



- CCSI's Co-siting and Antenna Sharing services include engineering design, installation, integration, commissioning and test of all antenna sharing components including all cabling, Receive Multi-couplers (RMC), duplexers, diplexers, Low Loss Combiners (LLC), and all associated jumpers and interconnects.
- Prior to installation our team will perform a pre-construction site visit and audit. Based on the site audit CCSI will provide a site specific antenna sharing engineering design, including a complete bill of materials and line drawings showing all interconnects for the antenna system.
- 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 both insertion loss sweeps and Passive InterModulation (PIM) testing of all installed cabling and passive components.
- 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. Based on customer requirements CCSI technicians may keep an identified list of spares at the worksite to replace any out-of-the-box failures.
- 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 Antenna Sharing solution 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 solutions are installed and integrated in a timely manner.



Overview

CCI Services (CCSI) delivers complete Antenna Sharing Solutions from design to installation to turn up and test, from the bottom of the tower to the top. Our team of highly trained technicians will design, install, integrate and test all of the elements Antenna Sharing Solution including all cabling, Receive Multi-couplers (RMC), duplexers, diplexers, Low Loss Combiners (LLC), and all associated jumpers and interconnections.

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

CCSI is capable of providing Antenna Sharing Solutions throughout North America. CCSI continues to provide both national and regional services supporting several of the major carriers for their 4G rollouts. We've 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 detail engineering design of the proposed Antenna Sharing Solution complete with bill of materials.
- Inventory customer equipment and deliver to site for integration, including optional on site spare capability.
- Installation and commissioning of all equipment including any racks or enclosures, tie into existing power and alarming, install all RF interconnects to designated equipment.
- PIM testing of all passive equipment and cabling as installed.
- Insertion loss sweep testing of installed cabling, as well as the combined antenna system.
- After the installation is completed, return power to existing radio equipment and ensure that it is functioning and no alarms are present.
- Perform call testing on all installed sectors to confirm that equipment has returned to service.
- 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 a troubleshooting expertise.