



# Project Overview

## FRP STRENGTHENING OF CONCRETE SLAB IN HEALTH CARE FACILITY

**Name: Providence Hospital**  
**Type: Health Facility**  
**Location: Anchorage, Alaska**  
**Completed: May 2005**

### PROBLEM

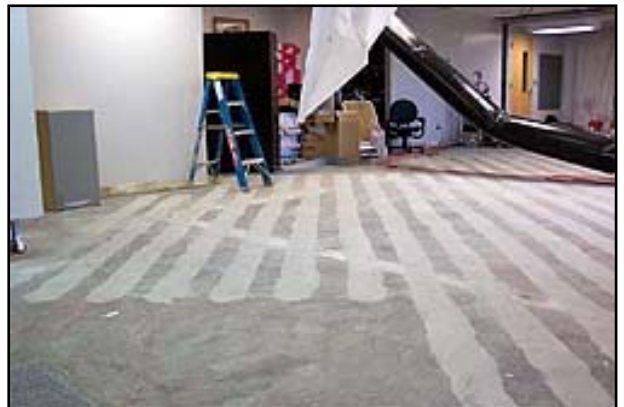
The installation of a high-density filling system generated a live load of 300 psf . The existing floor system did not have the required capacity to withstand this loading and needed to be strengthening. The strengthening had to take place while the hospital was in service.



### SOLUTION

QuakeWrap® FRP Strengthening System was selected since the strengthening could take place while the hospital remained in operation. In order to restrict the affected area to just the filling room, QuakeWrap® composite carbon plates were installed on the top face of the slab.

The entire project was completed in less than a week. The nearly odorless QuakeBond™ resins facilitated work inside the operating hospital.



## Technical Highlights

- 1,000 ft<sup>2</sup> of floor was strengthened to resist a live load of 300 psf
- 800 ft of carbon plates (strips) were used
- Strengthening was done from top of slab with minimal disturbance to the hospital operations



## Credits

Consultant: Schneider & Associates, Anchorage, AK  
General Contractor: Cornerstone General Contractors, Anchorage, AK

*“The FRP Retrofit Experts”*