

## Tennessee Titans and Thread-Lock® score big in debut season

*Taking a chance on new fiber optic connector creates winning team, saves stadium time and money.*

**B**uild them a stadium, and they will come . . . In 1995, the city of Nashville attracted the Houston Oilers to town with the offer of a new stadium, designed with the team's input, and incorporating the latest technologies available. Oilers owner, K.S. "Bud" Adams, leapt at the chance to play in a new \$292 million dollar facility, and moved his team to Music City, USA, announcing that in 1999, their name would change to the Tennessee Titans.

But this year's NFL season marked more than the debut of a new stadium and team name. It was also the big league debut of a new fiber technology—reusable, epoxyless Thread-Lock™ connectors, a key part of the new stadium's technology infrastructure.

Adelphia Coliseum is a 67,000-seat open-air, natural grass stadium on the banks of the Cumberland River. Designed to house not only the NFL football team and the Tennessee State University Football Squad, but also events such as concerts, lectures and appearances; the facility boasts some of the finest amenities and multimedia capabilities available at an NFL complex.

After the coliseum was designed, the Metropolitan Development and Housing Agency hired Cottonwood, Inc, a Nashville-based consulting firm specializing in information technology, to design and engineer the technology infrastructure and manage the data and telecommunications network installations at the facility. By November of 1998, Carter Myers, Chief Engineering Manager at Cottonwood, had presented an "Invitation to Bid for Premise Distribution Cable System". The specs he supplied revealed a technological gem of an installation, and everyone involved was intensely excited.



(L-R) Danny Beecham of Graybar, Jeff Flint of LanLink, Michael Carter of Leviton, Tim Isbell and Mark Neel of Teldata, Randy Bland of Cottonwood, and Charlton Doss of Teldata pose in the newly completed Adelphia Coliseum.

### Fiber figures heavily in Stadium Specs

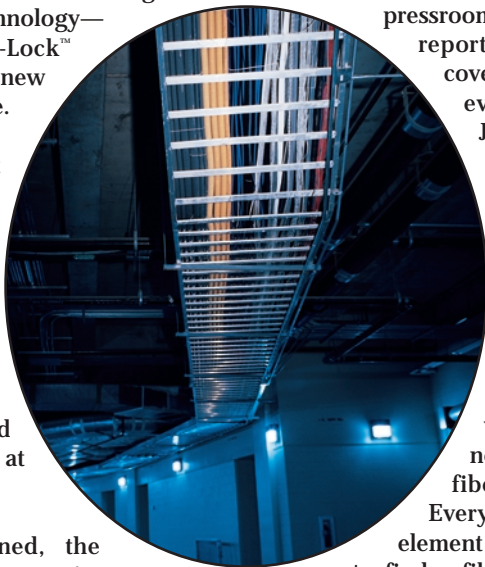
The cabling networks installed in the facility were vast and complex, using a combination of enhanced Category 5 and vital fiberoptic connections to move voice and data. The system included four distinct data networks, a massive telephone and fax system with over 4,000 miles of cable and 36,000 pairs of wire, a pressroom (allowing 180 announcers and reporters to simultaneously relay coverage of football games and other events), two enormous Sony Jumbotron® scoreboard displays, a Ticketmaster outlet, concessions network, ATMs, payphones and more. Even the coaching staff and game officials would have connections for phones, laptops and instant video playback equipment—right on the field!

All of these high-traffic audio, video and data systems and sub-networks would rely heavily on a fiber optic network for support. Everyone knew fiber was a crucial element to the installation. It was important to find a fiber system that could both handle the job and keep the project on time and on budget.

When Myers wrote his initial specifications in 1998, one key player in the installation had yet to emerge. Five states and half a country away, the final touches were just being put on a brand new technology that would improve the overall efficiency and cost-effectiveness of Myers' installation. A fiber optic connector being developed by Leviton Telcom in Seattle, simplified and uniquely re-terminable, requiring no epoxies or crimping, would become an invaluable player in creating the technological marvel that would become Adelphia Coliseum.

**LEVITON**  
T E L C O M

Center: The massive telephone and data systems utilize over 4,000 miles of cable and 36,000 pairs of wire. Left: The Adelphia Coliseum Press Room and Booths enable over 180 announcers and reporters to simultaneously relay football and event coverage.



