



t e c h n o l o g y

Passive Water Desalination is a process occurring constantly in nature as water from water bodies like lakes, rivers and oceans vaporize and become part of the atmosphere. It is dependent on the amount and surface area of water to be evaporated, temperature both inside and outside the desalination pod and partial pressure inside the desalination pod. The design of 33 water desalination pods will create a controlled environment that contains and accelerates this natural evaporation process.

The relative humidity of the pod should be low for the rate of evaporation to be faster with the condensation collection surface being cool. The air inside the pod should ideally be hot and dry, evaporating the shallow pool of sea water, condensing it into potable water.

edge detail

- POLYCARBONATE SHEETING
- COMPOSITE DECKING
- WATER HARVESTING CHANNEL WITH STEEL GRID GUARD
- SEA WATER PUMP
- RAINWATER DOWNPIPE TO STORAGE TANK
- SEA WATER INTAKE PIPE
- ALUMINIUM SUBSTRUCTURE
- 205L STEEL BARRELS FILLED WITH URETHANE PORE FOAM
- PROFILED SHEET METAL PAN

- WATER LEVEL
- NYLON ROPE NET RAILING

estimated water output

Desalination pods: 25000sqm
Surface area (harvesting): 45000sqm

Hotbox output/annum: 91 250 000l
Water harvesting/annum: 14 400 000l

Projected total capacity/annum: 105 650 000l
Santa Monica water consumption per annum: 16 580 125 000l

0.64% anticipated contribution per annum

section B-B 1|1000

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