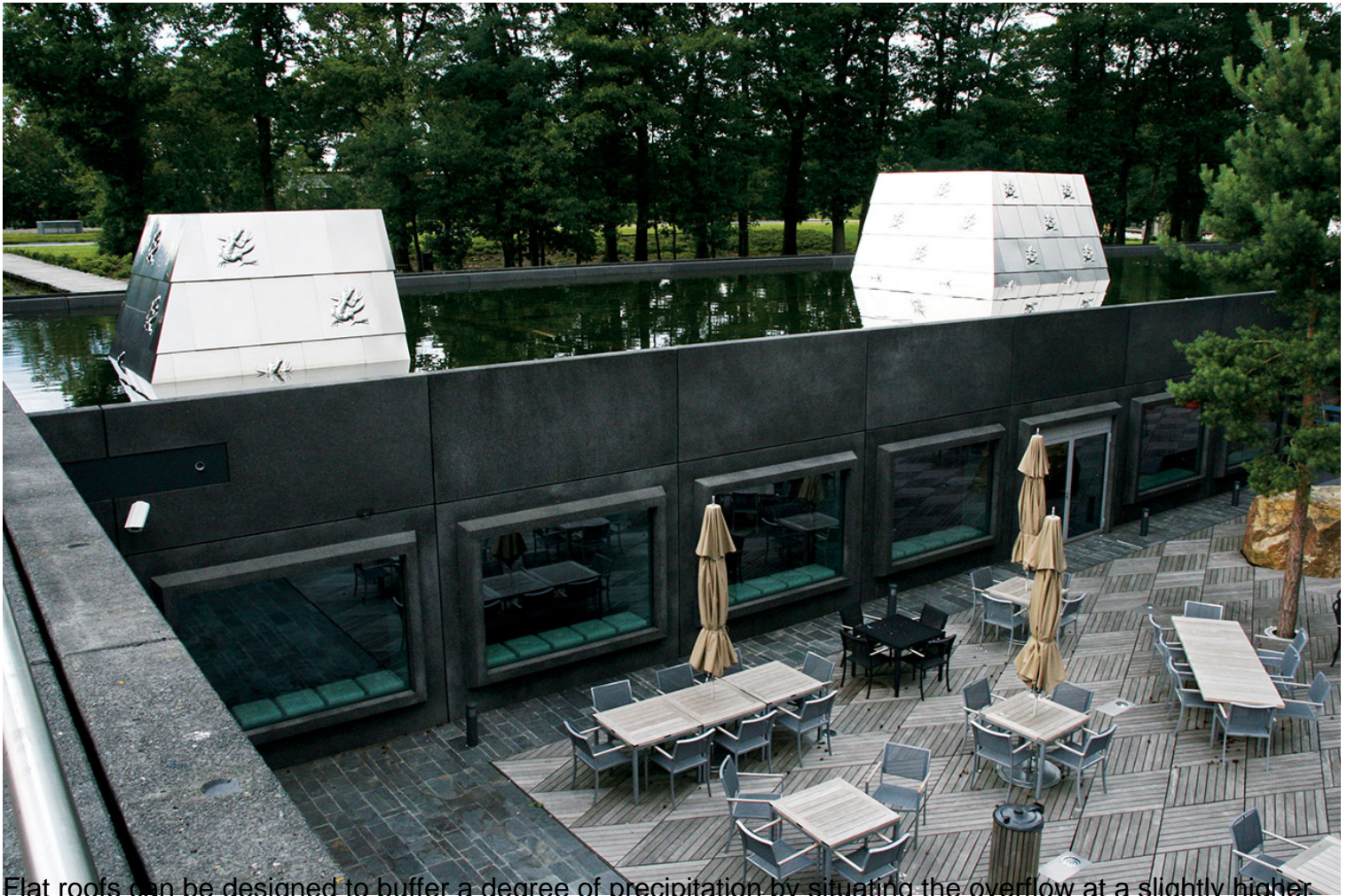


## Water roofs for rainwater retention



Flat roofs can be designed to buffer a degree of precipitation by situating the overflow at a slightly higher level. This needs to be taken into account in the roof's construction (greater load). The water only remains on the roof for a short period of time after rainfall. The rainwater is drained off at a delayed pace using narrower drainpipes. The water needs to be drained off to create sufficient storage capacity in time for the next rainfall. Contrary to what some people assume, the cooling effect of the water on the underlying rooms is only temporary and does not always occur at the preferred moments.

Water roofs only need to store rain falling on the roof; as such, the storage height need not be as high as that in rainwater ponds. [Geiger et al., 2009]

