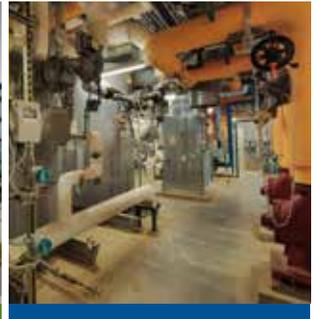
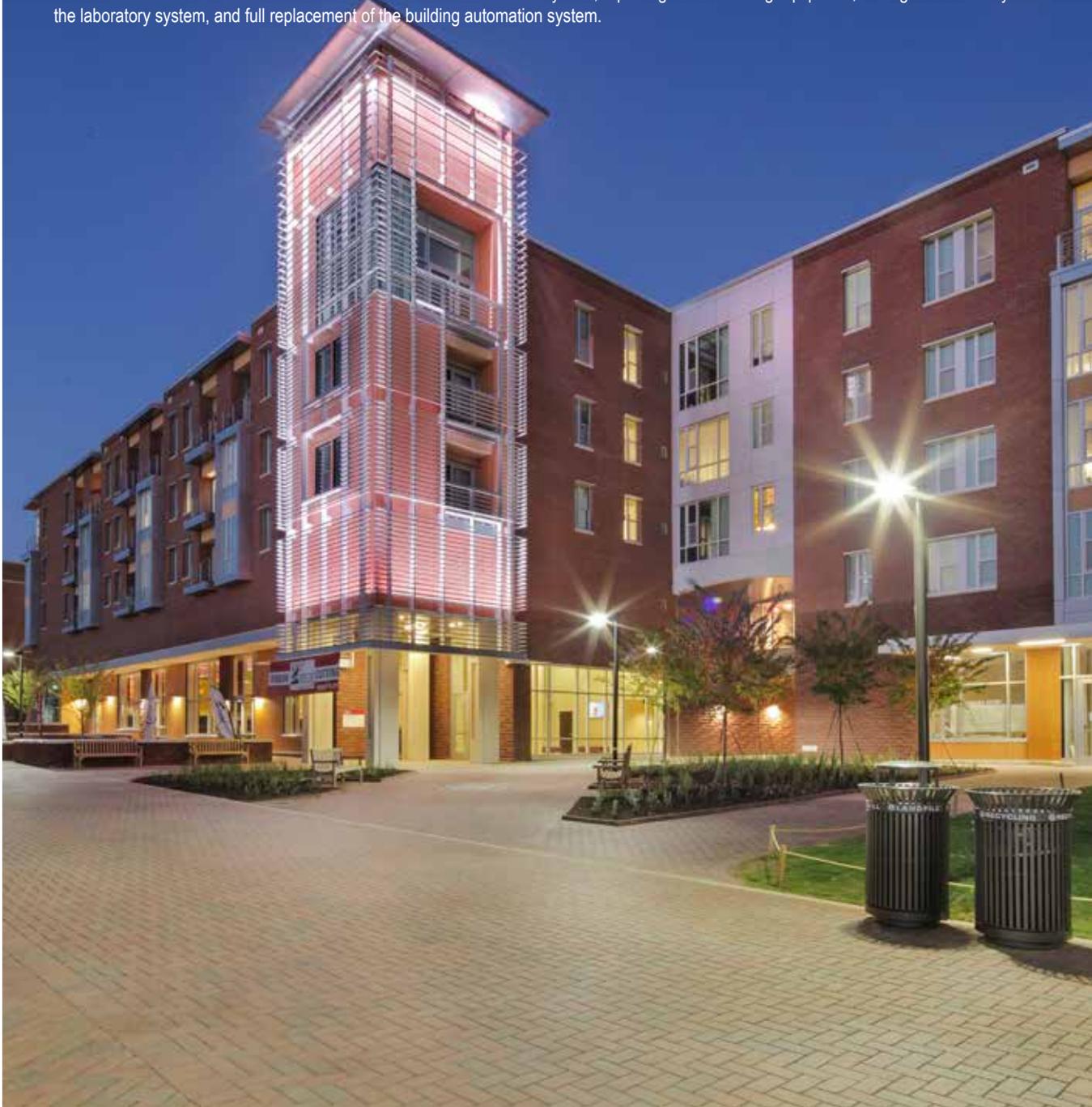


Higher Education New Building Commissioning



North Carolina State University (NCSU) Centennial Campus, Raleigh, North Carolina

After more than 20 years of use, many of the HVAC systems were functionally obsolete in the Partners I and Research II buildings. A full HVAC renovation of each building was initiated to replace the aging equipment and connect the buildings to a central chilled water and steam plant where feasible. We performed the commissioning from design through warranty phases. Research II is 46,000 SF of office space and two lab pods. The renovation included replacement of the air handling equipment, local hot water boilers and pumps, VAV terminal units, and full replacement of the building automation system. Partners I consists of 82,000 SF of office and laboratory space. The renovation included connection to the central steam and chilled water system, replacing all air handling equipment, adding heat recovery to the laboratory system, and full replacement of the building automation system.



