

Monde condominiums

Toronto, Canada

The oasis of green living

A bespoke modular cradle for 3 users.

Architect: Moshe Safdie
Building company: Great Gulf

Monde Condominiums is a jewel of design on Toronto's downtown waterfront with stunning views of Lake Ontario. It is the proud recipient of the 2012 Best High-Rise Building Design award from BILD. From the architecture to the interior design, every detail has been thoughtfully considered for minimum impact on the environment, according to the LEED Gold certification.

Scope

The building is located on a brand new boardwalk with strong wind currents that in winter enhance the low temperatures. The building facade has plenty of different corners and balconies in each level that complies with its "Garden in the Sky" design philosophy. For this reason a special 3-module cradle has been designed. This cradle can be adapted manually to the building façade while is suspended and support three users at the same time.

Strategy

An impressive 52ton BMU with telescopic arm and special 3-module cradle has been designed and produced to copy the differences in the facade. This cradle can be adapted manually to the building façade while is suspended supporting three users at the same time!.

We have minimized the weight of the machine applying the Finite Element Analysis (FEA).



The 3-module suspended cradle towards the Lake Ontario, one of the 5 Great Lakes of North America.

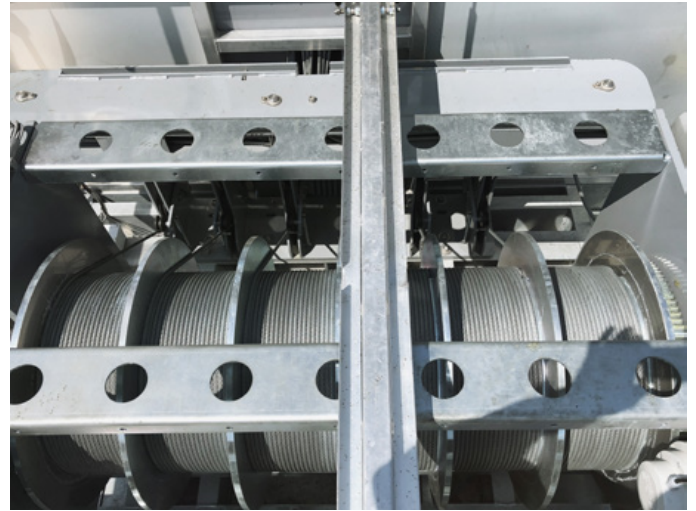
The BMU components are prepared to work in extremely cold conditions.

BMU Type FBA S

A telescopic machine with an outreach of 36m maximum and 11m as minimum.



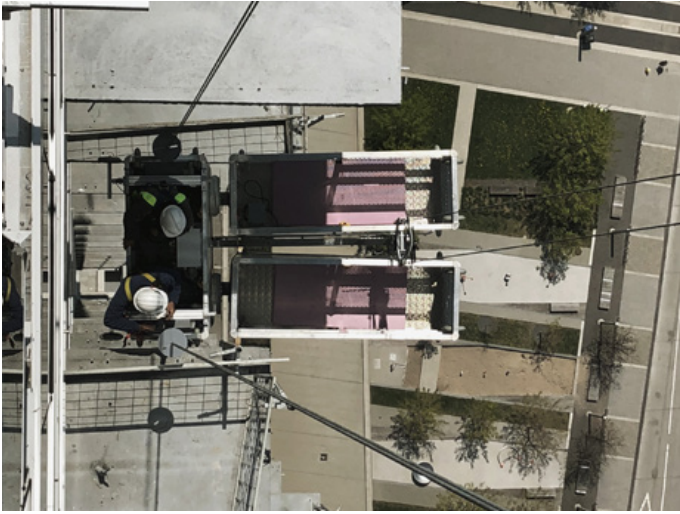
The 3-module cradle suspended from telescopic arm towards the city of Toronto.



A special multi-layer lifting hoist equipped with 6 steel ropes to suspend the 3-module layer from a height of 226m.



The BMU telescopic arm a) displayed at its maximum outreach of 36m and b) retracted.



3-module cradle; the auxiliary cradles move on each side of the primary cradle at an angle of 180 degrees.



Engines to extend the telescopic arm.



User operating the BMU through remote control from the building's terrace.