

# The HORIZON Folding Solar Roof.



ENERGY FOR MANKIND

[dhp-technology.ch](http://dhp-technology.ch)



**dhp technology develops, produces and installs the HORIZON folding solar roof, a system unique in the world. Thanks to its unique lightweight construction and folding mechanism, the folding solar roof allows useable industrial areas to be utilised dually for solar power generation.**

## Energy self-consumption and self-sufficiency.

The power consumption of wastewater treatment plants is very high. 100% of the solar power generated on site by the folding solar roof can be used by the wastewater treatment plant. On average, the installation of this solar roof will increase energy self-sufficiency by 50 %.





## **Access to settlement tanks.**

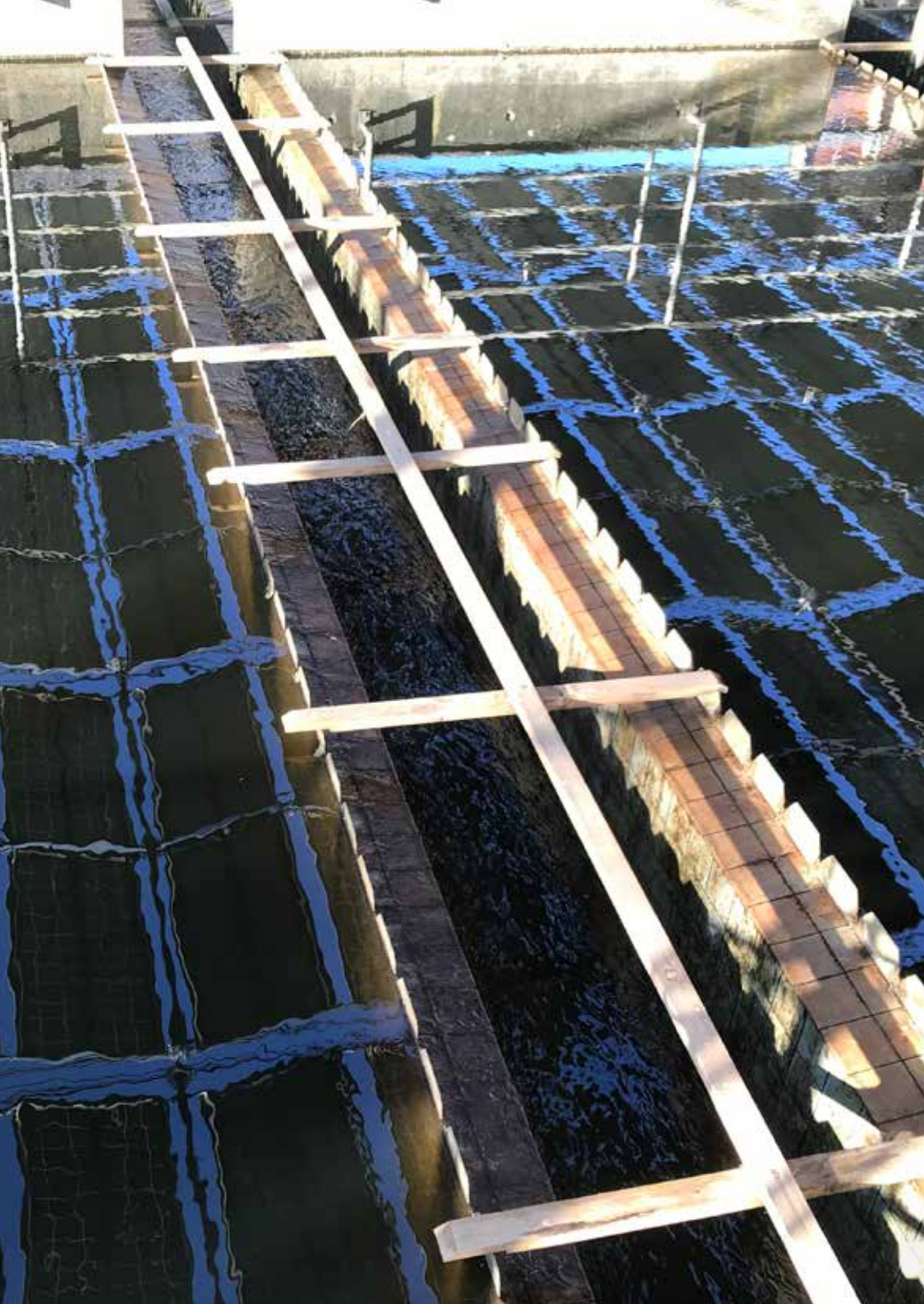
The folding solar roof can be retracted **at any time**. This guarantees crane access to the settlement tanks. New equipment can consequently be installed at any time and maintenance work can also be carried out whenever necessary.

