WIND TECNOLOGY

Canopy structure is covered by a double skin design with gradual perforations according Santa Monica data of wind direction, frequency and velocity. Perforations with 1100 mm diameter are packed with a Compact Wind Acceleration Turbine (CWAT). This type of horizontal axis wind turbine with a cone increasing the velocity of the wind as it passes through the rotors sweep area performing the efficiency in X2.5 of the overall system.

WAVES TECNOLOGY

The ring is conceptually similar as a bouy which is equipped with a mechanical drive train system for electric power generator . The wave ring is connected to the seabed concrete base using a taut mooring line. It has a pneumatic pre-tension module between the mooring line and the ring to enable a lightweight system with high natural frequency of oscillation can be able to convert the wave energy into electric power.

WATER HARVESTING

The canopy shape acts like a cone which guides rain water over surface to the collector ring located at the base of the railing glass.

Moreover, as consequences of energy reconversion using a fuel cell, Hydrogen stored is mixed again with Oxygen creating H2O and allowing the possibility to obtain pure water as a consumed energy result.

HYD CANOPIES

VIEW FROM SANTA MONICA PIER