

# Why Green Roofs?



Green roofs go beyond any other roofing option when it comes to the multitude of benefits they provide to those who own, work and live among them. Green roofs are beautiful, create habitat, promote health and well-being, attract customers, reduce stormwater runoff, protect building envelopes and conserve energy. To learn more about how to optimize the benefits of your green roof application, **please contact us at 800-875-1392.**

## Productivity & Profits

- **Better Attendance** - Workplaces which incorporate biophilic design elements such as access to nature have reduced absenteeism, fewer complaints, and improved staff retention.
- **Improved Focus** - Providing access to nature in the workplace can reduce eyestrain, relieve mental fatigue, and improve focus on tasks.
- **Increased Output** - Integrating plants into workplaces yields productivity gains and reduced psychological stress.
- **Higher Rents** – Green roofs can be used to improve the view in leased space, translating into more dollars guests or tenants are willing to spend.
- **Maximizing Occupancy** – Facilities with green roofs reach full occupancy faster than similar buildings in those markets. These buildings also attract new occupants quicker than traditional locations when openings become available. By maximizing occupancy building owners enjoy more revenue and increase the ROI for green investment.
- **Expand Usable Space** – Adding green roofs can expand the amount of usable space a facility can offer. By adding amenity space, building owners can increase the usable space of their facility. Rooftop patios, healing gardens, and other amenity spaces make buildings more attractive to building owners, tenants, and customers alike.
- **Reduced Cooling Costs** – Through the process of evapotranspiration, plants create a thermal barrier between the warming rays of the sun and the building. This barrier keeps the cool air inside the building, reducing the load on the air conditioning system.

## Health & Comfort

- **Reduce Stormwater Runoff** - Research has shown that extensive green roof systems can reduce runoff by up to 90+% annually (varies with climate, soil and pitch of roof).
- **Clean water** – Green roofs prevent stormwater runoff from combining with sewage and overflowing into local waterways. Urban environments, with their expanses of impermeable surfaces, allow stormwater to runoff directly into municipal sewer systems. Living roofs act as a sponge to absorb much of this runoff and keep waterways cleaner.
- **Prevent Pollution** – Rainwater that runs off impermeable surfaces rinses pollutants into local waterways. Vegetated roofs filter these pollutants from the runoff before it reaches municipal water treatment facilities.
- **Increased oxygen** - Plants naturally infuse the air with oxygen and reduce carbon dioxide levels for overall improved air quality. Plant leaves, roots and soil can remove traces of toxic chemicals such as carbon monoxide and formaldehyde.
- **Reduce Noise** - Plants, soil and air trapped in the soil are acoustic insulators. Green roofs dampen and reduce noise, which is of great benefit to occupants of buildings affected by airports, industry, trains and traffic.

## Marketing

- **Demonstrate Stewardship** - A living roof tells customers, residents, employees or neighbors that you care about your community, your health, and the ecosystem.
- **Community Health** - Living roofs as part of green communities increase sense of pride and place, levels of trust, and civic participation. These communities see less violence, aggression, vandalism and littering.
- **Green Space Compliance** - Green roofs typically qualify for credits associated with green/open space and onsite stormwater management in many municipal zoning ordinances; often equating to time and money savings in the zoning process or financial rewards from tax credits and other incentives.

## Conservation

- **Restore Habitat** - Plants and soil help recreate habitat for pollinators such as bees, butterflies, insects and songbirds.
- **Save Energy** - The evapotranspirative effects of green roof plants and the growing medium reduce HVAC costs during hot weather.
- **Protect Building Envelope** - Plants and soil protect membranes from UV radiation, temperature fluctuations, and high winds.
- **Fire Prevention** - Succulent green roof plants and inorganic growing media help reduce the risk of fire.
- **Reduce Heat Islands** - Green roof vegetation helps cool the air, slow air movement, and acts as a substrate for pollution to settle out and detoxify.
- **Conserve Municipal Storm Systems** - The soil in green roof systems acts like a sponge and absorbs excess rain water, and thus municipal stormwater systems do not have to be expanded as much. It also means reduced overflows as well as reduced pollution and associated costs.

## Education

- **Enhance Performance** - Student exposure to nature has been correlated with higher academic performance in Math and English.
- **Improve Focus** - Studies have also demonstrated that exposure to nature eases symptoms of ADHD.
- **Teach Stewardship** - Students who are engaged with the maintenance of green roofs learn about the vital role of plants in air quality, stormwater management, and climate control. Depending on the roof's design, students can evaluate the performance of different cultivars, track biodiversity in pollinator populations, and even grow their own food.

## Health Care

- **Recover Faster** - Patients who physically interact with plants use less medication and experience significantly reduced recovery times after medical procedures.
- **Enhance Patient Experience** - Using planted roofs to improve views or provide places of respite in healthcare enhances the experience of patients, visitors and staff, who report greater satisfaction and positive feelings in the presence of nature.