

At ATMC, Marketing and Handholding Smooth the Path to Fiber

A North Carolina telephone cooperative, ATMC, has become one of the fastest-growing fiber-to-the-home providers in the country, as its service area changes from a sleepy seaside county to a popular vacation-home destination.

By Masha Zager ■ *Telecom Editor*

Along the southern coastal strip of North Carolina, new homes and communities are springing up everywhere the eye can see. The construction wave of vacation and retirement communities that originated in South Carolina's Myrtle Beach began to move northward into Brunswick County in the early 1990s, really took off in 2004 as national builders moved in. It hasn't stopped since, despite the nationwide housing slowdown.

For the local telephone cooperative, Atlantic Telephone Membership Corporation (ATMC), this growth has present-

area. Horton had already decided to install fiber-to-the-home in the development, and intended to partner with a competitive provider with which it had worked on earlier FTTH projects. But ATMC – which had investigated fiber but hadn't yet had the opportunity to deploy it – lobbied Horton for the opportunity to build the network.

In the end, ATMC was selected as the preferred provider, with a marketing and sales agreement through the Property Owners Association. Not only did it offer bundled triple-play services at a competitive price, but it was well known in the

In the two years since being selected by D.R. Horton, ATMC has deployed fiber networks, and started providing voice, video and data services, in seven other communities and one commercial development. Altogether, it now has about 800 fiber subscribers.

The parade of new projects hasn't stopped. Kris Ward, Business Development Manager at ATMC, says that approximately 89 new developments are being planned in the company's service area. Even allowing for the fact that some of these projects will never make it past the planning stages, he says, ATMC expects to have 13 additional active fiber communities by the end of 2007. Several large commercial developments are also on the drawing board, bringing retail, banking and medical facilities to a now underserved area, and ATMC hopes to deploy fiber in all of these as well.

The company's policy is to deploy FTTH in all new developments that meet a minimum size. Burying fiber in greenfield areas is now more cost-efficient than burying copper and coax, and the company is also starting to realize maintenance savings from the fiber plant. But because the electronics aren't completely scalable, about 100 houses are needed for a project to break even, given ATMC's business model. Of course, there are exceptions even to that rule, depending on how close the development is to other areas served by fiber. Just recently, Ward says, ATMC made plans to install fiber in a development with fewer than 70 homes because the deployment could

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ed both a challenge and an opportunity. The company has risen to the challenge by making a commitment to fiber-to-the-home and working with developers to install it in new developments wherever it's economically feasible.

In 2005, D.R. Horton, the largest homebuilder in the U.S., broke ground on a new 1,000-unit development, *The Farm at Brunswick*, in ATMC's service

area, had a well-established local customer service operation, and was able to provide a traditional voice offering, in contrast to the VoIP solution proposed by competitive providers. ATMC took over the deployment for the project's first phase, installing a BPON network from Motorola. (About one quarter of *The Farm at Brunswick* has been built out so far.) Then it began looking for new FTTH opportunities.

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In a few cases, the company has even overbuilt existing networks. Ward says ATMC was invited by one community to replace a cable provider midway through a build-out; in another case, it was invited by a property owners' association to replace an existing provider. "We're getting good feedback if people want us to come in and tear up the yard again," he jokes. ATMC is conducting feasibility studies to determine whether additional overbuilding would be justified.

Developers See The Train Rolling

Developers are now approaching ATMC and asking for fiber to the home. "It's

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become a game of 'keeping up with the Jones' between developers," says Ward. "As soon as the first development started promoting fiber, the others had to have it." The developers' perception is that homes served by fiber are selling bet-

