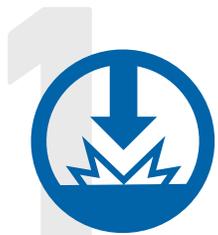


# 5 WAYS COVER BOARDS SUPPORT PHOTOVOLTAIC ROOFS

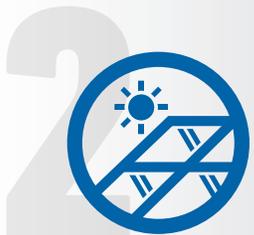
PV IS FOR PHOTOVOLTAIC

As more people and businesses discover the benefits of using renewable energy to power their buildings, solar-powered roofing will only continue to grow in popularity. Understanding their additional support requirements prepares you for performance success. Here are 5 ways adding a cover board to the roofing assembly meets the unique needs of today's photovoltaic (PV) paneling.



## PUNCTURE RESISTANCE

PV installation takes added labor and equipment, introducing more opportunities for punctures in the roof membrane. Puncture and impact resistance help ensure product longevity, so it maintains performance integrity under maintenance and repairs. In third-party testing, assemblies with 1/4" DensDeck® Prime Roof Boards underneath were 83% more puncture-resistant, on average, than thermoplastic membranes with no cover board at all.<sup>1</sup>



## DIMENSIONAL STABILITY

Some cover boards require gapping to compensate for general expansion and contraction. But given the added weight that comes with the equipment load, photovoltaic roofing can't take that risk. PV requires a sturdier cover board to support the wear of installation and withstand the weight of paneling. DensDeck® Prime Roof Board's superior strength and stability allow for installation without gapping.



## SOUND ISOLATION

Installation is loud; there's simply no way around it. But with the right cover board in place to reduce sound transmission, updating an existing roofing system with modern PV paneling can be as minimally invasive as possible. The Aviation Safety and Noise Abatement Act even offers multiple third-party tested LEED and IGCC-compatible sound-isolation solutions that include DensDeck® Prime Roof Boards in the cover board position.<sup>2</sup>



## FIRE RESISTANCE

Designed to attract the light of the sun, PV paneling must internalize its heat without sparking an actual fire. FM Global's 2014 FM 1-15 Standard for Solar Roof Systems recommends including a gypsum-based cover board.<sup>3</sup> With the right balance of strength and flex, cover boards provide a smooth substrate to support the waterproofing membrane. DensDeck® Prime Roof Board meets UL 790 Classification and FM Class 1 Approvals, with zero flame spread and zero smoke development per ASTM C1177.<sup>4</sup>



## DURABILITY

Including a cover board in the PV roofing assembly adds extra support for the duration of the roof's life, including protection from the extra abuse associated with the maintenance to the solar panels. When considering the extensive cost, building downtime and repair delays that would result with any roof failures, taking the extra precaution to secure the roofing system with a cover board at the start of the project just makes sense.