Sydney’s Central Station
Light rail track and arch waterproofing

**Project:**
Eddy Avenue arches

**Location:**
Sydney Central Station

**Project completed:**
2014

**Applicator/Contractor:**
ACR Group

**Market sector:**
Waterproofing and Infrastructure

**Products used & amounts:**
MasterSeal Traffic 2500 HD

**Sales contact:**
Fatima Javon

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**The background**

Sydney’s historic Central Station Tramway was built as part of the Central Station relocation and upgrade in 1906. The light rail system was introduced at the Station in 1997 and has since become a crucial part of Sydney’s public transport system. It operates 24 hours per day, seven days a week, carrying over 3 million passengers each year. During peak hours, trams depart every seven minutes, making it one of the busiest stations in the city.

The Tramway is located above the Eddy Avenue Archway, which acts as a major thoroughfare for pedestrians and is home to businesses, shops and cafes. After over 60 years of service, the membrane of the Tramway had begun to fail, with water leaking onto the Archway below.

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**The challenge**

In 2014, a renovation team was faced with repairing the membrane, with minimal disruption to the busy light rail timetable. Traditional methods of membrane repair would have required removing the concrete that protected the membrane and then re-laying it over a new membrane. This would have caused severe disruptions to light rail schedules, commuters and to the businesses below. It would also have resulted in heavy costs for the Central Station operators.
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Our solution

The ACR Group were contracted to complete this project and chose to use BASF’s liquid membrane system, MasterSeal® Traffic 2500 HD.

The application team worked at night, during off-peak hours, to apply the MasterSeal system directly onto the tramway, eliminating the need to remove the concrete and expose the old membrane.

The MasterSeal Traffic 2500 HD System was applied over four nights. The process included surface preparation and detailing, the application of the new membrane and the wearcoat to allow for foot traffic and maintenance vehicle traffic, and a final UV protective coat applied at the end.

All applications took place during the allocated work time of between 10pm and 5am. MasterSeal Traffic 2500 HD was applied with little to no disruption to the light rail timetable or to the Eddy Avenue Archway below.

The customer’s benefit

- Protection of the heritage listed structure and avoiding damage from water penetration
- No disruption to the businesses located under the tramway
- Application without disrupting services or access to the area by working at night

Projects facts at a glance

- MasterSeal Traffic 2500 HD, a fully trafficable membrane system, was applied to the area
- Entire job complete in just four days
- System included a moisture tolerant priming coat, fast cure spray, polyurea hybrid membrane, polyaspartic fast cure wear coat and a UV protective topcoat

Master Builders Solutions from BASF

The Master Builders Solutions brand brings all of BASF’s expertise together to create chemical solutions for new construction, maintenance, repair and renovation of structures. Master Builders Solutions is built on the experience gained from more than a century in the construction industry.

The know-how and experience of a global community of BASF construction experts form the core of Master Builders Solutions. We combine the right elements from our portfolio to solve your specific construction challenges. We collaborate across areas of expertise and regions and draw on the experience gained from countless construction projects worldwide. We leverage global BASF technologies, as well as our in-depth knowledge of local building needs, to develop innovations that help make you more successful and drive sustainable construction.

The comprehensive portfolio under the Master Builders Solutions brand encompasses concrete admixtures, cement additives, chemical solutions for underground construction, waterproofing solutions, sealants, concrete repair & protection solutions, performance grouts, performance flooring solutions.