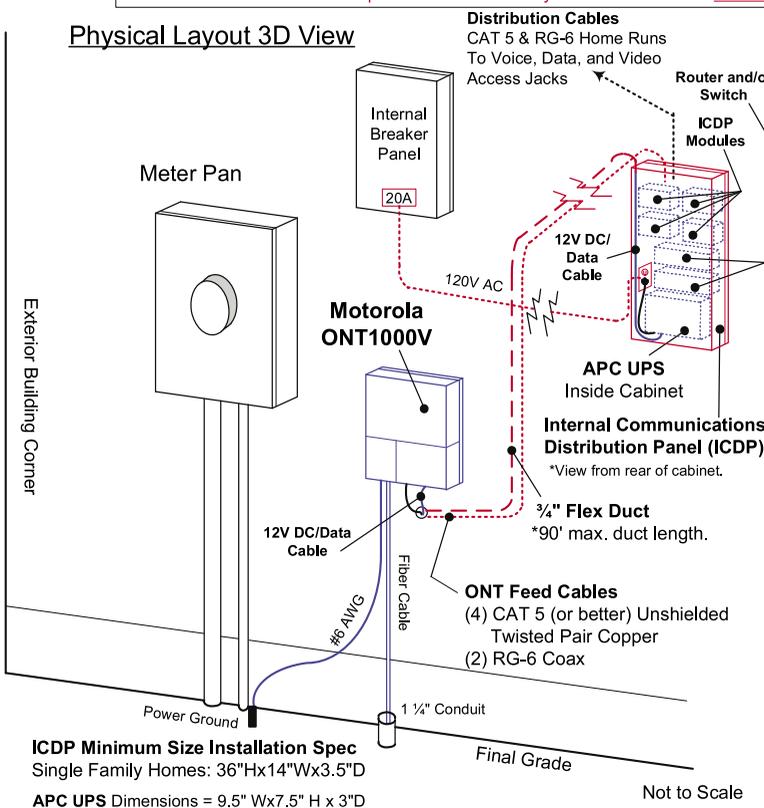
ter, due to both advertising and word of mouth, and they don't want to be left out. Many of their customers are coming from urban or suburban areas with fiber-to-the-home, and are surprised and pleased to find fiber available from a

ATMC ONT1000V Installation Layout for Single Family FTTP Applications

New Construction: Homeowner / Contractor Installation Responsibility

- Install the Internal Communications Distribution Panel (ICDP), 120V AC 20A circuit, receptacle, and install ONT Feed Cables [(4) CAT5- Voice & Data Cables and (2) RG-6 CATV Cables] to exit point as indicated.
- Establish 3/4" flex conduit (maximum length 90') with pull string from the ICDP to the ONT1000V for 12V DC /Data cable from UPS location to exit point as indicated. Extend flex duct 36" on exterior side and secure excess.
- * Items shown in blue (ONT, Fiber Cable, UPS, 12V/Data Cable, #6 AWG, ICDP components) to be installed by ATMC.
- * Items shown in red to be provided and installed by builder or contractor. *The Exit Point must be indicated before applying for buried power.*

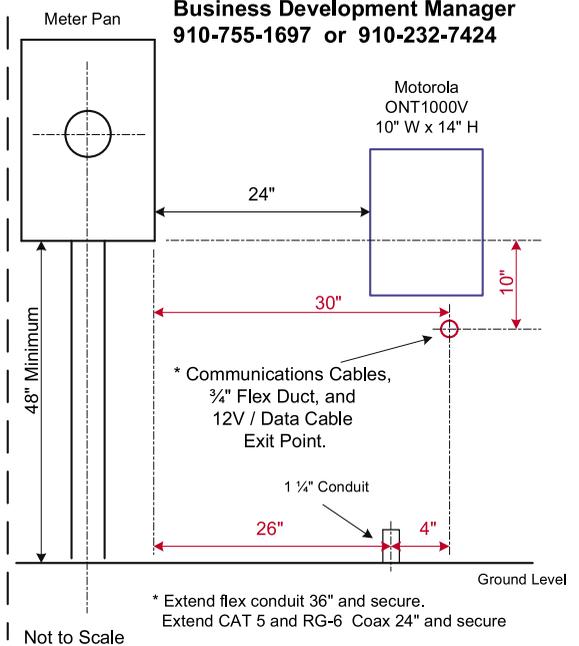
Physical Layout 3D View



Typical Layout Dimensions

*Layout may be reversed for left-side-of-meter application.
The Exit Point must be in place (or the location indicated) before applying for buried power.

