

The Wolford Apartment Building Masonry Restoration Project

Danville, Illinois

Client: Urban Innovation, Inc. , Chicago, IL
 Architect: BLDD Architects, Decatur, IL
 Masonry Contractor: Otto Baum Company, Inc., Morton, IL

Range of Services

- ▶ Exterior envelope investigation; exploratory testing, report on findings; cost estimates for phased building repair
- ▶ Construction administration; observation; investigation; exploratories; construction documents

Project Overview

The Wolford was a 9 story high-end luxurious hotel with 218 rooms that opened in 1926, and was operated as such until the early 1970's. It was gutted and renovated internally in 1980 by the Illinois Housing Development Authority. It now has 100 subsidized apartment units, mostly one bedroom. The South and East Elevations have a lower 30-foot band of terra cotta detailing and a ninth floor band of terra cotta detailing as well. There are Corinthian column capitals, large arches, fluted columns, circular medallions and miniature repetitive arches within these bands. There are six levels of brickwork between these terra cotta bands. The remaining elevations are mostly brickwork.

Wickersheimer Engineers began work on this building in 1986 for the CAMCO Company in Chicago, which managed the Wolford. Masonry investigation reports were done then; attempts at restoring the terra cotta were made but never realized due to cost.

One repair project was implemented in 1986-7: repair of the corner apartment porches. This centered on the terra cotta spandrel that was drooping at three corner apartments, see image A. The terra cotta was removed; the corroded supporting steel pieces were replaced and then the terra cotta was re-hung. See page 2, images 1 and 2. Parapet level brickwork that was water damaged and bulging was replaced on two elevations.



integrating
STRUCTURAL
 design
focused on
 quality

The Wolford Apartment Building Masonry Restoration Project

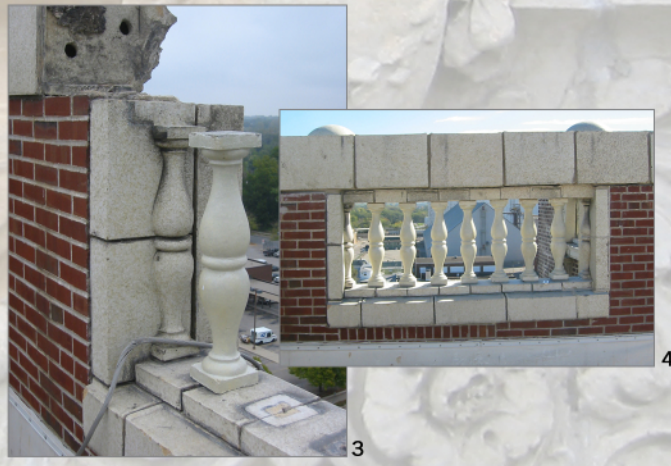
Danville, Illinois

Page 2

Project Overview *continued*

A new owner in 2004 had a desire to restore the exterior masonry of the building. WE was hired, because of its experience with the building, to do a re-assessment of the complete exterior masonry envelope. This involved testing every terra cotta piece and documenting every crack, chip and spall. A report followed with options for repair and attached dollar values for the owner to review. Construction documents were prepared and implementation began in 2005.

There were many locations on the building where the brick work mortar joints had been severely eroded. The brick work below the large terra cotta coping units was starting to spall and loosen due to improper joint repair between the large terra cotta units. Several terra cotta units on the roof were beyond repair, such as balustrade elements – these were replaced with glass fiber reinforced concrete units with a glaze coating to match the aged terra cotta finish. See image 3 and 4. All of the terra cotta coping units were removed, flashing added and the terra cotta coping units were anchored to the top of the wall with stainless steel anchors. The owner elected to repair only the severely deteriorated mortar joints. Matching mortar colors were selected for the brick joints and the terra cotta mortar joints. Several of the large ornate terra cotta units on the lower level band had large sections missing. Several existing terra cotta units were beyond repair and 35 replacement units were ordered at a cost of \$40,000. Jahn patching mortar with Edison glazing paint was used for several spalled terra cotta units, such as image B on page one. The mason was able to copy the ornate carving using the patching mortar to save column capital B, image 5.



integrating
STRUCTURAL
 design
focused on
 quality