



# Project Overview

## STRENGTHENING OF UNREINFORCED CONCRETE BLOCK WALLS WITH GLASS FRP

**Name:** United Airlines  
**Type:** Airport  
**Location:** Oakland International Airport  
**Completed:** November 1997

### PROBLEM

The United Airlines maintenance facility at the Oakland California International Airport is a URM building that can accommodate six large aircraft at any one time.

The URM walls surrounding the stairway needed a seismic upgrade. Because of the nearby aircraft, dust caused by the retrofit needed to be kept at a minimum level.



### SOLUTION

QuakeWrap® glass fabric was used to strengthen all walls. Chemical cleaning and stripping of walls minimized dust.



## Technical Highlights

- Facility could hold 6 large aircrafts
- Retrofit could not cause excessive dust
  - 4000 ft<sup>2</sup> of QuakeWrap® glass fabric was used
  - Wall surface was chemically cleaned to minimize dust
  - Project was completed in less than 2 weeks

## Credits

Structural Engineer: The Crosby Group, Redwood City, CA  
General Contractor: Watertight Restoration, Inc., Burlin Game, CA



*“The FRP Retrofit Experts”*