



NNSA - NATIONAL SECURITY CAMPUS KANSAS CITY, MISSOURI

2012
PROJECT PROFILE

CHALLENGES

Managing security-sensitive information, achieving Energy Star certification, simplifying on-site material management, addressing the uncertainty of copper prices.

SOLUTION

STABILOY® Brand aluminum alloy FeederPlex HS® (High Speed) cable and General Cable's experience and service.



GREGG SLAGLE
CONTRACT LEAD,
CITADEL ELECTRIC GROUP INC.



JAY GUERRA
PE, PRINCIPAL ENGINEER
GIBBENS DRAKE SCOTT, INC

It goes without saying that our national security depends on the expertise and unwavering diligence of highly trained military and law enforcement personnel; but it depends on something else as well: technological advantage. And while our men and women in uniform defend and advance the cause of freedom at home and around the world, facilities such as the NNSA - National Security Campus advance the applied science necessary to help them do their jobs.

When it came time to construct an administration facility for an operation that builds highly classified defense systems, a special kind of electrical contractor was needed. Enter aptly named Citadel Electric Group Inc.

With a reputation for fulfilling government contracts on time and on budget, Oak Grove, Missouri-based Citadel understands the ins-and-outs of working on security-sensitive defense projects. Following contracts at sites such as Fort Leavenworth and Whiteman Air Force Base, NNSA - National Security Campus, as the administrative building came to be known, was familiar territory.

"Eighty to ninety percent of our work is with government facilities," says Gregg Slagle, Building 1 lead electrical contractor on the NNSA - National Security Campus project. "We understand the importance of confidentiality, efficiency, and reliability on these kinds of contracts. And frankly, it is an honor to do the very best work we can on important national defense facilities like these."

PART OF DOING THE BEST POSSIBLE WORK INCLUDES USING THE BEST POSSIBLE MATERIALS AND PRODUCTS.

Part of doing the best possible work includes using the best possible materials and products. At NNSA-National Security Campus, that meant General Cable STABILOY® Brand FeederPlex HS® aluminum alloy cable.

Slagle says that, while they have used General Cable products since Citadel went into business in 1996, this was the first time they used FeederPlex HS cable. Consisting of a factory-produced, plexed assembly of STABILOY® Brand XHHW-2 conductors that are color-coded for phase identification, FeederPlex HS has a specially designed cross-linked polyethylene insulation that allows for fast and easy cable pulls without the use of pulling lubricants.

"We simply allocated pre-plexed reels to specific areas in the schematic, which saved a lot of time. Also, because they pulled so easily, our crews fell in love with them. I kept



hearing about how even though they are plexed configurations, they pulled more easily through conduits than single conductor.”

“Because of the instability in the price of copper, and because this was a project with large feeders, STABILOY Brand aluminum alloy cable made sense.”

While accustomed to General Cable’s commitment to service from his long history working with them, Slagle makes a point of mentioning that they went way above and beyond on this project.

“Typically we lose a lot of time receiving reels from the supplier, unloading them, storing them, then loading them again to ship to the site. General Cable partnered with BA/ Crescent Electrical Supply, Lee’s Summit, MO to arrange for the scheduled delivery and storage of the preconfigured, plexed reels right on the building site: a much more efficient approach.”

Gregg Slagle isn’t alone in his assessment of General Cable’s performance on NNSA - National Security Campus. Jay Guerra of the engineering firm Gibbens Drake Scott Inc.

was the principal engineer overseeing all of the mechanical, electrical and plumbing engineering for Building 1 of the NNSA - National Security Campus. He is another long-time General Cable advocate.

“The savings associated with using STABILOY Brand FeederPlex HS XHHW-2 conductors, both in terms of product cost and efficiency of installation, influenced our decision to go with General Cable” says Guerra. “Because of the instability in the price of copper, and because this was a project with large feeders, STABILOY Brand aluminum alloy cable made sense. We are working around the country on various data center projects and using STABILOY Brand cable has become a no-brainer.”

Guerra is also proud to point out that this national security facility was also designed with climate security in mind as well. An Energy Star compliant operation, NNSA - National Security Campus exploits numerous advances in sustainable design, reducing energy consumption by 50% and earning a LEED® Gold certification.

Whether it is standing vigilant against threats to homeland security, or serving as an example of what is possible in the fight against climate change, the NNSA - National Security Campus is pushing innovation from the frontiers of science to the frontline of national defense. And each in their own way, every one of those involved in its construction – including General Cable – is proud to have done their part as well.



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For more information on General Cable’s aluminum alloy product solutions, go to www.stabiloy.com or call toll-free 855-720-2792.
Form No. BW-2006-0414

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