

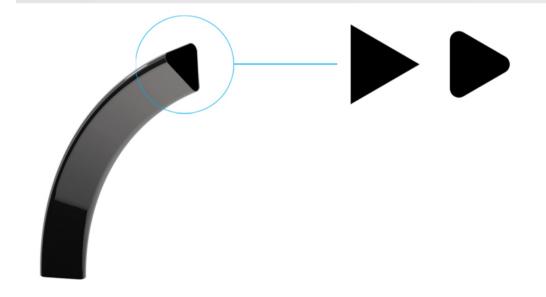








Structural elements



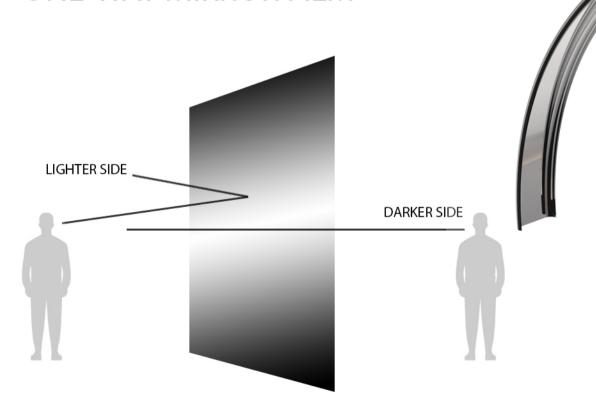
The cross-sectional area of these rings is triangular and these three sides can be a symbol of (sun, moon and star) or (light, mirror and water).

Each of the rings is made of six parts and six joints, and a tension cable holds all the parts together, finally, each ring is connected to a foundation with bolts and nuts to make it completely stable.

There are a total of six different sizes of rings that are spread at different angles and parametrically around a central point on the site.

Two of the three sides of the rings are covered with phosphorescent paint that absorbs light during the day and reflects it at night and as a light source illuminates the park area and one side of each ring contains a solar panel made of perovskite, which converts the absorbed light into electricity. This surface can convert about 20 to 28% of absorbed solar energy into electricity, Due to the high number of rings, the electricity needed in the park and even outside the park can be easily supplied.





Calculation of the amount of electrical energy production

Average of sunlight per square meter each year: 1075 KWH

Total area of panels: 1250 m² (1000 m²)

Perovskite panel output: (20% ~ 28%) 24% 1075 × 1250 m × 24% = 322.500 MWH

1075 × 1000 m² × 24% = 258 MWH per year

TRANSPARENT PLEXIGLASS (monolith)

PEROVSKITE

In 2009 Tsutomu Miyasaka and his team at the University of Tokyo discovered that synthetic materials with perovskite structures such as metal halide perovskites can function as semiconductors for solar cell construction, replacing silicon or other semiconductor materials. Since 2009, the measured conversion efficiency of perovskite solar cells has risen dramatically from 3.8% to rival the best silicon-based cells.

By using perovskite material in tandem with silicon, a 28% conversion efficiency has been measured by Oxford Photovoltaics.

The high absorption coefficient of perovskites enables ultrathin films of only 500 nanometers to absorb the complete spectrum of visible light, opening up endless possibilities for flexible and highly efficient solar modules.

ELECTRIC POWER TRANSMISSION WIRE STRUCTURAL TENSION CABLE

LUMINOUS PAINT

Luminous paint or luminescent paint is paint that exhibits luminescence. In other words, it gives off visible light through fluorescence or phosphorescence. There are two types of luminous paints: fluorescent paint and phosphorescent paint.

ONE-WAY MIRROR FILM