## **Supported by settlement tank side walls.**

The folding solar roof uses the side walls of the settlement tanks as its support structures. This allows logistics routes to be kept unobstructed and any work at the wastewater treatment plant will remain unimpeded. The settlement tanks are used as the foundations and will accept the roof's static forces.





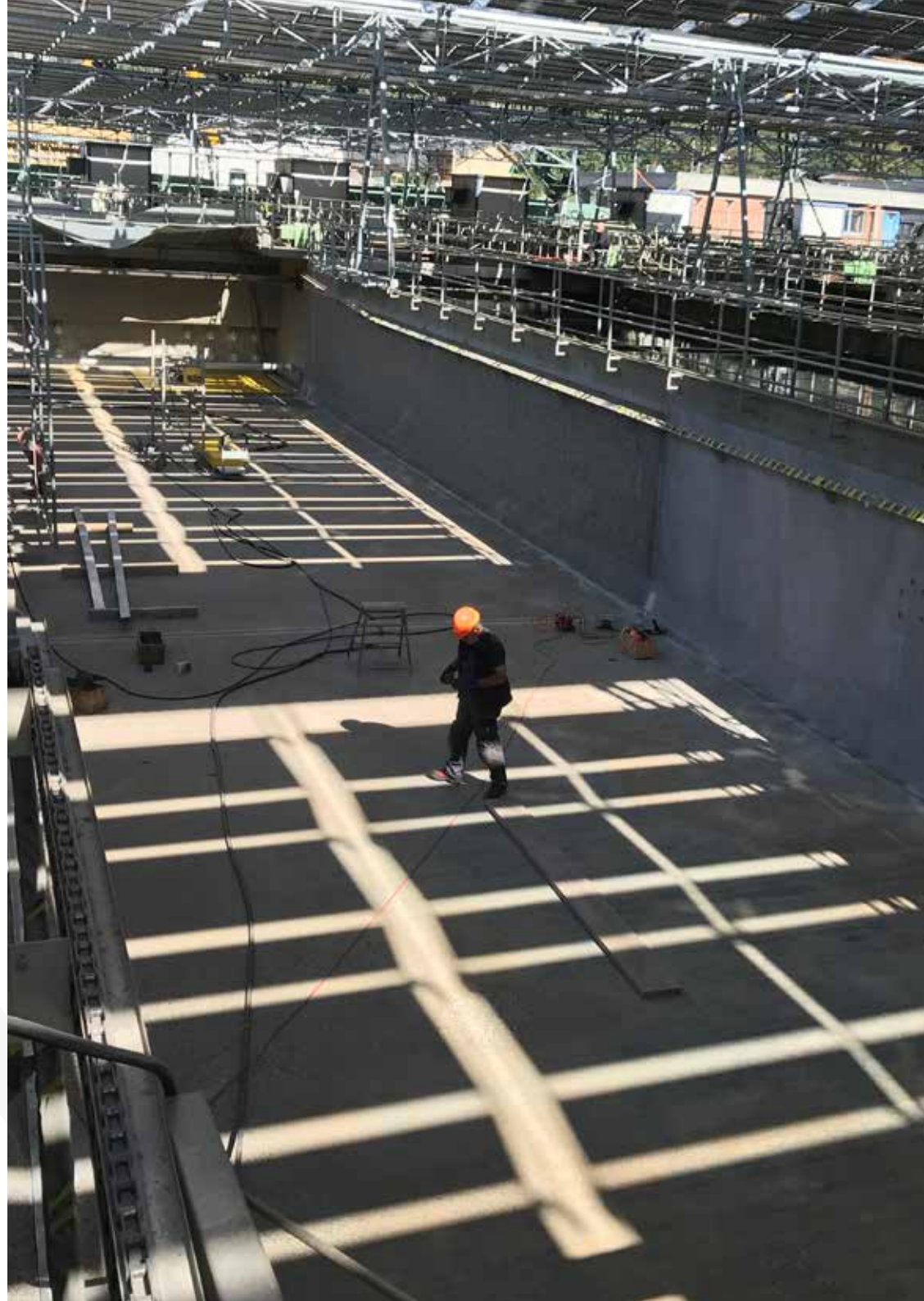


## **Shade to prevent algae growth.**

The folding solar roof provides shade from sunlight and so reduces algae growth by a measurable amount. An installed folding solar roof will therefore result in **reduced cleaning work** and, consequently, **reduced operating expenses**.

## Shade for health protection.

The folding solar roof will create shade over the settlement tanks. During summer this will provide protection against heat and radiation, i.e. during maintenance work on settlement tanks, for the operating personnel in particular.





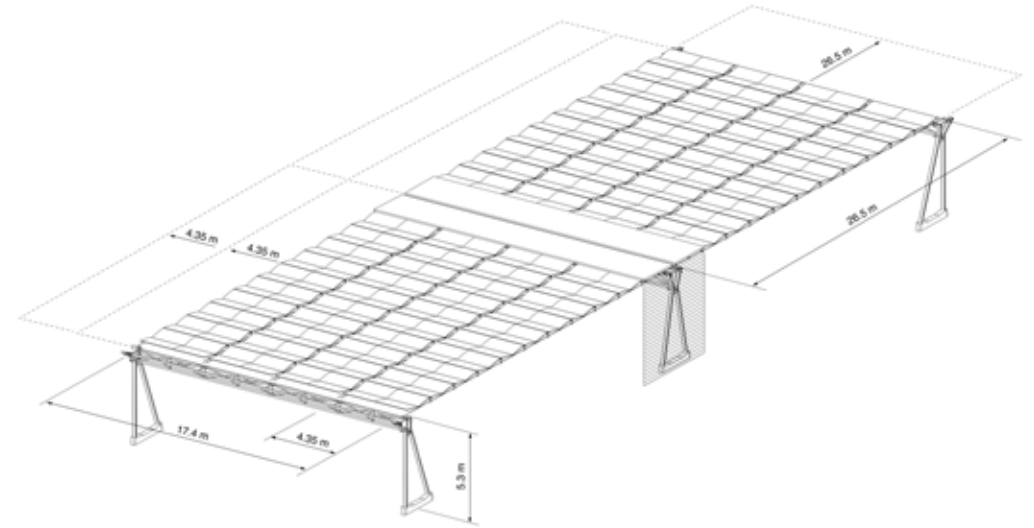


## Lighting over support structures.

The support structures for the folding solar roof allow for the perfect **integration of modern LED lighting**. This means that workplaces in and around the wastewater treatment plant will be better illuminated and therefore safer, when necessary.

# Factsheet.

<b>Installed output power</b>	110 kWp/m <sup>2</sup>
<b>Dimensions</b>	min. 1000 m <sup>2</sup>
<b>Modules</b>	345 Wp/panel
<b>Module inclination</b>	+/- 10° when folding roof is in its extended state, gable configuration
<b>Operating conditions</b>	Wind threshold > 15 m/s wind speed Wind and snow load supporting structure design dependent on site location
<b>Life expectancy</b>	25 years
<b>Control system</b>	Fully automatic, meteorological algorithm, system includes a local weather station
<b>Monitoring</b>	Live monitoring (system status, meteorological and yield data)
<b>Scope of delivery</b>	Complete system with installation Ready for use
<b>Guarantee</b>	10-year product guarantee on PV modules, 25-year linear performance guarantee of 80% (as per module manufacturer's warranty conditions). System technology guarantee: 2 years as per the warranty conditions of dhp technology AG



119 kWp system (minimum size)



**„Our vision is one of a modern power supply that also satisfies eco-friendliness, societal and cost-efficiency requirements in equal measure.“**

