

CASE STUDY

NEW KAPALAMA CONTAINER TERMINAL

Tie-Bar Protection





Kapalama Container Terminal Phase 2 during construction in late 2022.



The Denso and Viscotaq tape wrap system installed on tie-bars.



Protected with PVC piping before final burial.

Project Data

Location	Honolulu, HI
Completed	2021-2024
Project Type	Tie-Bar Protection
Contractor Applied	Kiewit
Products / Systems Used	Densyl Tape & Viscotaq PVC Outerwrap

Project Details

The New Kapalama Container Terminal Phase 2 Project was constructed from 2021 to 2024 and features an 84-acre container yard and 1,863 linear feet of additional berthing capacity. Over 115,000 cubic yards of concrete was poured and over 80,000 feet of 3" and 3-1/2" tie-bars were installed to secure the foundation. With the highly corrosive marine environment that the harbor is faced with, the Hawaii DOT Engineers selected Densyl Tape and Viscotaq PVC Outerwrap to protect the tie-bars from corrosion.

Prior to installation, the 45' and 30' pieces of tie-bars were wrapped with 4" wide Densyl Tape spirally with a 55% overlap. Next, 4" wide Viscotaq PVC Outerwrap was applied spirally with a 55% overlap to provide additional mechanical protection during handling and installation. After the protected tie-bars were installed, a final layer of protection was utilized by sliding PVC pipes over the surface.

By utilizing the Denso Petrolatum Tape System to protect the tie-bars at the Kapalama Container Terminal, The Hawaii DOT knows that the structures foundation will be sound well past the design life.

Benefits

- Minimal surface preparation required
- Highly conformable
- Allows for movement of the rods, e.g., flexural or post tensioning
- Over 95 years of proven history

Date Published: May 2024

Denso North America - Canada (Ontario) 90 Ironside Crescent, Unit 12 / Toronto, M1X 1M3 Tel: 416-291-3435 Fax: 416-291-0898 sales@densona-ca.com