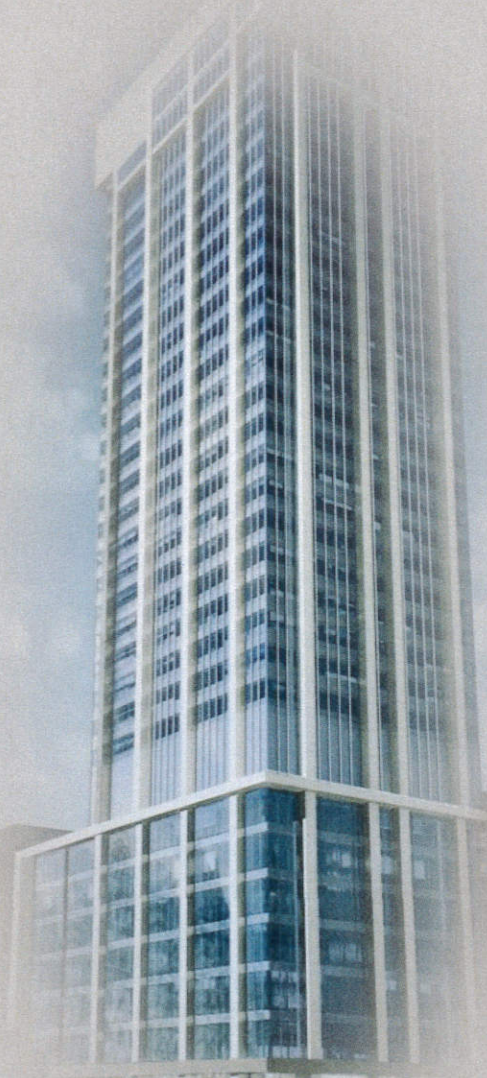


With over 200 years of world class  
experience let our team put new life  
into your buildings



SAFER  
ECONOMICAL  
FAST



## SAFER

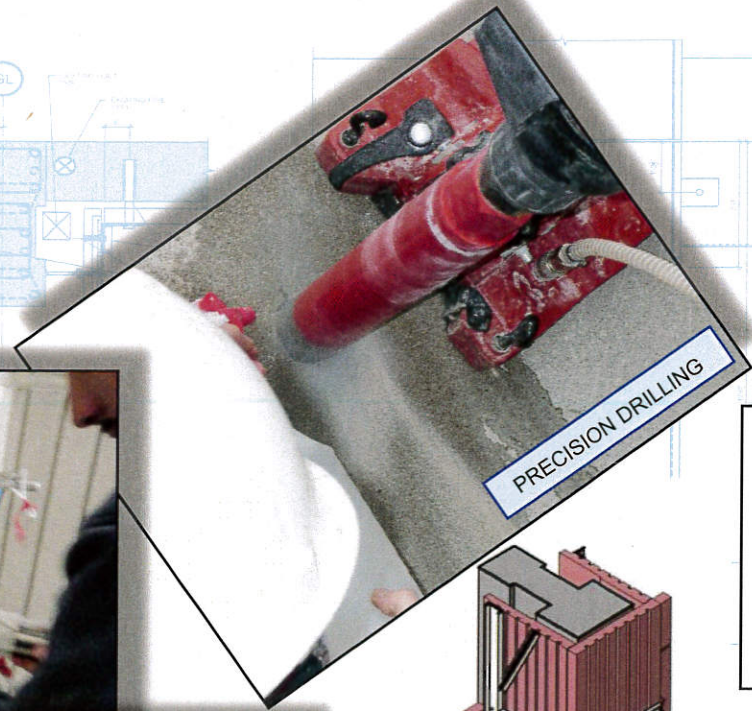
Use of the Cintec system allowed re-attaching heavy concrete panels whose original ties were failing. Design allowed for mounting points for the new cladding. This approach eliminated the need to remove panels via crane in a very high traffic area - both pedestrian and vehicular.

## ECONOMICAL

Since panels were not removed the windows and building mechanicals were not affected. All work was performed from the exterior and when combined with above benefits there was no need to vacate the premises. Disturbance to tenants was kept to a minimum, vacancies eliminated and rental cash flow preserved.

