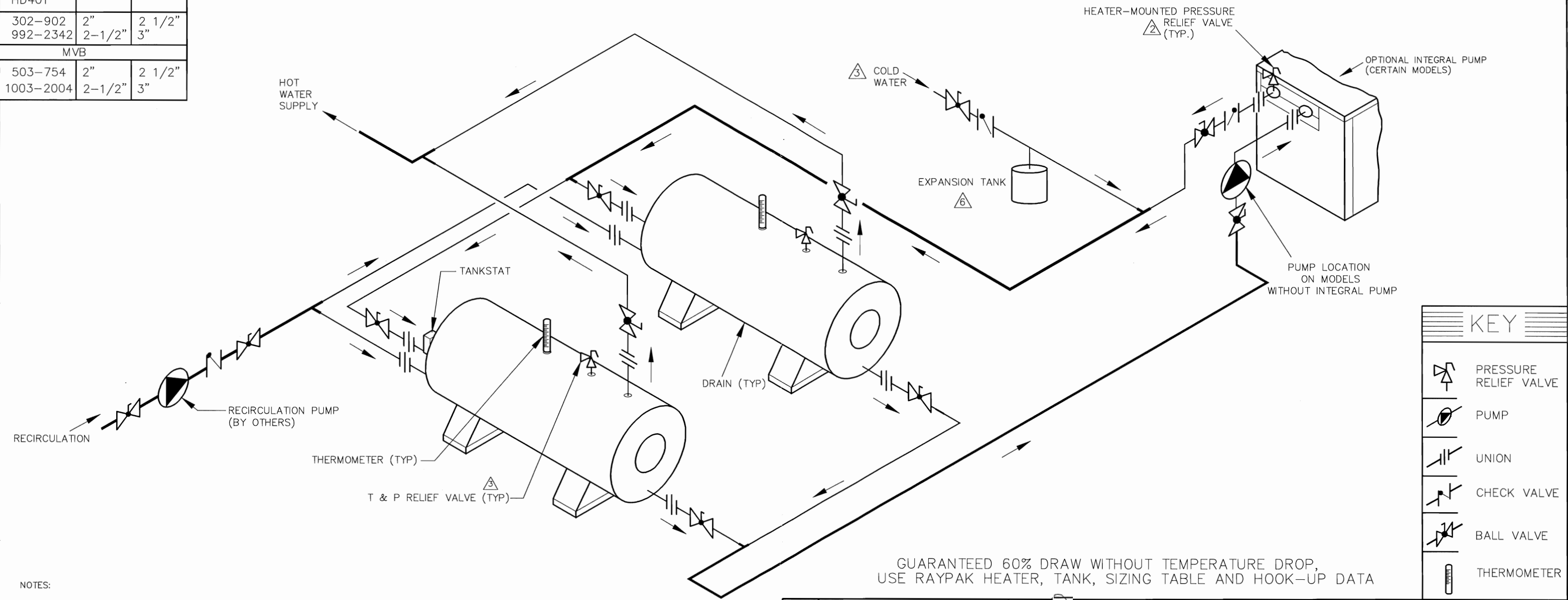
PIPE SIZES		
	HEATER	MAIN
RAYTHERM		
133	1-1/4"	1 1/2"
181-401	1-1/2"	2"
514-824	2"	2 1/2"
926-1826	2-1/2"	3"
2100-4001	3"	4"
HI DELTA		
HD101-HD401	1-1/2"	2"
302-902	2"	2 1/2"
992-2342	2-1/2"	3"
MVB		
503-754	2"	2 1/2"
1003-2004	2-1/2"	3"

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
3	REDRAWN, UPDATED TANK LOGIC.		RAN	6-25-04
4	UPDATED PUMP NOTES		JMB	4-5-07
5	UPDATED FORMAT, SYMBOLS. ADDED NOTE 7. REMOVED ADB USAGE, ADDED 504-2004.		RAN	4-1-09
6	UPDATED USAGE, TITLE, NOTES 4, 5, 7.		KA	2-7-14

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KEY	
	PRESSURE RELIEF VALVE
	PUMP
	UNION
	CHECK VALVE
	BALL VALVE
	THERMOMETER

GUARANTEED 60% DRAW WITHOUT TEMPERATURE DROP, USE RAYPAK HEATER, 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 MAX 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 160F, SPECIFY "H" BOILER INSTEAD OF "WH" WATER HEATER.

ACAD: 8121.DWG

HEATER SHOWN REPRESENTS VARIOUS MODELS. BECAUSE INDIVIDUAL MODELS WILL VARY IN DESIGN AND SIZING, SEE EACH SPECIFIC HEATER TYPE FOR DETAILS.

8121	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 	DATE 2-14-14	 OXNARD, CALIFORNIA
	CHECKED D BALDWIN	DATE 11-14-97	E.O. SCALE SPR NONE	
	6	MAT'L.	DRAWN D BALDWIN	DATE 11-14-97
TITLE PIPING, UNI-TEMP 60: 1 HEATER, 2 H TANKS				
		SERIES/MODEL WH	DWG. NO. 8121	REV 6