



NEW

High Performance Consideration



**Andri & Veena
Residence**



Andri & Veena Residence

Participant information

Premier SIPs
Becky Susan
1420 Washington Avenue
Puyallup, WA 98375
Phone: 800-275-7086
Email Address: info@premiersips.com
Website: www.premiersips.com

Category: Single Family Homes (over 3,000 sq. ft.)

High Performance: Yes

Project information

Andri & Veena Residence
Seattle, WA 98118

Date Completed: 12/16/2017

Dimensions of building (all floors of multi-story building): 41'-6" x 27'-1" (three levels)

Total sq. ft. of conditioned space: 3,361 sqft (including 361 sqft garage)

Built By (if different than applicant)

TC Legend Homes
Seattle, WA 98118

Panels Manufactured By: Premier SIPs

Designed By (if different than applicant - SIPA will only recognize members)

TC Legend Homes
Ted Clifton Jr.
Seattle, WA 98118

Total sq. ft. of conditioned space: 3,361 sqft (including 361 sqft garage)



Andri & Veena Residence



Describe the end use of the building:

Custom Residence - Ultra-Green!

How did SIP construction help you get this job?

Completely Beyond net-zero project, this is a Positive Energy home that generates enough power to operate all needs, and two electric car stations. Few other technologies (than SIPs) are able to achieve this without extensive materials, costs and installation requirements.

SIP wall thickness and core material: 6" GPS core (Platinum) wall panels

SIP roof thickness and core material: 10" GPS core (Platinum) roof panels

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

All of the above. Install time (FAST), labor costs (minimal compared to other advanced framing options) and ENERGY efficiency. The goal for this project was to generate renewable energy, which is multiplied when the envelope is extremely efficient and much of the energy generated can go to other things (two electric cars).

Describe any innovative design elements or structural engineering involved:

Positive Energy Home! The system together is innovative in design as it powers all home energy, and two electric cars! Through a combination of the following systems: solar panels, hydronic radiant floors, triple-pane windows, radiant hydronic floor heating, advanced HVAC & HRV, and Structural Insulated Panels (SIPs) this home is able to achieve positive energy to power two electric cars. Additional design considerations include shell (building envelope) designed factoring in orientation with smaller east & west windows to avoid overheating via solar gain.

Please list any certifications the project received, such as ENERGY STAR, LEED, National Green Building Standard, WELL, Passive House, Green Globes or local green building programs. Only list certifications that are completed:

Built Green Emerald Star (highest rating possible in Washington, 2nd house to ever achieve!), DOE: Zero Energy Ready, Energy Star Certified, Indoor Air Plus Qualified, Positive Energy beyond Net-Zero energy home. (Positive-energy homes use non-carbon-based sources of energy to produce 100% of energy needs for appliances, heating, and lighting. Additionally, the homes generate enough energy to power TWO electric cars. Most importantly, a positive-energy home does not produce carbon emissions, which are responsible for global warming.)

HERS Index (required only for High Performance Category and recommended for residential projects): 0

Blower door test results (ACH50) (required only for High Performance Category and recommended for residential projects): 0.7

Energy use intensity in kBtu/ft2 (required only for High Performance Category and recommended for commercial projects): 0

Andri & Veena Residence



Describe the HVAC system used on the project:

Chilltrix CX34 heatpump to radiant hydronic (1st floor) and fan coils on 2nd & 3rd floors

Zehnder Comfoair 250 whole house HRV. Zehnder comfoair 250 whole house heat recovery ventilator (HRV).

Describe any other energy-saving materials used in the building envelope other than SIPs. List U-values of windows used and the U or R-value of any insulation materials. (judged only for High Performance Category)

Advanced features include: solar panels, triple-pane windows, ultra-efficient heat pump, 50 year lifespan Allura siding.

Please list any energy-efficient products or design features, such as lighting, hot water heating, appliances, passive solar (judged only for High Performance Category):

Remote monitoring of electrical energy production. Remote monitoring of rainwater (for potable use) accumulation, 10000 gallon potable rainwater system, no rainwater goes to city storm-water system. Over 90% of construction waste recycled.

Were any solar panels installed on the project? If so, indicate the size of the system (judged only for High Performance Category): Yes

Please list any sustainable materials or design features not listed above, such as recycled materials, low-VOC finishes, landscaping, etc. (judged only for High Performance Category):

All low VOC or no VOC finishes. All FSC lumber. No PVC. Low cement content concrete.

