

NEW High Performance Consideration



Single Family Homes - under 3,000 sqft – High Performance

Participant information

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

Category: Single Family Homes (under 3,000 sq ft.) **High Performance:** Yes

Project information Columbia City Home Seattle, WA 98816

Date Completed: 06/2017

Dimensions of building (all floors of multi-story building): Not provided. 2250 sf ft of fi

Total sq. ft. of conditioned space: 2,250 sqft

Built By (if different than applicant)

TC Legend Homes & New Century Seattle Homes Premier SIPs 1420 Washington Avenue Seattle, WA 98118

Panels Manufactured By: Premier SIPS

Designed By (if different than applicant - SIPA will only recognize members) TC Legend Homes Jack Evans Seattle, WA 98121

Total sq. ft. of conditioned space: 2,250 sqft







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Columbia City Home

Describe the end use of the building:

Spec Home with Ultra-Green features in Washington State: Premium 5-Star Built Green, Positive Energy beyond Net-Zero energy home in the heart of Columbia City Seattle.

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 an electric are. Not as easily achieved without SIPS.

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!!

Describe any innovative design elements or structural engineering involved:

Positive Energy Home! Powers all home energy, and an electric car! Through a combination of the following systems: solar panels, hydronic radiant floors, triple-pane windows, HEPA air filtration, Structural Insulated Panels (SIPs), reclaimed fir floors, induction stove, ultra-efficient AC, electric car charging station. Spacious 5BR, no electric bills + solar tax credits!! High Walkin HERS score of 91

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 5-Star, Energy Star Certified Home, Indoor Air Plus Qualified, DOE: Net-Zero Energy, These positive-energy homes use noncarbon-based sources of energy to produce 100% of energy needs for appliances, heating, and lighting. Additionally, the homes generate enough energy to power an electric car. 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): 0.69

Describe the HVAC system used on the project:

Ultra efficient AC (Chilltrix CX 30) heat pump, radiant hydronic in-floor & fan coil heaters. Balanced, always-on, whole house HEPA filtered air exchange coupled to on demand cooking & humidity exhaust.



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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, hydronic radiant floors, triple-pane windows, HEPA air filtration, Structural Insulated Panels (SIPs), reclaimed fir floors, induction stove, ultra-efficient AC, electric car charging station. Spacious 5BR, no electric bills + solar tax credits!! High Walk-in HERS score.

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

Advanced features include: All rainwater infiltrated onsite. House planned to follow existing site slopes to eliminate soils trucking. Energy shell designed with smaller east & west windows to avoid overheating via solar gain. Passive solar harvesting on south aspect using appropriately sized & shaded windows.



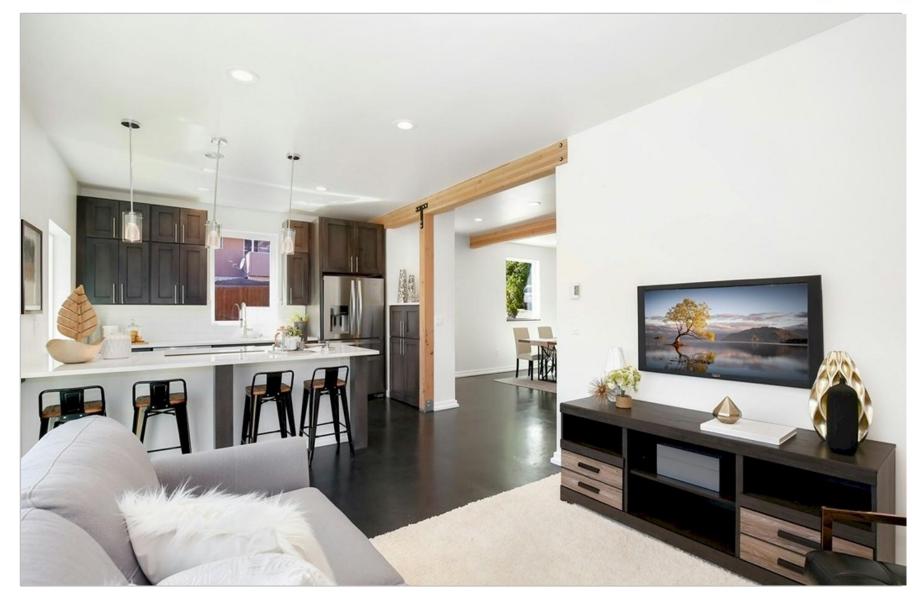
Rear view





Interior living space





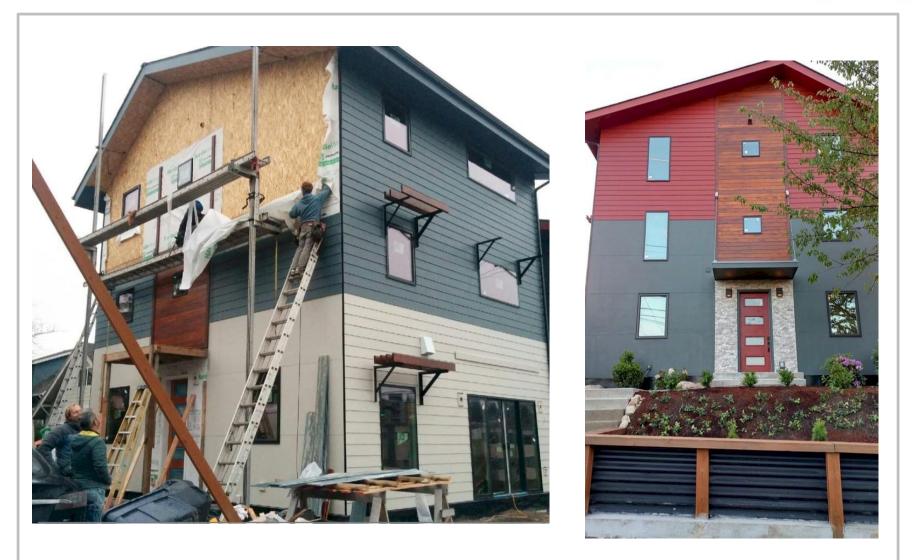
Landscaping





Exterior front construction





Exterior side view





Exterior side view





Construction





Foundation work



