

Sika Corporation Photovoltaic Installation/Warranty Policy

INTRODUCTION

Rooftops are an attractive platform for the installation of solar photovoltaic (PV) systems (a “PV System”). Sika Corporation (“Sika”) has for many years been an advocate of roof mounted PV Systems. When considering the installation of a PV System on your new or existing Sika roofing system (a “Roofing System”), it is important to remember that:

- a.) The Roofing System’s function is first and foremost to protect the building from the elements
- b.) A PV System installation imposes numerous additional loads on the Roofing System, both during installation and throughout its service life
- c.) The investment horizon for a typical PV System installation is quite lengthy. The remaining service life of the Roofing System should at least match that of the PV System.

The enclosed booklet “Successful Rooftop Photovoltaics: How to achieve a high quality, well maintained, compatible rooftop PV system”, prepared by the Center for Environmental Innovation in Roofing (CEIR), provides useful information and advice.

When considering whether to install a PV System on a new or existing Sika Roofing System, it also is important to take into account and understand the impact such installation will have on the warranty issued by Sika on the existing Roofing System or the warranty to be issued by Sika on a newly-installed Roofing System (the “Roofing Warranty”). A PV System, and the installation thereof, enhances the potential of leaks in the Roofing System due to significant roof top traffic that occurs during the installation and the numerous additional loads put on the Roofing System during installation and throughout the Roofing System’s service life.

Accordingly, the Roofing Warranty for an existing Roofing System will be suspended during the installation of a PV System. With respect to a newly-installed Roofing System, Sika will not consider issuing a Roofing Warranty for such Roofing System unless and until the installation of the PV System is completed. This Sika Photovoltaic Installation/Warranty Policy (the “PV Policy”) describes the requirements and conditions that must be satisfied in order for Sika to

August 8, 2014

determine whether to reinstate or issue a Roofing Warranty after the installation of the PV System is completed, which determination is within the commercially reasonable discretion of Sika.

The following guidelines and requirements also will help you realize the expected service life of your Sika Roofing System should you elect to proceed with the installation of a PV System.

TECHNICAL REQUIREMENTS

With respect to any PV System installation, whether on a newly-installed or existing Roofing System, in order for Sika to consider whether to issue or reinstate a Roofing Warranty, as the case may be, following the completion of the PV System installation, the Sika Roofing System must at least meet the following minimum technical requirements:

- **Sarnafil G410 or S327**
- **60 mil membrane thickness or greater**
- **An approved cover board (Dens Deck, Dens Deck Prime, Securock, High Density Isocyanurate Insulation) under the membrane**
- **Membrane must be no more than five (5) years old.**

Acceptable High Density Isocyanurate Insulation Boards:

1. Sarnatherm Roof Board-A
 2. Sarnatherm Roof Board-H
 3. Sarnatherm Roof Board-M
- All Penetrations are to be round in shape and be able to be flashed a minimum of eight inches (8”) above the finished roof level.
 - Sika G410 or S327 protection sheets of a minimum 60 mil thickness must be used under the solar racking or mounting systems, each ballast pan, rail or other component in contact with the roofing membrane.
 - No Self Adhered, welded or other similar attachment methods of securing the PV System directly on to the membrane will be allowed without Sika’s written approval
 - The PV System must not impede drainage from the roof surface.
 - The PV System shall not impede repairs of the roof membrane throughout the Roofing System’s service life.
 - Any PV components hindering leak investigations and/or warranty repairs are to be disconnected and removed at the building owner’s expense
 - The building owner will be responsible for mitigating any hazards (including but not limited to electrical) and insuring that areas to be investigated and/or repaired under warranty are safe

August 8, 2014

ACCEPTED RACKING SECUREMENT SYSTEMS:

To the extent OMG Powergrip or U-Anchor anchoring component products (the “Anchoring Products”) are included as part of, or incorporated into, the PV System, Sika will consider issuing, reinstating or continuing a Roofing Warranty only if Anchoring Products having a target patch made of Sika membrane are used and the Anchoring Products are installed by the Sika authorized applicator in strict conformance with all Sika’s installation guidelines and requirements and in accordance with the terms of this PV Policy.

Please be advised that Sika has not tested, and cannot comment upon the suitability, effectiveness, durability or other aspects of the Anchoring Products that may be installed or used in connection with a particular roofing/PV project or a particular PV System. Also, Sika cannot, and therefore does not, predict any short- or long-term impacts the installation of Anchoring Products and other components of a PV System may have upon the Sika Roofing System, particularly after any installed Anchoring Products or other attachment or solar paneling systems are subjected to a thermal expansion and contraction, wind loads, shear forces and the like. By allowing U-Anchor or OMG Powergrip components to be installed on Sika Sarnafil Roofing Systems, Sika in no way intends to, nor does Sika, make any endorsement of either U-Anchor or OMG Powergrip products.

