



Horizon House Condominiums is a 30-story concrete frame building that was constructed in 1963. The windows at the building consist of redwood frame windows with single pane glass panels, and aluminum frame operable hopper windows that were installed in the wood frames.

Over the years, some of the unit owners had replaced the single pane glass panels with insulated glass. However, in many instances, those replacement glass panels had not been properly sealed or supported along their perimeters. In addition, numerous window-related leaks were reported by the unit owners.

An evaluation of the windows by BTC revealed deteriorated glass perimeter sealant, open and deteriorated wood joints, localized rotting of some sills, and extensive water leakage through the operable hopper windows.

Subsequently, BTC prepared recommendations for alternative approaches which included rehabilitation of the existing windows as well as complete replacement. The Owners selected the rehabilitation alternative. The repairs were designed by BTC and included stripping of existing paint, complete removal and replacement of perimeter sealant, localized wood patching and selective replacement of wood components. In some instances, improperly sized insulated glass units were also replaced.

During the mock-up phase, water testing was performed to evaluate the effectiveness of the repairs. Those tests and post-rehabilitation results indicated a very significant reduction in window-related leaks.

Project Name:
*Horizon House Condominiums
Window Rehabilitation*

Project Location:
Chicago, Illinois

Client:
*Wolin-Levin, Inc.
325 West Huron Street, Suite 600
Chicago, Illinois 60610*

Approximate Construction Cost:
Confidential

Year Completed:
2004

Nature of Services:
*Evaluation, repair, and restoration of
deteriorated wood windows*

