

NYDOT Replaces Salt Storage Buildings

Major structural inefficiencies lead to a state-wide replacement.

When two wood salt storage buildings collapsed within months of each other in February 2003, the New York State Department of Transportation (NY DOT) hired an independent engineering company to examine the remaining 146 salt storage buildings across the state to ensure there were no more building failures. The report concluded that 70 more buildings suffered from major structural inefficiencies and a building solution was needed fast.

“The repair cost estimates ranged from \$20,000 to \$180,000 per building and it was determined anything costing over \$75,000 to repair needed to be replaced,” says Bob Richter, P.E., facilities manager, NYDOT.

A resident engineer in neighboring Allegany County built a Cover-All (www.coverall.net) building for salt storage in 2001 and was impressed with the building. He recommended the buildings for salt storage state-wide, and that

proved to be the answer.

“We needed the buildings replaced immediately,” explains Richter.

The manufacturer was able to install all 72 TITAN® buildings in just four months. The authorized dealer delivered and fully installed each building 90 days after NY DOT placed a building order. The average time for a crew of four to install a 60-ft wide by 90-ft long building is just seven working days.

Strong and durable, these buildings provide a massive clear-span space and are designed to meet the needs of large



NY DOT chose 72 TITAN buildings to help manage 800,000 tons of salt to maintain 43,000 miles of roadway.

operations. Pre-engineered for wind and snow loads, the buildings maintain structural integrity even under unbalanced conditions. Extensive ongoing tests of the engineering and individual components ensure that each structural part is complimentary in weight and strength and, in combination, create a sound, secure steel framework. Foundation options are varied and may include, but are not limited to: spread footings, concrete piles, floating blocks, concrete or steel walls, and ground anchors. Specific foundation applications are dependent on site conditions. The buildings can be installed for both wall and ground mount applications.

According to NY DOT, machine operators like the buildings because the clear-span space and wide entranceways make accessing the salt much easier.

The buildings are also easy to maintain. If damage occurs on a particular section of a building, the section can easily be replaced. Unlike NY DOT's other buildings, the new buildings do not require specialized personnel to monitor and repair the buildings. **GE**



TITAN buildings used for salt storage range in size from 50 ft to 60 ft wide and about 90 ft long.