## Specifier chooses final components to go the distance

In search of the best fiber system, Carter Myers began a study of the latest top-rated cabling/connecting hardware and spec data, just as Thread-Lock was hitting the market. Myers' examination of the choices was painstaking and in-depth—he even performed a blind study with product samples.

After comparing the results, Myers specified Leviton Telcom's Thread-Lock product as the stadium's fiber optic connector, mainly because it delivered the best performance and minimal loss.

## Installers impressed with newcomer

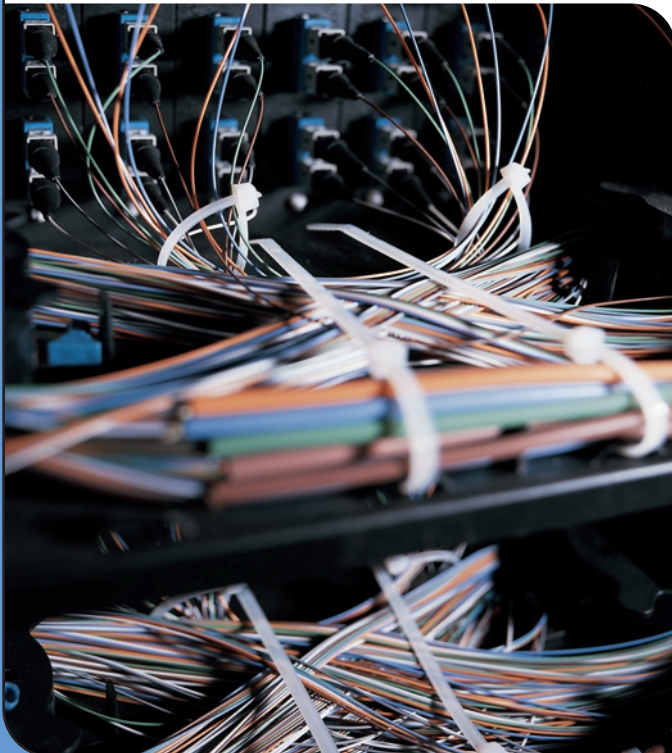
Installation contractor Teldata Corporation (Nashville) won the bid for the installation, and field supervisor Charlton Doss and his crew were able to set to work right away installing over 1600 Thread-Lock ST® connectors.

Says project manager Tim Isbell, "As far as anybody's fiber connectors, these are by far the easiest—and Charlton's crew has done hundreds of thousands of fiber terminations. Optically, it has one of the best performance dB-wise that he's seen. He liked the overall results better than anybody's."



"The connectors helped us do this project very efficiently, and we didn't have to carry around a bunch

Leviton Telcom Fiber Panels, like this one in the main distribution frame, support four distinct data networks.



of different tools or use any epoxy," adds Doss. "And we only had to re-do one connector. It was nice not having to waste any materials or order extra connectors to account for the inevitable shattered fiber."

The installation method is quick and achieves a robust fiber connection with less than 0.2dB loss. It is especially attractive because it is the only connector which doesn't require a crimping tool or epoxy to terminate, so connectors can be re-used and re-terminated multiple times without sacrificing industry standards for insertion loss, reflectance or cable retention.

## Testing confirms performance

Independent certification testing confirmed that both the system and Teldata exceeded expectations. Isbell recalls, "It tested out without a glitch—everything was 100% the first go-round. I was floored. Their supervisors commented to me that they've never worked with a system and contractor that tested out perfectly the first time."

The Tennessee Titans won all of their home games in the new Adelphia Coliseum, inspiring them to an exciting January 23rd victory over the Jacksonville Panthers and a trip to SuperBowl XXXIV. ESPN.com writes, "After playing at four stadiums in three cities in four years, Tennessee finally found the Promised Land."

The project was a victory for the Thread-Lock connector, as well. Mark Neel, executive vice president of Teldata is already a fan of the new technology, and Cottonwood's Carter Myers plans to recommend them in future specifications. He reflects, "I was dubious about switching from the leading connector to a new product—but when the Thread-Lock tested out better, it really opened my eyes."

