## Construction of the golden gate bridge

Design, Architecture



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Introduction

The Golden Gate Bridge was opened in 1937 and at that time consisted of the longest main span for any existing suspension bridge. The Golden Gate Bridge connects San Francisco with Marin County, and has been considered by the American Society Engineers as among the seven civil engineering wonders of the world (Hemenway, 2009).

Safety Lesson from the Construction of the Golden Gate Bridge

The construction of the bridge was completed in four years in conditions that were dangerous and difficult. These conditions are derived from the strong and fierce winds, and ocean currents that sweep across the Golden Gate

Strait, which is also shrouded by thick fog. Tall towers, long and thick cables, and the largest underwater foundation piers ever to be built were all part of the construction requirements for the bridge. There were many who considered this task impossible in the violent open seawater conditions in which the construction was to take place (Hemenway, 2009).

In those days the fatality average in such constructions was one fatality for every million dollars spent and \$35 million was spent on the construction, meaning that in these conditions the fatalities should have been more than 35 constructions workers. Yet, the bridge opened on time, with a much lower fatality rate (Hemenway, 2009).

This was the result of safety precautions taken in the form of strict rules preventing dangerous behavior at the construction site and the use of protective head gear. However the stand out precautionary measure was the use of a safety net that was strung out underneath the bridge floor from one

end of the bridge to the other, and was the safety lesson learnt from the construction of the bridge. In the first three years of the construction only one fatality occurred, and more importantly the utility of the safety net was demonstrated, when nineteen men accidentally fell during construction onto the safety net and survived the normally fatal fall. These men later came to be known as the Halfway to Hell Club (Hemenway, 2009).

## Conclusion

The safety net strung underneath the bridge during construction was the historic lesson learnt in the construction of this engineering marvel for preventing fatalities during construction of bridges.

Literary References

Hemenway, D. (2009). While We Were Sleeping: Success Stories in Injury and Violence Prevention. California: University of California Press