

# Green Roofing Systems



A green roof is a roof of a building that is partially or completely covered with vegetation and soil, or a growing medium, planted over a waterproofing membrane.

#### Stormwater Retention

- Regulatory requirements for stormwater management can be met with a green roof
- The growing medium and vegetation absorb rainwater where it is returned to the atmosphere through transpiration and evaporation
- Green roofs can also act as natural filters for any excess rainwater that happens to run off
- Delays the time at which runoff occurs resulting in decreased stress on sewer systems at peak flow times

#### Temperature Control

- Reduced cooling and heating costs
- Protects the roof membranes from harmful UV radiation and heat
- Reduces the size of the HVAC unit necessary and makes for a more efficient heating and cooling system
- Reduces the urban heat island effect

#### Improve Air Quality

- The soil, plants, layers of roof membranes, barriers and insulation reduce the noise pollution for the occupants of commercial buildings
- Through the process of photosynthesis, plants convert carbon dioxide, water and sunlight/energy into oxygen and glucose. This cyclical process supplies animals and humans with oxygen and food
- A green roof will not only absorb heat, decreasing the tendency towards thermal air movement, but will also filter the air moving across it

#### Public Benefits

- Increase local support for new development
- Aesthetically pleasing to tenants above buildings with green roofs
- Tenants or employees are provided with a rooftop oasis
- Access to the outdoors can increase productivity and morale
- Decreased need for health care services due to the benefits of passive experiences with nature and vegetation
- Increase public perception of your corporation