

Overview

Organization

Universal Communications Group (UCG)

Profile

UCG provides cost-efficient residential communications and media services in Australia. UCG's wholly owned subsidiary Open Access Networks Pty Ltd creates networks that are open to all service providers.

Situation

UCG needed an aesthetically appealing, cost-effective solution to deploy a fiber-to-the-unit network to an upscale condo community.

3M Solution

- 3M™ One Pass Fiber Pathway for the hallways
- 3M™ One Pass Mini Fiber Pathway for the living units
- 3M™ Fiber Distribution System 8400 Series terminals to transition from vertical to horizontal fiber

Benefits

- Low-profile pathways minimized visual impact
- Labor savings due to quick, easy installation
- Resident inconvenience reduced

Results

- Won acceptance from homeowners association
- Deployed FTTH network to 162-unit building in five weeks
- Units installed in two to three hours each

3M™ One Pass Fiber Pathways help service provider deploy cost-effective, aesthetically appealing fiber-to-the unit network to upscale condos

The Challenge

Universal Communications Group is one of the leading providers of cost-efficient residential communications and media services in Australia. UCG's core business designs, builds and manages robust communications networks for both greenfield developments and retrofits. UCG's wholly owned subsidiary Open Access Networks Pty Ltd creates networks that are open to all service providers.

The homeowners association of Pacific Park condominiums turned to UCG to replace the building's failing coax free-to-air (FTA) TV network. The 162-unit, upscale community in suburban Sydney needed better telecommunications and video service, but did not want to alter the building's interior decor.

"We surveyed the building and discovered that it had been cabled with poor-quality, air-spaced coaxial cable in a looped topology, where cables ran in a daisy chain fashion from unit to unit," says Roger McArthur, General Manager, UCG.

In addition to failing TV service, the poor cabling had affected the building's controlled access system and residents' telephone service. Moreover, building residents were ready for an upgrade. Some did not have access to high-speed broadband, and Pacific Park was one of the few remaining large developments without pay TV.

To meet residents' needs, the entire building needed to be rewired. UCG proposed two options to the association's project manager: 1. Deliver FTA digital and pay TV by installing a new coaxial distribution system; or 2. Install a fiber-to-the-unit platform to deliver FTA digital and pay TV, but also prepare the building for future services to each unit. The client chose the fiber option.

The installation environment was challenging with many different hallways over multiple levels. In addition to hallway installation, owners wanted each living unit to be equipped with two fiber wall outlets – one in the living room and one in the main bedroom.



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However, the structure lacked existing conduits or cable pathways. UCG considered a number of potential solutions to run fiber through the hallways and into living units, including a skirting board system, removal and replacement of the ceiling cornice, and a range of PVC trunking options. All of these options were deemed unsuitable by the client due to cost or visual impact.

The Solution

The 3M office in Sydney provided UCG with samples of the 3M™ One Pass Fiber Pathway for the hallway and the 3M™ One Pass Mini Fiber Pathway for the living unit.

The 3M One Pass Fiber Pathway is an adhesive-backed, surface-mount, horizontal cable pathway and drop cable solution installed simultaneously in one pass around a hallway perimeter. Designed for use in brownfield Multi Dwelling Units (MDUs) serviced by FTTH networks, the pathway adheres to a variety of wall surfaces and is paintable.

The 3M One Pass Mini Fiber Pathway is an extension of the 3M One Pass Fiber Pathway hallway solution, enabling service providers to discreetly and easily take fiber into the MDU living unit. The One Pass Mini Pathway contains a single, ultra-bend-insensitive fiber capable of maintaining a 5 mm bend radius, allowing it to turn around sharp corners without affecting signal performance.

UCG installed the samples of the 3M One Pass Pathways in a common area of the building for residents to preview prior to a meeting in which they were reviewing and voting on the installation project. 3M also offered 3M™ Fiber Distribution System 8400 Series terminals to transition from vertical to horizontal fiber. Building owners approved the project along with the total 3M solution.

“The 3M One Pass products were deemed to be an excellent solution, meeting the operational, aesthetic and cost requirements of the project,” McArthur said.

After one day of training with 3M technical service reps, UCG technicians installed 5,100 feet of 3M One Pass Fiber Pathway duct in the hallways and 23,000 feet of One Pass Mini Pathway duct in living units. The installation was completed in five weeks, during which time 3M technical service visited the site and provided assistance.

The Results

Performance: “The fiber-to-the-unit network enabled by the 3M solution is delivering excellent TV service,” McArthur said. “It also provides a solid platform for the future delivery of additional services to residents. We are currently investigating deployment of IP-based access control and security options using the 3M One Pass Fiber Pathway solution.”

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Aesthetics: 3M One Pass Pathways were installed flush against the ceiling cornice in the hallway and living units. The building has since been painted and the pathways are barely noticeable. “The result is very pleasing and our client is pleased with it,” McArthur said. “3M has provided a solution for our client where previously we had no acceptable solution that met the aesthetic requirements of the building.”

Cost Savings: The client saw significant savings in labor compared to other proposed deployment methods. “I am delighted with the ease and speed with which the 3M One Pass Pathways have been deployed,” McArthur said. “Unit installations were kept to between two and three hours per unit, providing predictable installation windows for residents. Using other methods, the current complex build would have taken at least twice as long. 3M has been very supportive and also very responsive to our suggestions for product changes and improvements.”

To learn more about the 3M One Pass Fiber Pathway and the 3M One Pass Mini Fiber Pathway, visit www.3M.com/OnePass.

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