

# INDUSTRIAL HERITAGE PROTECTION AND REDEVELOPMENT

Edited by  
Michael Louw

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Industrial heritage is an important part of our built environment and landscape. It provides tangible and intangible links to our past and has great potential to play a significant role in the futures of our cities, towns, and rural environments. The protection and redevelopment of industrial heritage can contribute to the building of social and cultural capital, environmental sustainability, and urban regeneration. This book showcases a selection of works completed since 2010 with a wide global distribution. It highlights an encouraging increase in the practice of the transformation, redevelopment, and adaptive reuse of industrial structures. From underutilized, disused, or discarded reminders of times past, the latest metamorphoses of buildings and structures have imbued them with new purposes in what could be regarded as one more stage in a continuous process of industrial evolution. The four essays written by authors from a variety of backgrounds and locations offer a rich addition to the selection of case studies and could serve as opportunities for further research. This book provides direct, informational reference to architects, researchers, and decision-makers.

Cover image: Rotermann Grain Elevator by KOKO architects © Tonu Tunnel





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# **INDUSTRIAL HERITAGE PROTECTION AND REDEVELOPMENT**

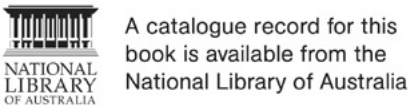
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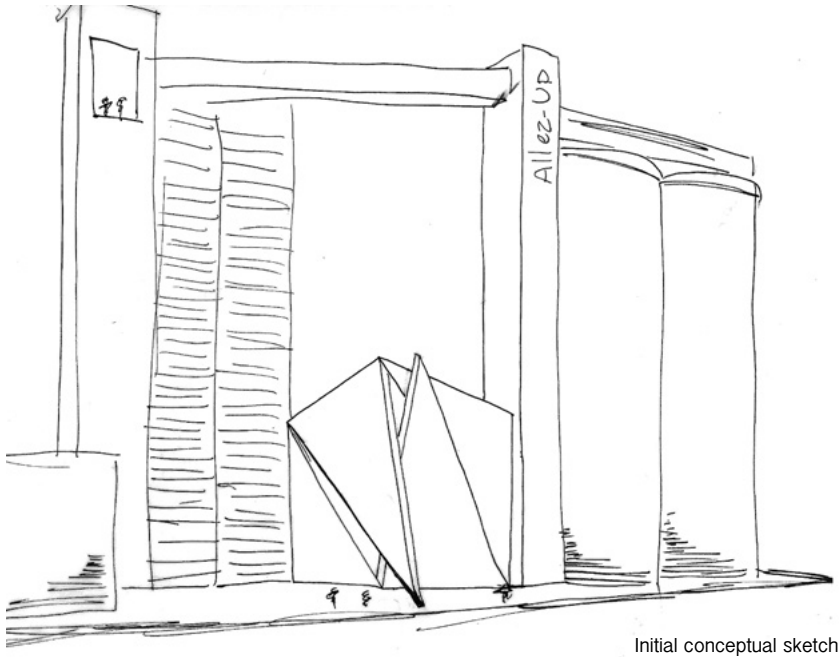
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# Allez Up rock-climbing gym

## Conversion of four silos

Location-Montreal, Canada  
Architect-Smith Vigeant Architectes Inc.  
Area-13,132 square feet (1220 square meters)  
Completion-2013  
Photography-Stéphane Brügger  
Client-Richer de la Plante Family



Initial conceptual sketch

Located on the Lachine Canal in Montreal's Southwest borough, rock-climbing gym Allez Up's newest facilities are part of an important urban and social renewal project.

In 1825, the Lachine Canal opened as a solution to allow boats to bypass the upstream rapids of the Saint-Laurent. This new commercial path kick-started the industrial development around the canal and the area of what is now the Southwest borough. By the 1860s, the area was a busy industrial neighborhood. In fact, it was the most diversified concentration of industrial establishments in the country. In 1952, four silos were erected by Redpath Sugar Refinery to serve as storage for the factory.