## FAST

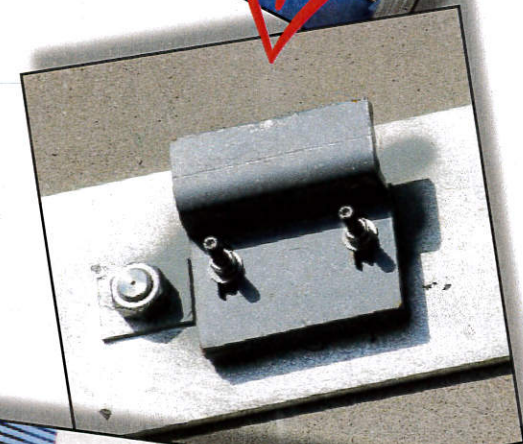
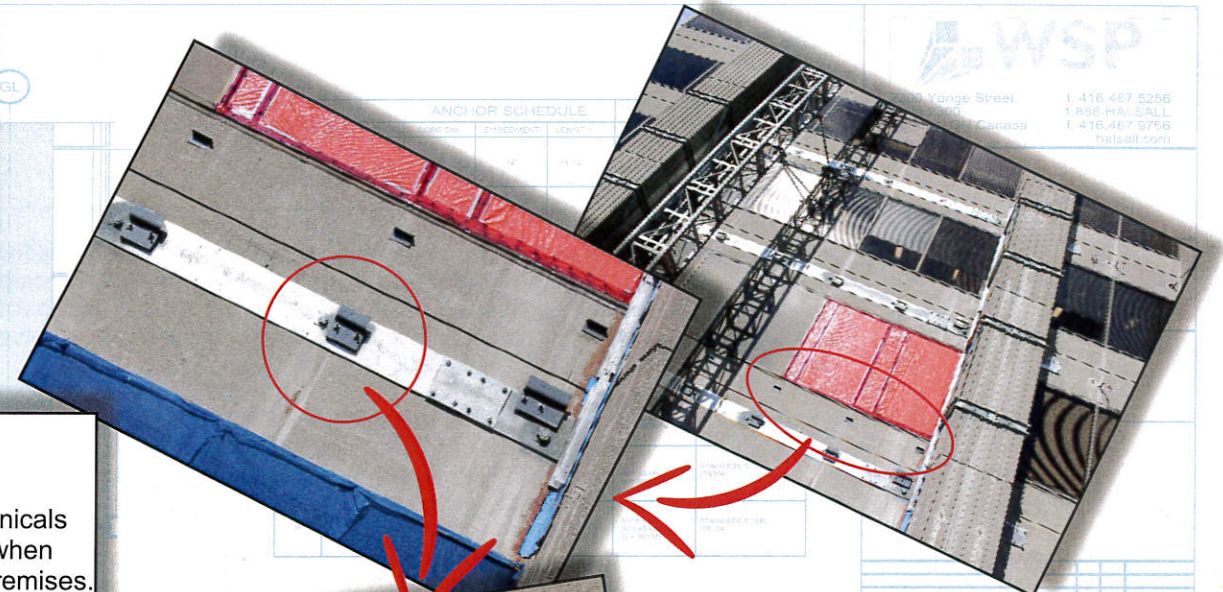
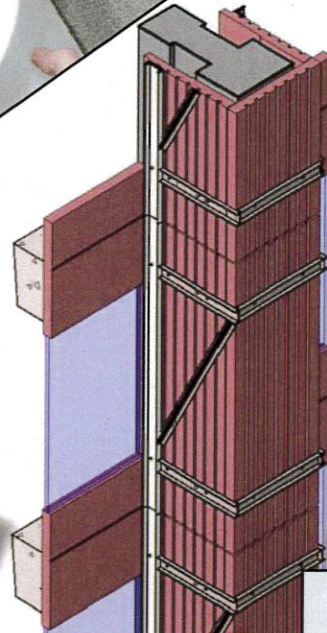
This "one step" solution provided much needed structural enhancement and attachment while eliminating the necessity to remove panels. Because the panels were left in place the project timeline was greatly reduced and time is money.



