

Water roofs



Water roofs for cooling purposes are not the same as water roofs for rainwater retention. Whereas water roofs for rainwater retention are designed to be emptied in time to buffer water during the next rainfall, cooling water roofs in fact retain the water and allow it to evaporate slowly. The optimum situation would be for the water management of these roofs to have an electronic interface with the weather forecast and discharge the water before the next rainfall, as this would allow both functions to be combined. Singapore already uses such electronic control systems for rainwater cisterns, and they are also used in the Netherlands to pump water out of reservoirs before heavy rainfall, as a preventative measure.

A water roof keeps the building below cooler, and the evaporation means that the immediate surroundings are also cooler. One drawback is that it is impossible to guarantee that sufficient rainwater is available at all times, however; once the rainwater has evaporated, drinking water or sufficiently high-quality surface water will have to be pumped onto the roof.



