

Greenroof Transformation

Calgary, AB, Canada



Plasti-Fab® EPS Product Solution provides compressive resistance and quick installation.

When the city-owned roof covering a portion of a local firehall and hotel began to leak, the task of repairing the 300 s.f. area began, and with it came the reimagining of the space overall.

Up to that point, the ill-defined and publicly-accessible rooftop patio was not regularly maintained. Over time, it became unkempt, was used primarily as a smoking area, and attracted too many late-night visitors. After leveling the existing structures that served as seating or planter boxes, the city elected to gate the area and turn it into an outdoor venue for hotel functions.

Repairing the space and redefining its purpose required special consideration for the materials to be used. The city engaged a local landscape design firm that contacted Plasti-Fab for a solution.

Aaron Rennie, Director of Market Development at Plasti-Fab, explained the firm specified “the project needed a fill material that could add height, be used across a wide area, have compressive resistance to withstand weight from snow, landscaping and people, while minimizing additional weight on the structure below.”

The answer was Plasti-Fab’s GeoSpec® lightweight fill material, also referred to as expanded polystyrene (EPS) Geofoam.

Plasti-Fab’s GeoSpec blocks are designed to support heavy compressive loads, but has a density of less than 1 percent of traditional earth materials. It was ideal for this project given the uniform elevation requirements above the roof deck would level changes in the roof line and create the desired public space. Adding thousands of pounds of material to achieve that could have exceeded the capacity of the concrete roof structure beneath.

Not only did GeoSpec address the weight issue, it checked another construction box as well: speed of installation. EPS geofoam can be cut with a handsaw, and certainly a power ripsaw, thereby allowing for “field fitting,” Aaron points out. “It can be easily cut to fit in the typical areas – like corners and edges – but allows installers to easily accommodate changes in elevation.”

For more than 50 years, EPS Geofoam has been used in projects involving roads, bridge approach fills, slope stabilization, embankments, foundations, and landscaping. Plasti-Fab is proud to add this project to our profile list, and contribute to a new, beautifully designed public space that offers hotel guests and event attendees stunning vistas of downtown Calgary.

Copyright © 2016 by Plasti-Fab Ltd. Insulspan® and Plasti-Fab® are registered trademarks of Plasti-Fab Ltd.

