





Roof Pond Thermal Optimization: How it works

Today's roof ponds are improved by an intermittent insulation system. At a set daytime temperature, cloud-gel coated insulating beads move pneumatically from storage chambers into a segmented 7.6cm space. Even on the hottest summer days, this prevents overheating of the water pond and keeps rooms cool while letting in diffused light. On cold nights and in winter, the reverse happens. This allows heat from sunlight, absorbed by the roof pond's thermal mass, to warm interior spaces.