

# RTKL Headquarters

NextLAN® 6eX copper and fiber cabling system chosen for corporate headquarters



RTKL Associates, Inc., an international architectural and engineering company founded in 1948, is in the business of designing solutions that support the business needs of its clients. So, when RTKL needed to relocate its corporate headquarters and Baltimore studio to a new building in the Fells Point community of Baltimore, the selection of a cabling system was of critical importance. RTKL's chosen cable and connectivity would be a showcase for clients and most importantly, would be a reflection of the objective engineering evaluation process that RTKL promises its clients.



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> The design documents for RTKL's new cabling system required a minimum of Category 6 for the horizontal, and multimode fiber for the backbone. RTKL desired a structured cabling system that would provide maximum performance for current applications, and still be able to deliver top performance when higher speed applications are deployed in the future.

"Deploying a Category 6 system was mandatory for us," says David Labuskes, Vice President of RTKL and Director of the firm's Telecommunication and Technology Design Group. "While we are initially installing a fast Ethernet

"In an extremely competitive bid process with many highly qualified participants and manufacturers, the NextLAN system offered by BlackBox provided the best overall combination of performance, utility, warranty and value," says Labuskes. "The performance track record of both Leviton and Superior Essex further cemented the decision to use their system."

LAN, we plan to upgrade eventually to 1000BASE-TX as our Gigabit Ethernet solution rather than the more complex 1000BASE-T standard. The 1000BASE-TX technology will be significantly less expensive to adopt and necessitates a Category 6 cabling system."

### Selecting a Solution

In its selection process, RTKL evaluated independent test results of four Category 6 cabling solutions from leading manufacturers and installers. In the end, RTKL's requirements were exceeded by the NextLAN Category 6eX solution from Superior Essex and Leviton Voice & Data. BlackBox was selected as the installation contractor for the system.

The Category 6eX NextLAN system chosen by RTKL combines Superior Essex NextGain® Category 6+ CMP rated cable with Leviton's eXtreme® 6 structured cabling components. NextLAN is one of a select few cabling systems to offer the combination of lifetime warranty, quarterly independent system testing, and bit error rate system testing.

The actual performance results of the Category 6eX NextLAN system are the sort that excite engineers who normally evaluate cabling systems as part of

their jobs. Independent tests consistently show the worst-case measurement results of the NextLAN channel to exceed TIA/EIA 568-B.2-1 specifications by wide margins.

This performance advantage is the result of advanced engineering and the tightest quality controls in the industry. NextGain cable provides guaranteed NEXT margin of 6 dB (over TIA/EIA 568-B) and exceptional impedance performance across the entire usable spectrum. Leviton eXtreme 6 components combine high-quality, error-free performance with a variety of innovative frame and workstation solutions. Together, they provide the ideal bandwidth and headroom for mission critical installations.

### The Installation

When the LAN for the new headquarters is completed, the system will be wired with 200,000 feet of NextGain cable, 3 IDFs, and over 400 cable drops. RTKL's Telecom and Technology Group did the design for the headquarters using a zone cabling concept under raised floors throughout the studio and office space. This will allow for maximum flexibility and minimized costs when responding to a potential reconfiguration of the space. In preparation for future convergence plans, both voice and data applications are being run over the Category 6 cabling runs. This approach will allow RTKL to eventually implement VoIP with zero impact to the installed cabling system. It also provides RTKL the flexibility to change any existing voice port to a high-speed data port after a simple cross-connect change.

RTKL's backbone will utilize Superior Essex TeraGain® 62.5 micron fiber cable and Leviton OptX® fiber components. TeraGain 62.5 micron fiber cables provide 220 MHz-km bandwidth at the 850 nm wavelength, slightly better than standard fiber cables. The powerful Opt-X fiber system includes high-quality singlemode and multimode solutions for ST, FC, SC and LC connectivity, in mechanical and epoxy styles. Opt-X also features a variety of customizable solutions, including high-density workstation accessories, patch panels, and a complete line of fiber optic cable assemblies and pigtails.

The fiber backbone is also part of the NextLAN system offering from Superior Essex and Leviton, and is included in the lifetime warranty program offered through certified installers.





