SOLAR PRIMER

SILFAB SOLAR®

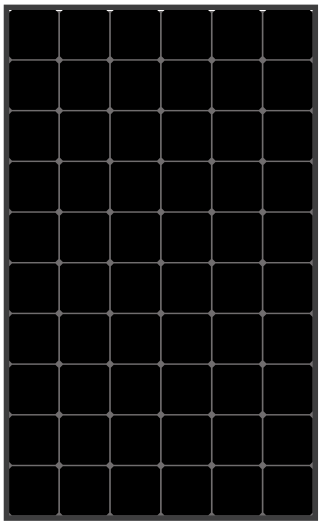
PHOTOVOLTAICS (PV)

Photovoltaics (PV) is the process of converting light into electricity by using semiconducting materials that produce voltage and electric current when exposed to sunlight.



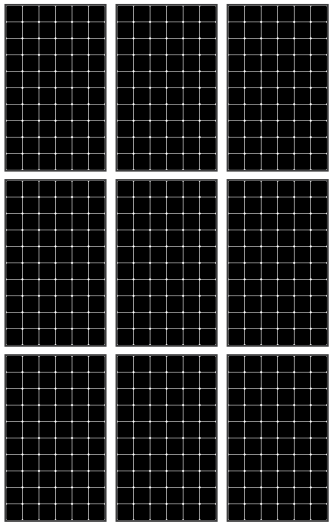
Solar (PV) Cell

A solar cell absorbs sunlight and converts it into an electrical current by the photovoltaic (PV) effect. The solar cell is the electrical device used in the assembly of solar panels.



Solar (PV) Panel

When solar cells are strung together, they form a solar panel.

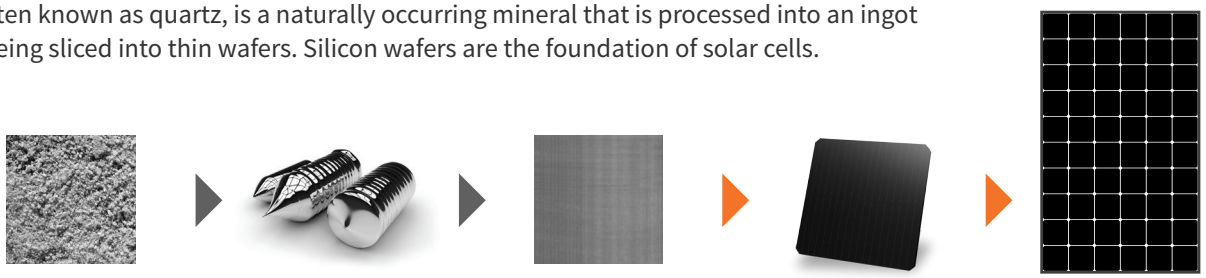


Solar (PV) Installation

When combined, the solar panels create a solar installation or solar system.

HOW SOLAR PANELS ARE MADE

Silica, often known as quartz, is a naturally occurring mineral that is processed into an ingot before being sliced into thin wafers. Silicon wafers are the foundation of solar cells.

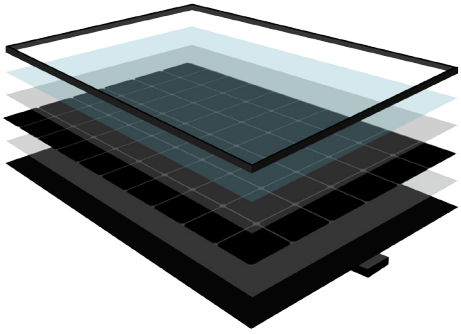


SILICA SAND | **SILICON INGOT** | **SILICON WAFERS** | **SOLAR CELL** | **SOLAR PANEL**

SILFAB SOLAR®

Silfab Solar's business focus is on the assembly of solar cells and solar panels.

Ready-made wafers are used to assemble the solar cells. Solar cells are strung together to create a layer. This layer is sealed between two layers of encapsulant, which shields it from moisture, dirt, and damaging pollutants. A protective layer of tempered glass is laid on top. With an aluminium frame on top and a backsheet on the bottom, the layers are secured together, protecting the solar cells from the external environment. The junction box is the output interface and is used to connect panels together.



- Frame
- Glass
- Encapsulant
- Solar Cells
- Encapsulant
- Backsheet
- Junction Box