

ELEVATED ADU

This design embodies the principles of Universal Design, Innovation, Sustainable Design, and Resiliency. It is a visionary concept that combines creativity, functionality, and environmental consciousness and is one that ensures that every aspect of the living space is inclusive and adaptable to various needs, making it an ideal home for all.

Main Level Living:

Accessibility begins with ease of entry. The ADU features a main level accessed via an ADA compliant walkway, ensuring that residents and guests can easily navigate the primary areas of the home without encountering barriers.

Flexible Sleeping Arrangements:

While the primary sleeping area is located in an upper loft space, the floorplan is thoughtfully designed for adaptability. The space can be easily reconfigured to accommodate sleeping on the entry level, offering flexibility for individuals with diverse mobility needs.

Multi-Purpose Loft Space:

The second-level loft space serves as a flexible area that can be used for storage, an additional sleeping room, or as a caregiver's quarters, providing a dynamic living environment that meets evolving requirements. The attic space incorporates vaulted ceilings that add a sense of spaciousness. The lower end of the vault remains below 7 feet so that the calculated square footage (per zoning codes) is minimized while the upper end is generously equipped with large windows, flooding the interior with natural light.

Efficient Open Plan:

The open plan layout minimizes wasted space for circulation, allowing for a spacious kitchen despite the dwelling's modest size. This ensures that the design is not only accessible but also efficient in its use of space.

Elevated Structure:

Elevating the dwelling on posts not only minimizes environmental impact on the site but also allows for easy adaptation to complex, sloping terrain that is more common than not in Bellingham and much of Whatcom County. This innovative approach maximizes the utility of challenging landscapes.

Modular and Panelized Systems:

The design employs modular and panelized systems, primarily utilizing 4x8 Structural Insulated Panels (SIPs) as the main structural material. This not only reduces construction waste and cost but also significantly shortens construction time while providing an exceptionally energy-efficient building shell.

Sustainable Design and Resiliency:

Acknowledging the ecological concerns associated with concrete production, the ADU design minimizes its use, making it an environmentally conscious choice.

Weathering steel is employed as cladding, offering a zero-maintenance, recyclable material that stands up to the elements. This choice ensures the longevity and eco-friendliness of the dwelling. The dwelling can be placed atop shipping containers as per the presentation images, extending their useful life and utilizing 100% recyclable steel.

This innovative approach not only reduces waste but also provides a strong support for the main level of the ADU. The elevated structure and use of non-combustible materials enhances flood and fire resistance, safeguarding occupants and their property. Additionally, the bridge entry incorporates expanded metal to minimize stormwater runoff, promoting on-site rainwater recharge through rainwater harvesting systems.

In conclusion, this accessible dwelling unit design encapsulates the principles of Universal Design, Innovation, Sustainable Design, and Resiliency, offering a model that is not only inclusive but also forward-thinking and eco-conscious. By providing a flexible and efficient living space, optimizing attic usage, and incorporating sustainable materials and construction techniques, this design sets high bar for accessible and environmentally responsible housing. It serves as an example of how thoughtful design can address the diverse needs of inhabitants while minimizing its ecological footprint, ensuring a more inclusive and sustainable future for all.