However, the canal was already in its later days, as it couldn't be expanded to allow for larger ships to pass through. In 1959, the completion of the Saint-Laurent seaway marked the end of the canal's golden age. In 1970, the canal was officially closed, causing companies to relocate and eventually leading to the desolation of the neighborhood. While other industrial buildings in the area were reused and re-purposed, the silos—more difficult to transform because of their unusual shape—were left completely abandoned for nearly 40 years.

Allez-Up's previous gym was located nearby, in a converted industrial site. The client wanted to triple its facilities' capacity and believed that the site and the silos offered amazing potential for a rock-climbing gym. The re-purposing of the abandoned silos was a unique way to exploit the potential of Montreal's neglected industrial heritage. Their transformation into recreational use was the first intervention of its kind in Canada and has significantly added to the recreational and touristic attractiveness on the Lachine Canal.

The cylindrical volumes were connected by a rectangular form, filling most of the site's vacant space. This reconfiguration created new limits within the site while connecting the two sets of abandoned silos.

The concept for the new building extension was shaped by the dynamic movements of the interior climbing walls. Instead of organizing the space in a traditional way and stacking floors on top of each other, the architects wanted to make the most of the vertical spaces by using vertical planes, providing maximal functionality to the climbers.

The main façade of the building extension reads as three solid elements sliced by inclined openings. The windows run full height and fill the interior space with natural light throughout the day. The angularity of the façade provides an interesting dialogue with the verticality and solidity of the silos, while the metallic exterior finish complements the industrial character of the neighborhood.

The silos were carefully integrated in the program. The reception area is located in one of the west silos, and climbing routes are set on the inside and outside walls of the massive concrete structures, taking advantage of their verticality. The silos became a full part of the climbing experience at Allez Up, and they carry with them the historic industrial heritage of the site, informing the visitor of the site's previous function.

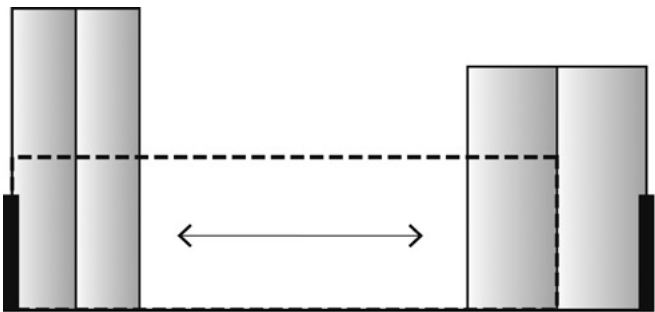
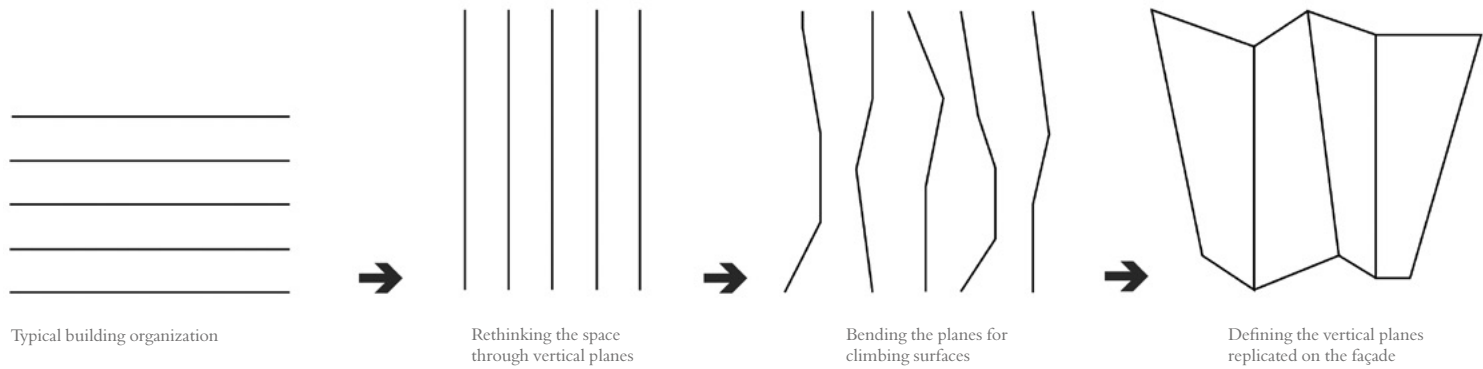
The insides of the silos were originally covered with two layers of cedar wood planks running full height in order to protect the stored sugar from humidity. However, some of them had to be removed to allow for the reconversion. As initiated by the client, they were reused as furniture and interior finishes.





