



## LEED Credit Opportunities for Xero Flor Green Roof Installations

This document provides a summary of potential LEED credits for Xero Flor Vegetation Mat Green Roof System installations. This summary guideline does not substitute for LEED rating registration requirements or individual project evaluation by LEED accredited design/build services. Source: LEED 2009 for New Construction and Major Renovations.

### **FULL CREDITS (4 Possible Points)**

**Whole point credit obtained from suitable green roof installations.**

#### **Sustainable Sites**

##### **SS 6.1: Stormwater Design – Quantity Control**

**Points: 1**

Xero Flor green roof systems have been demonstrated to reduce rooftop stormwater run off as much as 80%.

##### **SS 6.2: Stormwater Design – Quality Control**

**Points: 1**

Xero Flor vegetated mats have been shown to filter airborne pollutants from rainfall and atmospheric deposition.

##### **SS 7.1: Heat Island Effect – Non-Roof**

**Points: 1**

Option 2: Shade canopies covering at least 50% of parking spaces may qualify for credit when incorporating a Xero Flor vegetated surface.

##### **SS 7.2: Heat Island Effect – Roof**

**Points: 1**

Xero Flor green roofs may be used alone or in combination with high reflectance roofing to qualify for Heat Island Effect – Roof credit. Xero Flor green roofs have been demonstrated to reduce roof surface temperatures as much as 50°F and thermal loading by as much as 75%, thereby limiting the impact of Urban Heat Island Effect on surrounding human and wildlife habitats.

### **CONTRIBUTING CREDITS (20 Possible Points)**

**Point credit contribution from the green roof system as a part of whole project design and materials use metrics.**

#### **Sustainable Sites**

##### **SS 5.1: Site Development – Protect or Restore Habitat**

**Points: 1**

Xero Flor pre-cultivated vegetated mats provide habitat and promote biodiversity in high density urban areas with minimal-maintenance regionally adapted and native plant species.

##### **SS 5.2: Site Development – Maximize Open Space**

**Points: 1**

For urban projects receiving SS 2 credit for Development Density and Community Connectivity, Xero Flor green roofs may qualify for vegetated open space credit.



## **Water Efficiency**

### **WE 1: Water Efficient Landscape**

**Points: 2 or 4**

Xero Flor Green Roof Systems utilize regionally adapted, drought tolerant vegetation to accelerate roof landscape establishment and to limit irrigation requirements to the initial growing season. Maximum credit may be obtained when irrigation is provided for green roof establishment phase from rain collection reservoirs or reclaimed water systems to eliminate potable water use.

## **Materials and Resources**

### **MR 4: Recycled Content**

**Points: 1 to 2**

The complete Xero Flor green roof system consists of 23% to 30% recycled content depending on assembly components. Recycled source materials for Xero Flor green roof assemblies range from 22% to 27% post-consumer and 1% to 3% pre-consumer (i.e. post-industrial).

### **MR 5: Regional Materials**

**Points: 1 to 2**

Xero Flor green roof systems are manufactured and harvested within a 500 mile radius of most major metropolitan areas and potential job sites. See [www.xeroflora.com](http://www.xeroflora.com) or contact XFA directly for information regarding regional field locations and sourcing.

### **MR 6: Rapidly Renewable Materials**

**Points: 1**

Xero Flor green roof systems include organic mulch derived from plant resources as part of the pre-grown vegetated mat and supplemental growing medium layer. The organic mulch component provides 16% to 22% rapidly renewable material depending on specific Xero Flor assembly.

## **Innovation in Design**

### **ID 1: Innovation in Design**

**Points: 1 to 5**

Xero Flor green roofs provide additional benefits not described in the LEED Green Building rating system including, though not limited to: aesthetically enhanced sightlines, social meeting spaces, healing gardens, noise reduction, and educational opportunities.

## **Regional Priority**

### **RP 1: Regional Priority**

**Points: 1 to 4**

Xero Flor green roof systems contribute to regional environmental priorities for LEED-based projects. See <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1984> for zip code-specific criteria.

## **Reference:**

USGBC LEED 2009 Green Building Rating System for New Construction and Major Renovations <http://www.usgbc.org/ShowFile.aspx?DocumentID=5546>