

Xfinity Communities

Single Family Home Pre-Wire Specifications

Node Plus Zero Architecture & Requirements

Wiring Specifications

- All coaxial cable within the property, including the drop cables from the unit to the common distribution room, shall meet or exceed the following requirements:
 - RG-6 Tri-Shield for drop lengths up to 150’.
 - RG-11 Tri-Shield for drop lengths between 151’ and 250’.
 - Drop lengths should not exceed 250’. Each unit will have its own coaxial cable drop from the nearest intermediate/main distribution frame terminal/cabinet to the unit with no additional splices/splitters between the unit and the intermediate/main distribution frame coaxial terminal/cabinet.
- All coaxial cables used for RF signal distribution shall meet the minimum physical and electrical requirements of ANSI/SCTE 74 2003, Specification for Braided 75 ohm Flexible RF Coaxial Drop Cable, and must be approved by Comcast Project Coordinator (CPC). Cables used for RF signal distribution in all new installations must be a minimum size of Series 6 with a minimum foil-braid-foil, Tri-Shield configuration that includes a bonded inner foil tape, outer foil tape bonded to the jacket and at least 77% braid coverage.
- Alternative coaxial cable or connectorization needed for coaxial shielding termination requires CPC approval prior to installation.
- Internal Unit
- Coaxial Cable

Internal Home Wiring

- Each unit will have multimedia jack plates with 1 coaxial cable and 1-2 CAT5e/6/6e/6a subscriber interfaces. Leave 18”-24” coaxial and CAT5x/6x slack behind plate. Wiring must adhere to TIA-570B wiring/labeling standards.
- Media panels, where required, must be placed in a central/accessible location in unit. Enclosure material composition must accommodate wireless access when housing network/customer equipment, and is needed for subscribed wireless services. Each multimedia jack outlet in the unit must be wired to the panel enclosure.
- The media panel must have the following:
 - Inside: H 42”/W 14”/D 5.0” (scalable in 21” increments)
 - Outside: H45.2”/W 17.4”/D 5.7”
 - Engineered plastic, Wifi Transparent
 - Sized to terminate 9-16+ media; coaxial, CAT5x/6x and accommodate associated network equipment (power supplies, battery backup systems, UPS, gateways, routers, switches, access points, RF splitters, etc.).
- All equipment and installation must comply with federal, state, local fire and safety codes (OSHA, NEC, GO95, NESC, ANSI/TIA, etc.).

New Underground Subdivisions, Projects, and Building

- For Single Family Homes the minimum size for the exterior service box at the side of the home shall be at least 14" wide x 10" tall by 3.25" deep or larger.
- Developer is responsible for placement of all sub-structure (ducts, conduits) at each Crossing to include 1 - 4" conduit. All underground substructure work must be installed in accordance to G.O. 128 and any other applicable regulations. Comcast will place our distribution cable in the Joint Trench duct structures. A mule tape or pull string must be installed in all conduits. Comcast will install drop cable from our plant to pre-wired Single-Family Homes after the underground drop conduit duct structure has been placed from the pedestal to the home.
- Install the main distribution (sub structure) duct structure with a minimum of (1) 4 inch mainline(if required by Construction and Engineering) and (3) 2-inch PVC, schedule 40 PVC for both with 2" or 4" 90 degrees sweeps. All sweeps must be at least 24" in radius. Larger sizes are acceptable. This pipe must be installed at a minimum depth of 24" below grade for sidewalk and 30" for street asphalt or otherwise deemed by local city department of public safety. All substructure runs must not exceed 270° maximum without a utility vault installed. If the length of the conduit run is short- Comcast will request that the run not exceed 180° without a vault installed.

Project Plans

- Owner or Owners Agent shall provide Comcast with accurate scaled project plans in both a hard copy and electronic AutoCAD 14 (.dwg) format with distances of inputs and home run lengths prior to the start of work or activation of the cable system.
- Underground utility projects must include trench layout.
- Provide City Approved Address Plat



Comcast reserves the right to amend these specifications and descriptions without notice and will provide adequate written notification to the builder. Homes not meeting these specifications may encumber the ability for Comcast to provide service.

GROUNDING

Grounding the CATV system is a major requirement by the National Electrical Code and State Electrical Code. In order that Comcast fully complies with these regulatory bodies. Comcast requires that builder to make provisions for attaching our CATV terminal box to the home power electrical ground.