

LEED For Neighborhood Development PILOT VERSION Updated June 2007

Rating Category	Credit Description	Points	Discussion of Asphalt Pavement Applicability/Contribution to Rating Category
<p>Green Construction & Technology</p>			
<p>GCT Credit 9</p>	<p>Stormwater Management</p>	<p>1 - 5</p>	<p>Porous asphalt pavement (i.e. pervious paving) constructed on a recharge bed reduces stormwater flow rate and quantity leaving the site. Potentially, site discharge and flow can be reduced below predevelopment conditions through conveyance of roof drainage, and other stormwater flows, to the pavement recharge bed. Pollutant reduction of natural water flows is attained through infiltration. Data indicates infiltration BMPs have the highest pollutant removal efficiency for total phosphorus, soluble phosphorous, nitrate, zinc, and TSS, when compared to wetlands, wet ponds, filtering, swales, and dry ponds. Presentation - Porous Asphalt Pavement: http://www.flexiblepavements.org/documents/PorousPavementforevisions.pdf Design Guide: http://store.hotmix.org/index.php?productID=179 Specification (porous base mix): http://www.flexiblepavements.org/documents/PorousPavementBaseCrse_rev15apr11_.pdf Specification (porous surface mix): http://www.flexiblepavements.org/documents/PorousPvmtSurfCrse_rev15apr11_.pdf</p>
<p>GCT Credit 10</p>	<p>Heat Island Reduction: Option 1 - Non-Roof</p>	<p>1</p>	<p>There are two ways in which asphalt pavement may be used to attain this credit. (1) Porous asphalt pavement (i.e. pervious paving) applied to at least 50% of the site hardscape. (2) Reducing heat island effect using asphalt pavements is achievable by coating the pavement surface to raise the Solar Reflectance Index (SRI). This approach allows the designer to capture the economy of using asphalt pavement while also expressing creativity and ingenuity. Coatings of virtually any color are available to treat asphalt pavement. This allows the designer to raise the SRI and integrate features such as color designated pavement areas. Multiple colors can be used to identify walkways, bikeways, emergency parking, handicap areas, or other. Another treatment that raises albedo is “sealing and chipping” using limestone or other light colored aggregate. Sealing and chipping is low cost and provides an agrarian look. Lastly, a simple slurry application of portland cement following paving, while the asphalt surface is still hot, fills and coats the surface to raise SRI. Coating Colors for LEED Credit: http://www.integratedpaving.com/our-products/streetbondsr/index.cfm?PageContentID=41&do=content ODOT Specification - Sealing & Chipping: http://www.dot.state.oh.us/Divisions/ConstructionMgt/OnlineDocs/Specifications/2010CMS/400/422.htm</p>

LEED For Neighborhood Development (continued)

Rating Category	Credit Description	Points	Discussion of Asphalt Pavement Applicability/Contribution to Rating Category
<p>Green Construction & Technology (continued)</p>			
<p>GCT Credit 17</p>	<p>Recycled Content in Infrastructure</p>	<p>1</p>	<p>Reduction in virgin materials is accomplished by incorporating recycled asphalt pavement. Project features utilizing asphalt paving materials and referencing the Ohio Department of Transportation Construction & Material Specifications are permitted to contain the following percentages of recycled asphalt pavement: Surface course mixes - 20%, Intermediate course mixes - 35%, Base course mixes - 50%. Asphalt shingle manufacturing waste may be used in base course mixes up to 10% of the total mix composition. ODOT Specification: http://www.dot.state.oh.us/Divisions/ConstructionMgt/OnlineDocs/Specifications/2010CMS/400/401.htm#a_401_04 Ground Tire Rubber (GTR) can be added either as an asphalt cement modifier or a constituent of the aggregate structure.</p>
<p>GCT Credit 18</p>	<p>Construction Waste Management</p>	<p>1</p>	<p>Asphalt pavements are 100% recyclable. Where construction/major renovation of the site requires removal of asphalt pavement the entire quantity of asphalt pavement can be redirected to the manufacturing process for recycling into new asphalt pavement.</p>