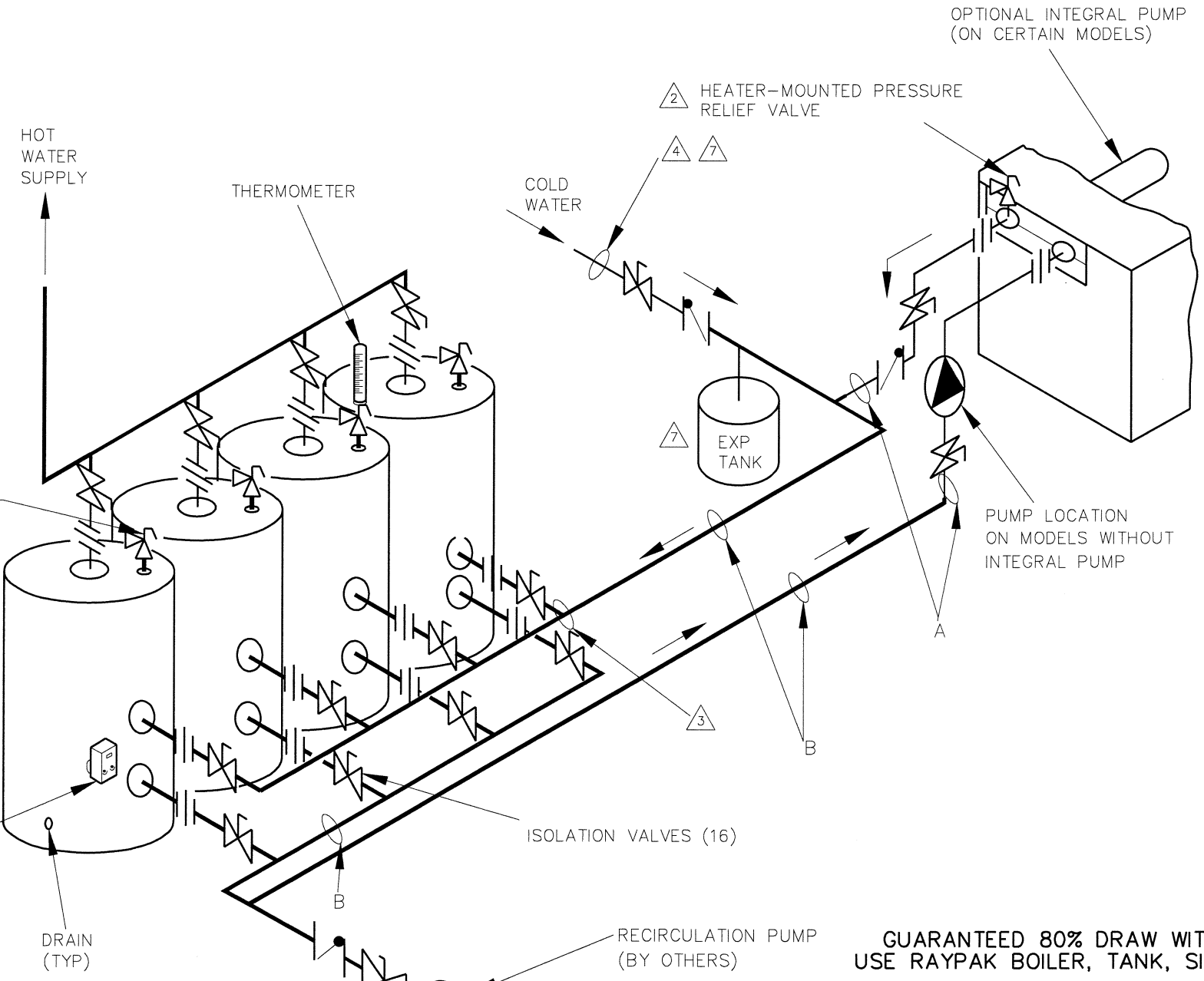


MINIMUM PIPE SIZES		
	A	B
RAYTHERM		
133	1-1/4"	1-1/2"
181-401	1-1/2"	2"
514-824	2"	2-1/2"
926-1826	2-1/2"	3"
2100-4001	3"	4"
ADB		
500-751	2"	2-1/2"
1001-1501	2-1/2"	3"
MVB		
503-753	2"	2-1/2"
1003-2003	2-1/2"	3"
504-754	2"	2-1/2"
1104-2004	2-1/2"	3"
HI DELTA		
122-202	1-1/4"	1-1/2"
242-322	1-1/2"	2"
302B-902B	2"	2-1/2"
992B-2342B	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	CHECK
1	RELOCATED RECIRC LINE. ADDED SUGGESTION ONLY NOTE.		RAN	9-20-05	DRB
2	UPDATED PIPE SIZING TABLE, FORMAT AND LOGIC.		RAN	3-18-08	



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

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

- NOTES:
- PLUMB SWING CHECK VALVE IN GRAVITY-CLOSED POSITION.
 - PIPE ALL RELIEF VALVES TO DRAIN, OR AS LOCAL CODES REQUIRE.
 - LOCATE TEE AS CLOSE AS POSSIBLE TO TANKS.
 - INSTALL COLD WATER BETWEEN HEATER OUTLET AND TANK.
 - SEE CHART "MINIMUM PIPE SIZES" FOR MINIMUM PIPE SIZES. SIZES CALCULATED ON MAXIMUM FLOW.
 - SIZING BASED ON HEATER AND TANKS BEING PLACED FIVE FEET APART. IF DISTANCE IS GREATER, THE PUMP 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.

ACAD: 8342.DWG
HEATER SHOWN REPRESENTS VARIOUS MODELS. BECAUSE INDIVIDUAL MODELS WILL VARY IN DESIGN AND SIZING, SEE EACH SPECIFIC HEATER TYPE FOR DETAILS.

8342	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	 OXNARD, CALIFORNIA
	CHECKED D BALDWIN	DATE 2-13-02	E.O.	
	DRAWN E ALVARADO	DATE 2-13-02	SCALE NONE	
	TITLE PIPING: UNI-TEMP 80: 4 VERT. TANKS, 1 TEMP.	SIZE B	THIS DRAWING SUBMITTED UNDER CONFIDENTIAL RELATIONSHIP, AS IT EMBODIES PROPRIETARY INFORMATION, WITH ALL RIGHTS RESERVED BY RAYPAK, INC.	
2	MAT'L.	SERIES/MODEL WH 122-4001	DWG. NO. 8342	REV 2