

It would be difficult to justify a system in terms of electricity savings alone. Consider a pool collector radiating 150 BTU's per square foot per night for 120 nights per year. Against an electric system with an EER of 10 this saves only 1.5 kWh per square foot per year. The radiant cooling system must replace a conventional electric air conditioning unit. The cost of 400 ft of 8" PVC pipe, a suitable thermal mass for 400 square feet of house, could be less than adding another 1 ton A.C. unit and there is no noise, no drafts, and almost no power bill. 400 square feet of radiator would provide the same cooling, 60,000 BTU's, as a one ton unit on 5 hours each day.

A solar pool heater used to cool during the summer can't heat the house in winter if it is heating the pool, in many climates the pool is only heated during mild weather in spring and fall, during the winter the pool heater, suitably designed to drain down at night, could heat the space it cooled in summer.

The following pictures show a ceiling crossed by 8" PVC pipes with high and low headers and a wall storage system using a flattened helix of 4" PVC sewer pipe winding its way from the floor up to 6'.

Also shown are 6" pipes to be installed vertically with high and low headers in a wall. All these storage arrangements have about 20 lbs. H₂O per square foot and should approximately match their radiator in area.