

# Lakeland Community College Green Roof: Plant List 2008



Copies	Date	No.	Description
			Emery Knolls Farm – Vegetated Roof Landscape Plantings
6	08-20-08	2 pages	Delosperma nubigenum ‘Baustoland’ <b>Not Used; Not Hardy.</b>
6	08-20-08	2 pages	Sedum Sexangulare
6	08-20-08	2 pages	Sedum Kamtschaticum
6	08-20-08	2 pages	Sedum Spurium ‘Fuldaglut’
6	08-20-08	3 pages	Sempervivum – Substituted for Sedum Spurium ‘Tricolor’ per Emery Knolls Nursery
6	08-20-08	1 pages	Sedum Floriferum Weinstaphaner Gold
6	08-20-08	5 pages	Sedum Album – Substituted for Sedum Album Micranthum ‘Chloroticum’ per Emery Knolls Nursery
6	08-20-08	2 pages	Sedum Grisebachii <b>Not Used; Not Hardy Zone 6</b>
6	08-20-08	1 pages	Meadow Spread Assortment (Recommended per Emery Knolls Nursery)
6	08-20-08	5 pages	Talinum calycnum, Sedum sieboldii, Orostachys boehmeri, Sedum reflexum <b>Not Used; Not Hardy.</b>

## Green Roof Benefits

<http://www.liveroof.com/reading-writing-rooftops-new-albany-plain-local-schools-take-learning-to-new-heights-with-liveroof-vegetated-roof/>

### *Sidebar 1*

#### **Green Roof Benefits**

**Better Stormwater Management:** Immediate stormwater runoff reduced by 50-90 percent. Green roofs filter rainwater water and act as a buffer against acid rain.

**Longer Roof Life:** Plants and soil serve as a protective shield and prevent UV radiation from degrading roof components. Fewer cracks and leaks. Waterproof membranes can last 200-300 percent longer.

**Energy Conservation:** On a sunny 95°F day, conventional rooftop surfaces can hit 175°F. By shading and insulating the rooftop, green roofs bring these temperatures in line with the ambient air temperature. They reduce indoor temperatures and energy consumption, especially for air conditioning in summer. That decreases costs for building owners.

**Interior Noise Reduction:** Lower indoor sound levels, as much as 40 decibels.

**Urban Heat Island Effect Mitigation:** Plants release oxygen and evaporate water. Green roof soil also evaporates water. That makes a green roof function like an evaporative cooling system. The combination of the umbrella effect (shading and insulating) and evaporative cooling moderate temperatures at street level.

**Improved Air Quality:** Every one square foot of green roof can filter about seven ounces of dust and smog particles per year. And through the process of photosynthesis, plants covert carbon dioxide, water and sunlight/energy into oxygen and glucose. This results in reduction of greenhouse gases in the atmosphere.

**Enhanced Aesthetics:** Green space is visually appealing and inviting. People feel better and are more productive when they have a natural view. Barren rooftops become habitable spaces with walkways, patios and seating and thereby add useable space to buildings.

### *Sidebar 2*

#### **Business Benefits: the Main Drivers for Building Green**

**Reduction in Operating Costs:** On average, 13.6 percent for new buildings and 8.5 percent for retrofits

**Increase in Building Values:** On average, 10.9 percent for new buildings and 6.8 percent for retrofits

**Increase in Return on Investment (ROI):** On average, 9.9 percent for new buildings and 19.2 percent for retrofits.