

**Project:**

*VivoCity*

**Location:**

*Singapore*

**Project completed:**

*2006*

**Applicator/Contractor:**

*Penta Ocean Construction  
Co. Ltd*

**Architect:**

*Toyo Ito, Japan and  
DP Architects*

**Market sector:**

*Waterproofing*

**Products used & amounts:**

*MasterTop® P 1602 –  
0.30 kg/m<sup>2</sup>*

*MasterSeal® M 800 –  
1.50 kg/m<sup>2</sup>*

*MasterSeal® TC 259 –  
0.25 kg/m<sup>2</sup>*

## Waterproofing VivoCity's spectacular roof

### Reliable and durable waterproofing



Our reference in VivoCity (Singapore). Photo courtesy of Mapletree Investments Singapore.

#### The background

VivoCity, Singapore's largest lifestyle destination mall, covers 1,500,000 square feet (140,000m<sup>2</sup>) of gross floor area, on the exhibition halls site of the former World Trade Centre. Located in the HarbourFront precinct, the development boasts over 300 retail tenants, along with large event spaces, including an outdoor amphitheater, a 20,000-square foot open plaza and a 300m harbour front boardwalk, swimming pools, playgrounds, and promenades.

Mapletree Investments, a subsidiary of Temasek Holdings, is the developer of the S\$417 million complex. The mall is designed by star Japanese architect Toyo Ito, whose inspiration for the shape of the building came from the waves of the sea.

#### The challenge

The main waterproofing challenge of this project lies in the irregular wave-shaped roofing of VivoCity. In addition to this, Master Builders Solutions was also commissioned to waterproof the connecting bridge and roof of the bus terminal while the mall was still under construction. The project required waterproofing membranes to be installed quickly and provide water tightness to the difficult roof profiles, within a month.

**Contact:**

*MB Solutions Singapore Pte Ltd  
Telephone: +65 6232 4899*

# Waterproofing VivoCity's spectacular roof

## Reliable and durable waterproofing



Application of waterproofing on roof of VivoCity (Singapore). Photo courtesy of Mapletree Investments Singapore.

### Our solution

MasterSeal® Roof 3500, a liquid-applied, crack-bridging roof deck waterproofing system based on advanced polymeric materials, was chosen for the project. The unique hot-spraying technology provided by the product allows the materials to be sprayed over a wide variety of surface profiles, whether they are irregular, vertical, or horizontal.

Only one applicator was required to complete the entire job. The materials set very quickly, regardless of the substrate or ambient conditions. This allows a uniform coating thickness to be formed around any surfaces, even those of the most complex construction geometry, providing a permanent water-right seal even for the most demanding site conditions.

Compatible to all types of RAL and NCS colors, MasterSeal® Roof 3500 spray-applied membranes will bond instantly during application, bridging all cracks to form a continuous, seamless, and highly effective waterproofing system, which can be aesthetically enhanced with color.

### The customer's benefit

- Reliable and durable waterproofing of the complex roof geometry.
- Highly effective waterproofing solution supports extended service life of the building and lower maintenance efforts.
- Savings in installation time and overall manpower costs.

### Projects facts at a glance

- Water-tight membranes required in the entire VivoCity project, of which the mall's irregularly shaped roofing presented the greatest waterproofing challenge.
- Installation was completed within a short deadline.
- MasterSeal Roof 3500 provides a permanent and durable watertight seal for the entire project.
- Application through rapid cure hot spraying technology is the key advantage of this waterproofing membrane.
- Other benefits include the high-performance, durability, fast and cost-efficient installation, and reduced need for future maintenance.

### Master Builders Solutions by MBCC Group

The Master Builders Solutions brand expresses MBCC's expertise in providing customized chemical solutions for new construction, maintenance, repair and restoration of structures.

Master Builders Solutions is built on the experience gained from more than a century in the construction industry. At the core of the Master Builders Solutions brand is the combined know-how and experience of a global community of MBCC construction experts, who connect with you to solve all of your construction challenges.

Further information is available at:

[www.master-builders-solutions.com/en-sg](http://www.master-builders-solutions.com/en-sg)