

nVent CADDY Products Provide Made-to-Order Solutions on the Kallang/Paya Lebar Expressway Project



CASE STUDY



The 12-km-long Kallang/Paya Lebar Expressway (KPE) being built in Singapore will stretch from the East Coast Parkway (ECP) in the south to the Tampines Expressway (TPE) in the North East when it's completed. The estimated \$1.8 billion expressway includes about 9 km of tunnel, which will be the longest underground expressway in Southeast Asia. Work on the KPE started in 2001 and is targeted to be completed in 2007.

The tunnel includes a section crossing below the Geylang River and a 2-km section crossing under the Pelton Canal, which will be temporarily diverted. These sections pose an extra challenge to construction because of the soft clay material through which the tunnels have to be constructed.

Tunnels of this length also present unique challenges for Electrical and Mechanical (E&M) equipment installations. The sophisticated E&M provisions needed for this project include six buildings to house ventilation systems for the tunnels, fire-protection systems, lighting and sophisticated communications equipment. The

systems also include an Integrated Traffic and Plant Management System that encompasses traffic control, signaling, surveillance and management of the E&M plants. All of these systems require extensive cabling to be run through the tunnels.

"As a result of choosing nVent CADDY as our support systems provider, we received quality products, versatility in design and fabrication and added value in many aspects."

Chua Sey Kok, Project Director for Sembcorp – Daewoo JV

Sembcorp Constructors & Engineers, the primary civil engineering contractor whose scope of work included the Electrical support provision, chose nVent CADDY products to support the cabling. "With cost issues and many factors to consider within a very limited time frame, our decision on the support system supplier was an important one," says Chua Sey Kok, Project Director for Sembcorp – Daewoo JV. "We chose nVent CADDY after careful evaluation. Eriweld International – who utilized nVent CADDY products in their supply and install contract – together with the nVent CADDY (Singapore) team approached the project with professionalism right from the onset. They came prepared with their technical

support and efficient service and dedication to ensure that we would get this job done right and on schedule.



nVent CADDY supplied custom cantilevers in a timely manner.

nVent CADDY Eristrut cantilevers, strut, nVent CADDY spring nuts, brackets and accessories were supplied for the project. Part of the reason nVent CADDY products were specified was the company's ability to supply custom cantilevers for the project in a timely manner.

The nVent CADDY line includes a broad range of high-quality strut, E-channels and cantilevers for light- to heavy-duty applications. nVent CADDY's durable cantilevers use strong backplates with a material thickness of 4 mm and 8 mm depending on cantilever size. The strength of the backplates is aligned to the load requirements of the project. Welding on the cantilevers is done by numeric-controlled welding robots to help ensure top quality.



nVent CADDY has a wide range of light-to heavy-duty strut, E-channels and cantilevers.



nVent CADDY Strut Spring Nuts



"As a result of adopting nVent CADDY as our support systems provider, we received quality products, versatility in design and fabrication and added value in many aspects," Chua Sey Kok continues. "Overall, the pricing was competitive, but the value added extras and excellent service were the welcome bonus. We would certainly consider nVent CADDY as a supplier of choice for future projects."



Our powerful portfolio of brands:

CADDY ERICO HOFFMAN RAYCHEM SCHROFF TRACER