ATMC Contact: Kris Ward
Business Development Manager
910-755-1697 or 910-232-7424



File: ONT1000V Installation
Layout Rev10
S. Dutton 7/14/06

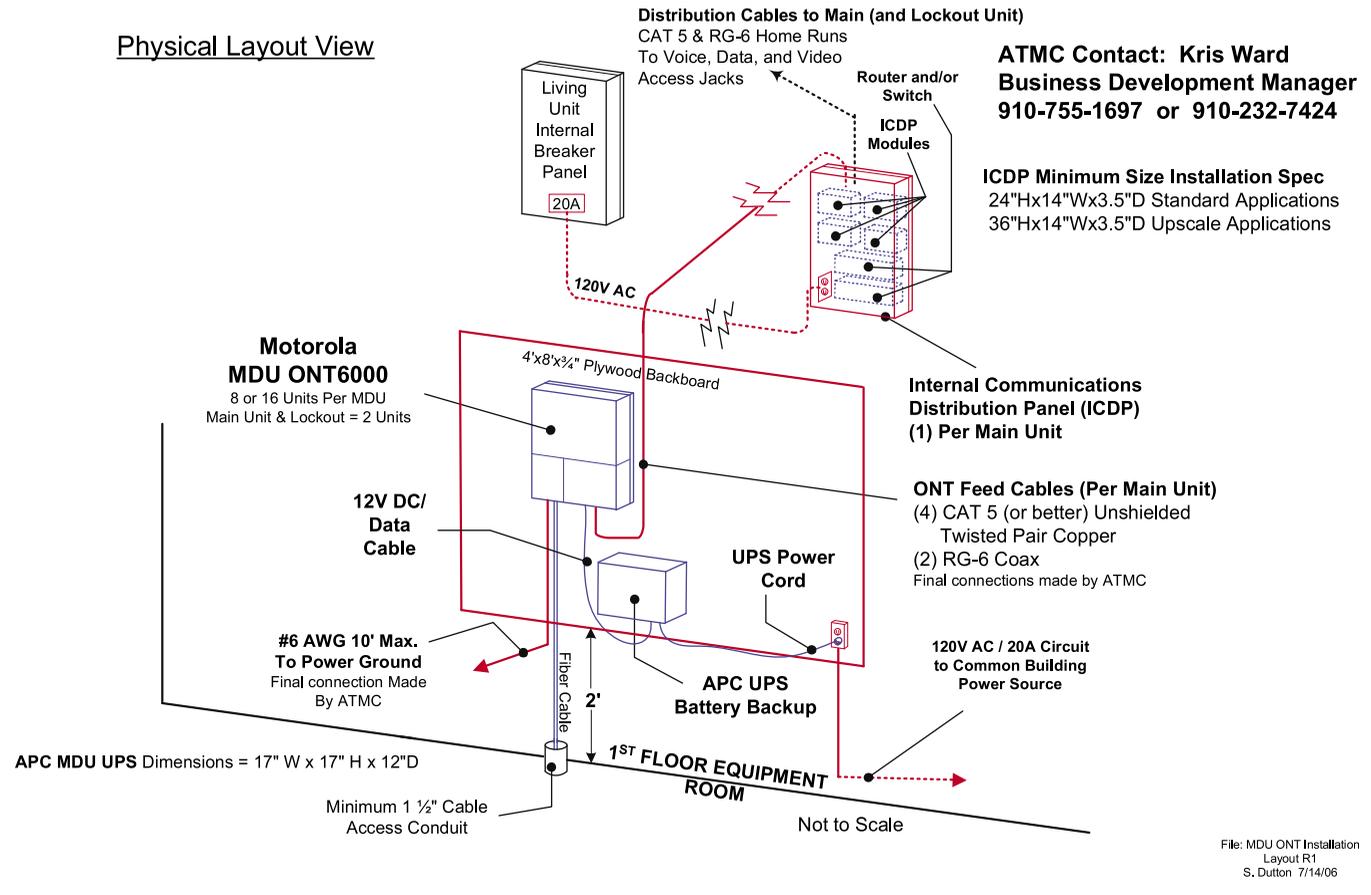
ATMC installation layout using Motorola's ONT1000V for single family FTTH applications.

