

STRUCTURAL REPAIR: COMPOSITE STRENGTHENING

Project: Corporate Headquarters
Garage Repairs, Phase 3

System: Carbon Fiber Composite
Strengthening System

Quantity: 516 Inverted "T" Beams

Area: 62,000 SF Carbon Fiber
Wrap



Completed: 2001

At a corporate headquarters located in North Texas, problems were discovered in many of the precast beams that support the floor structure of the North and South Parking Garages. Phase 3 of the repair work included the application of a two-layer, carbon-fiber wrap system to the bottom surface of the precast, pre-stressed inverted "T" beams.

Strict limits were placed on the contractor regarding the number of parking spaces that could be blocked at any one time, in order to keep the majority of both garages in service. Beams that supported drive aisles had to be repaired on Friday evenings in order to obtain 48 hours of cure time prior to re-opening on Monday morning.

An acrylic topcoat was applied to the black carbon-fiber fabric making the repaired beams barely noticeable.

Note: Used SikaWrap

