

PIPE SIZES

	1 UNIT	2 UNITS	3 UNITS	4 UNITS
1005-2005	2-1/2"	3"	4"	5"

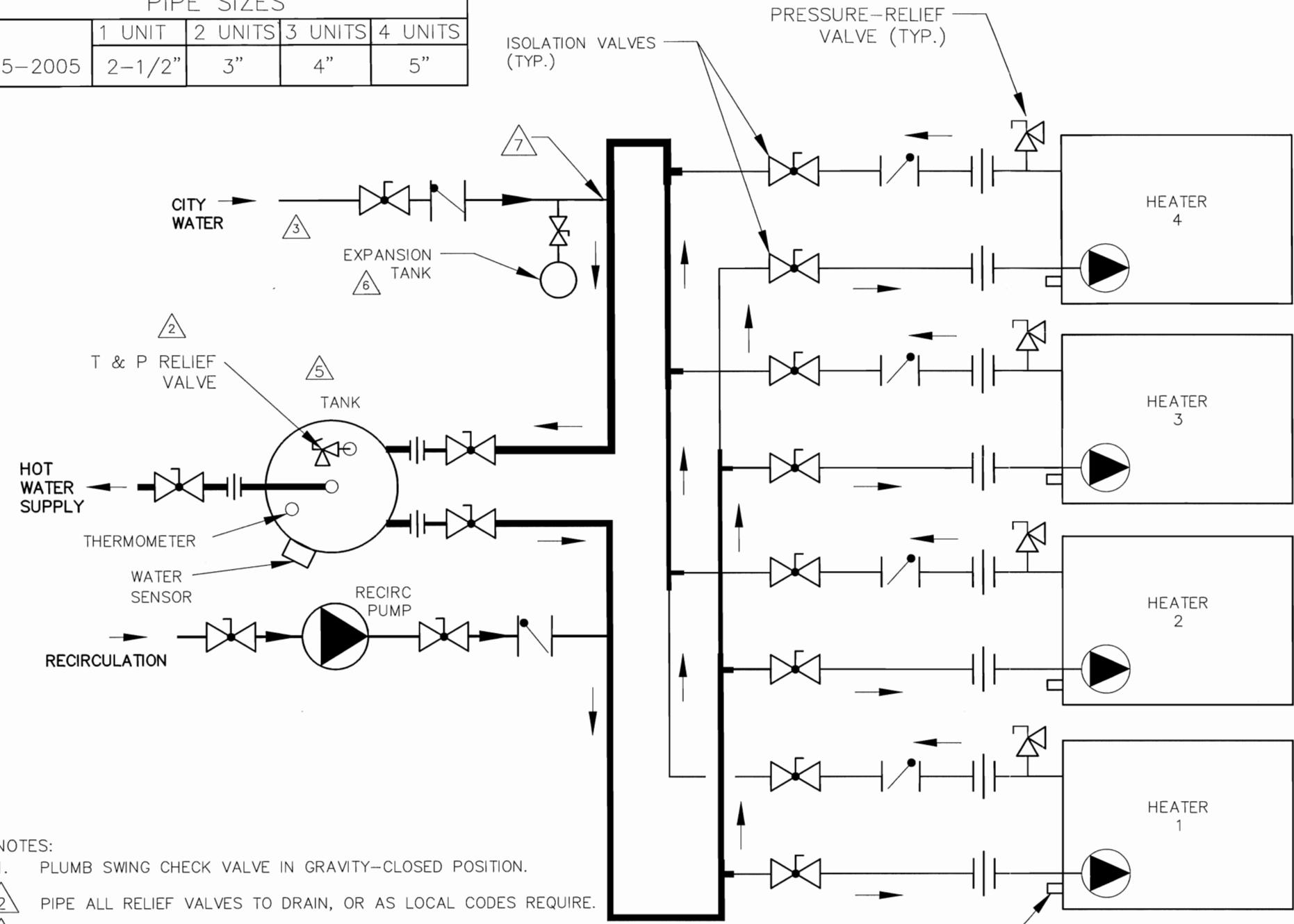
REVISIONS					
REV	DESCRIPTION	E.O.	BY	DATE	CHECK
1	REDEFINED FOR DHW USAGE. GENERAL CHGS.		DRB	3-31-09	DRB
2	REMOVED 2ND PRV		KA	3-7-11	DRB
3	RELOCATED COLD WATER INLET, REVISED NOTE 3. ADDED NOTES 8 & 9.		KA	3-25-14	

B

A

B

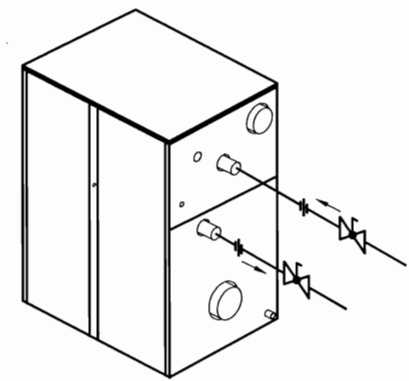
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THIS PIPING DIAGRAM IS RAYPAK'S RECOMMENDATION AND IS NOT INTENDED TO REPLACE AN ENGINEERED PIPING SYSTEM DESIGNED BY A PROFESSIONAL ENGINEER.

BOILER INCLUDES (STD):  
CONTROLLER  
CWR PROTECTION  
HEATER PUMP

CONDENSATE PIPING NOT SHOWN.



KEY	
	PRESSURE RELIEF VALVE
	PUMP
	UNION
	CHECK VALVE
	BALL VALVE
	THERMOMETER

- NOTES:
- PLUMB SWING CHECK VALVE IN GRAVITY-CLOSED POSITION.
  - PIPE ALL RELIEF VALVES TO DRAIN, OR AS LOCAL CODES REQUIRE.
  - MINIMUM PIPE SIZE MUST BE AT LEAST EQUAL TO THE BOILER INLET/OUTLET SIZE. SEE "PIPE SIZES" CHART ABOVE; COMBINED PIPE SIZES CALCULATED AT MAX FLOW, NOT TO EXCEED 7.5 FT/SEC.
  - PIPE CONDENSATE DRAIN TO DISCHARGE PER LOCAL CODE, OR NEUTRALIZE AND DRAIN TO DISCHARGE PER LOCAL CODE.
  - PIPE SIZING BASED ON 100 EQUIVALENT FEET OF PIPING. IF DISTANCE IS GREATER, THE PIPE MUST BE SIZED TO ACCOMMODATE INCREASE IN PIPING-RELATED LOSSES.
  - 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.
  - LOCATE TEE AS CLOSE AS POSSIBLE TO TANK.
  - INSTALL COLD WATER BETWEEN HEATER OUTLET AND TANK.
  - IF HOT WATER SETPOINT EXCEEDS 150°F WITH MAX FLOW, SPECIFY "H" BOILERS INSTEAD OF "WH" WATER HEATERS.

CONDENSATE DRAIN (TYP.)

ACAD: 8665.DWG

HEATERS SHOWN REPRESENT 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

8665	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 4/2/14	OXNARD, CALIFORNIA	
	CHECKED D BALDWIN	DATE 2-3-09	E.O. SPR	SCALE NONE
	DRAWN R NASH	DATE 2-3-09	RAYPAK PROPRIETARY AND CONFIDENTIAL INFORMATION This drawing contains Confidential and Proprietary Information of Raypak, Inc. All rights reserved by Raypak, Inc.	
TITLE PIPING, UNI-TEMP 80: 4 XTHERM, 1 V TANK				
MAT'L.	SERIES/MODEL WH	SIZE DWG. NO. B 8665	REV 3	