



## PROJECT PROFILE

# Rialto Square Theatre

Terra Cotta Facade Restoration | Joliet, IL



### CLIENT

Will County Metropolitan  
Exposition and Auditorium  
Authority

### BACKGROUND

The Rialto Square Theatre opened in 1926 and was originally designed and operated as a vaudeville movie palace. This four-story Neo-Baroque-style building is clad with terra cotta on the south and west facades. The north and east facades of the building are clad with common brick masonry. The structure of the building is reinforced concrete with mass brick masonry infill. The four-story portion of the building has plan dimensions of 174 feet in the east-west direction and 132 feet in the north-south direction.

WJE was retained by the Rialto Square Theatre in 2012 after a section of terra cotta cladding fell from the northwest corner of the building above the fourth floor window. Due to concerns about more potential falling debris, WJE was asked to perform a visual survey of the theatre from ground and roof levels to review and document all of the cracks and distressed conditions of the terra cotta facade. After completion of this review, WJE developed both emergency and long-term repairs and prepared construction documents for the facade restoration.



### SOLUTION

Based on the initial site visit, WJE determined that significant water infiltration at the top of the wall system was causing damage to the underlying steel structural supports and accelerated deterioration of the masonry parapet back-up wall assembly. This, along with freeze-thaw action, was identified as one of the main causes of the terra cotta distress.

As a result, WJE developed phased repair recommendations for the theatre that included removing and replacing loose/spalled terra cotta units at isolated locations, rebuilding the parapet wall at the fourth level, and replacing the steel shelf angle below the terra cotta units. WJE also prepared repair drawings and specifications for the restoration of the terra cotta facade.

In 2014 and 2015, the exterior terra cotta facade underwent a restoration program that include replacement of the entire terra cotta parapet, replacement of the failed window heads, and replacement and repair of isolated terra cotta distress. The work was funded by a \$2.2 million grant from Illinois Governor Pat Quinn.

WJE also provided bidding and construction phase services for this restoration work.