

Project: 929 Office Tower

Location: Bellevue, WA

Architect: LMN Architects

Glazier: Crown Corr, Inc.

Product: Fireframes SG Curtainwall® Series frames and Pilkington Pyrostop® fire-resistive-rated glass



With a sleek, upscale aesthetic and strong corner presence in one of Bellevue, Washington's, premier, mixed-use districts, LMN Architect's 929 Office Tower is attracting big name tenants like the cloud-computing giant Salesforce. Many of these occupants will walk past its stylish glass-clad exterior on their way to work every day without realizing it provides critical protection against the spread of fire between adjacent structures. In large part, this is due to the Fireframes SG Curtainwall® Series, an innovative, exterior fire-rated separation solution from Technical Glass Products (TGP).

Installed on the southeastern ground floor corner and side of the building, the Fireframes SG Curtainwall Series serves as a one-hour barrier to the spread of flames, smoke and heat. It helps prevent a fire from traveling to or from neighboring buildings—a critical safeguard for an office tower positioned along one of Bellevue's 600 foot by 600 foot downtown "superblocks." Even more importantly, it brings fire and life safety protection in line with the building's aesthetic design intent.

Unlike other fire-rated curtain wall systems, the Fireframes SG Curtainwall Series is able to achieve the clean sightlines and seamless aesthetic of silicone glazed (SG) curtain wall systems. It consists of Pilkington Pyrostop® fire-resistive-rated glass attached to narrow, steel, fire-rated frames with a toggle retention system. The assembly is silicone sealed and requires no pressure plates or caps. Once installed, the toggle retention system becomes completely hidden, allowing for a smooth, frame-free exterior surface. This was a critical design benefit for LMN Architects, as only select portions of the 929 Office Tower ground-floor exterior were required to provide fire protection by code. The monolithic aesthetic of the Fireframes SG Curtainwall Series helped ensure smooth visual transitions at these junctions.

As an added benefit, the Fireframes SG Curtainwall Series made it possible for the project team to provide lot line protection without sacrificing light transfer. The large, fire-rated glass walls extend the surface area through which light can transfer to help illuminate the office tower's linear core and retail area. The curtain wall system also uses a variety of strategically insulated fire-rated glazing products, including low-emissivity and spandrel fire-rated glazing, to respond to the angle of the daylight and support balanced light transfer. The 929 Office Tower is designed to LEED Gold standards, and uses a number of complementary controls, including smart technologies and phone apps to help further control energy use.



The patented Fireframes SG Curtainwall Series is available with up to 120-minute fire ratings for unrestricted glazing in locations where the total glazing area exceeds 25 percent of the wall. It is air- and water-pressure tested for exterior use, and is classified and labeled with Underwriters Laboratories (UL). TGP designed the system to accommodate its Fireframes® Designer Series and Fireframes Heat Barrier Series door systems to provide architects with a complete curtain wall and entrance solution.

For more information on the Fireframes SG Curtainwall Series and Pilkington Pyrostop, along with TGP's other fire-rated and specialty architectural glass and framing, visit www.fireglass.com.