**Project #54 – Classic** 



# DiNuovo-Linkkila Residence

### Single Family Small House under 900 sq. ft.

## **DiNuovo-Linkkila Residence**



Participant Information:
Premier Building Systems LLC
Laurie Miller
18504 Canyon Road E
Puyallup, WA 98375
253-846-6033
laurie.miller@premiersips.com
www.premiersips.com

Category: Single Family Homes under 900 sq. ft. "Small House"

Project Information: DiNuovo-Linkkila Residence 707 Misty Ridge Road Port Townsend, WA 98368

Date completed: October 2021

Dimensions: 34' L x 22' W

Total sq. ft.: 796 sq ft

Built by:

Piecewurx Construction & Remodeling Neil Nelson 1425 Katherine Street Port Townsend, WA 98368 425-218-8429

Panels Manufactured by: Premier Building Systems LLC

Designed by: GreenPod Development / KD Structural Ann Raab / Katie Dobzinsky 606 Roosevelt Street Port Townsend, WA 98368 360-385-5614



#### Building use:

Set on 5 wooded acres in the foothills of the Olympic Mountains of Washington State, this hilltop modern craftsman-style cottage is designed and set to maximize natural light and cubic footage to create a sense of spaciousness in a tiny energy-efficient footprint.

How did SIP construction help you get this job?
The clients were motivated primarily by energy efficiency but SIPs construction also supported the owners' desire for a small space with an open floor plan.

### Single Family Small House under 900 sq. ft.

## DiNuovo-Linkkila Residence



#### Additional innovative design elements

KD Structural specified Simpson Strong Walls - prefabricated, engineered panels - and extensive use of glulam support beams that allowed for an elevated primary living space with a three-season indoor/outdoor space below that expanded the living area of the tiny footprint. Interior glulams allowed for fewer walls and an open, energy-efficient floor plan.

#### **HVAC System:**

EnergyStar rated Mitsubishi Trane 12K BTU Hyper Heat Ductless Heat Pump with exclusive inverter technology that allows it to maintain its efficiency when temperatures drop, all the way down to -13 degrees Fahrenheit.

Additional energy-saving materials used in the building envelope: Sierra Pacific Urban Awning windows with U factor 0.3 and Low E-272 glazing were used and provide a balance of solar gain during cold months and reflection of intense light of summer months. Site and home placement results in significant passive solar gain during winter months. Awning openings provide crossflow cooling from summer breezes emanating from the Strait of Juan de Fuca. Ducoterra SolaRay 240 V Infared Heating Ceiling Panels used in entry/mud room & bathroom (product qualifies for LEED certification).

Additional energy-efficient products or design features, such as lighting, hot water heating, appliances:

All LED lighting. Ductless heat pump, supplemented by Ducoterra IR panels. Rheem 27 KW on-demand hot water heater is self modulating and 99.8% energy efficient.

Frigidaire Gallery induction cooktop with auto sizing technology. EnergyStar rated: 18" Bosch Dishwasher, 24" Whirlpool Bottom Freezer Refrigerator, in addition to Beko Front Loading Compact Washer & Ventless Heat Pump clothes dryer. A study done by SEDI (Super Efficient Dryer Initiative) found that heat pump dryers save 50-60% of energy as compared to conventional clothes dryers and, in addition, save energy because there is no outside venting. 60" Hinkley DC ceiling fan circulates heat efficiently in great room.

Solar panels installed:

Planned but not yet implemented.

Additional sustainable materials or design features:

Siding is reclaimed saltwater log-boom lumber that was rough-cut and treated with ECO antifungal, a non toxic wood stain and treatment with just one application, no need to ever restain or maintain. Roof, soffets and glulam end caps are protected by low maintenance, EnergyStar-listed Taylor Metal material.

Ceilings are tongue and groove paneling, also sourced from reclaimed/discarded log boom logs, that were white-washed with odorless, water-based SAMAN stain. Interior features include reclaimed freshwater pilings recovered from razed piers on Lake Washington, near Seattle.

Amorim Cork flooring was used in entry/mud room. This low VOC material is sustainably-harvested from live cork oak trees each nine years and provides additional thermal insulation over slab floor.

Wood floors and interior staircase feature earth-friendly bamboo that regenerates at 15x the rate of wood such as pine.

All tile and countertops are of natural stone tile including granite, slate, travertine & limestone.

Zero VOC Benjamin Moore Regal Select interior paint is used throughout.

The home is surrounded only by mixed natural vegetation; rhododendrons, honeysuckle, madrona, manzanita, salal, Oregon grape, fir, hemlock, cedar and alder. The intent is to preserve water and allow the site to return to its mixed-flora natural state that will sustain resident wildlife.

## **DiNuovo-Linkkila Residence**