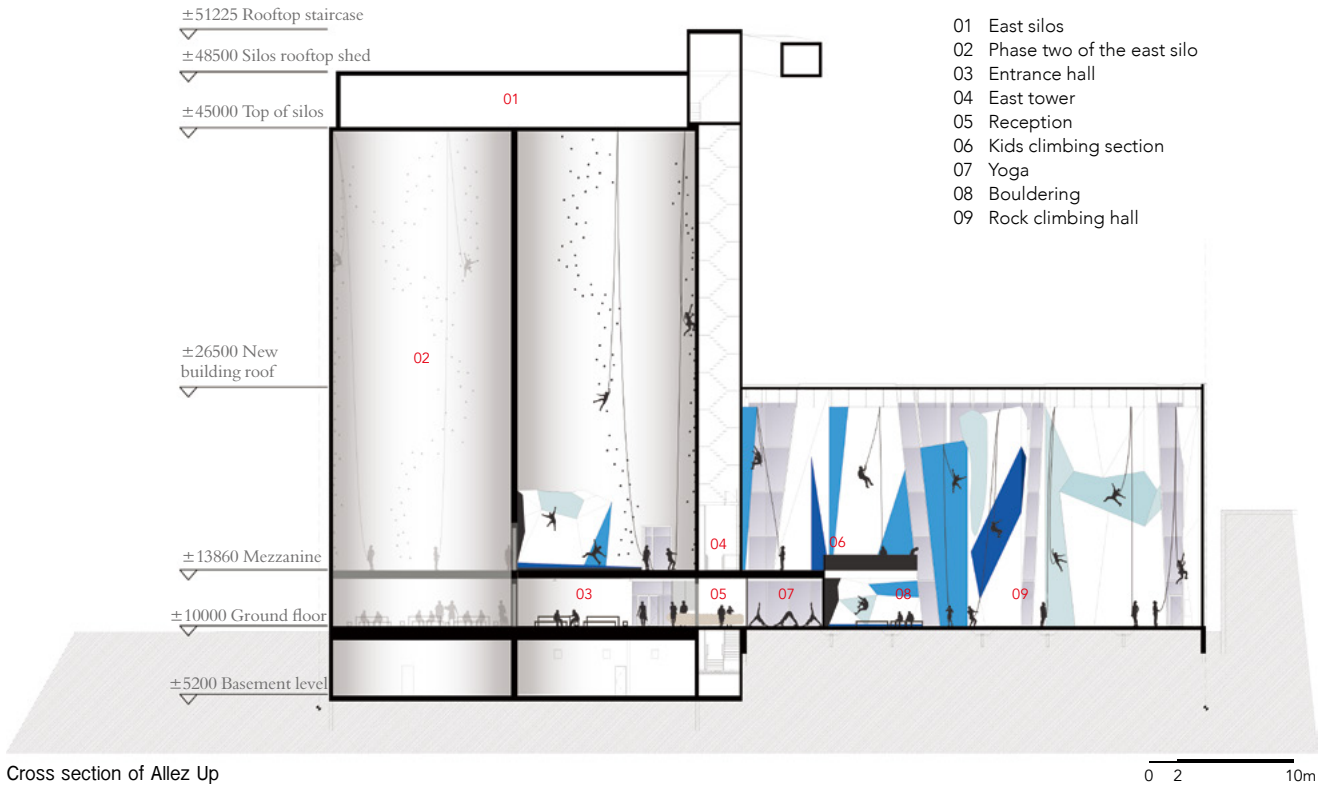


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