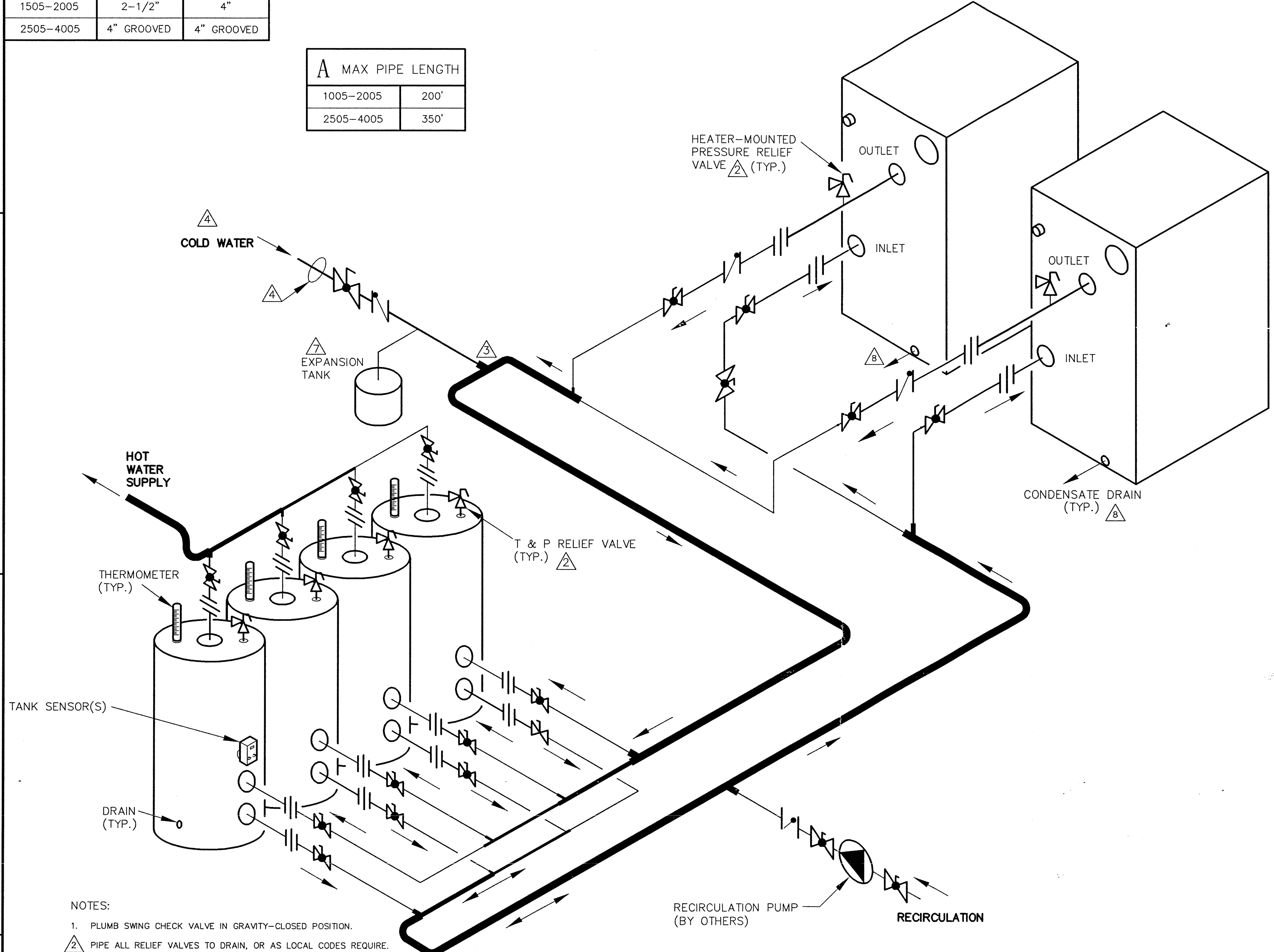
PIPE SIZES		
	1 UNIT	2 UNITS
1005	2-1/2"	3"
1505-2005	2-1/2"	4"
2505-4005	4" GROOVED	4" GROOVED

REVISIONS						
REV	ZONE	DESCRIPTION	E.O.	BY	DATE	CHECK

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

A MAX PIPE LENGTH	
1005-2005	200'
2505-4005	350'



CONDENSING HIGH-EFFICIENCY SYSTEMS ONLY

XTHERM INCLUDES (STD)

HEATER PUMP
COLD WATER PROTECTION
VERSA IC CONTROLLER
INJECTOR PUMP – (INTERNAL ON 1005–2005. MTD ON INLET PIPING FOR MODELS 2505–4005.)

8829

KEY

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

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. PIPING FROM COLD WATER INLET TO TANK MUST ACCOMODATE HEATER FLOW PLUS EXPECTED COLD WATER FLOW.
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 A 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 TREATMENT PRIOR TO DRAIN.
9. **IF HOT WATER SETPOINT EXCEEDS 150°F WITH MAX FLOW, SPECIFY "H" BOILERS INSTEAD OF "WH" WATER HEATERS.**

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

ACAD: 8669. DWG

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

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 3/14/16
CHECKED DATE 3/11/16
DRAWN J SIRON DATE 3-10-16

Raypak OXNARD, CALIFORNIA

E.O. SPR
SCALE NONE
SIZE C

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TITLE
PIPING, UNI-TEMP 80: 2 XTHERM, 4 V TANKS

MAT'L.
SERIES/MODEL WH
DWG. NO. 8829
REV