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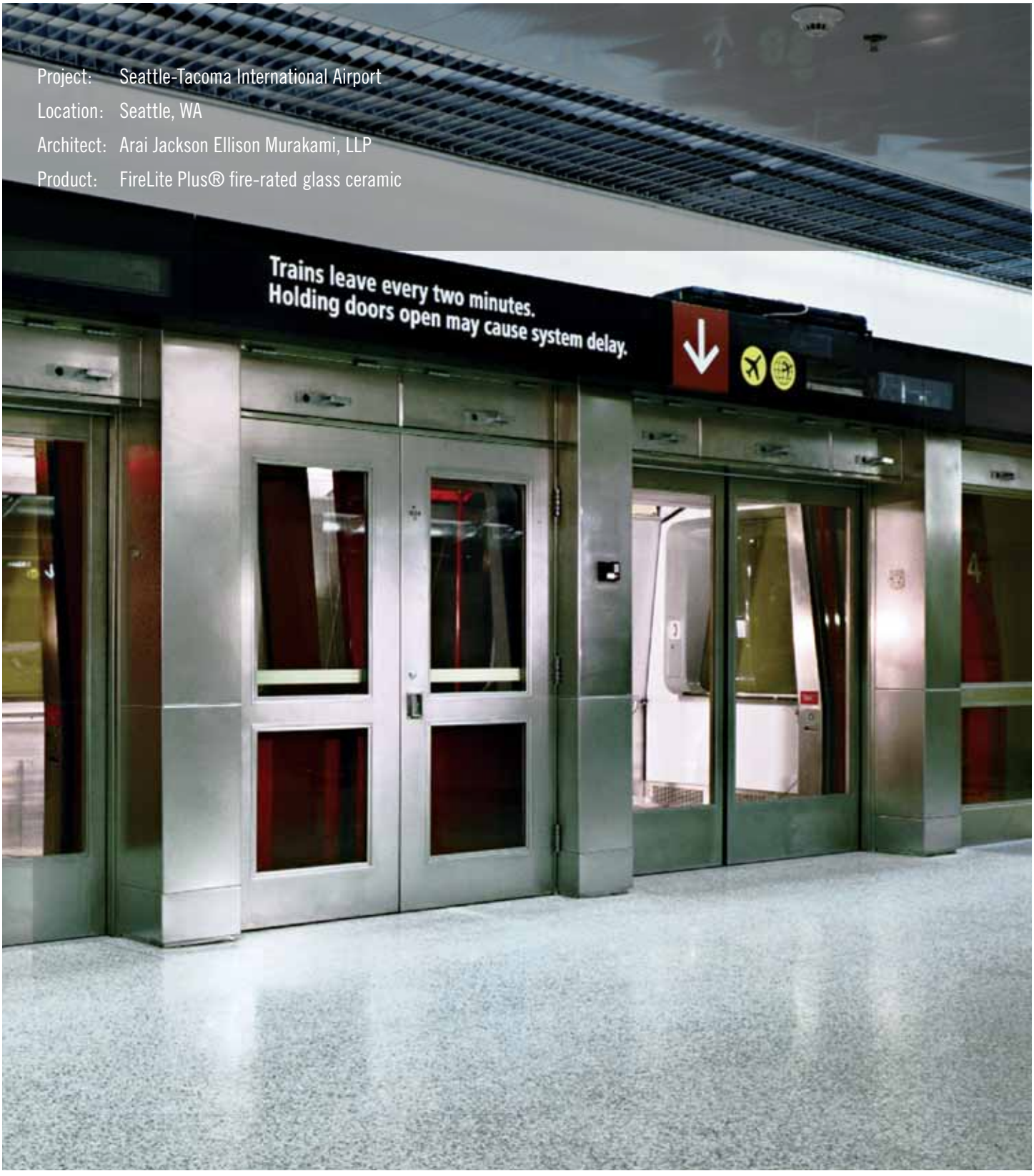
FIRE-RATED GLASS AND FRAMES HELP ARCHITECTS MEET LIFE SAFETY REQUIREMENTS WITH BEAUTY AND ELEGANCE



Project: Seattle-Tacoma International Airport
Location: Seattle, WA
Architect: Arai Jackson Ellison Murakami, LLP
Product: FireLite Plus® fire-rated glass ceramic

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FIRE-RATED GLASS AND FRAMES HELP ARCHITECTS MEET LIFE SAFETY REQUIREMENTS WITH BEAUTY AND ELEGANCE

Although typical building and fire codes run for thousands of pages and include extensive detail, architects, specifiers and code officials recognize that no code can foresee all possible building situations. In many cases, interpretations of multiple code requirements must be made to ensure that life safety goals are achieved.

A case in point is the re-design of the passenger terminal subway stations at the Seattle-Tacoma International Airport (Sea-Tac Airport). Known as the satellite transit system, the subway transports air passengers from the airport's main terminal building to the terminal concourses and satellite terminals. The system is comprised of two independent train loops, with a separate linear shuttle train within the main terminal. Altogether, there are eight underground stations, which serve tens of thousands of passengers per day.

As part of a comprehensive airport capital improvement program, the Port of Seattle – Sea-Tac's owner and operator – wished to expand and refurbish the satellite transit system. One of the goals of the $158 million refurbishment was to create a more open and modern feel for the aging stations, which were originally built in the early 1970s.

The project architects, Arai Jackson Ellison Murakami, LLP, of Seattle, Washington (sub consultant to prime consultant Lea + Elliott), prepared a design that included extensive glazing throughout the stations. In addition to glass in the station doors, a glass transit wall the length of the station was included to allow waiting passengers to better see arriving trains and enable passengers on the trains to have a view of the station. The walls and doors provide separation between the station platform and the tunnels that serve the electrically powered trains.

Based on an extensive review of building and fire codes, it was not clear if a fire rating was required for the station doors and walls. However, to enhance safety, the port's building and fire officials and the architects decided to specify fire-rated glass for the project.

According to Frank Silkwood, partner with Arai Jackson Ellison Murakami, his team wanted glazing that could do double duty – be both fire-rated and meet the aesthetic needs of the project. Wired glass, with its institutional appearance and susceptibility to impact damage, didn't fit the bill. Instead, the architects selected FireLite Plus® glazing from Technical Glass Products (TGP), Snoqualmie, Washington. FireLite Plus is a clear glass ceramic with fire ratings from 20 minutes to 3 hours. It can also withstand thermal shock from fire hoses and sprinklers and is impact safety-rated (meets ANSI Z97.1 and CPSC 16CFR1201 (Category I and II)).

Regarding the issue of code requirements, Silkwood says, "The FireLite Plus added a level of protection over and above what was needed by the letter of the code," while providing an unimpeded view into the trains. Although codes weren't clear on required fire ratings, the use of FireLite Plus for the project helps improve life safety in areas of the airport that are frequently crowded.

TGP offers a full range of fire- and impact-resistant glazing and framing materials, providing protection for municipal buildings, schools, stores, offices and other commercial structures. For more information on FireLite Plus, along with TGP's other specialty glass and framing products, visit www.fireglass.com.