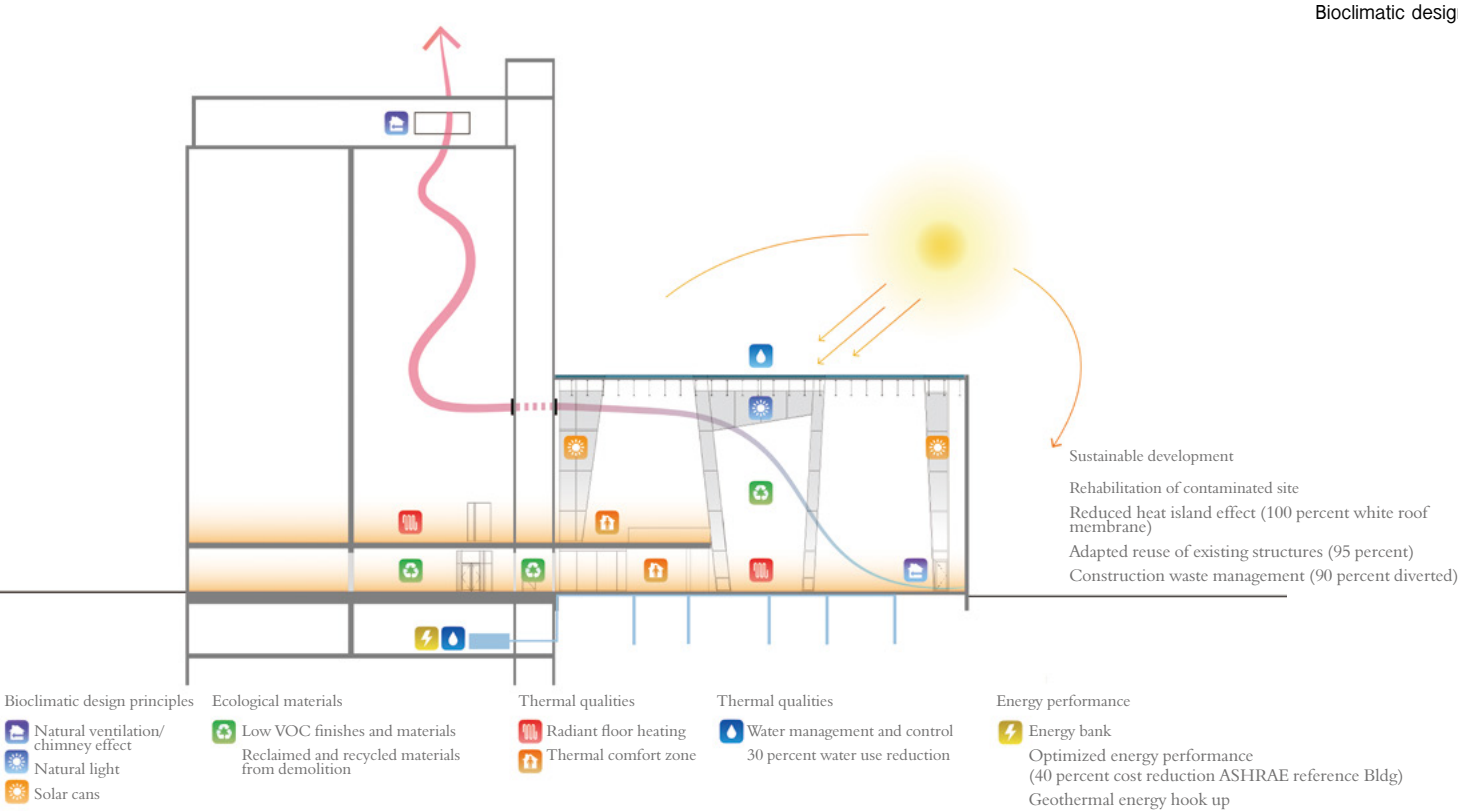


