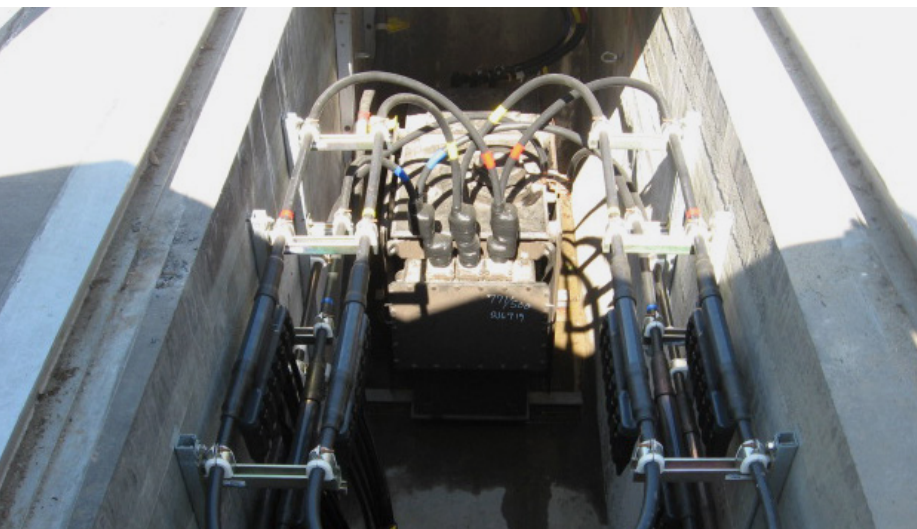


CASE STUDY

# Custom Homac® ring bus system



Industry: Electric utility — downtown network system

Challenge: Reduce electrical system downtime for repairs

Products: Custom Homac ring bus system

—  
01 Completed vault

**Customer:** A large investor-owned utility (IOU) that serves a group of commercial and residential high-rise buildings from a below-grade network vault.

**Challenge:** The IOU faced persistent failures from water intrusion caused by years of modifications to the system. Attempts to seal these modifications were typically made with tape and heat shrink, but this failed to prevent leaks.

**Solution:** The IOU chose to renovate the entire vault using a Homac ring bus system configuration, which included a Homac Flood-Seal® ring bus connector. ABB product engineers designed this product specifically for this application as part of the company's service package. The custom ring bus connector enhanced the system's reliability by reducing the amount of downtime in electrical service to make repairs and modifications.

Homac Flood-Seal ring bus connectors are insulated with PVC and EPDM rubber to ensure watertight connections and provide greater resiliency to the overall system.

To meet the customer's needs, the ring bus connector was designed using compression technology to tap into the 1000 kcmil main line and allow up to eight 500 kcmil services to be connected using mechanical set-screw technology.

In addition to providing watertight connections in the environment of the underground utility vault, ABB supplied its strut products to help secure the connections to the vault walls and enable the installation to be completed quickly. This resulted in limited downtime of electrical service and contained reconstruction costs.

The new ring bus solution with Flood-Seal technology also allows for additional taps to be connected at a later time. This flexibility helps reduce the cost of future electrical demands.

The ring bus connector may be tailored to fit a variety of configurations. For more information about ABB custom solutions, please contact a member of ABB's skilled engineering team at (800) 238-5000. Additional information about the Homac brand is available at [solutions.abb/cable-accessories-apparatus](https://solutions.abb/cable-accessories-apparatus).

# Product application

—  
01 Before  
—  
02 After



01



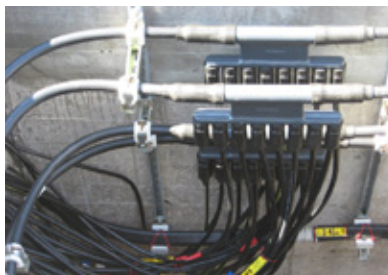
02



02



02



02



02

## Additional products from ABB

### Homac custom solutions

The Homac brand is an industry leader in tailoring underground and substation distribution systems to meet customer needs.

### Superstrut® metal framing

With a selection of multiple finishes, Superstrut metal framing is totally protected from corrosion.

### Homac Flood-Seal ring bus connectors

Subjected to dielectric testing at 4,000 volts for 60 seconds, Homac Flood-Seal ring bus connectors offer ensured insulation integrity.

### Kindorf® channel systems

Designed so that the maximum number of metal framing applications can be constructed with a minimum of parts and labor, Kindorf channel systems are modular for maximum flexibility in field applications.

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**ABB Inc.**  
Electrification Products  
860 Ridge Lake Blvd.  
Memphis, TN 38120  
Customer Service: 800-816-7809

**[solutions.abb/  
cable-accessories-apparatus](http://solutions.abb/cable-accessories-apparatus)**

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