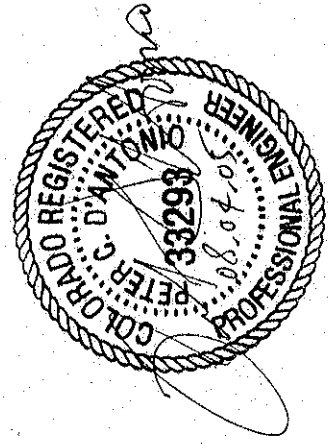


**DOUB RESIDENCE
ENERGY ANALYSIS USING 2 DEG F OUTDOOR DESIGN CONDITION (CLEAR, COLD DAY & NIGHT)**

loads	29,219	peak		from CHVAC program
heating		Btuh	design	
dhw	1,581	Btuh	average	
Daily	739,204	Btu/day	design	
passive gain	184,801	Btu/day		
Net daily	554,403	Btu/day	design	
internal gains	52,833	Btu/day		2201
Net daily	501,570	Btu/day		7.5% 27018



tank capacity	3,998,400	Btu
avg	4.87	kWh/m2/day
	0.45	kWh/ft2
avg	1544	Btu/ft2
collector area	384	sf
Total	582,856	btu/day
avg efficiency	45%	
	266,830	btu/day

8.0 number days consecutive cloudy until tank depleted
 assumes full charge on tank
 assumes no panel contribution
 assumes passive gain contribution

**DOUB RESIDENCE
ENERGY ANALYSIS USING 20 DEG F OUTDOOR DESIGN CONDITION (TYPICAL COLD, CLOUDY DAY & NIGHT)**

loads	29,219 peak	from CHVAC program
heating	21,877 Btuh	when cloudy - heat loss at 20DegF outdoor and 68 indoor
dhw	1,581 Btuh	
Daily	562,996 Btu/day	
passive gain	Btu/day	
Net daily	562,996 Btu/day	
internal gains	52,833 Btu/day	
Net daily	510,163 Btu/day	2201 7.5% 27018

tank capacity	3,998,400 Btu
avg	4.87 kWh/m ² /day
avg	0.45 kWh/ft ²
collector area	384 sf
Total btu/day	582,956
avg efficiency	45%
	266,830 btu/day

7.8 number days cloudy until tank depleted
 assumes full charge on tank
 assumes no panel contribution
 assumes no passive gain

