

# Doyle Drive Tunnel, San Francisco, USA

## Project specifications

Project type: Roadway tunnel

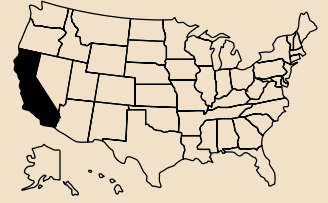
Application: Fire protection

## Partners

Owner: California Department of Transportation (Caltrans)

Engineer: Caltrans

Contractor: Brosamer & Wall



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The Golden Gate Bridge is one of the most iconic landmarks in the U.S. It is also a major transport route for both the Bay Area and the state of California. Originally, traffic from the east side of the city accessed the bridge via Doyle Drive, a highway that included a section of viaduct. To ensure seismic stability, the roadway has been replaced with a new parkway.

## The challenge

With a 1.6-mile (2.5km) length, the new six-lane parkway includes sections of elevated, at-grade and underground roadway.

Along with improved seismic stability, the new infrastructure needed to meet Caltrans' fire protection requirements, including for the section of cut and cover tunnel built by Brosamer.

## The solution

In collaboration with ready mix supplier Central Concrete of San Francisco, Bekaert demonstrated the use of Duomix® M6 Fire polypropylene fibers to increase fire resistance in concrete.

In the event of fire, the fibers decrease both the depth and area of spalling, especially when compared to fiber-free concrete.

Caltrans approved Duomix® M6 Fire for use in the trench tunnel's walls.