



# ROSE Port

Resilient Operations and Sustainable Energy



## OVERVIEW

The ROSE Port is an earthquake-resilient structure that captures solar power, stores renewable energy, collects and purifies rainwater, and supports zero-emission transportation. The hub operates independently during extended power outages caused by heat waves, ice storms, wildfires, or seismic events.

## KEY FEATURES

### Earthquake-Resilient Design

- Built to Risk Category 4 seismic standards for immediate post-earthquake functionality
- Water tank installed separately from main structure for enhanced safety

### Water Independence

- 3,100-gallon rainwater cistern with filtration and UV purification
- Emergency capacity: 30 Residents × 5 gallons/day for up to 3 weeks

### Energy Independence

- 17.82-kilowatt rooftop solar array, 30-kilowatt-hour battery, and inverter system
- Enables Residents to charge phones and small devices during grid outage

### Sustainable Construction

- Mass timber construction using mass plywood panels
- FSC-certified glued laminated lumber for posts and beams
- Renewable alternative to steel/concrete that protects old-growth forests
- Repurposed concrete foundation from original on-site structure

### Zero-Emission

- Four Level 1 EV chargers



"The ROSE Port represents what it means to care deeply for our people and our planet. By investing in resilient infrastructure, we're prioritizing the health, safety, and well-being of our entire community. RoseVilla isn't waiting to respond to climate-related emergencies; we're preparing for them."

— Glen Lewis, CEO, RoseVilla Senior Living

