



## BANFF ROADWAY

Belgard® VS5-108 Pavers Help Make Banff Roadway Better for Pedestrians, Drivers and Businesses

### LOCATION:

Alberta, Canada

### MANUFACTURED BY:

Oldcastle® APG, Canada West

### PRODUCT:

VS5-108 Paver

### COLORS:

Grey & Charcoal

### INSTALLED AREA:

46,848 sq. ft.

### ARCHITECT:

The Tula Project

### ENGINEER:

WSP Engineering

### GENERAL CONTRACTOR:

Brenmer Engineering & Construction

### HARDSCAPES CONTRACTOR:

JP Landscaping



## Background

In Banff, Alberta, Canada, Bear Street is lined with numerous restaurants, retail and service businesses. It is a vital part of the town's economy. However, its proximity off a main drag resulted in fewer pedestrian visitors to it than to the much busier and adjacent Banff Avenue. To create equity between the businesses of the two streets,

the town adopted a plan based on the Dutch concept of "woonerf," or living street. A street designed this way has no physical barrier between cars and people, forcing drivers to slow down and pay greater attention to pedestrians and bicycles.

## The Challenge

With its many different users, the project's

surface needed to be attractive and inviting for pedestrians but strong enough to support vehicle traffic (including heavy emergency vehicles).

Another significant challenge for the project team was stormwater management, particularly because runoff would eventually reach the Bow River.

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## The Solution

Kelsi Hurlbut, principal landscape architect with The Tula Project, chose Belgard® VS5-108 pavers because the vehicle-grade pavers interlock on four sides and the ridges on the bottom grip the gravel underlayment. She wanted the shared roadway to have minimal vertical movement, continuing to lie flat and level over time. "Keeping in mind the need for this surface to be accessible, I was aware that pavers can sometimes be difficult for people who need to use mobility aid devices—or even for people pushing strollers. I was confident the VS5-108 pavers could be set to the tight tolerances I specified—even over time, use and seasons."

Many traffic-calming strategies were employed to create a safe space, which was particularly important because Bear Street is just two minutes off a fast highway and drivers quickly need to be put in a town driving mindset. This included placing the paver design at a 45-degree angle to the buildings rather than reflective of the straight lines of a traditional road, placement of removable bollards to limit car movement within certain areas, and planters (built of boulders) that visually signify the space between them and the buildings as a pedestrian only zone. The visible texture of pavers also offers a traffic calming effect in that it automatically makes drivers want to slow down.

For stormwater management, team engineers and landscape architects used trench drains set into and flush with the road and graded the surface for the most advantageous runoff. They also incorporated a series of soil cells below the surface, in which trees are planted. The organic material in the cells feeds the trees while filtering contaminants from the water that seeps down through it. That water then enters a drainage system leading to the town's storm drain. This all minimizes the impact of the inflow to the river.

JP Landscaping installed the Belgard VS5-108 pavers (a mix of 300x300 and 150x300) in Charcoal and Gray. "It was challenging; maintaining the lines within the tight parameters of the pattern required us to lay it by hand," said JP Heroux, owner and president. "However, I was sure that once a stone is locked in place it's not moving, and it will be able to withstand heavy vehicles."

**It's a fantastic product. I can see that street being there in 50 years with the Belgard pavers. They were durable and nice to work with in a place where more than 5 million people a year will walk on it.**

*JP Heroux  
JP Landscaping/Owner and President*

## The Result

Installation of 720 pallets of pavers, 46,848 square feet in total, was finished on July 19, 2021. "It's a fantastic product. I can see that street being there in 50 years with the Belgard pavers. They were durable and nice to work with in a place where more than 5 million people a year will walk on it," said Heroux.

"Pedestrian traffic has already improved. We moved from a 5:1 ratio of pedestrians on Banff Avenue to those on Bear Street prior to the reconstruction to a 3.3:1 just through the first summer and fall after completion," said Pierre Hugues Gagnon, project manager and engineering coordinator for the Town of Banff.

### About Belgard Commercial®

Belgard Commercial, part of Oldcastle® APG, offers a complete collection of paver and wall products for plazas, terraces, parking areas, roadways, rooftops and retaining walls. Available in a range of styles, premium Belgard Commercial products have been found in the nation's finest developments and award-winning commercial and retail properties since 1995.

Oldcastle APG is part of CRH's Building Products division. As the largest building materials company in North America, CRH provides a single-source solution for commercial construction projects with a full portfolio that also includes structural masonry, masonry veneers, dry mix products, hardscape jointing sands and sealants, stormwater management systems, concrete infrastructure, architectural glass, lawn & garden products, and composite decking.