PRECISION DRILLING



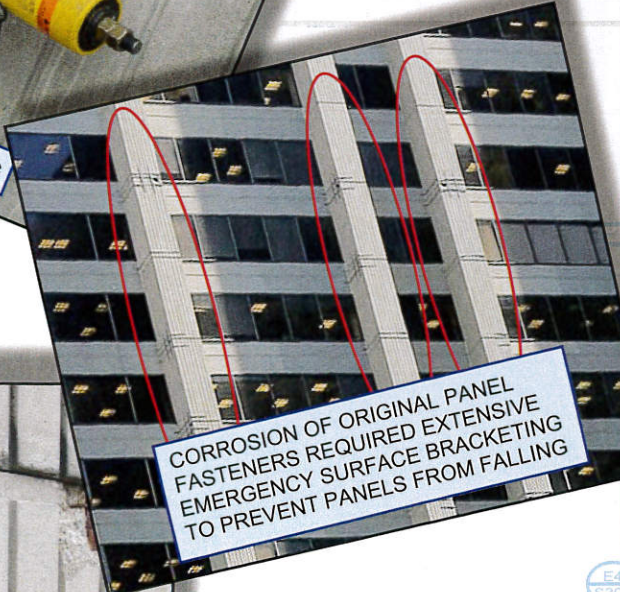
ANCHOR DURING AND AFTER INSTALLATION



PANELS AWAITING INSTALLATION



DESIGN COMPLIANCE LOAD TESTING



CORROSION OF ORIGINAL PANEL FASTENERS REQUIRED EXTENSIVE EMERGENCY SURFACE BRACKETING TO PREVENT PANELS FROM FALLING



DETERIORATED PANEL ATTACHMENTS



INSTALLING PANELS AND COLUMN WRAP



"MCWP" MAST CLIMBING WORK PLATFORM INSTALLED FULL HEIGHT

After World War II ended, the majority of European cities had suffered major bomb damage and loss of infrastructure. In the early 50's, system built construction was introduced to provide the necessary buildings and infrastructure. In North America and around the world, High Rise office blocks and apartments were constructed. Steel and concrete framed buildings with masonry panel cladding became common construction practice and many of these buildings are now showing signs of age. Problems developed as a result of construction defects, corrosion to reinforcing bars and panel ties or just old age. Unsightly to occupants and ever increasing liability to the owners.

This is the story of one such building.



WSP was the structural and facade engineering consultant for the over-cladding of this iconic landmark. The client's objective was to overcome the existing cladding durability concerns and re-establish the building's position in the marketplace. WSP worked closely with the design architect, peer review consultant and construction management team selected by the client, to arrive at a design solution for tender within a very aggressive schedule.

WSP is proud to have served an integral part of this major project for a building that is in the centre of the downtown core and will be highly visible for years to come. The Simpson Tower is a significant project for WSP as it truly demonstrates our ability to approach a project with an open mind. Our team understood the challenges of working with an existing structure and we relied on our expertise in structures and cladding to design an efficient, achievable solution that satisfied all parties.

As the building population ages, more clients are looking for facade renewal solutions to restore the life and refresh the appearance of the building. This project is an example of a successful coupling between the existing building and new facade and showcases solutions which



SPECIAL PROJECTS DIVISION

In 2013 the engineering firm WSP ( then known as Halsall / Parsons Brikenhoff) contacted Cintec Reinforcement Systems with whom they had a 20 year relationship. Assistance was needed in developing a system to rejuvenate the exterior of an existing structure located in the heart of the 7<sup>th</sup> largest city in North America. Since Cintec had over 30 years of world based experience in similar projects it was a logical choice.

Criteria of the solution was to reattach the cast panels (as a result of failing ties) while at the same time provide anchor points for a new glass curtain wall. The resultant was required to allow rehabilitation without moving out the tenants (read cash flow preservation), causing minimal disruption to the interior of the building and as further benefit improve the "class" of the building while addressing the ever-present Green Policy. WSP and Cintec reworked potential solutions until the anchors developed were unique, project specific and withstood testing and application. D F Pray, because of their international expertise, were relied on to bring concept to reality in a timely and financially prudent manner.



D.F. Pray was hired as Construction Manager for the Simpson Tower Re-Cladding project during the Design/Pre-construction phases of the project. D.F. Pray worked closely with the Design and Engineering teams at the onset of the project developing preliminary cost estimates, projected schedules and overall constructability assessments.

Understanding the complex logistical challenges associated with this tight urban site, D.F. Pray initiated and managed the discussions with Access contractors to determine the best way to build this historic project.

Since its founding in 1959 by C. Edward Pray, D.F. Pray has been building excellence by specializing in hands-on, design build, construction management services, regionally and nationally. Edward's son, Scott W. Pray, continues the family tradition of building excellence started by his father.

D.F. Pray is a single-source contractor providing a wide range of services that include design build, preconstruction, construction management, and general contracting. Our portfolio includes ground up, new construction, renovation, roll-outs, tenant fit-outs, and occupied renovations of retail, commercial/industrial, educational, public, hospitality, life science, healthcare, and senior living facilities all executed through our six offices; Seekonk, MA, Boston, MA, Manhattan, NY, Nashville, TN, Raleigh, NC, Toronto, ON.

Our emphasis is on the client and their specific needs. We take the lead in managing the complex design, planning, and construction every owner faces during the preconstruction, planning phase, and/or the construction process itself, the activities and objectives of the project team are designed to create value for the client while achieving the maximum scheduling and budgetary outcomes.

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