

TECHNICAL BULLETIN: 21-01

PHOTOVOLTAIC INSTALLATION/WARRANTY REINSTATEMENT POLICY

The following are IB Roof Systems recommendations and general policies concerning the installation of Photovoltaic (PV) solar array systems over an IB Roof System. The determination of the most suitable PV technology, racking, and installation method is the responsibility of the Building Owner or its designated representative. IB Roof Systems does not recommend self-adhered amorphous PV systems as many self-adhesive components are not compatible with PVC membranes.

Roof assemblies that incorporate overburden applications such as PV solar array components above the completed roof installation are permissible with various IB Roof Systems. PV solar array materials which are approved for use over IB Roof Systems assemblies remain the sole responsibility of their manufacturer or other parties. The mounted PV solar array in and of itself does not present a physical or material compatibility issue and will not nullify a new or existing IB Roof System Warranty. However, the PV solar array is considered an “overburden” per the terms and conditions of the IB Warranty and as such, overburden materials may require removal during the service life of the roof to permit roof inspection, repair, maintenance, or additions to the assembly. The responsibility for removal and replacement of overburden materials installed above IB roof membranes for inspection, repair, maintenance, or alteration remains with the building owner or other parties.

The following guidelines and recommendations apply to all PV solar array systems installed over an IB Roof System:

- The structural integrity of the building must be such that it will safely support the additional weight of the PV solar array.
- The substrate beneath the membrane must be in sound condition and capable of supporting the PV solar array and all anticipated construction and in-place service loads.
- Consideration should be given to the use of thermal insulation materials with compressive strengths equal to or greater than 25 psi, along with use of High-Density Polyisocyanurate or gypsum cover boards directly below the roof membrane.
- The PV solar array must be designed and installed by a licensed authorized integrator.

General Considerations

- Care should be taken to protect the IB membrane during installation of the PV solar array system to prevent damage.
- Racks should have enough clearance above the membrane to permit safe access and service of the roof. Failure to do so may result in requiring removal of the PV solar array to facilitate inspections and/or repairs in the future.
- PV solar arrays should be positioned to that all field seams and penetrations are accessible. Failure to do so may result in requiring removal of the PV solar array to facilitate inspections and/or repairs in the future.
- High traffic areas and access points shall be protected with IB Walk Tread or an additional layer of IB PVC membrane used as a protection layer and placed between the membrane seams and welded to the prepared roof membrane.
- It is the responsibility of the building owner to ensure compliance with local building codes.
- For penetrating photovoltaic installations, IB recommends the U-Anchor by Anchor Products, which is designed to be welded to the IB membrane with compatible IB membrane and is considered a universal receiver for mounted system connection points. To determine the most appropriate U-Anchor unit and placement – contact Anchor Products at 888-575-2131 or www.anchorp.com. When U-Anchors are not utilized, penetrations must be flashed in accordance with the appropriate IB Flashing detail. All flashing details must be completed by an IB Authorized Applicator.
- For ballast style and non-penetrating racking systems, the array’s supports must be installed over a protective layer of IB Walk Tread or additional layer of IB PVC membrane.
- IB Walk Tread shall be installed at all access points within and around the array.
- IB must be notified prior to any additions, alterations, or modifications or other substantial work is to be performed on or through the IB Roof System. Notice must be given to the IB Roof Systems Technical Department at warranty@ibroof.com prior to the commencement of the work. Alterations performed or undertaken without prior IBRS approval; or that is not in compliance with IBRS specifications and installation instructions may result in cancelation of the IB Warranty.



- Any incidental roof modifications, including penetrating the IB membrane, required or performed as a result of the PV installation must be performed by an IB Authorized Applicator.
- IB Roof Systems may, at its option, recommend or require specific roof detailing consistent with our IB Roof System Warranty Requirements.

The following table lists the roofing inspections during the PV system installation to ensure continuation of the IB Roof System Warranty. Upon completion of the roof alteration, an inspection must be scheduled and performed by an IB Authorized Applicator Field Services Representative.

Inspection fees must be pre-paid via credit card prior to being scheduled. Fees for inspections shall be payable in advance prior to issuance or reinstatement of the Roofing Warranty.

Inspection	Required	Fee
Pre-installation inspection (pre-PV array system staging, examination of roof system)	Not required by highly recommended	\$750
Post installation inspection after PV system installation	Required	\$750 Half Day \$1500 Full Day
Re-inspection(s)	Required if post inspection(s) are rejected	\$750 Half Day \$1500 Full Day