

Solar home tested

Living in a laboratory sounds cold and uncomfortable. But not if the "lab" is a 2½ story, three-bedroom house comfortably warmed by the sun.

Such a "live-in laboratory" has been built on the campus of the Rochester Institute of Technology, RIT.

It is a solar energy research project jointly sponsored by RIT, the Rochester Gas and Electric Corp., and the Rochester Home Builders Association. It is also home to a faculty family of four.

The house is a prototype for use of solar heat in Western New York, an area with bitter cold winters and abundant cloud cover.

"Solar energy tends to be seen by the public as practical only in the sunbelt," said Carolyn Rankin, RIT spokesperson.

"The Energy House will test the feasibility of solar heat for cold, cloudy areas like ours where efficient heating systems are really needed."

Original plans for the house were developed by Dr. Paul Wojciechowski of RIT's mechanical engineering department. He researched historical weather data for the area, and determined that if a house were built to take maximum advantage of available sunshine, half of its heat and hot water needs could be met by solar energy.

A year's operation of Energy House supports the analysis. The project may even exceed expectations.

"In the first week of October '78, despite seasonally cold weather, all of the house's space heating requirements were met by solar heat collected through its large, southern-exposure windows," said Ms. Rankin.

"That's an exciting indication of the sun's practical heating power."

In designing the house, architect John Fayko used readily-available, energy-efficient building materials and techniques. Type, size and location of windows figured significantly in the plan.

The windows serve as passive solar collectors, which flood the house with light and trap the heat of the winter sun. A wide expanse of windows fills the south wall. Lesser glass areas face east, west and north. All windows are Andersen Perma-Shield casements with triple glazing.

The windows are also efficient insulators. Perma-Shield units have a rigid vinyl sheath over preservative-treated wood-core sash and frames, factory-applied vinyl weatherstripping that is twice as tight as industry standards and double-pane insulating glass.

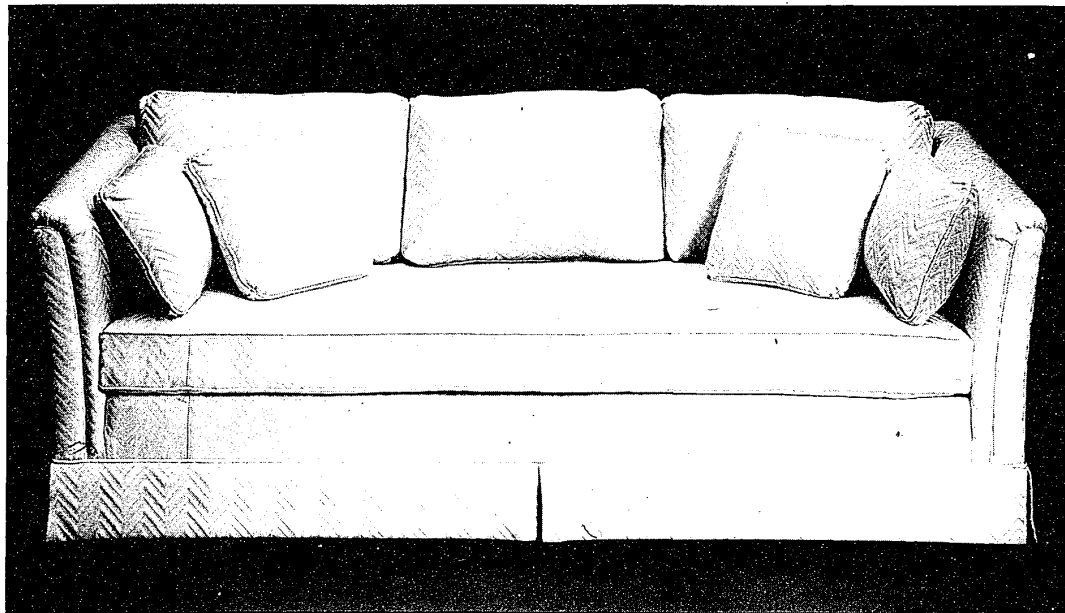
Triple glazing is achieved by a separate storm panel over the double panes. A 39-inch roof overhang and plenty of window ventilation keep the house cool in summer.

The house has 38 solar collectors on the sharply-pitched roof to catch as much winter sun as possible. There are two solar systems — one for space heating, the other for hot water. Electric heat provides a back-up system.

To facilitate heat flow through the nine-room house, interior wall space was minimized and rooms laid out around a central atrium-stairwell. It makes a distinctive architectural feature. The house has optimum insulation, magnetically-sealed doors, an energy-efficient fireplace, and tight construction.

There was no stinting on visual appeal. Exterior colors are a pleasing blend of earthtones — Perma-Shield windows in Terracotta color, dark earth-colored doors, and warm wood siding; all in all, a house that works with rather than against nature.

IT'S GORMAN'S GREAT \$529 SOFA REBATE!



**OR BETTER YET,
PAY JUST \$995
FOR THIS \$1524
HERITAGE
CUSTOM SOFA
AND FORGET
THE CHECK!**

That's a savings of 35%! And you can have this incredible savings on the 85-inch Heritage custom sofa, and have it with your choice of cushion styles . . . and some of the very finest fabrics. Heritage offers!

And that isn't all: right now we're having a sale on **all** Heritage custom design upholstered pieces. Heritage has made it easy with their unique Heritage Custom Design Program. You can choose hundreds of fabrics, five sofa sizes, seven frame designs, plus a variety of cushion and pillow styles to give you over a hundred different variations.

And one of Gorman's talented designers will help you make the perfect combination at no extra charge.

So why not replace that tired out piece of furniture with quality Heritage craftsmanship that you've designed yourself? Or fill that empty space with a beautiful Heritage masterpiece.

And save up to 35%!

Come to Gorman's for the Heritage Custom Design Upholstery Sale everyone's been waiting for. But hurry . . . sale ends October 31. **Holiday delivery guaranteed when ordered before October 15.**

GORMAN'S

W. Big Beaver at Crooks, Troy • Phone: 649-2070
Open daily 10 to 6; Monday, Thursday & Friday till 9; Sunday Noon to 5:30
Telegraph at 12 Mile, Southfield • Phone: 353-9880
Open daily 10 to 6; Monday, Thursday & Friday till 9; Closed Sunday