Sika disclaims any and all responsibility for any and all damages, leaks, defects or other problems or claims that may result, either directly or indirectly, from any and all aspects of the use and installation of the Anchoring Products on, or in connection with, Sika Roofing Systems.

ROOFS NOT MEETING THE TECHNICAL REQUIREMENTS NOTED ABOVE

In the event that a new or existing Roofing System does not meet the technical requirements for the membrane and cover board specified above, Sika will consider issuing or reinstating a Roofing Warranty, as the case may be if, in addition to the requirements set forth in this PV Policy, the following actions are implemented:

- A) Sarnafil G410-12 (48 mils), S327-12 (48 mils) or any Sikaplan membrane with an approved cover board:
- All systems: mandatory Sarnatred around all combiner boxes and between roof entry/exit point and arrays.
 - For ballasted systems: minimum 72 mil protection layer of Sarnafil G410 or S327 under the solar racking or mounting system, each ballast pan, rail or other system component in contact with the membrane.

August 8, 2014

- B) Any Membrane without an approved cover board installed under it:
- All requirements listed under A) above
 - Owner to sign warranty coverage limitation letter.
- C) Installation of PV system on any membrane that is more than five (5) years old will **void** any existing warranty with respect to such membrane.

ADMINISTRATIVE REQUIREMENTS

The following steps must be followed and conditions met with respect to a PV System installation in order for Sika to consider issuing or reinstating a Roofing Warranty for the Sika Roofing System on which the PV System will be installed:

- Sika must review the type of PV System to be used solely for the purposes of considering whether to issue or reinstate the Roofing Warranty following the installation of the PV System. Installation details and roof plans outlining the layout will also be required. Please allow a minimum of three (3) weeks for review. Sika does not assume any responsibility or liability regarding the PV System or the design thereof by reviewing the system for purposes of determining whether or not to issue or reinstate a Roofing Warranty following the installation of the PV System.
- In the case of an existing Sika Roofing System, an inspection of the Roofing System prior to the PV System installation (\$500.00) must be conducted. In the case of a newly-installed roofing system, a technically acceptable “final” inspection for warranty issuance of the newly-installed Roofing System must be completed prior to the installation of the PV System in satisfaction of the Pre-PV System Installation inspection requirement. This “final” inspection, however, will be conducted at Sika’s cost. In both cases, an inspection after the PV System is installed (\$500.00) must be conducted. Fees for inspections shall be payable in advance prior to issuance or reinstatement of the Roofing Warranty, as the case may be. These inspections will be conducted by a Sika Technical Representative. Any repairs identified in these inspections, that would not otherwise be covered under the Sika warranty must be completed at the owner’s expense by the original Sika Authorized Applicator who installed the roof assembly unless otherwise agreed to by Sika.
- The Owner shall enter into an agreement with Sika acknowledging and accepting certain rights, duties and obligations with respect to the PV System and the installation thereof.
- The original installing Sika authorized roof applicator must perform all flashing work on all penetrations associated with the installation of the PV Systems and accessories unless specifically agreed to in writing by Sika.

August 8, 2014

- Sika reserves the right to view the installation of the PV System at the owner's expense (\$500.00/visit) during the installation process.
- Issuance or reinstatement of a Roofing Warranty will be at the commercially reasonable discretion of Sika and subject to payment of all fees and completion of all repairs to the Roofing System.

RECOMMENDATIONS:

- It is strongly recommended that the Owner engages a Roof Integrated Solar Energy (RISE) Certified Solar Roofing Professional (CSRPF) for integrating roof system and PV System.
- It is strongly recommended that the Solar Integrator/ PV installer ensure with Owners' architect or designer that the PV system does not affect the roof system's fire resistance ratings, UL or other code approvals, insurance and other ratings
- It is strongly recommended that the PV installer ensure with the Owners' architect or designer that the additional weight of a PV system can be accommodated by the building structure, taking into account all dead and live loads, including wind uplift
- It is strongly recommended that the PV installer ensure with the Owners' architect or designer that the roof assembly be able to resist the installation construction traffic, the dead load, and the increased maintenance traffic.
- Additional Sarnatred or Sarnafil approved walkways should be installed around all combiner boxes and between the arrays and the roofs entry/exit points or in areas of expected heavy foot traffic.

August 8, 2014