



LEED-NC

Green Building Rating System for New Construction & Major Renovations

SmartSlope LRW System Can Contribute to 10-18 Points Earned

NC- 2009

SUSTAINABLE SITES

NC 2009 SSc5.1: Site Development - Protect or Restore Habitat

1 Point

Intent: To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.

SmartSlope modules enable steep grade changes in the landscape to support habitat and green-space at angles of inclination not possible with traditional solid structures.

NC 2009 SSc5.2: Site Development – Maximize Open Space

1 Point

Intent: To promote bio-diversity by providing a high ratio of open space to development footprint.

SmartSlope modules allow vegetation to completely grow over the improved structural area thus minimizing the impact to the site while enhancing the openness of the landscape.

NC 2009 SSc6.1: Stormwater Design - Quantity Control

1 Point

Intent: To limit disruption of natural hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from storm water runoff and eliminating contaminants.

SmartSlope modules replace traditional solid retaining walls to create completely pervious structures that promote infiltration and reduce storm water runoff.

NC 2009 SSc6.2: Stormwater Design - Quality Control

1 Point

Intent: To limit disruption and pollution of natural water flows by managing storm water runoff.

SmartSlope living retaining wall systems can support a wide range of plant material known to absorb pollutants and improve water quality. Fully vegetated *SmartSlope* retaining walls become runoff water management tools much the same as rain gardens and bio-swales.

NC 2009 SSc7.1: Heat Island Effect - Non-Roof

1 Point

Intent: To reduce heat Islands, minimize impacts on microclimates in human and wildlife habitats.

SmartSlope living walls are intended to be fully grown over with specified plant material. The top growth of the plant material will completely obscure the structural elements beneath which moderates temperatures and has been shown to reduce heat Island contribution.



LEED-NC

WATER EFFICIENCY

NC 2009 WEc1: Water Efficient Landscaping

2-4 Points

Intent: To limit or eliminate the use of potable water or other natural surface or subsurface water resources available on or near the project site for landscape irrigation.

SmartSlope modules have large verifiable soil holding capacity, providing an excellent culture for the long-term growth of a wide range of native perennials and regionally adapted plants, which do not require irrigation. Each *SmartSlope* module has features designed to accommodate the inclusion of drip irrigation tubing. Therefore, when irrigation is installed into the system it is very efficient due to gravity and capillary action within the wall column.

MATERIALS AND RESOURCES

NC 2009 MRc4: Recycled Content

1-2 Points

Intent: To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.

SmartSlope modules themselves can vary in post-consumer content between 5% and 80% by weight, depending on the location of manufacture and the specified needs of the project. The blended growth media installed in the pocket of each module at construction can vary in post-consumer content between 20% and 100% by weight. When desired, *SmartSlope* can be specified and manufactured to achieve the maximum percentages.

NC 2009 MRc5: Regional Materials

1-2 Points

Intent: To increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.

SmartSlope modules are always manufactured within a short distance of the project due to their innovative and portable forming system. The lightweight polymer *SmartSlope* forms are economically shipped to existing concrete producers in any region of the world. Locally produced concrete is then poured into molds using local labor. This also reduces the use of fossil fuels and costs in the transportation from manufacturer to job site.

INNOVATION IN DESIGN

NC 2009 IDc1: Innovation in Design

1-5 Points

Intent: To provide design teams and projects the opportunity to achieve exceptional performance above the requirements set by the LEED Green Building Rating System and/or innovative performance in Green Building categories not specifically addressed by the LEED Green Building Rating System.

SmartSlope modules allow the creation of a living structure, which can be engineered to perform several innovative tasks on a green building project. Some projects have need for large retaining walls, which create opportunities for stormwater management and retention/detention innovations such as intentional introduction of stored runoff water to be processed through plant transpiration.