

LEGACY WAY

[view](#)

Application range

Transport / Tunnel

Type

Reference, Showcase

Legacy Way is a 4.6km road tunnel that will connect the Western Freeway at Toowong with the Inner City Bypass at Kelvin Grove, Brisbane Australia. The project design is intended to minimise the impact on motorists, public transport services and active transport users, private vehicles and pedestrians in the area. The intention is also to integrate the project into the city, with urban designs aimed at preserving and enhancing the importance of adjacent areas, including the Brisbane Botanic Gardens.

TROX was involved in this prestigious project by supplying the Tunnel Ventilation Dampers and also the Cross Passages Dampers. As part of the contract requirement, TROX was required to run some high temperature tests as part of the Factory Acceptance Test (FAT). The clients (MECA) came down to witness the leakage test at 300 deg C for 2 hours whilst subjected to a pressure of 2.8kPa for 2 hours. The damper tested was of a customized design for this project consisting of two damper modules to be installed 1m apart, but operated by a single actuator. The other tests such as ambient leakage test, angle test and twist test also went well and proved the performance of our Tunnel Ventilation Dampers.

Another part of the contract terms was that TROX was required to make several site visits to inspect the Smoke Exhaust dampers whilst being installed on the ceiling of the tunnel. This was the same dampers that had passed the high temp test mentioned above. The damper consists of 2 modules, each with a size of 3m x 1m and were linked with adjustable connecting rods. The dampers were painted black and installed using a new design of clamp plates which could be easily removed for maintenance purpose. The ceiling of the tunnel was made of cast concrete which created an even surface to fit the damper properly.

The 2nd site inspection visit for Legacy Way Road Tunnel was conducted on the 15-18th Sept.

The site was inspected by Sivaruban, Kumaresan and with Norezani to assist with some minor site adjustments. 70% of dampers had been installed and were concluded to be fitted in good condition. A 3rd and final site visit is expected to be conducted in Mid December 2014.