



Stackt Container Market, built entirely out of repurposed shipping containers is located in heart of Toronto, services the eclectic Fort York/ Bathurst community. Designed by LGA Architectural Partners, the market is home to various retail pop-up shops, restaurants, artist spaces and onsite Belgium Moon Brewery. The 27,000 ft<sup>2</sup> market occupies a brownfield site has been leased to Stackt under a two and a half years term.

The HIDI Group provided mechanical design including HVAC and plumbing while on the electrical design side addressed power distribution and life safety systems. Alula Lighting Design provided lighting design throughout the site. Due to Stackt 's temporary installation, all systems and services needed to be able to be uprooted and moved to a new location if needed, this provided a fair amount of challenges.

**Challenges**

One of the major challenges was to design systems and services around a temporary structure. The goal was be able to service the site for two and half years and then be able to pick up and relocate to another location. The other issue faced was that the site was located on contaminated soil

**8** DISCIPLINES

- MECHANICAL
- ELECTRICAL
- PLUMBING
- LIGHTING DESIGN
- COMMUNICATIONS & AV
- SECURITY & RISK
- COMMISSIONING
- ENERGY SERVICES



which needed all services needed to be run and housed above ground. The third challenge was how to draw the needed electric site requirements due to the lower voltage residential grid being insufficient.

### Solutions

Due to the size of the containers and lower than normal ceilings heights, the mechanical team had to come up with creative HVAC solutions which included roof mounted equipment, radiant panels and low profile AC units. To reduce electric load the team utilized natural gas where ever possible.



To overcome the limitations of Hydro's residential voltage system, the electrical design team had to utilize a larger incoming supply voltage distribution system which needed the implementation of an outdoor switchgear to accommodate the incoming electrical services. Overhead line distribution was used throughout the site to satisfy all incoming tenants & site services requirements.

Similar solutions were utilized by ALULA Lighting. The team went with lighting that could be mounted directly to the containers. The container's front mounted linear LEDs served a dual purpose first to highlighting the entrance of each container / store, and second to provide sufficient spill light for pathway lighting throughout the market. Catenary cable suspended lighting provided overhead ambient light for long distances between containers and open space.



### Sustainability factors

LED lighting was used throughout Stackt, this allows for maximum energy savings and ease of maintenance. A warm 3000K colour temperature was used to provide illumination which promoted an inviting space for visitors, creating a "one of a kind" and almost magical lit atmosphere.



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**LOCATION:** Toronto, Canada  
**CLIENT:** Stackt Properties LP  
**OWNER:** Stackt Properties LP  
**ARCHITECT:** LGA Architectural Partners  
**SIZE:** 26,909 ft<sup>2</sup>  
**CONSTRUCTION VALUE:** 7.2 millions  
**COMPLETION YEAR:** 2019  
**MARKET SECTOR:** Retail

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