

CASE STUDY

EDWARD JONES DOME

Stormwater Improvements

1 The Herringbone pattern was utilized here.



Project	Edward Jones Dome
Location	St. Louis, MO
Date	June 22, 2009
Contractor	Ideal Landscape
Salesperson	Mark Stirnaman
Owner	Edward Jones Dome

2 70% of the Geoblock 5150 is installed.



THE CHALLENGE

The previous inferior grass paving product installed several years ago failed under the heavy loads experienced by the area. Failure was evident by the plastic rings popping out of the ground. The challenge was to come up with a better solution that could be installed quickly but be stronger than the previous system so it could withstand the heavy loading. All this while still maintaining the limited area of grass that they had in the vicinity.

3 Care was taken around obstacles to insure good coverage.



THE SOLUTION

The solution was to remove the previous system along with 6" of subgrade. The new system, Geoblock 5150, with 6" of engineered fill was then installed in the same footprint as the original. Not only is the Geoblock 5150 significantly stronger than the previous system, but the engineered fill also offered much greater load-bearing capacity. The engineered fill is a mixture of stone and topsoil, 70% stone and 30% topsoil.

THE PRODUCTS



GEOSYSTEMS

GEOBLOCK®5150 DESIGN GUIDELINE

Depth of Engineered Base
Recommendation: (Imperial)

LOAD DESCRIPTION TYPICAL MAXIMUM TIRE PRESSURE GROSS VEHICLE LOADS	GEOBLOCK®5150	
	VEGETATED SURFACES Topsoil Infill & Topsoil/Aggregate Base	
	CBR ¹² 2 - 4	CBR ¹² > 4
HEAVY FIRE TRUCK & H-20 LOADING Typical 110 psi, 80,000 lb Single axle loadings of 145 kN, tandem axle loadings of 220 kN	6 in	4 in
	Infrequent Passes	
LIGHT FIRE TRUCK & H-15 LOADING Typical 85 psi, 60,000 lb Single axle loadings of 110 kN	4 in	2 in
	Infrequent Passes	
UTILITY & DELIVERY TRUCK & H-10 LOADING Typical 60 psi, 40,000 lb Single axle loadings of 75 kN	2 in	2 in
	Infrequent Passes	
CARS & PICK-UP TRUCK ACCESS Typical 45 psi, 8,000 lb Single axle loadings of 18 kN	None	None
	Occasional Passes	
TRAIL USE: SURFACE STABILIZATION ~1,000 lb	None	None

4 Sod was placed on top of the soil filled cells and rolled.



5 One year later, the sod grew in well with little irrigation.



6 December 21, 2014 - Rams versus Giants



7 July 2020 - Project site 11 years later



THE RESULTS

Once the new Geoblock 5150 was installed, a very durable and stable platform was created that could handle all the loads that it would see. The Geoblock 5150 withstood 2 full seasons of football games with heavy loads running on it each game. The management at the dome is very pleased with the outcome and feel certain that they will not have to deal with this area again.

YOUR TRUSTED SITE SOLUTION SPECIALISTS

ASP Enterprises

aspent.com
salesasp@aspent.com

St. Louis, MO
636.343.4357
Kansas City, MO
816.554.1191

Wichita, KS
316.393.1554
Omaha, NE
402.861.8579

Quick Supply Co.

quicksupplydm.com
salesquick@quicksupplydm.com

Des Moines, IA
515.289.1271

Bowman Construction Supply

bowmanconstructionsupply.com
salesbcs@bowmanconstructionsupply.com

Denver, CO
303.696.8960
Longmont, CO
970.535.0863

Colorado Springs, CO
719.257.7840

Cascade Geosynthetics

cascadegeos.com
salescascade@cascadegeos.com

Portland, OR
971.339.1020