



# Project Overview

## FRP STRENGTHENING OF A CONCRETE SLAB WITH CARBON LAMINATES

**Name:** St. Joseph's Hospital  
**Type:** Hospital  
**Location:** Phoenix, Arizona  
**Completed:** April 2004

### PROBLEM

St. Joseph's Medical Center was adding new cath lab (cardiac catheterization) equipment and high-density, filing cabinets in separate locations. The floors of the hospital were not strong enough to support the heavy equipment or the 300 psf load of the filing system.



### SOLUTION

QuakeWrap® carbon plates were bonded to the top surface of the slab to achieve the desired strength for the floors.



## Technical Highlights

- Cath lab equipment weighed approx. 500 lbs
- Each cabinet weighed 300 psf
- Repair could not close down the hospital wing
  - 750 ft<sup>2</sup> of floor slab strengthened
  - Increase floor strength 4x
  - Entire job took 2.5 hours

## Credits

Consultants: Paragon Structural Design, Phoenix, AZ  
General Contractor: Kitchell Contractors, Phoenix, AZ



*"The FRP Retrofit Experts"*