

Connected Homes: Space Age? Science Fiction? No Way

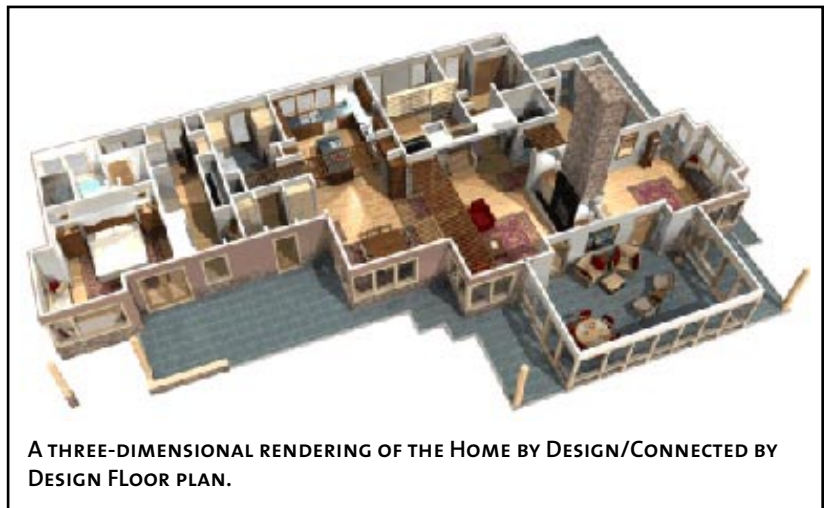
A Las Vegas show home demonstrates that fiber to the home and complementary within-the-home technologies have practical, affordable and life-enhancing application in the lives of today's typical consumers, not solely technology enthusiasts and experts.

By Scott Frederick, Broadband market development manager, Corning Optical Fiber

Technology is meant to make your life easier, to adapt to you and your lifestyle rather than the opposite. And where could technology and connectivity benefit you the most? In your home. Gone are the days of wrestling with a high-tech gadget for 30 minutes just to program it correctly; the same gadget that was meant to help you accomplish a task 10 minutes faster. These days, technology had better work for you, or it won't last long in this fast-paced world.

Gone, too, are the days of technology being just for "techie." The use of technology is so widespread and pervasive that it has become accessible to everyone. Suppliers have made their products more user friendly, more affordable and more available. Because of this, home connectivity — linking your home appliances, technologies and gadgets together for enhanced use and easy programming — has become an easier, realistic way to augment your life.

Earlier this year in Las Vegas, a truly unique show house demonstrated the real-world application of home connectivity — not as a gadget playground for tech enthusiasts, but as a haven for anyone. The Home by Design show house, built on-site at the Stardust Resort & Casino for a full month's display, employed innovative principles that may change how we think about our homes, how they can do more than simply sustain us, and how they can incorporate life-enhancing technology products and systems right into the very foundations. Corning Incorporated was a proud sponsor of the Home by Design show house and the related Connected by Design program.



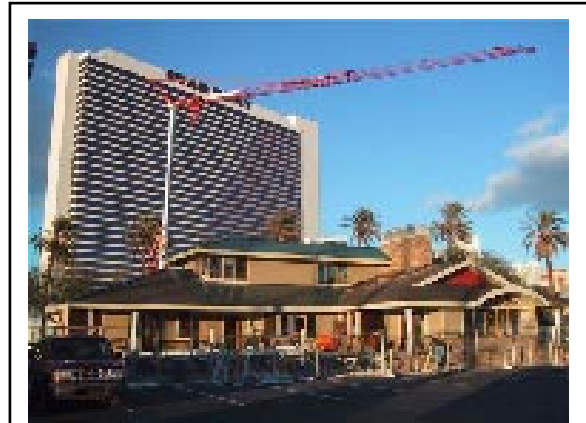
A THREE-DIMENSIONAL RENDERING OF THE HOME BY DESIGN/CONNECTED BY DESIGN FLOOR PLAN.

As the exclusive provider of fiber-optic connectivity to the home, bringing service from the distribution network into the home, Corning Cable Systems provided its SST-Drop Dielectric Cable with Corning® SMF-28e® optical fiber pre-terminated with SC APC connectors. The SST-Drop Dielectric Cable is intended primarily for operation in the last portion of an all-optical network and may be installed as self-supporting aerial cables, in ducts or trenched to the customer premises. SMF-28e fiber is the world's most widely demanded low water peak fiber, compliant to all major industry standards.

What Is Connected by Design?

Connected by Design is both a program to support home connectivity and a philosophy about what true residential broadband is meant to be. It serves as a tutorial for the physical connection of your home's high-tech products with one another for maximum advantage, and the less tangible – but no less important – connection of those technologies to your own lifestyle to best support you. The Connected by Design approach prepares and wires your home to ready it for future upgrades and installations, addressing a primary concern about technology: that the products will become obsolete and a whole new system will need to be installed. With the Connected by Design approach, you can retain your current system and simply integrate the available upgrades.

