



- CCSI's Carrier Add services include site audit, installation, RF interconnection, and power up test of all radio elements including Remote Radio Units (RRU) and Base Band Units (BBU).
- In addition our technicians will install and test all of the equipment required to support the additional radio elements, including all coaxial and fiber cabling, antennas, TMAs and any antenna sharing components.
- Prior to installation our team will perform a pre-construction site visit and audit, to confirm and validate the necessary work. Based on the site audit CCSI will confirm with the customer a site specific scope of work, including a complete a bill of materials.
- CCSI's skilled technicians will integrate and test all equipment and make all necessary RF connections as well as all connections for alarming, power distribution and ground.
- Our robust testing includes insertion loss sweeps and Passive InterModulation (PIM) testing of all coaxial cable and passive components as well as OTDR, insertion loss and connection verification testing of all fiber cable.
- All of CCSI test results will include a copy of the technician certification for the test equipment, test equipment verification and any calibration measurements as well as individual component or RF path test measurements compared against the customers identified acceptance criteria for that component or system of components.
- CCSI's excellent logistics support which utilizes our regional warehouse resources enables us to keep inventory of customer equipment and to deliver it to the work site. Our robust systems allow us to provide our customers with detailed asset tracking as part of the overall service.
- CCSI technical resources provide expertise throughout the project from RF engineering through ground and tower installation, integration and optimization.
- Industry leading project management support provides reporting on key milestones and project completion.
- Ability to quickly deploy multiple crews of experienced tower technicians and engineers provides quick ramp up on our customer's critical projects.
- Best in class closeout documentation includes all required test results and robust photo documentation of installed equipment as well data upload to the customers selected repository.
- At CCSI safety, quality and on-time delivery are our top priorities and all of our processes procedures are designed with these metrics in mind allowing us to deploy quickly, accurately and safely.
- With multiple locations throughout North America CCSI has the ability to support the wireless carrier in large national or regional roll outs.
- CCSI has installed thousands Carrier Add services throughout North America this experience combined with our in depth knowledge of the equipment supplied by all of the major radio and antenna manufacturers ensures that your equipment is installed and integrated in a timely manner.



SPECIFICATIONS

Network Deployment

Carrier Adds

Overview

CCI Services (CCSI) delivers complete Carrier Add services from our initial site audit to installation to power up test, from the bottom of the tower to the top. Our team of highly trained technicians will install all radio elements necessary for the carrier add. In addition we will install the all additional equipment required to support the new radio elements, including antennas, coaxial and fiber optic cabling, TMAs and any antenna sharing components.

No matter what the work entails, our team of technicians and engineers bring their expertise and the experience of thousands of Carrier Add services we've performed to your project, making CCSI one of the leading providers of services for cell site equipment.

CCSI is capable of providing Carrier Add services throughout North America. CCSI continues to provide both national and regional services supporting several of the major carriers for their 4G rollouts. We've have become a trusted partner and CCSI can always be expected to deliver high quality services, safely and on time.

Deliverables

- Pre-construction site audit and a site specific scope of work, including a complete a bill of materials.
- Inventory customer equipment and deliver to site for installation, including detailed asset tracking.
- Installation and power up test of all radio elements including any racks or enclosures, tie into existing power and alarming, install all RF interconnects to designated equipment.
- Installation and test of all additional equipment required to support the new radio elements including all coaxial and fiber cabling, antennas, TMAs and any antenna sharing components.
- PIM testing of all passive equipment and cabling as installed.
- Insertion loss sweep testing of installed coaxial cabling, as well as the combined antenna system.
- OTDR, insertion loss and connection verification testing of all fiber cable.
- Dedicated project and construction managers provide timely progress reporting and project tracking.
- Comprehensive closeout documentation includes all test results and complete photo documentation of installed equipment and includes digital upload services.
- As needed RF engineering and troubleshooting expertise.