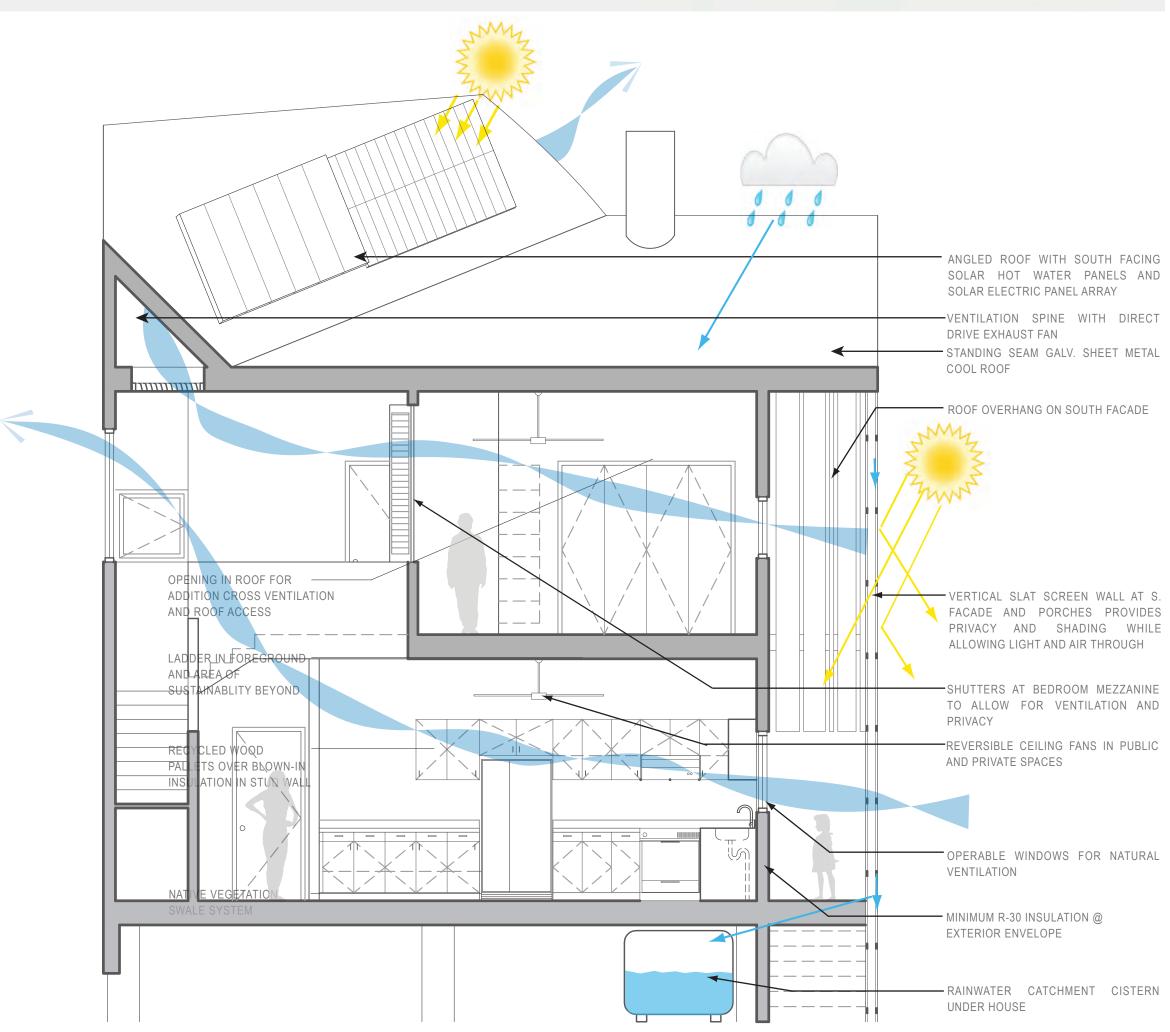


SOLAR SYSTEMS DIAGRAM



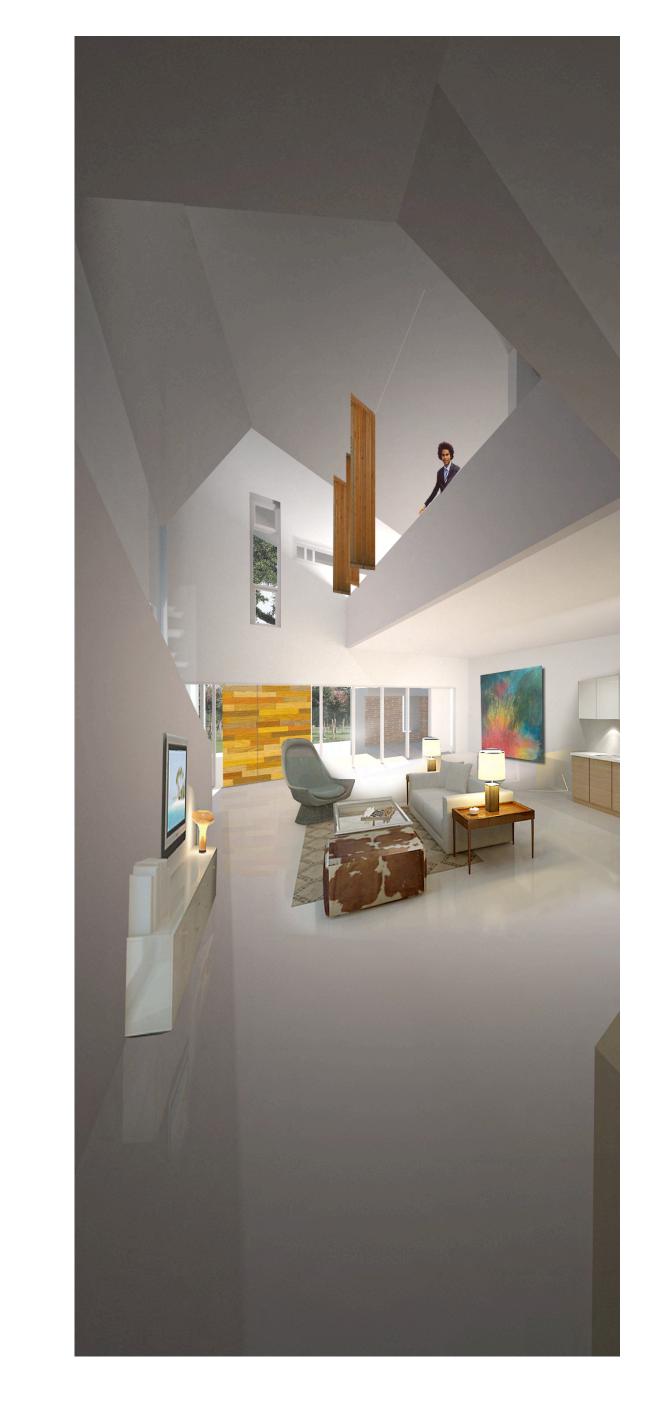
SUSTAINABLE SYSTEMS BUILDING SECTION SCALE 1/4" = 1'-0"

SUSTAINABLE SYSTEMS

Pugh + Scarpa's approach to Cradle to Cradle sustainability begins with passive solar design strategies such as locating and orienting the building to control solar cooling and heat loads; shaping and orienting the building for exposure to prevailing winds; shaping the building to induce buoyancy for natural ventilation; and shaping and planning the interior to enhance daylight and natural air flow distribution. The roof pitches upward from at an angle that both announces the home to the street and induces air flow upwards through clerestory windows set just below the roofline. On the exterior, vertically oriented, patterned paneling reinforces the home's height. Inside, a double-height space brings light, airflow and a sense of commodiousness to the living room.

The building responds to the specific conditions of the New Orleans climate in several ways:

- On the south side deep overhangs provide passive solar protection for the building's interior.
- Similarly, openings on the east and west sides are protected with deeper overhangs and porches.
- The north side is allowed to be flat and exposed, which affords daylighting with a
- minimum of solar heat gain. The roof is sloped to induce airflow.
- High ceilings and abundant cross ve ntilation allow heat to escape the building's interior. Cooling airflow inside the home is enhanced by ceiling fans, a direct drive exhaust fan, and operable windows, which create abundant cross ventilation.
- All materials selected are commercially available, cost-effective, and eco-friendly.
- All appliances are "Energy Star" rated. The home's high ceilings promote an airy,
- spacious ambiance, and will be less reliant on electric lighting than a conventional home.





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