



The hardworking Solar Shingle that protects your home and powers your life.



# Renewable energy from a remarkable source.

The DOW POWERHOUSE™ Solar Shingle system installs and protects like a typical asphalt shingle while offering so much more. It also generates clean, renewable energy to power a home. And that's energy you're making — not purchasing from your local utility company. With POWERHOUSE Solar Shingles, it's sustainability, energy savings and seamless design all in one. Welcome to the roof, reinvented.

### **Dual functionality**

• Protects as a roofing material and provides renewable energy.

## **Integrated aesthetics**

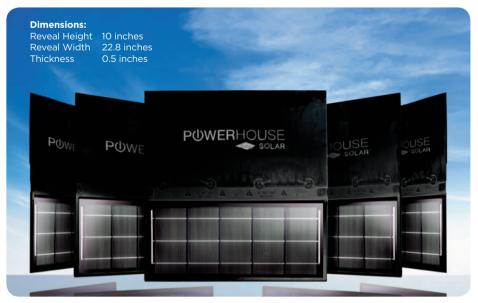
 A custom-designed, building-integrated photovoltaic solution for asphalt-composition shingle roofs that installs flush with asphalt shingles.

### Fase of installation

• No on-roof wiring required. Nails directly to the roof deck, just like traditional asphalt shingles.

## **Excellence guaranteed**

 Manufactured in Michigan and backed by The Dow Chemical Company, these durable shingles withstand sun exposure, extreme temperatures, wind, hail and other inclement weather.



**POWERHOUSE™ Solar Shingles** feature photovoltaic technology consisting of flexible Copper Indium Gallium diSelenide (CIGS) shingles with high transmission tempered glass.



# Better technology for a better world.

Dow puts its POWERHOUSE™ Solar Shingles through round after round of testing. From hail and torrential rain to high winds and high temperatures, our Solar Shingles have passed and earned certifications for both performance and safety — providing homeowners with excellent protection while generating significant savings season after season.

## Safety, durability and performance certifications.



#### **UNDERWRITERS LABORATORY**

- UL 1703 Flat-Plate Photovoltaic Modules and Panels: Safety standard for photovoltaic solar modules and panels that helps ensure that they won't cause harm over a 20-year life span
- UL 790 Standard Test Methods for Fire Tests of Roof Coverings: Safeguards against embers of one fire spreading to a neighboring house and causing another.
- CEC Class A Fire Rating: The most stringent rating available for exterior fire resistance.
- UL 1897 Uplift Tests for Roof Covering Systems: Measures the uplift force required to pull the shingles off the roof. Certified at 110 mph@4.12 pitch, 135 psf uplift.
- UL 746, 514 and 487: Sets of tests covering various components of the system.



#### INTERNATIONAL CODE COUNCIL EVALUATION SERVICE

- 2006 and 2009 International Building Code (IBC) 2006 and 2009 International Residential Code
- These codes cover all buildings and detached one- and two-family dwellings and townhouses up to three stories.



#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

 IEC 61646 Thin-film terrestrial photovoltaic (PV) modules: Covers much of the UL1703 testing while nominally ensuring that panels perform as advertised over their life.



#### CALIFORNIA ENERGY COMMISSION

CEC-300-2011-005-CMF, Fourth Edition: A power rating test to help determine how much energy a panel will produce to help compare PV modules.



#### AMERICAN SOCIETY FOR TESTING AND MATERIALS

 ASTM D3161-09: A wind test to see how high of a wind speed is needed to rip the shingles off the roof. POWERHOUSE has the highest rating (class F), allowing our product to be installed in areas with wind speed requirements of 110 mph.



### THE DOW CHEMICAL COMPANY

• Backed by the strength of Dow and a 20-year performance warranty.

### WARRANTIES

- 20-year material weatherization warranty and a 10-year wind retention warranty.
- 10-year and 20-year power output warranties.
- 10-year manufacturer's inverter warranty.

#### **IMPACT RESISTANCE**

Impact resistance to hail: 1-inch diameter at 52 mph.

For more information on DOW POWERHOUSE, go to dowsolar.com. Or, call 855.DOW.SOLR.



www.dowsolar.com







855.DOW.SOLR

#### Made in U.S.A.

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