Schematic diagrams

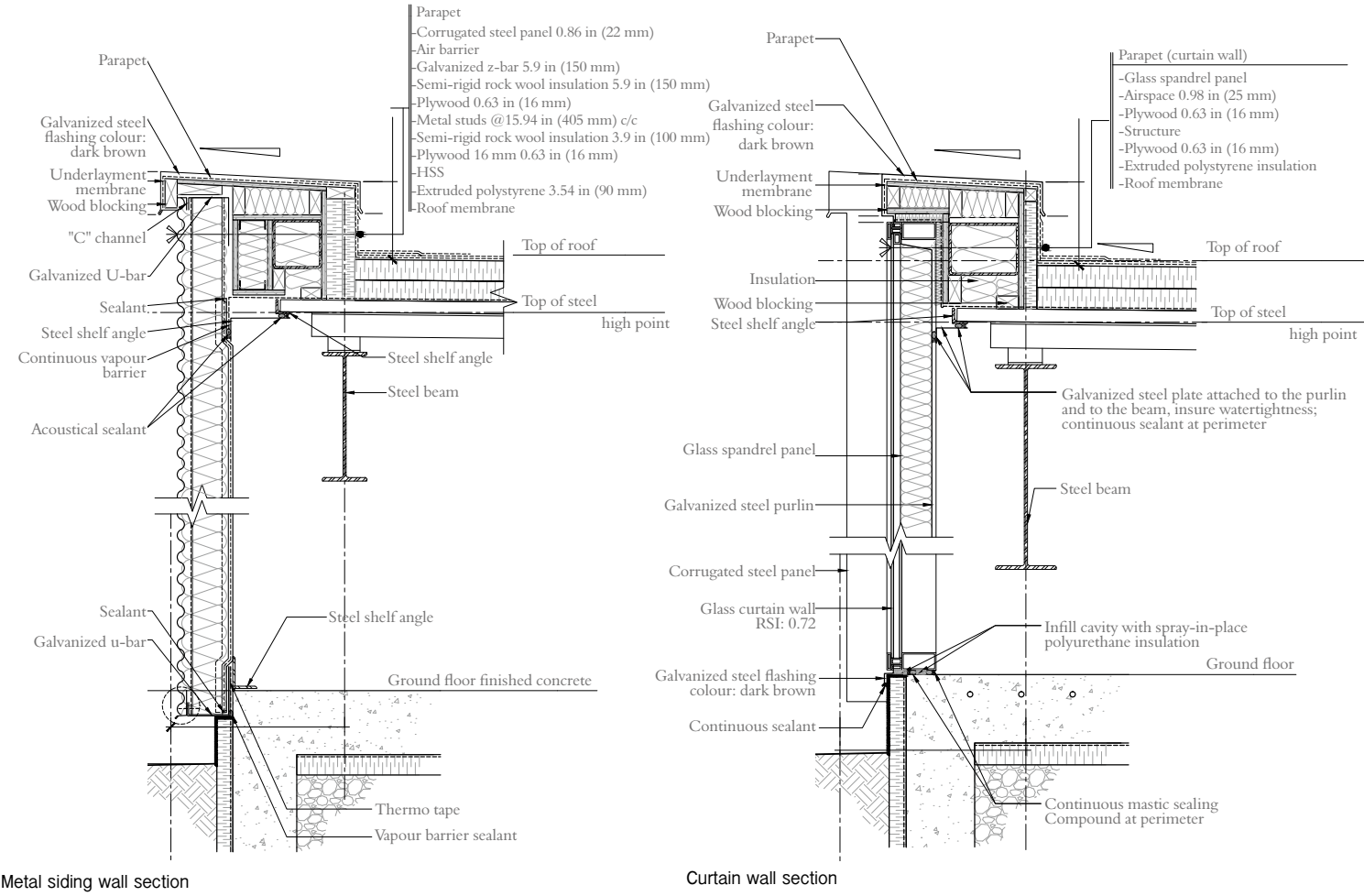
- 02- Historic aerial view of Lachine Canal
- 03- The Redpath Silos before the transformation
- 04- View after the transformation
- 05- Global view after transformation
- 06- Climbing the silos







