Granite Mountain Vault Expansion

Application

21,000 cubic feet of Foam-Control® EPS22 Geofoam provides protection against falling rocks above a mountainside vault’s entrance in Little Cottonwood Canyon, Utah.

Project Details

The Granite Mountain Vault was built in 1958 by boring 600' into the north side of Little Cottonwood Canyon in the mountains just outside Sandy, Utah. With the main entrance located at the base of a large rock face, there is continual danger of rocks falling from the mountain above with the potential to cause severe structural damage to the entrance of the building.

ACH Foam Technologies’ Foam-Control® EPS22 Geofoam was used to build a protective barrier above the structure’s entrance. The Geofoam was installed in sections up to 15' thick in areas which had the highest probability of rock fall. A geogrid material was placed between each layer of foam and each completed section was covered with a 6" layer of gravel and a 12" layer of soil. This dense cushion works in conjunction with the building’s 20" thick reinforced concrete roof to protect the vault from the impact of a boulder as large as 36" falling from a distance of 60'.

Granite Mountain Vault Expansion
• Little Cottonwood Canyon, UT
• Fall 2015
• Foam-Control® EPS22 Structural Protection Geofoam
• 21,000 Cubic Feet

Architect
Bell/Knott & Associates

Contractor
Layton Construction

Engineer
Ensign Engineering