

CASE STUDY

A decorative graphic consisting of two parallel, slanted, rounded rectangular bars in a bright yellow-green color.

# DUKE UNIVERSITY MEDICAL CENTER

**LOCATION:** DURHAM, US

**COMPLETION DATE:** 2006

**SYSTEM:** FiberTite® XT SYSTEM

**SECTOR:** LIFE SCIENCE - REFURBISHMENT

**ROOF AREA:** 8,361M<sup>2</sup>



## DUKE UNIVERSITY MEDICAL CENTER

### BACKGROUND:

Duke University Medical Center, located in Durham, North Carolina is a leading healthcare provider. Established in 1930, the medical center is Duke University's flagship teaching hospital that has also grown to become a world-renowned academic medical center. Duke University Medical Center is also one of three Level I referral centers in North Carolina's Research Triangle, providing the highest level of surgical care to trauma patients.

### CHALLENGES:

In early 2006, work began to replace the hospital's old and failing built up roof (BUR). As part of the complete re-roofing project, Duke University Health System officials wanted to incorporate a multi-platform roof-top heliport on its facility to provide enhanced emergency services for its patients as well as a vegetative roof-top patio. Because medical facilities are sensitive environments, officials needed a roofing system that was durable, reliable and resistant to chemicals found in aviation environments. The project included a number of installation challenges as well. The roofing crew had to work around pre-installed steel beams that supported the elevated heliport. The re-roofing job also included around 44 recessed roof areas at various elevations of the building. Many of these areas could only be accessed with the use of portable swing stages and many set-ups placed roofing crews over 100-feet from grade.

### SOLUTION:

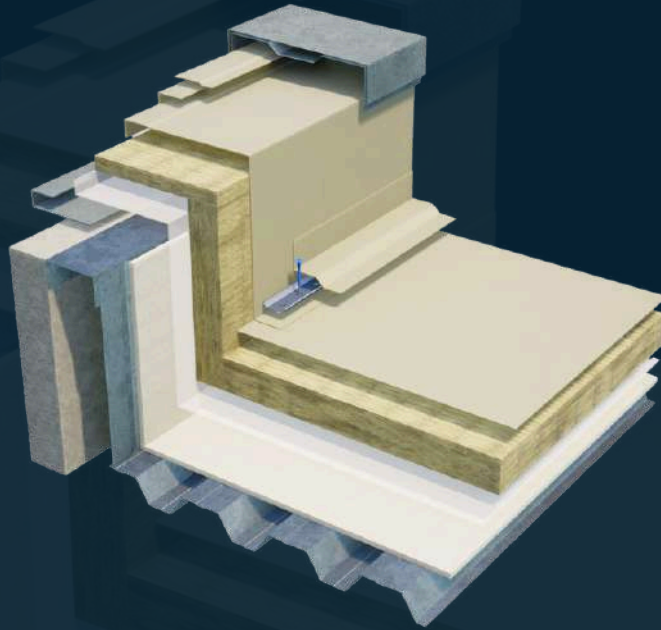
CFE, Inc., of Apex, N.C., was the contractor for the re-roofing project. CFE, Inc., who had been installing FiberTite for over 20 years, applied a fully adhered, Moy FiberTite XT membrane beneath three-inch T-Clear insulated concrete pavers. Other peripheral areas of the project were covered with MOYI FiberTite XT Tan colored membrane adhered over polyisocyanurate insulation. The new 90,000 square-foot roofing system was completed with a fully-operational heliport in November of 2006.





# SYSTEM USED

## FiberTite® XT SYSTEM



### BENEFITS:

- Utilising Elvaloy technology to create a KEE-PVC waterproofing membrane that provides superior performance over other single ply membranes.
- Superior fiber reinforcement provides unrivalled puncture resistance, tensile strength and resistance to foot traffic.
- Cold flexibility at temperatures as low as - 20°C.
- Elvaloy is used instead of liquid plasticisers, eliminating Plasticiser migration providing resistance against chemical, bi-product and environmental factors.
- Available with extended system warranties and a service life in excess of 25 years.
- Factory Mutual Certified Assemblies (consult MOY or RoofNav for further info)