07- Large angled windows fill the space with natural light  
08- Inside the climbing hall, the white walls are reminiscent of the sugar that used to be stored here



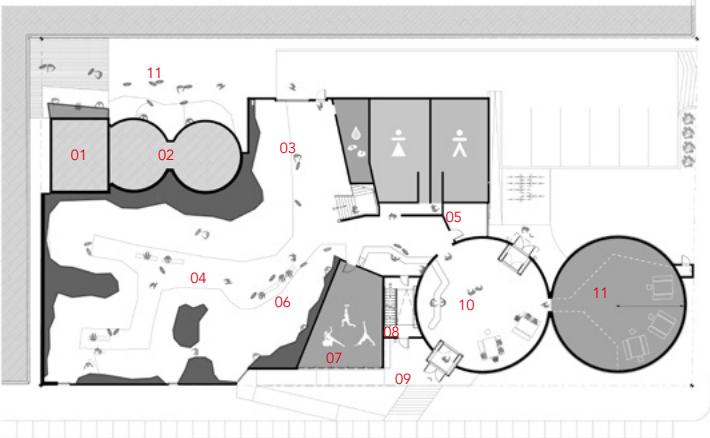


Inserting a suitable program helped to preserve and emphasize the verticality of these existing silos, while an original internal timber skin was harvested for use elsewhere in the building. A vibrant speckling of color on the new internal climbing walls makes for an unexpected counterpoint to the grey concrete of the existing structure.



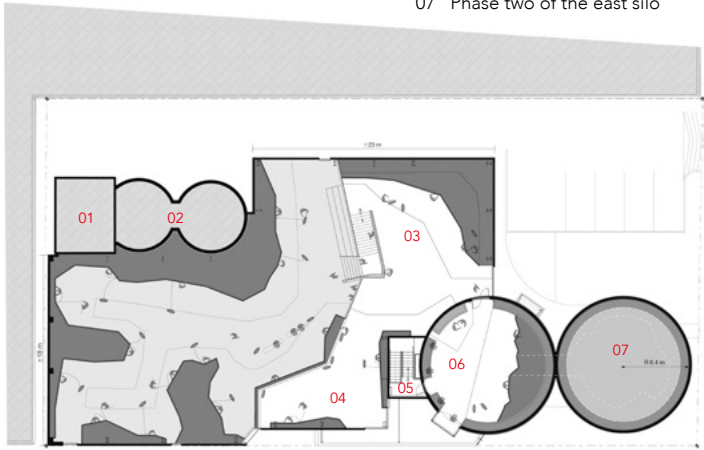
09- Entrance hall—wood decorative elements are scavenged from the cedar planks that used to line the inside of the silos  
10- Inside the center, a glimpse of verticality

- 01 West tower
- 02 West silos
- 03 Lead climbing walls
- 04 Rock climbing hall
- 05 Administration
- 06 Bouldering
- 07 Yoga
- 08 East tower
- 09 Main entrance
- 10 Reception
- 11 Phase two of the east silo
- 12 Exterior climbing on silo

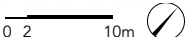


Ground floor plan

- 01 West tower
- 02 West silos
- 03 Bouldering
- 04 Kids and beginners climbing
- 05 East tower
- 06 Lounge and silo climbing
- 07 Phase two of the east silo



Mezzanine floor plan



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