

# Polyurea Goes to Work on the Subway

## WORKHORSE

With pure Polyurea systems, durability and fast return-to-service make it the “workhorse” of many industrial applications. Necessity typically moves research and development in that direction.

## SHOWHORSE

A new application exists for flooring in subway cars where aesthetics is the primary requirement. Naturally all the other properties of durability, fire safety, cost effectiveness, and rapid turnaround still apply. In refurbishing a fleet of subway cars, **Quantum Group's PRECIDIUM™ 550D-FR** moves from the familiar “workhorse” to “showhorse” to meet very specific requirements for aesthetics.

## BAY AREA RAPID TRANSIT DISTRICT

The fleet of transit cars that carry thousands of passengers daily in the Bay Area Rapid Transit District continue to evolve since their first run of 10 prototype cars in 1971. Initial requirements for these cars were luxurious interiors to compete with the “King Car” that was being used in the Bay area as well as the assurance of safety for the passengers that would be commuting through a predominantly underground transit system. These requirements have never changed and presently 200 cars are undergoing a completely unique transformation - the addition of a fire resistant, impressively durable, polyurea floor system.

Bay Area Rapid Transit (BART) began their search for new flooring with specific criteria in mind. Through research, surveys, and customer feedback, the desired design, color, texture, and finish were chosen. However, aesthetics was only the beginning of what they needed.



**PRECIDIUM™ 550D-FR moves from familiar “workhorse” to “showhorse” to meet specific requirements for aesthetics.**

### PRECIDIUM™ 550D-FR

*Protective intumescent char expands to prevent combustion*

BART also had to have a product that was affordable, durable, quick, environmentally friendly, and compliant with their exacting fire safety constraints. Quantum Group of Companies began additional research and development on **PRECIDIUM™ 550D-FR** to satisfy BART's stringent aesthetic requirements. **PRECIDIUM™** is already an excellent “workhorse”.

Perfecting BART's colour, design, and texture took several months, at which point eight trial cars were undertaken. The floors were cleaned and prepared for priming with one coat of **PRECIDIUM™ P-180D Primer**. The second step required multiple coats of **PRECIDIUM™ 550D-FR** in six different colours to achieve a multi-coloured, finely textured design. A final coat of **PRECIDIUM™ Aqua 90A** clear finish was applied to provide depth of image and light fastness. This completed floor design propelled **PRECIDIUM™ 550D-FR** into the arena as top “showhorse”.

A highly-qualified applicator with experience spraying polyurea was crucial to the success of this project. Innovative Painting & Waterproofing, Inc. stepped into the arena with **PRECIDIUM™**. President and applicator, Donald Dancey, comments, “*This is one of the most challenging projects I have ever undertaken, but the finished transit cars make it one of the most rewarding projects I've undertaken. They look fantastic!*”

With the rapid cure time of **PRECIDIUM™**, six to eight cars can be completed per week, fulfilling BART's final prerequisite for rapid turnaround.

*Seamless application, safe, durable, fast, cost-effective, and beautiful. Brilliant.*

For a product CD which contains technical data and information on Quantum's complete product line, go to **Quantum Group** on our website: [www.quantumchemical.com](http://www.quantumchemical.com) or call our technical advisors or sales reps toll-free at: 1-877-454-9166.