THE WILD AND WONDERFUL WORLD OF GAETANO PESCE

DESIGN TRENDS '09
BUBBLICIOUS ARCHITECTURE
THE BOOM IN BIO-PLASTICS
FASHION'S ZERO-WASTE DESIGNER
THE RAINMAKER

"I just arrived back from Singapore. I was in New York last week, and I now have to go to Dubai, last minute," says Ratti. "and there are several videos of it on YouTube." Carlo Ratti Associati has since been fielding calls from prospective clients based in fun-seeking capitals around the world, including Las Vegas, Dubai, and Kuwait. "There might be a way to use this technology as part of a hotel — maybe one with a double facade," he says. "If that happens, the term 'curtain wall' will take on a whole new meaning.

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Using 3,000 nozzles installed on the rooftop of a specially designed pavilion, designer Carlo Ratti has created a building with water for walls — the first of its kind. Computers control the water's speed and vertical resolution to create patterns and text messages. Motion sensors allow visitors to pass through the cascades without getting wet.

To minimize waste, the water is recycled continuously. The process begins underneath the pavilion, where two cisterns collect and cleanse the water that flows down from the roof. It's then pumped up through eight pipes, each placed to avoid interfering with the pavilion's structural I-beams. The pipes terminate at the roof's edge, where they meet an elaborate system of 3,000 digitally controlled nozzles that constantly open and close, creating liquid patterns and images — even text messages. When the water curtains detect motion, they stop to allow an opening for visitors to pass through. Ratti likens the technology to an ink-jet printer system, only on a monumental scale.

Officially opened this summer at an exposition in Zaragoza, Spain, the pavilion has become a crowd-pleaser.