ATMC MDU ONT Installation Layout for Multi-Family FTTP Applications

New Construction Multifamily Dwellings: Builder / Contractor Installation Responsibility

- Install (1) Internal Communications Distribution Panel (ICDP), 120V AC 20A circuit & receptacle, and install ONT Feed Cables [(4) CAT5- Voice & Data Cables and (2) RG-6 CATV Cables] to 1st floor equipment room as indicated per each Main Unit. Establish 4'x8'x¼" backboard, 120V AC circuit, and #6 Ground Wire for equipment installation.
- * Items shown in blue (ONT, Fiber Cable, UPS, 12V/Data Cable, ICDP components) to be installed by ATMC.
- * Required items shown in red to be provided and installed by builder or contractor.

Physical Layout View



ATMC installation layout for multi-family FTTP applications; note the number of dwelling units served by one ONT.

small company in rural North Carolina. “It’s the ultimate amenity,” Ward says.

Like other cooperatives, ATMC is grappling with the equity implications of letting some customers take advantage of FTTH’s enormous bandwidth capacity while other customers can’t. Ward says

are the same for its FTTH communities as for the communities it serves with cable. Across the board, except for some very remote rural areas, the company’s basic residential Internet package provides 6 Mbps of bandwidth downstream and 1 Mbps upstream. “As a coopera-

tor base,” Ward explains. “At least for the time being.”

At the moment, FTTH customers aren’t asking for higher speeds. But ATMC will be faced with a decision sometime in the next few years, as bandwidth demand increases and higher-speed Internet offerings become more widely available in other FTTH communities. “If customers requested additional Internet bandwidth in a new development – a large, upscale customer community – we would have to look at that,” Ward admits.

The key to ATMC’s success in building and marketing fiber economically is working closely with developers. “We learned very early in the process when we

ATMC has found natural allies in developers’ sales and marketing staff, who can sell fiber just as they would a granite countertop.

ATMC’s channel lineups, choices and Internet speed “beat the pants off local competitors” – but, so far, those options

tive, we are owned by our members, and therefore we try to keep the service offerings consistent across our entire cus-



The ONT model chosen can output fiber, Ethernet, copper pair, and coax.

deployed fiber in the first development that it was going to take a lot of hand holding to make this thing work,” said Ward. Even though D.R. Horton has been the only developer to designate a preferred telecommunications provider and set up a relationship with the property owners’ association, ATMC has found that it takes a concentrated effort to keep all of the developers very much in the loop from the earliest stages.

Ward attends county and municipal meetings to find out what developers are planning. Whenever one of them proposes a design for a new development, he contacts them and gives them the company’s FTTH packet. This material includes:

- Local news coverage about ATMC’s fiber-to-the-home offerings.
- A letter to the developer offering marketing help in exchange for cooperation with structured wiring.
- Clear explanations of the advantages of FTTH and structured wiring.
- Detailed diagrams of installation layouts for single-family homes and multiple dwelling units, with the contractor’s responsibilities, ATMC’s responsibilities and the demarcation point clearly distinguished.
- Contact information for Ward, ATMC’s “single point of contact” for developers.

Ward then keeps in touch with the developers on a regular basis, staying informed about changes to project schedules and making sure everyone is collaborating who needs to be. If developers

Letter to Developers

Mr. Developer:

ATMC is excited to offer Fiber-To-The-Home (FTTH) deployment in Sunset Ridge. Sunset Ridge residents will have access to Telephone, Cable TV and High-Speed Internet service delivered via Fiber Optics (tiny strands of pure glass). It is highly unusual (as of May 2006 there were 936 active Fiber Optic Communities in the US) and technologically advanced to be living in a community where the communications and entertainment infrastructure is built solely upon Fiber Optics.

Since Fiber is the technology of tomorrow, you can not expect to wire your house the same way that has been used for the last 50 years. To take advantage of the Fiber connectivity at the side of your house you will need to wire your house in a manner known as “Structured Wiring”. Structured Wiring is a method of wiring your house that combines all of the communications, computer networking and entertainment cabling into one centralized location. With Structured Wiring your home becomes networked. All the wiring is pulled back to a central panel for easy connectivity, control and troubleshooting applications. Fiber connectivity also needs a battery back-up which is supplied by ATMC and stored in the Internal Communications Distribution Panel inside your home. In 2005, 70% of new homes built in the U.S. had some form of “Structured” Wiring, according to the National Homebuilder’s Association.

