

Steve Baer (1978) recommends a width of 1/15 of the length of the collector.

Convective airflow is a result of temperature differences between two branches of the loop. The "chimney" effect governing the flow is proportional to the square root of the height of the collector times the temperature difference. To obtain the best air flow it is necessary to insure that air is supplied at the coolest available temperature, and to maximize the vertical distance between inlet and outlet.

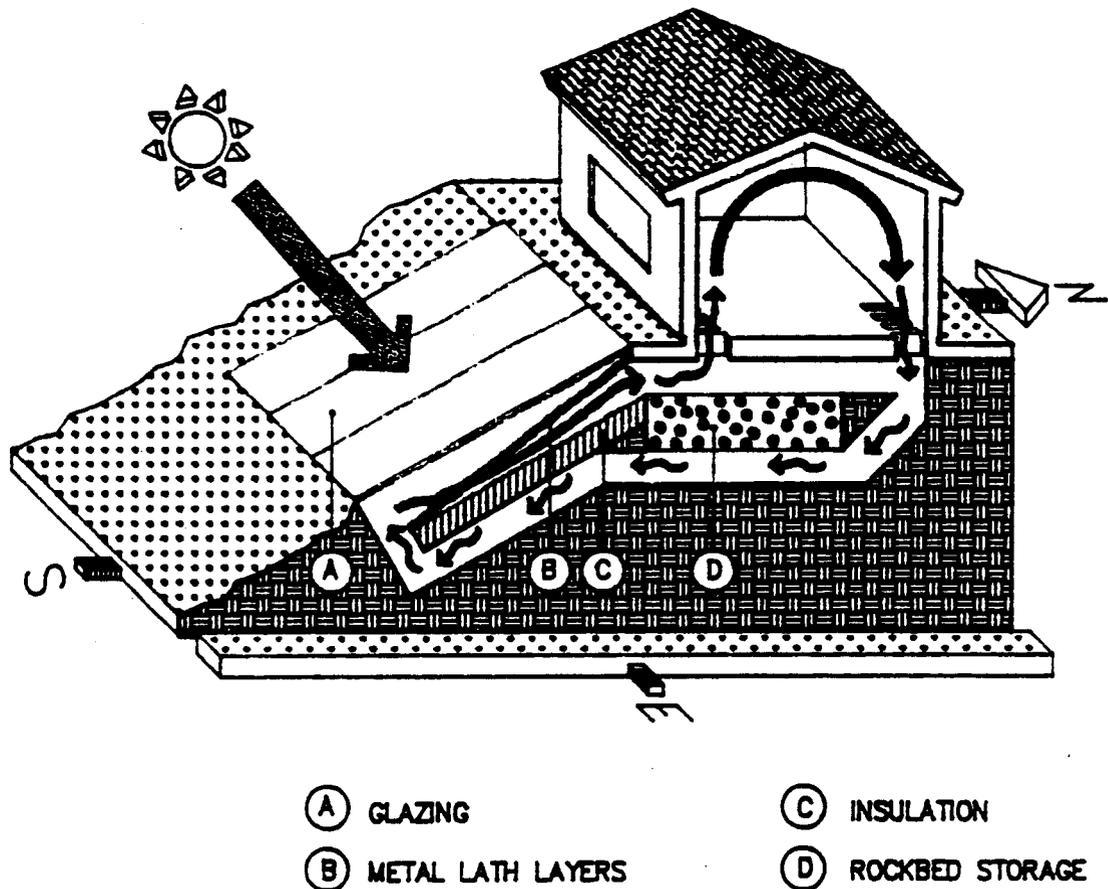


FIG. 3.D.1: Steve Baer System "Heating Mode"

In some situations, when a single story building is built on a southern slope, it is possible to locate the air collector of the convective loop below the level of the inhabited space which it serves. Such systems were developed originally by Steve Baer and Scott Morris in New Mexico. Many solar building with this system (modified) were built in Santa Fe by Architect Mark Jones.

There is no thermal mass integrally associated with the energy collecting elements in this type of solar heating systems. It