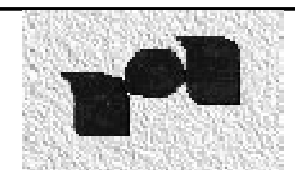


GENERAL NOTE :

1. ADD ISOLATION VALVES AND UNIONS AS NEEDED.

KEYED NOTES :

- ① KINGSPAN, HP-450 SOLAR COLLECTOR, INSTALL UP TO 6 COLLECTORS IN SERIES. FOR MULTIPLE ROW SYSTEMS REFER TO SOLAR ARRAY FLOW DIAGRAM, DHW-10.
- ② SOLAR CONTROL AND PUMP STATION. CONNECT TO ALL RTD's (TT) AND OPTIONAL HEAT DISSIPATOR (11).
- ③ MIXING VALVE (SEE MIXING VALVE DETAIL DHW-0)
- ④ ROUTE T&P RELIEF VALVE (PRESSURE RELIEF ONLY FOR SOLAR STORAGE TANKS) DISCHARGE, FULL SIZE, TO FLOOR DRAIN.
- ⑤ PRESSURE REDUCING VALVE - INSTALL ONLY IF WATER SUPPLY PRESSURE EXCEEDS 75% OF WATER HEATING SYSTEM DESIGN PRESSURE.
- ⑥ ASME THERMAL EXPANSION TANK - SIZE ACCORDING TO MANUFACTURER'S RECOMMENDATION.
- ⑦ COMBINATION TEMPERATURE AND PRESSURE GAUGE. INSTALL WITHIN 12" OF HOT WATER OUTLET.
- ⑧ PROVIDE FULL-PORT DRAIN VALVE AND ROUTE TO FLOOR DRAIN.
- ⑨ RECIRCULATION PUMP. PROVIDE AQUASTAT ONLY IF REQUIRED BY CODE WITH LETTER TO OWNER REQUIRING RELEASE OF LIABILITY (NON-MOVING WATER PROMOTES LEGIONELLA).
- ⑩ FREEZE PROTECTION VALVE, THERMO-MEGA TECH MODEL 3/4" IC/FP-035, INSTALL ON COMMON SOLAR HOT WATER RETURN LINE TO DISCHARGE ON ROOF. VALVE AND TEE TO REMAIN UN-INSULATED.
- ⑪ FAN COIL UNIT, SIZED TO DISCHARGE AT LEAST 5,000 BTUH PER COLLECTOR. 3 PORT VALVE TO DIVERT COLLECTOR RETURN AWAY FROM STORAGE TANKS TO DISSIPATOR AND ACTIVATE HEAT DISSIPATOR FAN WHEN COLLECTOR REACHES 230 DEG F. DUCT DISCHARGE THROUGH NEAREST OUTSIDE WALL.
- ⑫ PROVIDE 3/4" SHUTOFF VALVES FOR FUTURE ACCESS POINTS, ACCESSIBLE WITHIN SAME AREA.
- ⑬ INSTALL 1/2" NPT SOLENOID VALVE WITH Cv FLOW FACTOR OF 1.7 OR LESS, AS SHOWN, UPSTREAM OF THE DRAIN TEMPERING VALVE, DTV-R (PN 326-000000-100).



RAND ASSOCIATES INCORPORATED
 Domestic Hot Water Flow Diagram
 Single Water Heater
 Water Heater is the Storage Tank

PIPING DIAGRAM

Size: B	FSCM No: -	Drawing No: DHW-12	Version: 15
Drawn By: BLW	Scale: NONE	Date: 09.16.2012	Sheet: 1 of 1

09/16/12-17:10 PATH: DHW-12v15