Building commissioning best practices

As your commissioning (Cx) provider, we adhere to the best practices from the Building Commissioning Association:

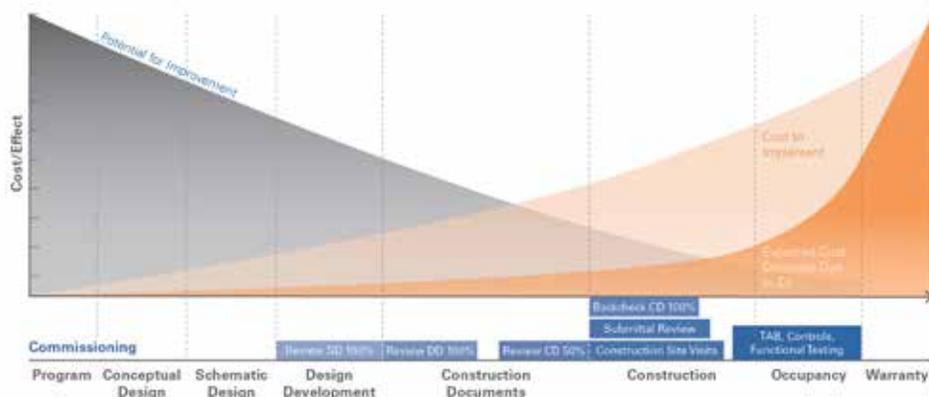
- The CxA is in charge of the Cx process and makes the final building performance related recommendations.
- The CxA is an objective, independent advocate of the owner.
- The CxA has current engineering knowledge and field experience.
- The Cx scope and purpose are defined in the CxA contract.
- The Cx roles and scope for all team members are clearly defined.
- Each project is commissioned according to the commissioning plan.
- The CxA reviews system installation for Cx-related issues.
- All Cx activities and findings are documented as they occur.
- The functional testing program objectively verifies building performance.
- The CxA provides constructive input for system deficiency resolutions.
- The project is documented through a Cx report.

Commissioning is the systematic process of making sure systems perform according to the design documentation and intent, in line with the owner's project requirements. It is important to be assured that the building design you approved is the building you take ownership over. The benefits are real-world sustainable solutions that yield smaller energy footprints.

- Eight to 20 percent energy and maintenance cost reduction compared to non-commissioned buildings
- Operations and maintenance (O&M) staff training
- Building control systems that work as expected
- Reduced number of change orders during construction
- Typical payback period of two years or fewer

Our people are licensed:

- Professional Engineers
- Certified Commissioning Professionals
- Commissioning Project Management Professionals
- Certified Energy Managers



We create efficient, sustainable solutions to optimize building performance.



University of North Carolina Charlotte Dining Hall, Charlotte, North Carolina

We provided enhanced commissioning of mechanical, electrical, and plumbing systems for a new 55,000-SF dining hall to serve the south end of campus. This included all mechanical systems, building automation system controls, electrical systems (normal and emergency power), and the domestic hot water system.

Winston-Salem State University, Winston-Salem, North Carolina

We provided enhanced commissioning of mechanical and plumbing systems for a new 24,000-SF inter-institutional building that houses collaborative design areas. Our work included all mechanical systems, building automation system controls, lighting controls, and the domestic hot water system. Notable components included four variable volume refrigerant systems, and one 850-cfm indoor energy recovery unit.



Our Services

- Design documentation and specification reviews
- Construction site visits to assess equipment installation
- Optimized pre-functional process
- Functional testing of building systems
- Warranty review of systems
- Persistence phase so systems are operating efficiently

Committed Professionals
Thought Leaders
Client Advocates



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Dewberry is a leading, market-facing firm with a proven history of providing professional services to a wide variety of public- and private-sector clients. We offer highly specialized subject matter expertise backed by the deep resources and stability of a national firm.