The Home by Design/Connected by Design exhibit consisted of a full-scale, fully finished home that demonstrated all the concepts of building a home designed to complement your lifestyle, from fixtures to flooring to fiber optics. Home by Design and Connected by Design integrate the latest technologies in a way that makes them affordable, accessible and user friendly.



THE HOME BY DESIGN WAS BUILT IN FULL-SCALE, LIVABLE DETAIL IN THE PARKING LOT OF THE STARDUST RESORT & CASINO IN LAS VEGAS.

“The Connected by Design program really helps to promote the reality of fiber to the home, by showing that it is practical and applicable to the way we live today,” said Bob Whitman, manager of broadband development, Corning Optical Fiber. “It is really meant to get everyone, not only tech enthusiasts, excited about home connectivity. With Corning bringing fiber to the home, we can help families live easier, better and more conveniently through technology.”

Home connectivity has endless practical applications for all people, from technophobes to tech enthusiasts and everyone in between. As you will see later in this article, there are many ways to benefit from a wired home: recording a movie at home when you unexpectedly get stuck at the office, having a fresh cup of coffee waiting for you no matter what time you wake up, being able to play your favorite songs at any time, anywhere in your house, just to name a few examples. The Connected by Design approach sees broadband as the next residential utility. In no time, homeowners will look back and wonder how they ever managed without broadband connectivity and the convenience it provides.

As broadband becomes part of the “plumbing” of the home — the connections and hardware necessary for the wired house to operate — it is essential that the foundations for broadband be incorporated into the blueprints and construction of the home. This technology infrastructure consists of two parts: the systems that bring the connections to the house and the systems that connect the technology *within* the house.

How Will Home Connectivity Help the Everyday Homeowner?

You don't have to be a tech enthusiast to benefit from bringing technology into your home. Remember, it's meant to make *your* life easier.

With true home connectivity, all electronic functions throughout the house are wired to a central command and connected to each other. Through this, programming, controlling and adjusting your settings and preferences for all devices, whether it's the computer, the cable or the coffee pot, will be easy and efficient.

Let's say you take an extended vacation. You would turn the lights off and the heat down to save energy. Through your wired home, you can program an outside light to come on every night, so your house doesn't look deserted. You can set

your heating system to turn on an hour or so before you return, so you don't come home to a cold house. Meanwhile, your television has recorded your favorite shows so you don't miss a minute. What's more, when your dog-sitter comes to feed and walk your dog, he or she is able to use all the appliances and products in your house while he or she is there without interruption to your settings. Forget a step? No worries – just access your home remotely – and securely – via the Internet and take care of it from your hotel room. Being away from home is simpler and more convenient..

In addition to the convenience factor, connecting and controlling the technology in your home can also mean cost savings to the homeowner. By controlling energy usage, monthly bills will be reduced as the house becomes more efficient. Efficient houses are also more environmentally friendly.

What Products and Services Are Connectable?

Fiber to the home and broadband within the home allow you to experience and enjoy many products and services through connectivity. Not only are all these technologies widely available to you, they are also affordable and easy to use.

Reading through what home connectivity can do, you will see that all these appliances and technologies are already being put to work in your home. This is just a new way to make them work better and harder *for you* . There are no new space-age technologies or complex connections to learn. Once installed, your connected home will provide nothing but ease and convenience.

Below is just a sample of the services that a wired home can offer.

- High-tech phone services are available through IP telephony. This affordable service will serve as the backbone for future telephone technology advances.
- Digital media adapters connect your camcorders and digital cameras with your entertainment system, allowing you to show your latest home movies or digital pictures in high-definition audio and video. Imagine your daughter's baseball game on the big screen!
- Media center PCs turn your ordinary computer into a digital entertainment center. In addition to advanced computing and Internet capabilities, music, videos, radio and pictures are easily at your fingertips.
- Television allows you to pause live TV, watch movies when and where you want and record at will.
- Music services will be significantly improved, as you can hear and record music easily, program set lists for a party, play music on speakers anywhere in the house and even take music with you when you leave.
- Working from home will be even easier and more convenient. With high-speed Internet access and connections to copiers, printers and faxes, you won't miss a beat being away from the office.
- Not to leave out the kids, video games with enhanced audio and visual effects allow for single or multi-player challenges or tournaments. And since you are plugged in to your Internet connection, you can even play against your friends down the street.

And this is just the beginning. All of your other appliances and systems, your home alarm system, lights, heating and air conditioning, can be wired in your home for easy, time-saving and enjoyment-enhancing use. You can view the conveniences of a wired home day and night at the Home by Design/ Connected by Design Web site <http://www.homebydesignshowhouse.com/designtour.asp>, including a 3-D walkthrough of the home, a photo gallery and virtual tour.