



GREEN ROOFS *for* HEALTHCARE & ASSISTED LIVING FACILITIES

Puyallup Medical Center, Puyallup, WA

Green Roof Products to meet the unique challenges of the rooftop environment.

- **Design Flexibility** Tray and Layered Systems
- **Technical Assistance** Stormwater calcs, weights, etc.
- **Warranty Protection** "Roof to Green Roof"

ENVIRONMENTAL BENEFITS

- Mitigates the quantity of stormwater runoff and air quality
- Cools the Urban Heat Island Effect and provides habitat for native species.
- Cleans pollutants from the air and stormwater.

COST BENEFITS

Green roofs reduce a facility's stormwater system development charges (SDCS) and construction set up costs.

- **Increased roofing membrane and waterproofing life cycle** Block UV exposure and greatly reduce surface temperature fluctuations. With a green roof, a membrane life can be extended by two to three times its average life.
- **Cut heating & cooling costs** Green roofs improve energy efficiency by reducing both heating and cooling needs.
- **LEED Credits** Green roofs can contribute up to 12 LEED Points.
- **Increased Revenue Potential** Long term care and assisted living centers often see increased revenue by providing access or simply a view of green space. Short term facilities such as hospitals and outpatient care centers see similar increases as potential patients are more likely to choose their "green" facilities.



Horizon House Retirement Community, Seattle, WA



Cincinnati Children's Hospital, Cincinnati, OH

IMPROVE PATIENT RECOVERY TIME

Research has shown better overall outcomes for patients who can view nature during recovery, rather than the built environment. Studies have demonstrated that patients who are provided at least visual access to greenery have **lower blood pressure**, use **less pain medications** and have **fewer post-operative complications**. Tests have indicated that **a green roof can reduce indoor sound** by as much as 40 decibels, providing a calming and comfortable atmosphere for the residents. Lower stress levels and greater satisfaction with the facility are also experienced by visitors and staff members who can view nature.

"Horizon House is a dynamic retirement community dedicated to dignified aging. Our green roof is an integral part of providing a healthy, green, and sustainable residential environment."

— **Brad D'Emidio** Director of Building Services,
Horizon House Retirement Community

"Hospital recovery days are reduced by 8.5% when patients have a view of nature."

— **Science magazine**

"The garden terrace has been a great addition to the hospital. It offers a peaceful place not just for patients, but for the parents and families."

— **Shelly Griffith** Director of Facilities,
Cincinnati Children's Hospital

"Green building design is known to contribute to health and wellbeing, in addition to environmental benefits. Our hospitals are implementing green roof technology as part of a broad effort to create a natural environment and reduce patient recovery time."

— **Alan Neunan** VP of Facility Operations,
Geisinger Hospitals.