

PIPE SIZES

HEATER MAIN

1005-2005 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.

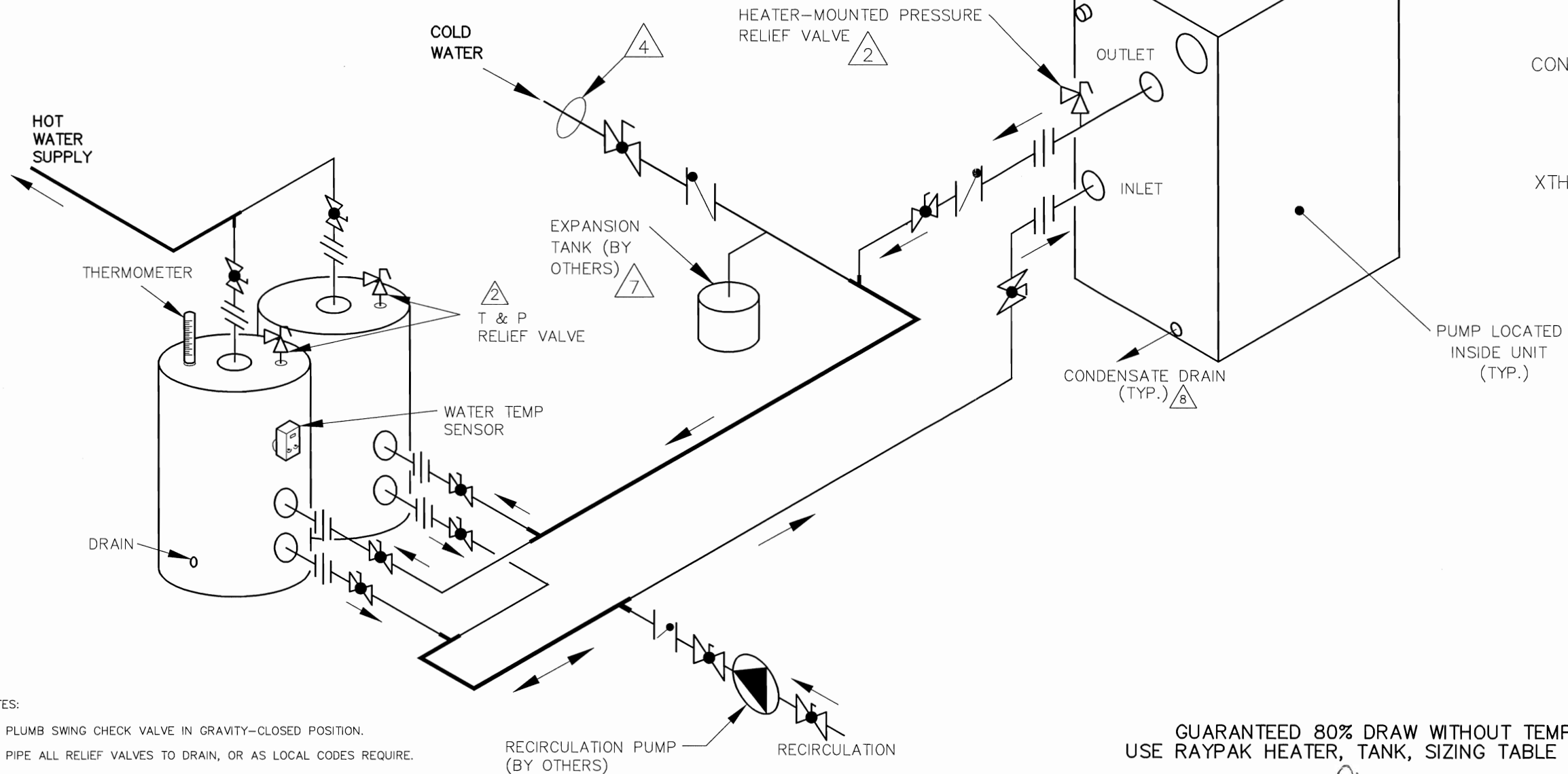
REVISIONS				
REV	DESCRIPTION	E.O.	BY	DATE
1	RELOCATED COLD WATER INLET. REVISED TANK PIPING. ADDED NOTE 9.		KA	3-18-14

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CONDENSING HIGH-EFFICIENCY SYSTEMS ONLY

XTHERM INCLUDES (STD) HEATER PUMP CWR PROTECTION CONTROLLER

- NOTES:
1. PLUMB SWING CHECK VALVE IN GRAVITY-CLOSED POSITION.
 2. PIPE ALL RELIEF VALVES TO DRAIN, OR AS LOCAL CODES REQUIRE.
 3. LOCATE TEE AS CLOSE AS POSSIBLE TO TANK.
 4. INSTALL COLD WATER BETWEEN HEATER OUTLET AND TANK.
 5. SEE CHART "PIPE SIZES" FOR PIPE SIZES, CALCULATED AT MAXIMUM FLOW, NOT TO EXCEED 7.5 FT/SEC.
 6. PUMP SIZING BASED ON MAX EQUIVALENT LENGTH OF 80 FEET OF PIPE BETWEEN TANK AND HEATER. IF LONGER, CONSULT FACTORY FOR PROPER PIPE SIZE REQUIRED.
 7. 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.
 8. CONDENSATE MUST BE PIPED TO AN APPROVED DRAIN. LOCAL CODE MAY REQUIRE NEUTRALIZATION PRIOR TO DRAIN.
 9. IF HOT WATER SETPOINT EXCEEDS 150°F WITH MAX FLOW, SPECIFY "H" BOILERS INSTEAD OF "WH" WATER HEATERS.

ACAD: 8660. DWG

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

GUARANTEED 80% DRAW WITHOUT TEMPERATURE DROP, USE RAYPAK HEATER, TANK, SIZING TABLE AND HOOK-UP DATA

KEY	
	PRESSURE RELIEF VALVE
	PUMP
	UNION
	BALL VALVE
	CHECK VALVE
	THERMOMETER

8660	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 4/1/14		OXNARD, CALIFORNIA
	CHECKED D BALDWIN	DATE 1-22-09	E.O. SPR		SCALE NONE
	DRAWN R NASH	DATE 1-22-09	SIZE B	THIS DRAWING SUBMITTED UNDER CONFIDENTIAL RELATIONSHIP, AS IT EMBODIES PROPRIETARY INFORMATION, WITH ALL RIGHTS RESERVED BY RAYPAK, INC.	
	TITLE PIPING, UNI-TEMP 80: 1 XTHERM, 2 V TANK				
1	MAT'L.	SERIES/MODEL WH	DWG. NO. 8660	REV 1	