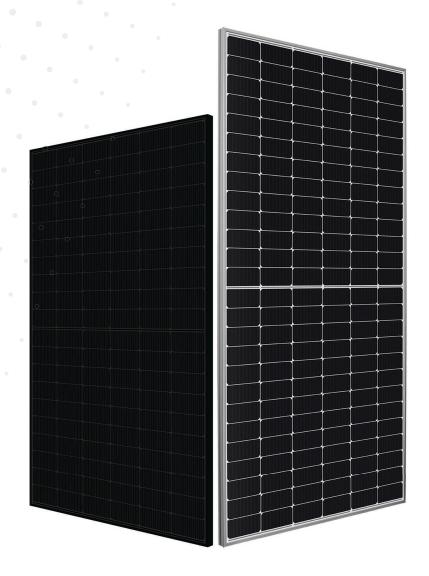


## THE EVOLUTION OF POWER

# SILFAB NTC

Silfab Solar's Next Generation N-Type Cell Technology



### THE FUTURE OF SOLAR TECHNOLOGY IN AMERICA

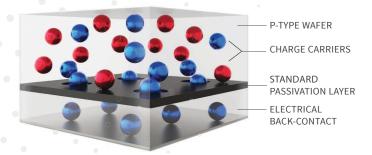
Utilizing next-generation N-type cell technology, Silfab NTC panels build upon the leading-edge technology and premium quality found in all Silfab Solar products. The results are clear: more power, improved efficiency, and consistent performance for the lifetime of the panel.



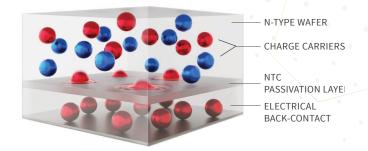
## THE POWER OF INNOVATION

**Silfab NTC** cells surpass the performance and reliability limitations encountered in standard solar cells, resulting in enhanced power output, higher efficiency in low light conditions, consistent performance in high temperatures, improved shade tolerance, and reduced degradation rates throughout the lifetime of the panel.

STANDARD SOLAR CELL



SILFAB NTC CELL



**Standard Solar Cell technology** relies on a p-type wafer with openings in the rear passivation for charge collection (charge carriers trying to find a small hole), causing reduced passivation, limiting efficiency and overall power output.

Silfab NTC Solar Cell technology uses an n-type wafer with a rear NTC passivation layer enabling better charge carrier collection while reducing recombination leading to improved efficiency.

### MORE POWER MORE PRODUCTION

±12%

#### IMPROVED EFFICIENCY

**Silfab NTC** boast significantly higher efficiency levels than standard conventional solar panels through better LCOE (levelized cost of electricity), requiring fewer solar panels and delivering unmatched efficiency and generating more power over the solar system's life.

STANDARD SOLAR PANELS 11 SOLAR PANELS = 3520 WP



SILFAB NTC SOLAR PANELS 9 SOLAR PANELS = 3690 WP



## RELIABLE FOR DECADES

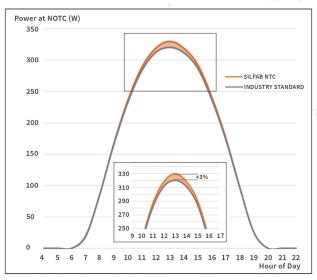
#### IMPROVED LOW LIGHT PERFORMANCE

**Silfab NTC** has better long-term performance in low-light conditions (cloudy days or early mornings/late afternoons) due to enhanced sensitivity to diffused light, ensuring continuous energy generation even when sunlight is not at its peak.

£2.3%

## LOWER OPERATING TEMPERATURE & HIGHER TEMPERATURE TOLERANCE

**Silfab NTC** maintains higher efficiency levels as temperatures rise, withstanding higher operating temperatures and providing more consistent performance and maximum power output in all weather conditions.

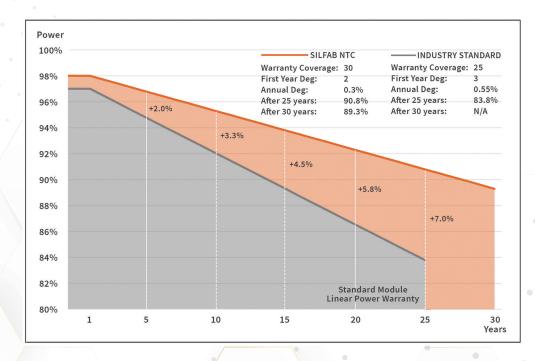


## MADE TO WITHSTAND THE TEST OF TIME

45%

#### **REDUCED DEGRADATION RATE & LID**

**Silfab NTC** presents lower degradation in comparison to industry standard panels annually, attributed to their heightened resilience against diverse stressors, encompassing light exposure, mechanical loads, thermal fluctuations, etc.



Leading-Warranty

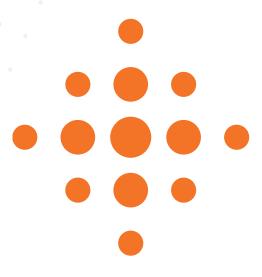
25<sub>year</sub> 3

Product Workmanship

Linear Performance

#### ENHANCED DURABILITY

silfab NTC features a unique passivation layer that protects against moisture, UV, temperature, and other environmental factors, ensuring prolonged lifespan. Testing by third-party renewable energy test centers RETC and Kiwa PVEL for top performance ensures all Silfab Solar panels are tier-one quality.



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