High Profile Substation Rebuild



Fibrelite Trench Covers Chosen for High Profile Substation Rebuild after Hurricane Sandy Destruction



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Fibrelite's HS-20 load rated composite trench covers have been selected by one of the nation's largest metropolitan electrical utilities for a high profile rebuild of a 345 kV bulk power substation. The substation is located in a low-lying coastal area that was subjected to severe flooding caused by Hurricane Sandy in 2012. The substation was flooded due to the hurricane's strong winds and subsequent storm causing significant damage to critical power transmission equipment and forcing the utility to take it offline during the storm.

As part of the utilities' efforts to protect its substations and generating facilities from future storms and hurricane damage, many of the transformers, switches and control equipment at the site were raised above the 100-year flood level elevation. As part of this process, the utility installed several hundred linear feet of concrete trench to run new cabling and underground circuits. The utility chose to install HS-20 load rated road crossing concrete trench manufactured by Trenwa, Inc., one of North America's largest and best known manufacturers of pre-cast concrete trench. Trenwa's concrete trench was equipped with Fibrelite composite trench covers that can carry heavy vehicle loads while being light enough to be easily removed and replaced by hand.

Trenwa Trenches and Fibrelite Covers

In 2015, Fibrelite and Trenwa jointly released a new line of Fibrelite composite trench covers designed specifically for Trenwa's pre-cast concrete road crossing trench (HS-20).

The Fibrelite trench covers are non-conductive, chemically resistant, lightweight yet extremely durable and will withstand heavy traffic loading and harsh field conditions for many years. When combined with Trenwa's concrete road bases they create an ergonomic, yet affordable system for drive-over areas. They are available for all of Trenwa's road crossing trench products from 10" wide to 48" wide.



HS-20 Load Rated Trench Covers are Strong Enough to Handle an 18 Tonne Load

Fibrelite's Composite Access Covers and Trench Covers - Tested and Proven Results

The load bearing capacity of Fibrelite's composite trench covers was tested during the rebuilding of the electrical substation. Mobile crane trucks were driven onto the site in order to assist with the installation of new transformer towers and a moat wall around the perimeter of the facility. These mobile crane trucks are designed to lift up to 50 tons and the trucks alone weigh nearly 80,000 lbs. When the crane trucks crossed over the trench section, the axle load transmitted to the 36" wide covers is approximately 26,400 lbs. Fibrelite's unique trench cover design can handle these extreme axle loads without any complications.

For more information on Fibrelite's product range please contact us:

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