AIRPORT TRAM RAIL REPAIR





PROJECT DATA Location – Pittsburg, PA

Application – Concrete Crack Repair General Contractor – Carl Walker Construction

PRODUCTS FEATURED

DURAL™ FAST SET GEL Rapid-Setting, High Modulus Epoxy Bonding Adhesive

DURAL™ FAST SET LV Low Viscosity, Rapid Setting, High Modulus Epoxy Adhesive

SCOPE OF PROJECT

Repair Concrete Beam that supports Airport Tram Rail



PROJECT SUMMARY

In the Spring of 2018, a concrete beam which supported one of the tracks for Pittsburgh Airport's (PIT) \$14 million people mover system needed to be repaired. The airport authorities were becoming worried about two transverse cracks through the main support beam. The people mover system consists of two driverless, rubber-tired trains that run on two parallel tunnels below airfield taxiways, spanning the half mile between PIT's landside and airside terminals.

The Pittsburgh Airport Authority hired Carl Walker Construction to repair the beam. Carl Walker Construction has been an industry leader for parking garage design, construction, restoration, and specialty concrete projects since its inception in 1996.

The people mover handles about 6,000 riders per hour, so the Carl Walker team had to keep service interruption to a minimum.

"Initially, we thought we may have to demolish and replace the rail altogether," said Greg Heddaeus, a Senior Project Manager with Carl Walker Construction. "But working with our Euclid sales representative, we figured out that using a fast-curing, high strength epoxy could help the airport avoid a major disruption and provide a long-lasting repair."

The team settled on Euclid Chemicals's DURAL FAST SET LV (Low Viscosity). This high modulus, low viscosity epoxy resin is the perfect solution for general bonding applications and for injecting cracks in concrete and a variety of other substrates.

The project team was able to access the beam at night and completed the repair within a few hours. After some safety testing, the airport was able to reopen the people mover to meet the morning demand. This section of rail has been continuously monitored since the repair was performed over two years ago and no further movement or cracking has developed.

"We're really happy with how the repair turned out, providing the owner a cost-effective and quick turn-around on a vital component of their facility was a win for everyone" said Heddaeus.

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