To take full advantage of the Fiber within Sunset Ridge, the inside wiring of each house needs to meet the specifications that ATMC provides and has developed in conjunction with Motorola, APC and other vendors involved in our Fiber build-out. FTTH is exciting and makes your community ready for today’s and tomorrow’s technology. ATMC can help you market your development and inform your employees about the advantages that Fiber Optics brings to Sunset Ridge. We can also offer you additional sources of revenue through home integration.

Please call me with any questions, 910-755-1697 (office).

Kris Ward
Business Development Mgr.

Why Do Structured Wiring?

- Structured Wiring is essential for connecting to ATMC's Fiber network.
- According to the National Homebuilders Association, some form of Structured Wiring was utilized in 70% of all new home construction in 2005.
- Homes sell quicker and with more profit margin if you install a Structured Wiring system and market its "Smart Home" capabilities.
- It is less expensive to use a Structured Wiring system during construction than retrofitting it after the house is complete.
- Most of today's buyers want a surround sound, home audio and video, intercom capabilities, outdoor speakers and security systems. Structured Wiring supports all of these services and it is better for the home buyer to include it as a part of the initial home-buying process than to have the homeowner go out on their own looking for sub contractors to install these services.
- Structured wiring provides a platform within the house that you can use as a profit center. The largest builders in America are offering Structured Wiring as a standard feature in all new homes, then "up-selling" the homeowner on home integration services. There is typically a profit margin of 25-35% built into home integration packages from large builders and you are adding additional services to meet your customer's needs!
- The outside of the home looks better because there is less equipment mounted on the exterior of the home.
- With Structured Wiring there is a wiring panel located inside the house where all the wires terminate and the telephone, Cable TV and Internet services are brought in from the outside. ATMC provides all the electronic modules and service devices inside the wiring panel that produce the telephone, Cable TV and Internet service.
- ATMC can partner with builders to become a "one-stop" provider for not only the telephone, Cable TV and Internet service, but Home Integration as well. It is much simpler and easier on you when the customer has one call to make to get service and repairs at no extra cost to the builder or homeowner.

(For more complete FAQ that ATMC uses about structured wiring, see our website at www.bbpmag.com/ATMC_structuredwiring.pdf.)

need help or have questions about construction, they can call him instead of going through the company's normal channels. "We want to make things as simple and easy as we can for developers," Ward explains. "When I serve as a single point of contact between the developer and our company, we ensure that the right information is passed to

the right people in the most efficient manner possible."

Ward also makes sure homebuyers know what services are available to them, and that they're aware of the benefits of FTTH. He helps educate the developer's sales and marketing staff, and provides materials for the model homes alerting buyers to FTTH. He also at-

tends open houses and sales events to answer buyers' questions.

Ward says ATMC has found natural allies in developers' sales and marketing staff, who can sell fiber just as they would a granite countertop – and not just fiber services, either. They can tell customers there are no issues with metal fittings and lightning, which pose a major problem in that part of the country. They can point out that there are no unsightly pedestals or other landscaping issues, since the fiber is all underground and splitter cabinets are deployed at common green areas where landscaping minimizes the visual impact of the cabinet.

The biggest challenge, Ward says, has been educating developers and builders about structured wiring, which is required for effective delivery of fiber-based services. "In the beginning, they saw it as an added expense," he says. "We did have some resistance." But he has been patiently explaining to them that more than half of all new homes now have structured wiring, that it allows them to put the battery backup inside, and that it gives the customer a platform for a "smart home" and the developer a revenue opportunity for selling home integration.

Thanks to Ward's efforts, most of the developers and builders have now been converted, and problems arise mainly when they change contractors in mid-stream. "New contractors, who don't know what's been agreed on, suddenly start daisy-chaining the telephone lines and pulling wire like they have for years, out of habit," says Ward. "I get out visiting the developments every week and making sure I'm seeing the same people doing the same things."

But even if it means keeping a watchful eye over new construction, ATMC remains committed to deploying the fiber technology that allows it to build a future-proof, maintainable infrastructure and continue contributing to the growth of its service area. **BBP**

About the Author

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