

# Structural Collapse Investigation

CTLGroup architects, engineers and scientists investigate design and construction deficiencies, and material failures as well as major catastrophic collapses, including infrastructure failures resulting from construction activities, accidents, extreme earthquakes, storm events, and terrorist attacks. CTLGroup provides comprehensive forensic consulting services to a wide range of clients in the legal profession, insurance industry, property owners, developers and managers, construction companies, design firms, and government agencies.

**Our forensic services** include condition and damage assessments, failure root-cause determinations, non-destructive testing and evaluations, litigation support, and laboratory testing of construction materials. Our firm has extensive experience investigating distress and structural failure in all types of buildings and structures, structural components, and materials, including pavements, industrial facilities, pipelines, tunnels, bridges, as well as foundations and retaining structures.

CTLGroup provides its clients with a single source of consulting and laboratory testing expertise, allowing us to make an accurate and efficient determination of cause and extent of damage that is used for the purposes of repair design, replacement, claims adjustment, or litigation. Known and respected for the dependability of our results, CTLGroup has regularly provided expert witness and testimony for litigation cases.

**Our Building Science team** is experienced in providing envelope assessments, investigating construction deficiencies, identifying causes of deterioration of exterior enclosure systems, and providing recommendations and repair designs for wall systems, fenestrations, roofing and waterproofing systems. We typically employ custom designed non-destructive and minimally invasive evaluations methods to minimize disruption for the buildings and their occupants.

**Our Concrete & Cement-Based Materials team** has assisted both plaintiff and third parties in defending litigation issues related pavement and asphalt failures in ports, airports, rail yards, highways, parking lots, and city streets.

Main functional issues that have been addressed include surface durability problems such as scaling and cracking, premature distress, and major concrete failures.

CTLGroup utilizes Petrographic testing, chemical analysis, mix-design review, and other means of testing to address if the failed concrete was in accordance to up-to-date specifications. CTLGroup professionals are also licensed in all 50 US states.

