

Friends University Uses Porous Pavement System for Renovation of Davis Hall

When officials at Friends University, Wichita, wanted to beautify the exterior of the newly renovated historic Davis Hall, they knew they would have to remove the large driveway leading up to the main entrance from the front gate. But what if emergency or maintenance vehicles needed to gain access to Davis Hall?

The solution was a geosynthetically reinforced porous pavement system that looks like a finely manicured lawn. The Presto Products Geoblock porous pavement system was the answer.

The Geoblock system is a series of interlocking, high-strength blocks made up from up to 98 percent post-consumer recycled plastic materials. The system is designed to handle the most demanding turf protection and load-support requirements while allowing for vigorous growth of turf grass.

The Geoblock system provides for vehicular and pedestrian load support over grass areas while protecting the grass from the harmful effects of the traffic. Manufactured from durable polyethylene, the Geoblock unit is inert to common chemicals, will

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Geoblock product enabled front lawn of Davis Hall to better support weight of vehicles, pedestrians



The grass and sidewalks leading up to the 110-year-old Davis Administration Building at Friends University, Wichita. A geosynthetically reinforced porous pavement system was used to provide vehicular and pedestrian load support over grass areas.

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not absorb moisture and is unaffected by freeze-thaw cycles.

The Geoblock system is comprised of four major components: 1) the Geoblock unit itself; 2) base support material (topsoil/sand mix); 3) selected topsoil infill; and 4) selected vegetation.

Both the Geoblock unit and the base support materials work together to support the imposed loading. The Geo-block unit, the base support material and the topsoil combine to create a healthy environment for vegetative growth. Other components may include topsoil additives to enhance vegetative growth and geosynthetic reinforcement. Available in two sizes: 1' x 3' x 1.25" and, for heavier support requirements, 1' x 3' x 2".

The Geoblock protects the crown of the grass, prevents soil compaction and significantly reduces rutting by supporting heavy vehicular weight and concentrated loads on the units' cell walls. The system provides total design flexibility, creating a natural grass load-bearing pavement.

In many cities, current stormwater management systems are pushed beyond their capacities by runoff from traditional hard surfaces. With over 80 percent open area at the surface, the Geoblock system offers a permeable solution. This design allows water to percolate into the ground through the bottom of the units, decreasing stormwater



A view of the area in front of Davis Hall. The decorative area at the bottom of the photograph is referred to as the Rose Window Plaza.

runoff and allowing natural groundwater replenishment.

This type of porous pavement system has proven to be the best choice for load support and aesthetic improvements to the historic Davis Hall at Friends University. ■

This article was submitted by John Warren, with ASP Enterprises Inc., Kansas City, Mo. ASP Enterprises was the material supplier for this project, which took place last fall. For more information contact Pat Stelter at Presto Products Co. (800) 548-3424.