

Accubrace® Weathers the Storm

SUMMARY

October 28, 2012 was not the typical Sunday afternoon along the Mid-Atlantic coast. For residents, the churning surf, grayed skies and increasing winds hinted at what was to come. The usual Sunday activities were suspended, replaced by final preparations for the impending landfall of Hurricane Sandy.

In the overnight hours of October 29, Sandy came ashore along the northeastern United States as a Category 1 hurricane, unleashing hurricane force winds extending 90 miles, tropical storm force winds extending nearly 1,000 miles, storm surges with waves up to 39.5' and extremely heavy rainfall.

As morning unfolded, numerous cities faced severe flooding, including New York City's financial district. Heavy snow fell across the Appalachian Mountain region and a staggering 7.5 million people were left without power.

In the days and weeks that followed Hurricane Sandy, the tenth hurricane of 2012, was estimated to be the nation's second costliest storm behind Hurricane Katrina. The effects of the storm extended across 24 states and Sandy earned the impressive distinction of being the largest Atlantic hurricane on record.

PROJECTS

- **Middlesex Warehouse:** Edison, NJ – Nixon Lane
- **Project Liberty NJ:** Robbinsville, NJ – Matrix Business Park
- **BJ's:** North Brunswick, NJ – Route 1 and Commerce Blvd.
- **FedEx Queens:** Queens, NY – Borden Ave. and 30th Street
- **Raynham Walmart:** Raynham, MA – Broadway
- **FedEx Philadelphia:** Philadelphia, PA – Old Tincum Island Rd.

CHALLENGE

All along the Mid-Atlantic coast, contractors monitored weather reports, securing their jobsites as best they could, not knowing if their projects would make it through the predicted wrath expected with the coming record storm.

Among these eastern seaboard projects were six sites where partially constructed buildings of Tilt-up



The panels for this FedEx facility under construction in Philadelphia were braced by Accubrace Helical Ground Anchors (HGA) which helped them withstand the high winds and drenching rain from Hurricane Sandy.



Despite high winds and drenching rains, not a single tilt-up project secured with Accubrace HGA equipment experienced failure during the Hurricane Sandy storms.

construction were being braced with Dayton Superior's tilt-up braces anchored to our Accubrace helical ground anchors (HGAs). All of these projects were within range of suffering from the fury of the monster storm. Certainly, Dayton Superior and Accubrace systems are built for strength. The braces varied in length from 21' to 27' and were secured by 7'-0" HGA, a connector and a 4'-0" Helical Extension for deeper installations, the HGAs can handle brace loads up to 12,000# SWL or 15,000# SWL with the extension.

Proof of Accubrace's HGA strength was apparent just over a year earlier when the total bracing system proved a critical asset on numerous jobsites, withstanding the 70 mph winds and 90+ mph gusts of Hurricane Irene. But, with all reports on Hurricane Sandy warning of a storm significantly more massive in size and force, no one was certain what to expect. As the storm hit, the contractors for each of these six Accubrace projects could only wait until the threat had subsided to survey what toll Hurricane Sandy had actually taken on their respective job sites.

SOLUTION

In the hours immediately following the landfall of Hurricane Sandy, there was little doubt about the reality of those predictions. The landscape of the country's east coast was radically changed, damage was estimated in the billions of dollars and reports coming out of the areas where the Accubrace projects were located provided little comfort.

In Edison, NJ, location of the Middlesex Warehouse project, there was no power. The community's Mayor initiated an 8:00 p.m. curfew for all and asked residents to stay home and stay off the roads. Robbinsville, NJ, where the Project Liberty site at Matrix Business Park was located, also was without power and reporting utility poles and trees down throughout the township. In North Brunswick, NJ, home of the BJ's project, the township's website declared a state of emergency and advised residents of downed power lines and severe wind. Queens, NY, where one of two FedEx projects were underway, was overwhelmed by the storm surge, taking on 4' to 5' of water. In Raynham, MA, where a new Wal-Mart was under construction, fared better than those in neighboring states, but still experienced high winds, power outages and downed trees. And, in Philadelphia, PA, home of a second FedEx project, a state of emergency was declared in the wake of mass power outages that immobilized the city's mass transit systems.

Yet, in each and every one of these locations, each and every Accubrace project weathered the storm. Not one failure was reported in the wake of the storm. Much of this is due, in addition to the proven strength of the Accubrace total bracing system, to the stability offered by the installation of HGAs into the soil to support the wall braces. The HGA is set to an installed torque to attain the loads required of the steel braces that temporarily support the wall panels.

RESULTS

- Accubrace total bracing system withstood conditions that caused devastating damage across the Mid-Atlantic Coast.
- With no jobsite failures, the stability of the Accubrace helical ground anchors and the strength of the system braces potentially saved these projects thousands of dollars in costly repairs and schedule delays.

RESOURCES

Learn more about Dayton Superior's Accubrace Total Bracing System online at www.daytonsuperior.com

Additional product information is available online at www.daytonsuperior.com. Contact your Dayton Superior representative at 888-977-9600, or send an email message to info@daytonsuperior.com if you would like to discuss how these or other innovative systems can make your construction projects more productive.