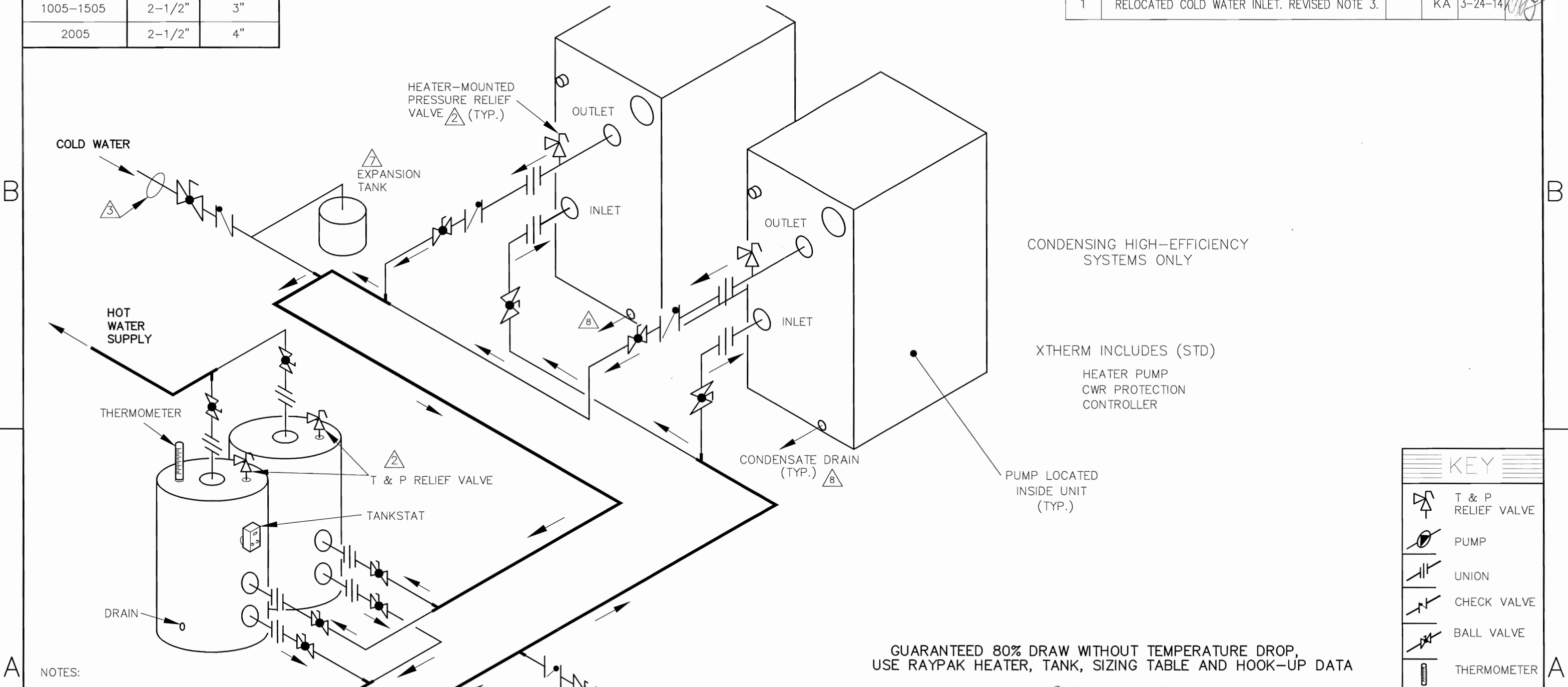


REVISIONS

REV	DESCRIPTION	E.O.	BY	DATE	CHECK
1	RELOCATED COLD WATER INLET. REVISED NOTE 3.		KA	3-24-14	

PIPE SIZES	1 UNIT	2 UNITS
1005-1505	2-1/2"	3"
2005	2-1/2"	4"

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



CONDENSING HIGH-EFFICIENCY SYSTEMS ONLY

XTHERM INCLUDES (STD)

HEATER PUMP
CWR PROTECTION CONTROLLER

PUMP LOCATED INSIDE UNIT (TYP.)

KEY	
	T & P RELIEF VALVE
	PUMP
	UNION
	CHECK VALVE
	BALL VALVE
	THERMOMETER

GUARANTEED 80% 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. 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. PIPE SIZING BASED ON MAX EQUIVALENT LENGTH OF 100 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.

ACAD: 8648.DWG

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

8648	UNLESS OTHERWISE SPECIFIED: ALL UNITS ARE IN INCHES FRACTIONS ±1/32 ANGLES ±1° X.X = ±.12 X.XX = ±.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 1-6-09	E.O. SPR	SCALE NONE		
	DRAWN R NASH	DATE 10-30-08	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: 2 XTHERM, 2 V TANKS					
1	MAT'L.	SERIES/MODEL WH	DWG. NO. 8648	REV 1		