

TOWER COLLAPSE

A communication tower had been reinforced for the installation of several new antennas. During the installation of the antennas, the tower collapsed, resulting in the complete loss of the tower structure. An inspection of the tower structure, a review of the original tower design and the reinforcement design, and interviews of the workers on site at the time of the failure indicated that the collapse was a result of improper use of the lifting equipment and improper rigging.

INDUSTRIAL ROOF COLLAPSE

A portion of the roof on an industrial facility collapsed during a heavy rain. The building had been re-roofed a few months prior to the collapse and the roof was in good condition. An inspection of the collapsed structure showed that there was no decay or corrosion of the structural members that contributed to the collapse, and a review of the original structural design showed that the structure was properly designed and constructed. During the site inspection, it was noted that the size of the roof drains had been reduced when the new roofing was installed. The reduction in the size of the drains allowed excessive amounts of water to accumulate on the roof, resulting in an overload of the roof structural system.

INDUSTRIAL FACILITY TORNADO DAMAGE

An industrial facility was damaged by a powerful tornado. A complete scope of damage, both storm related and non-storm related, was prepared. A cost estimate to repair the storm related damage was then developed and the repair effort scheduled and coordinated.

HURRICANE DAMAGE TO OFFICE BUILDINGS

Numerous buildings in an office park were damaged during a hurricane. A complete assessment of the damage was conducted and a temporary shoring plan provided to prevent additional damage to the structures.

BUILDING COLLAPSE

A few hours after the concrete slab for the second story of a building was poured, the building collapsed. A portion of the joists supporting the second story and a portion of the wall studs failed, allowing the entire structure to collapse. A review of the structural design and the construction of the building showed that the original design was inadequate. The design of the second story floor joists allowed excessive deflection of the joists under the weight of the wet concrete, leading to the collapse of the structure.