



PolyTurf® Inc LEED™ New Construction Credit Compliance

PolyTurf® Inc synthetic turf products qualify for LEED™ credits in several LEED™ areas.



Synthetic turf can be used in a wide variety of applications such as Boulevards and municipal landscaping, playgrounds, residential landscaping, sports venues and commercial landscaping.

WE Credit 1.1 & 1.2: Water Efficient Landscaping. Intent: Eliminate the use of potable water or other natural surface or subsurface water resources available on or near the project site for landscape irrigation.

Requirement Option 2: Install landscaping that does not require a permanent irrigation system.

PolyTurf® Inc synthetic turf, while providing most of the advantages and desirable characteristics of natural grass, requires no watering for its maintenance. An occasional vacuum or raking off to remove accumulated dust or debris is all that is required. PolyTurf also offers a recycled vertical to horizontal drainage underlayment mat called PolyDrain if you would like to divert, collect and recapture the water.

SS Credit 6.1, 6.2: Stormwater Design. Intent: Limit disruption of natural water hydrology by reducing impervious cover, increasing on-site infiltration, eliminating sources of contaminants, and removing pollutants from storm water runoff. **Requirements:** Implement a storm water management plan that reduces impervious cover, promotes infiltration, and captures and treats stormwater runoff from 90% of the average annual rainfall using best management practices.

PolyTurf® Inc synthetic turf by virtue of being permeable with perforation holes allows rapid drainage for significant quantities of rain water thus reducing the volume of run off, particularly relative to concrete or asphalt. The fiber design of the resilient and natural appearing grass incorporated with a thatch zone (known as a crimped yarn fiber) offers a high bulk density which acts as a catch basin to collect soluble and particulates which also reduces run off.

These suggested synthetic grass products were developed specifically to require no in-fill materials, which is a standard with most synthetic grass products available in today's market. PolyTurf also offers a recycled vertical to horizontal drainage underlayment mat called PolyDrain if you would like to divert, collect and recapture the water.

At some point these synthetic grasses will need to be recycled. The PolyTurf Carpet Removal Recycling Recovery Program offered by PolyTurf, is only available for PolyTurf products.

SS Credit 7.1: Intent: Reduce Heat Islands (thermal gradient differences between developed and undeveloped areas) to minimize the impact on microclimate and human and wildlife habitat. **Requirement:** Provide any combination of the following for 50% of the site landscape: Shade (within 5 years occupancy), paving materials with a Solar Reflectance Index of at least 29, open grid pavement system.

PolyTurf® Inc synthetic turf utilizes a porous backing with a surface of imitation grass of various shades of green and of various thicknesses and lengths. Other than its visual similarity to real turf the system has the following characteristics:

- a) **Permeability;** Allows water penetration through the surface which both irrigates and reduces run-off problems.
- b) **Reflectance:** A range of shades means that the reflectance values vary, but are similar to that of real grass when well watered and green.
- c) **Thermal Emittance:** The same range of colors affects the thermal emittance of the surface and can be selected for the particular project requirements.
- d) **Tree and Shrub preservation.** The product provides a superior method of providing protection for tree roots and, by allowing water penetration, to greatly reduce the problems of root heave caused by water starvation – which often results in destruction of the tree. Trees can be left in place providing shade and retaining moisture.

In part due to the variety of colors and textures, specific numbers for the above category are not currently available.

1) Innovation in Design:

LEED™ ID Credit 1.1 to 1.4 : Intent: To provide design teams and projects the opportunity to be awarded points for exceptional performance above the requirements set by the LEED for new construction Green Building Rating System and/or innovative performance in Green Building categories not specifically addressed by this rating system. **Requirements:** In writing, identify the intent of the proposed innovation credit, the proposed requirement for compliance, the proposed submittals to demonstrate compliance, and the design approach (strategies) that might be used to meet the requirements.

PolyTurf® Inc synthetic turf products provide an innovative and environmentally friendly solution for landscaping, recreational and sports surfacing requirements. Synthetic turf is attractive in appearance by virtue of its close resemblance to natural turf (in its best condition, well watered, weeded and trimmed) and year round green, well cared for look. PolyTurf requires no watering, no fertilizers or weed killers, reduces insect infestation, is friendly to animals, easy to clean and/or disinfect and requires little in the way of maintenance. It is rapidly becoming the surface of choice for sports venues such as soccer, football, hockey, golf (putting greens) rugby and other sports typically played on grass. In these applications it provides a uniform, consistent surface with good traction and ball bounce characteristics which reduce injuries, and requires less maintenance than a grass field. PolyTurf offers a Carpet Recycling Recovery Program on many of its synthetic turf products and systems and a no-infill, porous, bound recycled elastic layer for sports facilities.

Please see Attached Appendix for this submittal.