



**American Rubber
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**RubberStuff® Landscape & Playground Mulch
(made from 100% Recycled Tire Material)
LEED™ New Construction Credit Compliance**

RubberStuff® Mulch for playgrounds, landscaping, tree surrounds, equestrian arenas & trails qualify for LEED™ credits in several LEED™ areas:

- 1) **Heat Island Effect LEED™ credit 7.1:** This credit refers to products that contribute to a reduction of the “heat island effect” by affecting solar reflectance, thermal emittance, permeability and tree preservation.

RubberStuff® Landscape & Playground mulch utilizes a loose-fill system which results in an attractive, resilient and durable surface available in a variety of organic and designer colors. Other than its ability to easily follow curves and surface irregularities like mounds and hollows and to use around obstacles such as fire hydrants, posts, trees and other obstacles, RubberStuff has a high degree of:

- a) **Permeability:** Allows water penetration through the surface which both irrigates and reduces run-off problems.
- b) **Reflectance:** A wide range of colors allows selection to be made to suit reflectance requirements of the project.
- 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 was developed to provide 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.

LEED™ 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. Or, place a minimum of 50% of parking spaces under cover. Any roof used to shade covered parking must have an SRI of at least 29.*

2) Recycled Content:

RubberStuff® Landscape & Playground Mulch utilizes 100% recycled tires. The Recycled SBR is 1-6 inches thick so the recycled content is 100% recycled material. Based on the cost formula of Credit 4.1 the recycled content exceeds the requirement by having a recycled content of 100%.

LEED™ MR Credit 4.1, 4.2: Intent: To increase demand for building products that incorporate recycled materials thereby reducing the impact of extracting and processing virgin materials. Requirements: Use materials with a recycled content such that the sum of post-consumer recycled content plus one half of the pre-consumer content constitutes at least 10% (based on cost) of the total value of the materials in the project.

3) Regional Materials:

RubberStuff® Landscape & Playground Mulch utilizes 100% locally manufactured or produced materials in both the contiguous Southeastern United States as well as the Mid-southern United States.

LEED™ MR Credit 5.1, 5.2: Intent: To increase demand for building materials and products that are extracted and manufactured in the region where they are used, thereby supporting the use of indigenous resources and reducing the environmental impact resulting from transportation. Requirement: Use building products that have been extracted, harvested or recovered as well as manufactured within 500 miles of the project site for a minimum of 10% (based on cost) of the total materials.

4) Storm Water Design:

RubberStuff® Landscape & Playground Mulch by virtue of being permeable absorbs significant quantities of rain water thus reducing the volume of run off, and providing filtration & irrigation.

LEED™ SS Credit 6.1, 6.2: Intent: Reduce or eliminate water pollution 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 rainfall using best management practices.

5) Innovation in Design:

RubberStuff® Landscape & Playground Mulch was developed and in 1992 to divert tires from landfills. A few years later, actual colorization of the rubber chips was first introduced by American Rubber Technologies in order to provide a 100% recycled product that would emulate natural wood in appearance, but exceed standards in performance. The subsequent addition of a line of designer colors for decorative landscape and waterscape areas as well as playgrounds rounded-out this permeable, resilient, colorful, attractive, durable surfacing solution – all while representing the first product of its kind to not be truly 100% recycled – but to perform better than its organic counterpart.

It is **non-flammable** (16CFR 1500.44), **non-toxic** (Acute Oral Toxicity Testing 04.04.95) and it **resilient**; exceeding impact attenuating testing for playing surfaces (ASTM F-1292) and passes ASTM F1951 Determination of Accessibility of Surface Systems Under and Around Playground Equipment. RubberStuff® Landscape and Playground Mulch diverts tires from landfills, does not produce fungus and inhibits weeds and is **non-linear**, allowing it to follow curves and go around corners as well as accommodate contour changes. As indicated in the foregoing Credits, RubberStuff Landscape mulch exceeds requirements in every category thus qualifying for additional LEED ID Credit 1 credits.

***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.*