Any additional comments on the project:

House also planned to follow existing site slopes to eliminate soils trucking.

Front view

Andri & Veena Residence



Side view

Andri & Veena Residence



Loft access

Andri & Veena Residence



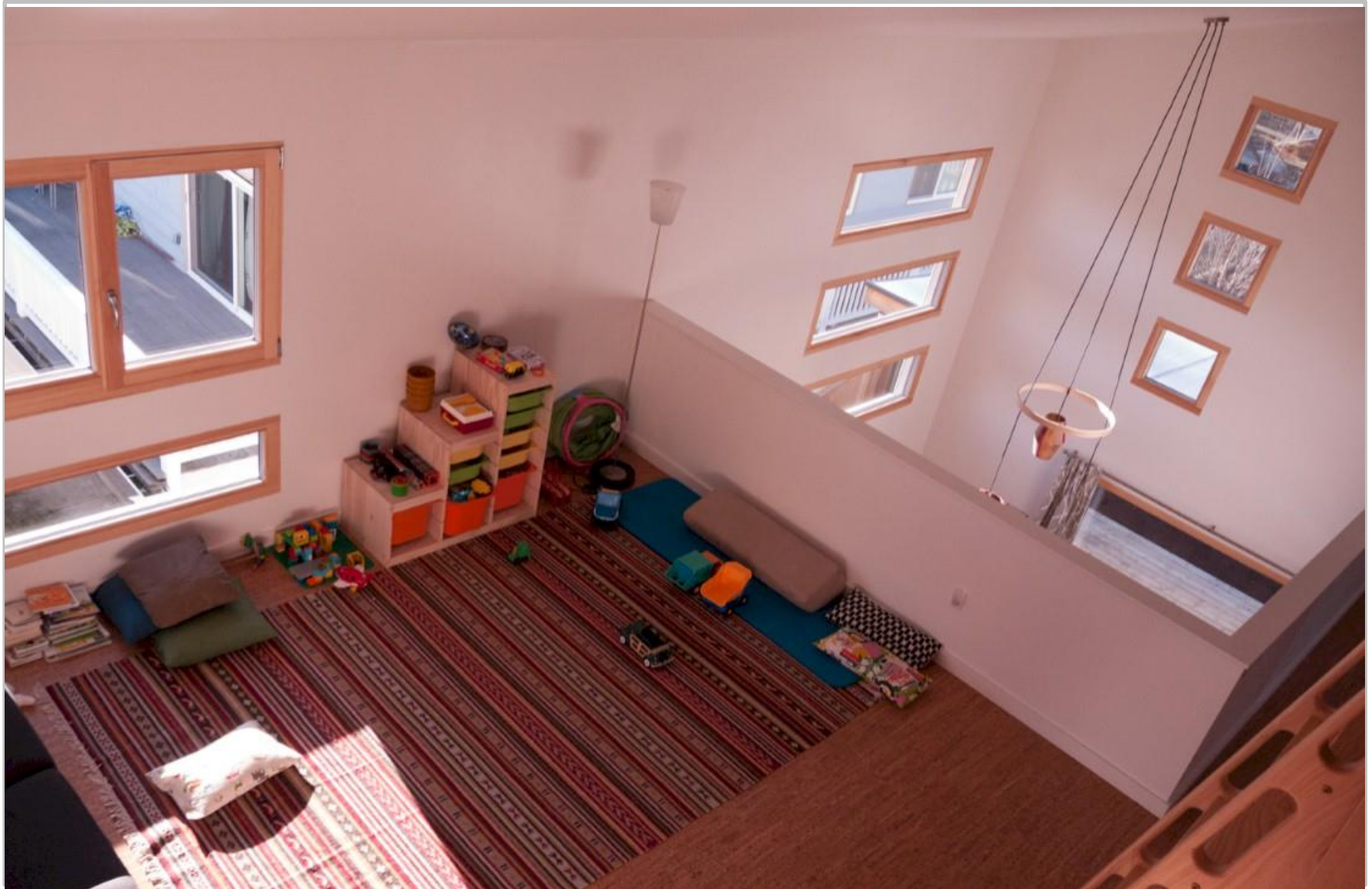
Main floor living

Andri & Veena Residence



Loft view

Andri & Veena Residence



Solar panel install

Andri & Veena Residence



Floor plan

Andri & Veena Residence



Site Plan

Andri & Veena Residence

