

# Product Profile

## Powers Zamac Nailin® Anchors Prevent Granite Fascia From Loosening in Seattle Bus Terminal

Aesthetics played a major role in the construction of a 1.3-mile mass transit bus tunnel running under the city of Seattle, WA. Working together, artists and architects turned the tunnel stations into places of human interest and creativity. Included in the design were the facings for the concrete walls.



The fascia selected consists of an assortment of granite panels and terra cotta tile mounted onto the concrete walls. The panels and tile are supported by a "HAT" channel made of galvanized steel that is vertically mounted onto the concrete and some steel "stringers" that are set horizontally.

As a bus comes into a station, the movement pushes the air directly in front of the vehicle onto the walls. This creates a wind load on the channel which it must resist to avoid loosening.

Zamac Nailin® anchors from Powers Fasteners, Inc., New Rochelle, N.Y., are used to secure the channel to the concrete walls because the fasteners satisfy two important requirements. They are economically priced, and they

provide the holding power needed to withstand the wind load.

The anchor has a body made of Zamac 7, a special zinc alloy developed for its resistance to corrosion. The expansion device is a nail, supplied in stainless steel to curtail the effects of corrosion, a prevailing condition in the tunnel.

The 1/4" x 2" Nailin is inserted into a predrilled 1/4" hole in the channel until the head of the zinc body is flush with the surface. Then the nail is hammered into the zinc body, expanding the lower most portion of the body. The latter grips the walls of the hole, locking the anchor into the concrete.

Over 100,000 anchors were used in this application with no reports of any loosening to date.

Bill Baker of Atlas Construction Supply worked closely with the general contractor, CSI Contractors of Calgary, Alberta, to select the best anchor for the project, which involved four stations. Performance expectations were



Product:  
Zamac Nailin® Anchors

Application:  
Secure granite fascia

Location:  
Mass Transit Bus Terminal  
Seattle, Wash.

the first priority because of the high visibility of the job, but cost considerations were also important. Bill suggested the Powers Zamac Nailin, the contractor submitted them and Metro approved.

"After the fact, it was gratifying that not only were the results 'as advertised', but also cooperation by the Powers Seattle branch had everything en route on schedule to maintain the established time table," said Bill Baker. "Everyone involved considered this one just about as perfect as ever they'd seen," he added.