

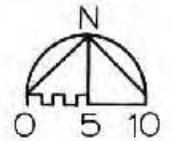
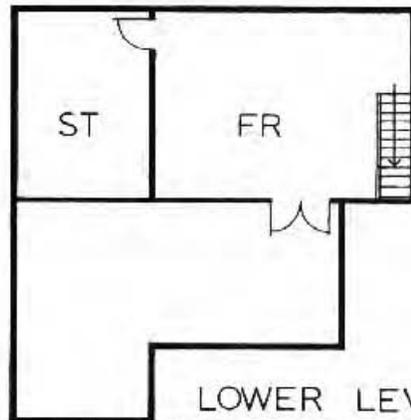


The Frisk home, designed by Solar Energy Associates of Omaha, is an interesting combination of conservation strategies and direct gain, trombe wall and greenhouse passive solar heating techniques. A particularly nice feature of the Frisk home is the loft (opposite left) located above the bathroom area and overlooking the great room. The empty vertical spaces typically found in rooms with clerestory windows and high ceilings can be ideal for lofts which can be used as a study, family room, spare bedroom, children's play area, etc.

An earth berm protects the northeast corner of the house from winter winds. Mature trees to the north of the house serve as a windbreak during the winter, and those to the west shade the house from the afternoon sun in summer. Another conservation feature of the home is the airlock entry which functions as useable space. The main

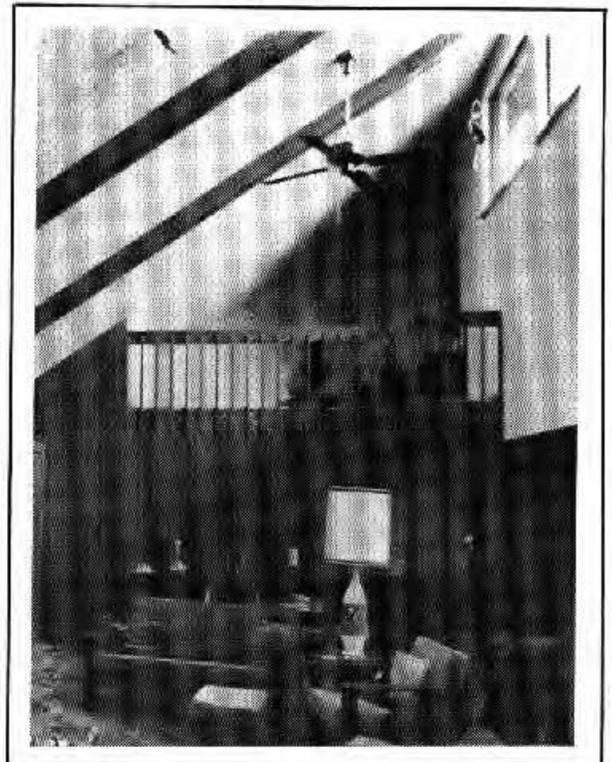
entrance is an airlock entry that is also a solarium/sunspace (opposite right). The other airlock entry, between the garage and the kitchen, is the location for the laundry and pantry.

Sunlight reaches north rooms through clerestory windows, and, in the great room, a massive fireplace located along the north wall absorbs and stores direct solar gain. The Trombe wall is located in the breakfast area and two of the bedrooms. Trombe walls are inherently efficient and temperature stable, and the owner is very pleased with the "toasty" atmosphere of the Trombe wall spaces. No night shutters are used in the house, and backup heating is provided by a heat pump.



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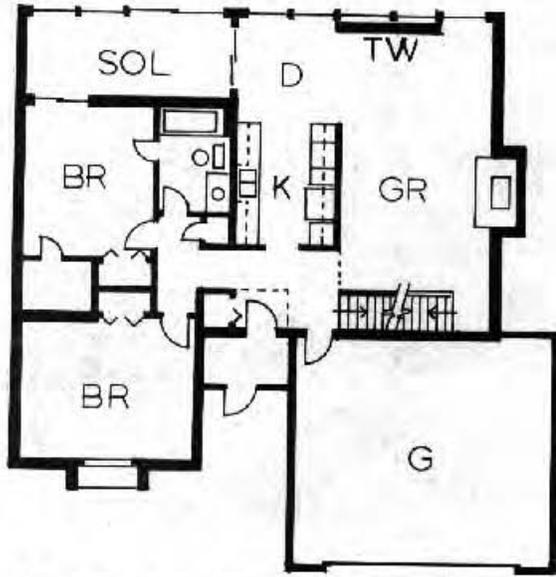


The decision made by Pacesetter Homes several years ago to upgrade the energy efficiency of their houses, has resulted in their emergence as the leader in constructing energy conscious/solar tract housing in Omaha. Their homes are affordable and well designed. They are also attractive in appearance without overstating their energy conservation and solar aspects.

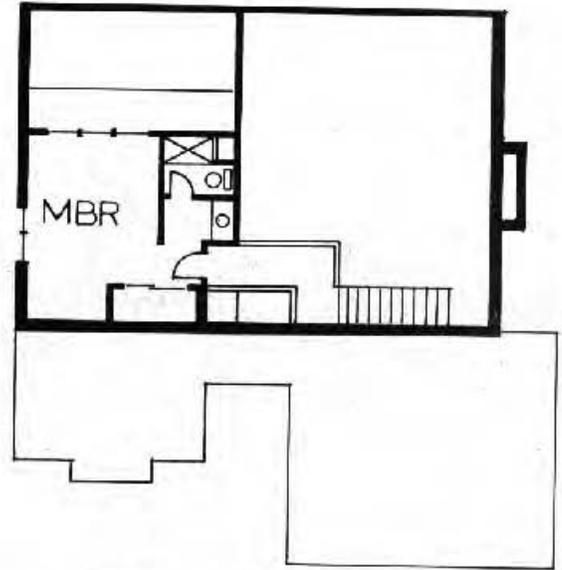
The Henley residence is Pacesetter's Solarstar model. The base design has slightly more than 1300 sq ft of floor space on the main level. The conservation features include an air lock main entry (vestibule) on the streetside of the house (opposite), a 6 mil vapor barrier on all exterior walls and ceilings, a clock operated thermostat for the automatic setting back of temperatures at night, and a furnace with an energy efficiency rating of 83%. Insulation levels are

R-25 in the exterior walls, R-40 in the flat ceiling areas, and R-36 in the sloped ceilings. In addition, 3" of rigid insulation are installed below grade.

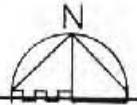
Like the Bussey home, the other Pacesetter solar model described previously in this inventory, the Solarstar is primarily a direct gain structure. Unlike the Riviera model, however, the Solarstar is designed so that the back of the house faces south, and it utilizes more than just direct gain passive solar strategies. In addition to the considerable main level direct gain glazing, there is a two story sunspace, a 12" Trombe wall, and masonry floors in the solarium and dining room to absorb solar heat. Warm air from the solarium can be circulated to the north bedrooms, bath and loft in winter, and it can be vented to the outside in summer.



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