



Fire Damaged Warehouse

Watsonville, California

Structural Engineering



In April 2011, a fire raged through the Apple Growers Ice and Cold Storage Company warehouse located near downtown Watsonville. The historic warehouse was originally constructed in 1928. At the time of the fire, 500,000 cases of Martinelli's Apple Cider and thousands of bins of unprocessed apples were stored there.

42,000 square feet of the building's roof collapsed during the fire. Due to the vintage of the building and extent of the fire damage, Mesiti-Miller Engineering was contacted by the City of Watsonville's Building Official to perform a stability assessment.

Mesiti-Miller Engineering maintains a twenty-four hour emergency service hotline and responded immediately to the City's request. Mesiti-Miller Engineering worked together with the Owner, Contractor and the Building Official to rapidly evaluate the structural condition of the building and develop a suitable shoring scheme to prevent total collapse of the fire damaged structure.

The temporary shoring layout was designed to permit quick installation and ease of access for the clean-up and demolition contractor. Mesiti-Miller Engineering was also able to reduce the overall cost of the shoring system by using good engineering judgment and working closely with the Building Official. We were able to persuade the Building Official that the loads predicted by the California Building Code were overly conservative. Because the shoring system would be in-place for only a short timeframe we utilized an alternative design standard, similar to the methodology used for tilt-up construction and other temporary installations.

With Mesiti-Miller Engineering's assistance, the Owner was able to stabilize the building, while keeping adjacent portions of the warehouse facility in operation.



Client Reference:

Apple Growers Ice & Cold Storage
Stephanie Phillips
P.O. Box 854
Watsonville, CA 95077
(831) 724-1321

Shoring Costs: \$70,500

Clean-up prior to Demolition: \$250,000

Structure Demolition: \$375,000