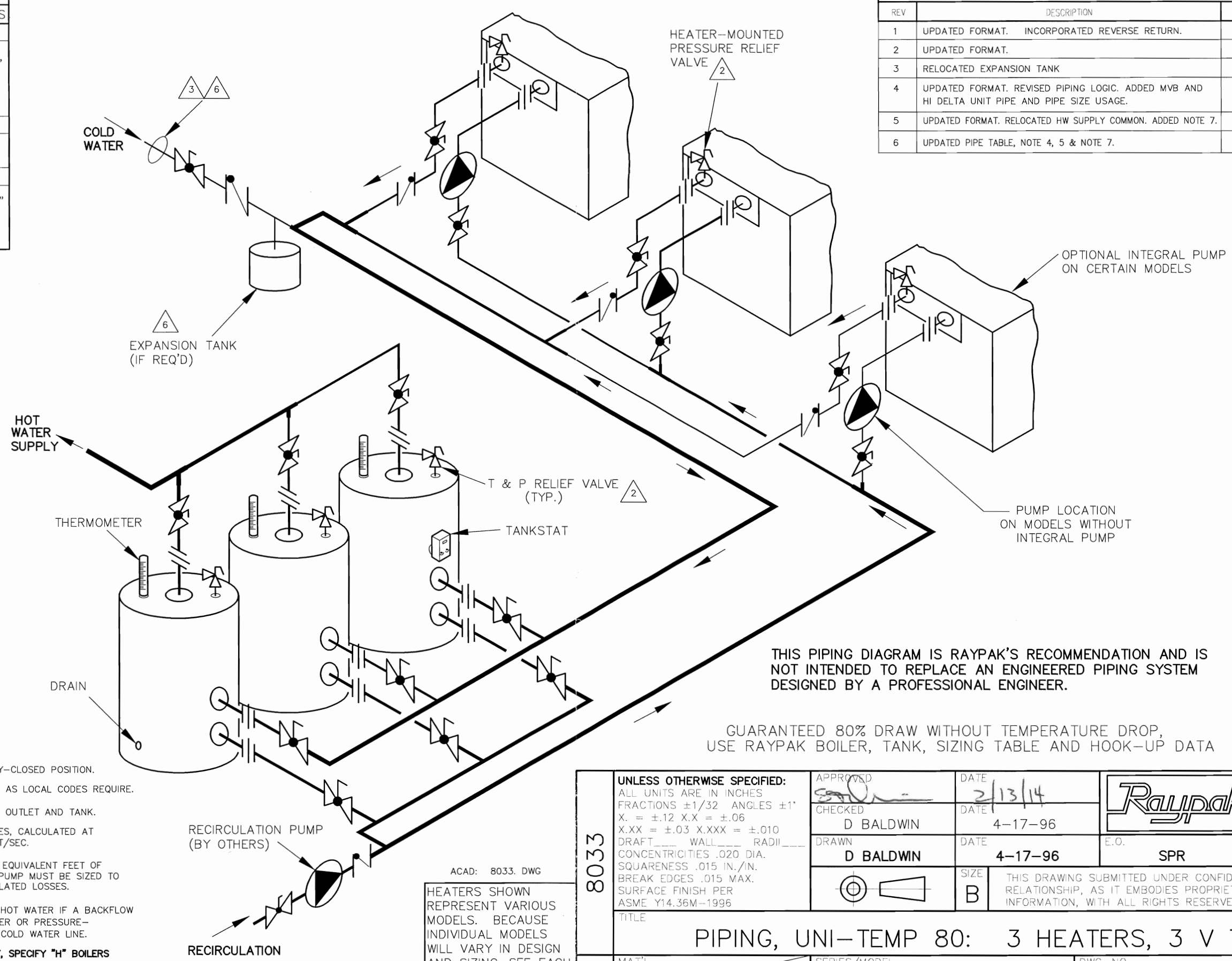


PIPE SIZES			
	UNIT	2 UNITS	3 UNITS
RAYTHERM			
133	1-1/4"	1-1/2"	2"
181-401	1-1/2"	2"	2-1/2"
514-824	2"	3"	4"
926-1826	2-1/2"	3"	4"
2100-4001	3"	4"	6"
MVB			
503-754	2"	3"	4"
1003-2004	2-1/2"	4"	5"
HI DELTA			
HD101-HD401	1-1/2"	2"	2-1/2"
302-902	2"	3"	4"
992-2342	2-1/2"	4"	5"

REVISIONS					
REV	DESCRIPTION	E.O.	BY	DATE	CHECK
1	UPDATED FORMAT. INCORPORATED REVERSE RETURN.		DRB	2-19-99	DRB
2	UPDATED FORMAT.		RLH	9-9-99	DRB
3	RELOCATED EXPANSION TANK		DRB	2-3-00	DRB
4	UPDATED FORMAT. REVISED PIPING LOGIC. ADDED MVB AND HI DELTA UNIT PIPE AND PIPE SIZE USAGE.		RAN	10-31-08	DRB
5	UPDATED FORMAT. RELOCATED HW SUPPLY COMMON. ADDED NOTE 7.		RAN	4-8-09	DRB
6	UPDATED PIPE TABLE, NOTE 4, 5 & NOTE 7.		KA	2-4-14	<i>[Signature]</i>



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- 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 MAXIMUM 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" BOILERS INSTEAD OF "WH" WATER HEATERS.

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

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

ACAD: 8033.DWG
 HEATERS SHOWN REPRESENT VARIOUS MODELS. BECAUSE INDIVIDUAL MODELS WILL VARY IN DESIGN AND SIZING, SEE EACH SPECIFIC HEATER TYPE FOR DETAILS.

8033	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 <i>[Signature]</i> DATE 2/13/14	Raypak OXNARD, CALIFORNIA
	CHECKED D BALDWIN DATE 4-17-96		E.O. SCALE NONE	
	DRAWN D BALDWIN DATE 4-17-96		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: 3 HEATERS, 3 V TANKS				
MAT'L.	SERIES/MODEL WH	DWG. NO. 8033	REV 6	