



WATERFRONTToronto

Spadina WaveDeck Key Facts

DIMENSION

58.9m (length)

10.7m (width)

Total area = 630 m²

The height of the deck above the water varies according to seasonal changes in water levels. Today the deck is approximately 2.26m above the lake at the centre crest and 77cm above the lake at the east and west sides.

The wavedeck can accommodate up to 1000 people and structurally could hold the weight of a fire truck.

MATERIALS

The deck is made up of 3564 deck boards (2970 short deck boards and 594 long deck boards).

Two types of wood were used to build the deck: Ipe wood, a durable hardwood with an extended life-cycle of 40 years; and gluelam Coastal Yellow cedar, chosen for its water-repellent character.

Ipe wood was also used for Waterfront Toronto's water's edge improvement projects at York and John Quays, which helps provide a coherency and unified look for the central waterfront.

The steps are large gluelam Coastal Yellow Cedar timbers which were custom milled to accurate radii in order to obtain the playful undulating curves of the deck.

The contractor responsible for building the wavedeck was Somerville, a privately owned Toronto based firm that has extensive experience working on the waterfront and other unusual, one-of-a-kind, high-profile projects.

Construction on the \$4.1 million wavedeck started in November 2007. It was completed in less than 10 months and on budget.

MORE

The wavedeck had to be structurally built to withstand the strong wave force of the lake and any ice shifting.

LIGHTING

24 in-water LED lights have been installed as part of the Spadina WaveDeck and can be programmed to create an in-water lighting show. The LED lights are highly-efficient with a 20-year life cycle.

ACCESSIBILITY

The wavedeck is completely wheelchair accessible and routes from the street to the central overlook area are marked by a stainless steel disc pathway.

FORM & PROGRAMMING

The Canadian shoreline inspired the design of the wavedeck. The geometry of the wavedeck is unprecedented where the playful curves are constantly changing. The wavedeck is a totally flexible structural space. The stairs act as an informal amphitheatre and the varying heights of the deck allow for different vantage points and ultimately different experiences with the lake.

The form allows people to interpret the space in many different ways – the landings on the east and west sides allow for informal staging for buskers and other performers and the steps can be used as seating.

The 57.2m backless bench acts as an elegant barrier to the water while also providing seating for users of the space. The bench was used as an alternative to the toe rails used in other portions of the waterfront.

OPERATION OF THE PARK

The City of Toronto is the owner of the Spadina WaveDeck and they will provide maintenance and operation of the public space.

ENVIRONMENTAL SUSTAINABILITY

The Spadina WaveDeck also includes the creation of new fish habitat. Riverstone shoals, tree logs and embankments were installed to provide shelter and increased feeding and foraging opportunities for lake fish. Aquatic Habitat Toronto, which Waterfront Toronto is a partner of, recently won a Public Sector Quality Fair award for the aquatic habitat enhancement work being done on Toronto's waterfront.