

Building Excellence Awards

Emery-Schuna Residence

| | |
|-------------------|--|
| Project Name: | Emery-Schuna Residence |
| Category: | Single Family Homes over 3,000 sq. ft. |
| High Performance: | No |
| Manufacturer: | |
| Submitted By: | Terry Dieken |

Project
2042 E Main St
Madison, WI 53704
United States

Builder
Aldo Partners
Tim Lemkuil
507 Bruce St`, 103
VEerona, WI 53593
United States
Phone: 608-333-6125

Design Professional

Design Professional
Gingko House Architects
Tim Lemkuil
3157 Milwaukee St
Madison, WI 53714
United States
Phone: 608-692-8830

Building End Use:
The building will serve as a unique, high-performance residence for circus-loving homeowners.

Describe the end use of the building:
This residence is located in the historic “Winnebago-Atwood” area in downtown Madison, WI. Given the history of the area, the builder and homeowner decided to use SIPs to create a high-performance, energy-efficient home that would enhance the neighborhood in both design and sustainability.

The homeowners love the circus. They needed the design flexibility provided by SIPs to include a primary living area on the first floor, while the second floor and loft areas take advantage of the 20' ceiling for rope swings and other circus-themed training equipment.

SIP wall thickness and core material:
6 1/2"

SIP roof thickness and core material:

12 1/4"

Describe the benefits of using SIPs on this project. Did SIPs help save time, labor, construction costs, or energy?

Due to the design a steel frame was necessary to meet structural requirements. By using SIP walls and roof panels to wrap the structure, we were able to achieve the performance and design the homeowners were wanting far faster than we could have by using traditional building methods. There was also significantly less on-site waste and environmental contamination, which was an extremely important consideration due to the location of the project.

Describe any innovative design elements or structural engineering involved:

Certifications & Specifications

Certifications:

HERS Index:

Blower door test results (ACH50):

0.54 ACH50

Energy use intensity in kBtu/ft2:

Describe the HVAC system used on the project:

Radiant in-floor heat in basement and first floor. Single source electric to house (No NG onsite).

Other Energy-saving Materials:

Energy-efficient products or design features:

2 Tesla Powerwalls, 2 Tesla charging stations, LED lighting, low-VOC finishes

Solar panels installed:

17 kW of solar installed

Sustainable materials or design features:

Additional comments:

Builder, homeowner, occupant testimonial:

Files & Photos



EMERY SCHUMA TECTITE REPORT.pdf



EMERY SCHUNA 102921.pdf



IMG_6981.jpg



unnamed 12.39.38 PM.jpg



68972285189--B5C4B397-CB45-4E1E-ACFE-AB3E9AE96CBF.jpg



IMG_7045.jpg



IMG_7013.jpg

Delete Application