

Buildings & Facilities

Material cracks or discoloration, suspected seepage, and surface peeling are some of the main signals that bring our team of structural engineers and petrographers into the field for condition assessments, non-destructive testing (NDT), and microscopic core studies. Ambient vibration, or seismic noise that travels through structures from the outside world, can cause unique problems that we monitor, analyze, and provide quality solutions, such as service-life projections to help keep buildings and facilities in business.

CTLGroup's Buildings & Facilities Practice Group helps clients with complex structural and materials issues affecting:

- University and Education Buildings
- Healthcare and Laboratory Buildings
- Municipal Buildings
- Historic Buildings and Landmarks
- High-rise Commercial and Residential Buildings
- Parking Garages and Structures
- Stadiums
- Cultural and Religious Facilities
- Manufacturing and Industrial Plants

The needs of our Buildings & Facilities clients vary considerably. However, CTLGroup expertise consistently brings value to each project, providing innovative and cost effective solutions. Our primary areas of practice include:

- Building envelope studies, maintenance, rehabilitation, and repair programs
- Design and installation of structural monitoring systems
- Failure and forensic investigations
- Nondestructive testing of structural assemblies and components
- Strength and service evaluation of existing building structures
- Development of practical solutions to address structural deficiencies
- Troubleshooting construction problems and techniques leading to improvements in safety and efficiency
- Geological and geotechnical considerations
- Concrete moisture investigations
- Flooring consulting and testing
- Green building, infrastructure, pavement + materials practices

Representative Projects

- Burj Khalifa: advanced materials performance evaluation for supertall structures
- Frank Lloyd Wright Unity Temple: award-winning historic renovation
- Deep Space Antenna Pedestal: condition assessment of concrete deteriorated by alkali-silica reactions

