

GRP CABLE MANAGEMENT PROVES PERFECT SOLUTION FOR JERSEY'S HISTORIC RAIL TUNNELS

High humidity levels and potential fire risks posed a cable management specification challenge during work at Jersey's famous St Aubin's war-time tunnels.

Corroded casing needed replacing within the tunnels because it was considered a fire risk and required frequent repair due to high humidity levels. Marshall-Tufflex's GRP cable management proved the perfect solution thanks to its corrosion resistance and excellent fire safety credentials.

St Aubin's has had a checkered history, having been used by the Germans to store ammunition during war-time occupation. The original tunnel was built in 1898 as part of the Jersey Light Railway scheme but was extended during the 2nd World War, taking the original 55 metre stretch to its current 130 metre, with an additional 11 tunnels coming off the central core. Parts of the tunnels are now open to the public and used to store road and civil engineering materials etc.

For this project the Marshall-Tufflex GRP tray was suspended from ceilings and carries a wide range of cables, including PVC/SWA sub main, lighting SY sub-circuit, fire alarm and low voltage signal cables. Light fittings have also been fixed to the trunking's underside.

Challenging environment

Specifier for St Aubin's, Dave Atkinson from States of Jersey, explained why Marshall-Tufflex's GRP cable management was ideal for this challenging environment: "The humidity level in the tunnels at certain times of the year is very high due to water permeating through the hillside and concrete structure. Because of this moisture, the existing electrical installation had corroded.

"We chose Marshall-Tufflex's suspended GRP tray for the upgrade as it's resistant to humidity and fire. Apart from putting an end to the corrosion issues, St Aubin's needed a solution that would improve safety for tunnel users while also allowing maintenance teams to reduce testing regimes – something that was taking up a lot of time. Thanks its fire resistant credentials, the use of GRP has meant that periodic testing is now sufficient, in-line with BS5839," concluded Mr Atkinson.



Why GRP (Glass Reinforced Polyester)

GRP (Glass Reinforced Polyester) is increasingly becoming the material of choice for a wide range of cable management requirements, including the UK's railway networks. Fire and corrosion resistant, light weight and long lasting, GRP is ideal for power and data delivery – for signalling, surveillance systems and lighting.

With a large cable capacity, fast and flexible installation solutions and the option for on-site assembly and configuration, GRP from Marshall-Tufflex has been designed for demanding environments, offering a robust solution for railways, tunnels and bridges, above and below ground.

Up to 40% lighter than steel but equal in strength, GRP is easier to handle, without adding unnecessary weight to a structure and effective at temperatures of -80°C to +130°C.



Marshall-Tufflex is included in the London Underground Products Register for a number of its cable management solutions including:

- GRP tray, ladder and support systems
- Aluminium trunking systems:
- MT Supertube FR Plus

Marshall-Tufflex is registered with RISQS Railway Industry Supplier Qualification scheme (formerly Achilles Link-up), which covers products/services procured by the rail industry. The scheme supports Network Rail, LUL/Transport for London, train operators and other rail products and services providers in the management of supply chain risk.



Visit www.marshall-tufflex.com to find out more about GRP Cable Management