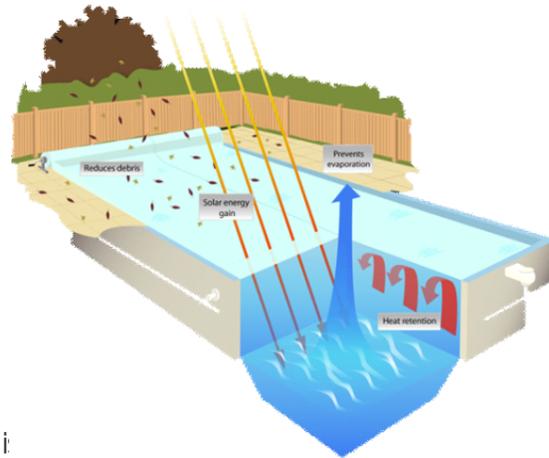
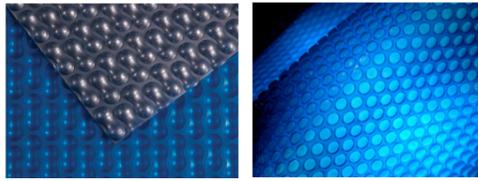


SOLAR COVER / 1211101

Solar covers are used in pools since they prevent heat loss due to radiation and convection. In addition, the solar cover pool provides protection against dust, soil, mud, leaves, etc.

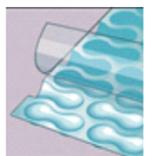
Working Principle

Solar covers are made of seamed lengths of dual layer polyethylene material which at top having flat surface and multiple bubble surface underside. These bubbles provide insulation and make cover swim.

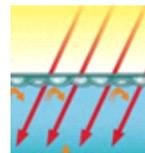


Approximately 70% of the heat loss in the outdoor pool is evaporation. Even in the simplest bubble covered pools, heat loss is prevented by 90%, this reduces heat bills, chemical consumption and water change.

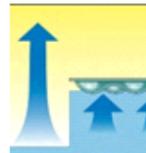
Generally, the basic principle of a solar cover is to allow the solar energy from the sun's rays to penetrate the cover and become trapped within the pool water, thus increasing the pool water temperature. It has been proven by scientific research and years of experience that the cover increases the pool temperature up to 8 °C.



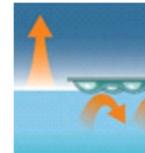
Dual layer polyethylene



Solar energy penetrates and is trapped



Evaporation is significantly reduced



Heat is retained

Heat Transmission Coefficient (U)

The thermal conductivity coefficient (λ) for the solar cover is 0.0035 W/m²K and cover thickness (d) is 0,0006 m. Heat transmission coefficient (U) is calculated with the inputs of thermal conductivity coefficient (λ) and solar cover thickness (d).

d : solar cover thickness [m]

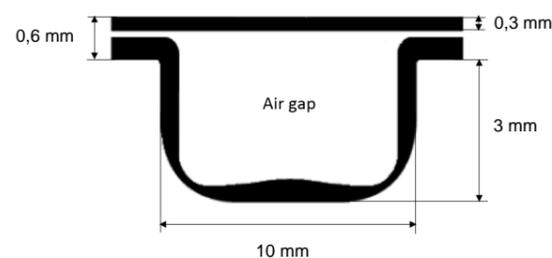
λ : thermal conductivity coefficient [W/mK]

R : thermal resistance [m²K/W]

U : heat transmission coefficient [W/m²K]

R : $d/\lambda = 0,0006/0,0035 = 0,17$ W/mK

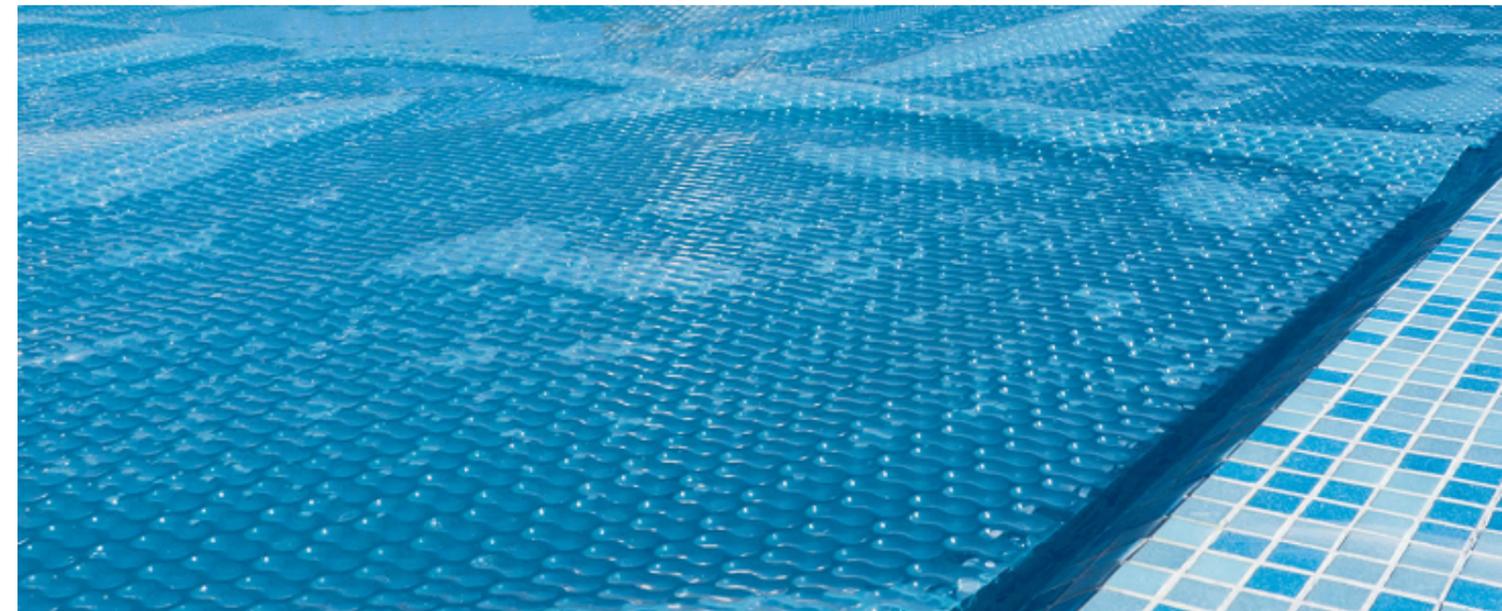
U : $1/R = 1/0,17 = 58,3$ W/m²K



Bubble section view

Pool Cover Reel For Outdoor Pools

The reel design assists flotation of the lead edge of the cover. A solar cover can be manually handled, but a solar cover roller is a perfect choice to make handling effortless and to seriously increase the longevity of the cover.



"Pool Technology"