

# Psychical Spaces

**Architect's House,  
South Dade County, Florida  
Robert Barnes & Assoc.**

This unusual home was conceived by unusual means. It is an architectural response to the needs of a present-day family, based on an appreciation of past cultures and the spiritual make-up of their buildings. However, as a hands-on research project that explored pushing traditional limits of reinforced masonry and light-gauge steel, it also represents an appreciation of more contemporary building techniques.

Looking back to Mayan builders in the Yucatan, architect Robert Barnes discovered block-type massiveness and some unique design elements that addressed his philosophical as well as structural requirements. He adopted a rustic masonry exterior finish to depict the "fortress-like resiliency" of the human spirit, and an "eye of the hurricane" motif, symbolizing a center of energy, to embellish its broad surface. Water pools at the east and west entrances are intended to be both calming and inviting and to offer elements of reflection and balance. Curved walls, too, serve symbolic and practical purposes. The east-west axis is oriented toward the rising and setting sun.

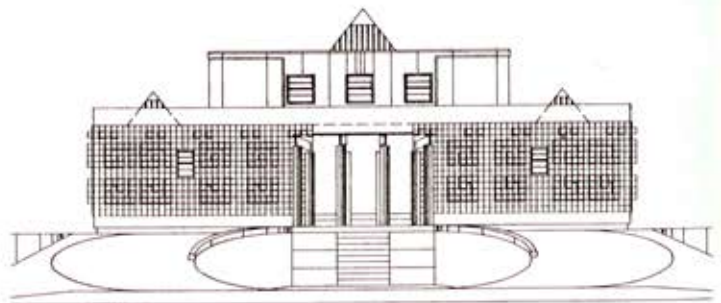
It was perhaps a more practical consideration for the family to select a site near good schools, in a relatively secluded but high-density suburban area. The three-level plan, too, is practically as well as spiritually motivated. The top floor, "domain of those who manage the family's growth," houses a master bedroom suite with a rooftop deck. Communal spaces and the children's rooms are found on the main floor. A ground floor—actually below ground, "site of creative processes," accommodates an art



*Intended to be an example of "green" architectural design, the plan incorporated natural light and solar energy as well as environmentally sensitive building products.*

studio, office, and guest room. Set on slightly more than a half-acre, the total enclosed space measures 4,350 sf.

Energy-efficiency was built into the house through a number of means. The curve of the exterior "eye wall" provides a pocket designed to catch prevailing easterly winds, and the combination of cross-ventilation







*Contrasting colors, deep spatial forms, and the Mayan influenced "eye of the hurricane" motif add plastic depth and dramatic interest to the rustic masonry exterior.*

and a thermal chimney effect via the stairwells further enhances interior air flow. Solar energy will be used to heat the swimming pool and potable water (through a photovoltaic water pump). Gas appliances, solid poured exterior masonry, and light-gauge metal walls assure thermal lag and high insulation values. The ground

floor, dug into the earth, maintains a stable low temperature.

A number of environmentally sensitive building products were incorporated into all phases of the construction process. Using light-gauge steel for roofs, floors, and interior walls created high resilient strength and provided space for high insulation values, as well as

avoiding potential wood rot and termite problems. Water-based urethanes and paints were used throughout, and trees felled during Hurricane Andrew were used to supply wood finishes.

**Architect:** Robert Barnes & Assoc.

**Principal in charge:** Robert Barnes, AIA

**General Contractor:** Richard Mullins & Co.

**Construction Management:** Robert Barnes, AIA

**Pond Construction:** Walter Dawson

**Owner:** Robert Barnes, AIA

*Photographs: Carlos Domenech*