Solar Houses at MIT
Solar V

Located on 270 Vassar Street in Cambridge, this building, erected in 1978 on the MIT campus, was used as an experimental studio/classroom by the MIT Department of Architecture.

Unlike the first four MIT solar houses, Solar V did not require mechanical equipment such as solar collectors, pumps or fans. All elements of solar heating were incorporated into the building materials: narrow venetian blinds between layers of special glass in the south-facing windows had mirrored upper surfaces that reflected sunlight onto special ceiling tiles. These tiles had a solid chemical core composed of sodium sulfate, water, and other chemicals that melted upon absorbing the solar energy. Special transparent plastic material inserted between the panes of glass increased the window's insulation as it reflected room heat back into the building. Sensors and measurement instruments were located throughout the building to record the system's effectiveness.

Bibliography:

