

## New home building trend: Pre-installed Wi-Fi® networks

Wi-Fi® is an important component of any home—nearly as critical to daily life as electricity and appliances. Sixty-four percent of home buyers would pay more for a new home that is pre-wired with high quality Wi-Fi equipment, and 76 percent indicate interest in employing smart home devices, such as thermostats and keyless door locks.<sup>1</sup> Wi-Fi is a key ingredient to smart living. The ubiquity of Wi-Fi devices and steady growth of connected smart appliances, televisions, home security, lighting, and climate control systems reveal that homeowners increasingly rely on Wi-Fi every day. New home builders can now offer whole home Wi-Fi coverage with exceptional performance using professionally designed and installed Wi-Fi CERTIFIED™ home networks.

Wi-Fi CERTIFIED Home Design™ is a certification program from Wi-Fi Alliance® that provides home buyers with reliable, move-in ready Wi-Fi networks designed specifically for newly built homes. Wi-Fi Home Design enables builders to integrate professionally planned Wi-Fi networks into home floorplans, giving home buyers convenience, peace of mind, and confidence in their new home Wi-Fi network.

## Turnkey, whole home coverage brings high-quality Wi-Fi experience and convenience

Builder-installed Wi-Fi networks give homeowners a high-quality user experience anywhere in the home, including garages, patios, and decks. Whether in a bedroom watching HD video on a tablet, in the family room playing online video games, or on the deck streaming music while grilling, homeowners will experience consistent Wi-Fi coverage.

This turnkey approach to home Wi-Fi offers new home buyers quality with convenience. In the same way that new homes are constructed with well-planned lighting and electrical schemes, home buyers will now benefit from integrated Wi-Fi networks that set a new standard in home network design and installation.

**Professional network design:** Networks are specially designed for each home's individual floorplan. Placement of network equipment considers such factors as type of home, square footage, number of levels, and wall composition. The result is consistent, whole home coverage throughout all living spaces.

**Expert installation:** Wi-Fi Home Design networks are installed by the builder. Optimal placement of access points (APs) and top quality, dual-band Wi-Fi CERTIFIED equipment delivers high-performance, uniform coverage throughout the home upon move-in.



**Built for growth:** Wi-Fi Home Design networks can easily accommodate a diverse range of Wi-Fi devices to provide a high caliber Wi-Fi experience well into the future as new devices are added in the home. Each design integrates equipment needs based on forecasted increases in smart device and Wi-Fi usage over time.

<sup>1</sup> Lennar Home Technology Survey, 2016

## Wi-Fi Home Design floorplans

Certified Wi-Fi home designs must meet industry-approved design practices to ensure the resulting Wi-Fi network meets connectivity, coverage, and performance requirements.

### Design considerations:

- Optimized AP location based upon square footage, materials used, and floorplan
- Confirmed living space coverage, including garages, decks, and patios, through CAD drawings and site heat map
- Service provider performance requirements to ensure consistent, quality connections

### Network optimization considerations:

- Home size, expected number of occupants, current bandwidth application needs, and forecasted growth in Wi-Fi demand
- Number and coverage of required APs based on square footage of the home
- Maintain less than 50 percent channel utilization with fewer than 35 devices per channel at time of installation to allow for future growth

### Performance considerations:

- Equipment: Dual-band Wi-Fi CERTIFIED ac equipment operating in 2.4 and 5 GHz bands to accommodate various device types
- Signal strength: Desired performance is maintained whether near an AP or in nearby outdoor living spaces
- Latency: Under 10 milliseconds latency for time-sensitive and bandwidth intensive applications

## Wi-Fi CERTIFIED Home Design™



## Wi-Fi CERTIFIED: Technology to trust

Since 2000, Wi-Fi Alliance has been driving the adoption and evolution of Wi-Fi through the Wi-Fi CERTIFIED program. The Wi-Fi CERTIFIED logo designates products with proven interoperability, backward compatibility, and the highest industry-standard security protections in place. Wi-Fi CERTIFIED devices can communicate with previous and future generations of Wi-Fi technologies, enabling new homes installed with Wi-Fi CERTIFIED networking devices to provide a seamless, interoperable experience with a multitude of other Wi-Fi devices brought into the home for years to come.



Learn more: [www.wi-fi.org/wi-fi-home-design](http://www.wi-fi.org/wi-fi-home-design)