

# Florida/Caribbean ARCHITECT

Official Journal of the Florida Association of the American Institute of Architects | Winter 2020



AIA  
Florida

# Lotus on Orange Avenue

Sarasota, Florida

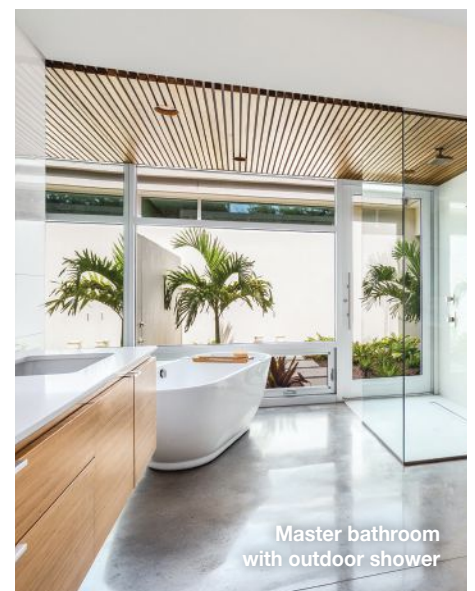
Leader Design Studio | Sarasota, Florida



Entry courtyard

All photos: Ryan Gamma Photography

Photos of this house in isolation do not hint that it is sited on a heavily trafficked street. Nor is it immediately evident that beyond the passive design technique using large overhangs to shade west-facing glass, the house is Certified Net Zero, LEED Platinum and Florida Green Coalition Platinum. Designed for indoor-outdoor living, the house is a creation of concrete slabs and 45-degree angles, ponds and pools, and indoor gardens. Although the house appears horizontally stressed, there are visible vertical supports throughout that seem to secure the “floating” horizontal slabs.



Master bathroom with outdoor shower



Enclosed pool and hot tub





This 2,569-square-foot residence was designed using passive techniques and energy-efficient technologies. Large overhangs shade windows and clerestory windows admit light. A series of strategically located operable windows and doors allow for passive ventilation.

Two 16-foot sliding glass doors in the kitchen and living room open onto a covered porch. The L-shaped rear of the house wraps around a custom-designed screened outdoor room that contains a swimming pool, spa and gas fire pit. The master suite features a private courtyard, accessible only through the master bath.

The backbone of the house is a high-performance building envelope with insulated storefront windows, a reflective, cool roof and CMU block walls filled with

bio-based insulation combined with radiant barrier insulation.

Additionally, energy-efficient building systems integrated into the design include a photovoltaic system, electric car charging station, high-efficiency air-conditioning system, tankless gas hot water heating, LED lighting with occupancy sensors, low-flow plumbing fixtures and low VOC paints

With all the site considerations combined, including the plant palette, the design successfully integrates this house into the Florida climate. ■

[Interiors:](#) SAWA Design Studio, [Contractor:](#) Josh Wynne Construction, [Structural Engineer:](#) Sterling & Wilbur Engineering, [Landscape Architect:](#) Michael Gilkey Landscape Architects

