



GUARANTEE GUIDELINES

Roofing Systems

717 17th St. Denver, CO 80202 (800) 922-5922

Photovoltaic Overburden Additions on JM Guaranteed Roof System

Prior to installing any photovoltaic energy system on a JM guaranteed roof system and to ensure continued guarantee coverage, the required information and process under the Johns Manville Peak Advantage Guarantee ("Guarantee") is outlined below.

The Guarantee expressly requires that any alterations to the roof during the guarantee period must be approved by JM and performed by an approved JM contractor. Therefore, the Guarantee will be suspended during the installation of any photovoltaic ("PV") system. To reinstate the Guarantee coverage the building owner must provide the following information and abide by the process outlined herein:

Complete this form in its entirety and submit all required information to Johns Manville at roofservices@jm.com

Project Name: _____

JM Guarantee Number: _____

Address: _____

City: _____ State / zip: _____

JM Approved Roofing Contractor: _____

Note: If roof system modifications are being performed within 24 months of the start date listed on the guarantee, the original installing JM Approved roofing contractor listed on the guarantee is to be retained to complete the roofing scope of work.

Building Owner Contact: _____ Email: _____

Photovoltaic Installer: _____

Photovoltaic Supplier/Manufacturer: _____

Photovoltaic System Type: Ballasted Mounted to Structure Hybrid Thin Film

Describe Scope of Work: _____

List any JM Materials Utilized: _____

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Additional Required Items to be submitted with this form:

(Check Each Item that is completed and attached to this form)

Detailed Roof Plan Indicating Scope of Work and Location on Roof

- Roof plan is to indicate the full extent of the photovoltaic array over the roof's surface including maintenance paths and entry and exit points.

Installation and/or Flashing Details

- Details are to clearly define the photovoltaic mounting system including applicable roof membrane flashing details

Photovoltaic Overburden Waiver Signed by Building Owner (Included at the bottom of this Form)

- Failure to sign and submit the PV Photovoltaic overburden waiver will void the guarantee.

Inspection and Fee Schedule:

Applicable fees must be received by Johns Manville prior to scheduling an inspection.

1. On an existing Johns Manville guaranteed roof system, a post-inspection is required after the photovoltaic installation has been completed. The review and inspection fee of this project will be **\$0.02/ ft² with a minimum charge of \$1000 per project.**
2. On new construction or re-roof projects, with the PV installation being completed within 6 months of the guarantee start date, there will be no additional fees for the required post-inspection by Johns Manville. Installations past that date are subject to the terms in item 1 above. The final inspection on the roofing system must be completed and approved prior to installation of the PV array. The original JM Approved Contractor listed on the guarantee is to be retained to complete the roofing integration scope of work. All other requirements outlined in this bulletin must still be followed.

Once the photovoltaic installation has been completed, the roof modifications have been inspected and approved by a Johns Manville Technical Representative, all applicable fees have been paid to Johns Manville, and the Building Owner has signed and submitted the Photovoltaic Overburden Waiver, the guarantee will be placed back in Active status.

Please be advised that Johns Manville reserves the right to discontinue guarantee coverage if satisfactory information is not received or if the long term performance of the roofing system has been compromised beyond reasonable repair.

In addition to the requirements outlined above, Johns Manville offers the following Recommendations for PV installations on JM guaranteed roofing systems:

1. The roof must be adequately protected from trade-related roof traffic and damage during the installation of the PV array.
2. Areas of the roof to be used for PV maintenance and access are to be protected in accordance with JM published walkway details.
3. The building owner shall be responsible for verifying the building's structure is adequate to withstand the additional loading.
4. For ballasted PV array Installations:
 - a. A compatible protection sheet at PV mounting contact points should be installed to protect primary waterproofing membrane from premature wear and degradation. Recommended protection sheet materials include JM DynaTred walkway pads or polyester reinforced modified bitumen cap sheets for bituminous systems and JM walkpad material or min. 60 mil single ply membrane of the same type as the primary waterproofing membrane for single ply systems.



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- b. The point-of-contact must be centered on the protection layer extending beyond the point-of-contact a minimum of 2 inches in all directions.
 - c. The slope of the roof should not exceed 1:12" (one inch per foot) for single ply systems and ¼:12" (one quarter inch per foot) for bituminous membrane systems.
 - d. Point loading of photovoltaic system should be kept to a minimum with loading distributed over the largest possible footprint.
 - e. Ballasted PV assemblies are NOT Recommended on gravel surfaced bituminous membrane assemblies. As an alternate to ballasted PV assemblies, JM recommends the PV assembly be mounted to the building structure. The mounting apparatus can then be flashed (waterproofed) in accordance with JM approved details.
 - f. Ballasted PV assemblies are NOT Acceptable for installation on stone aggregate ballasted single ply membrane assemblies; this installation will void the JM roofing system guarantee.
 - g. **For new construction or re-roof projects** to receive a ballasted PV array, JM recommends the roofing system incorporates an adhered high density cover board (minimum 150 psi compressive strength) and a fully adhered membrane. This configuration will distribute loading and minimize long term point loading impacts on the waterproofing membrane.
5. The mounting system point-of-contact shall not interfere with the performance of the membrane or impede drainage. All water must drain completely within 48 hours of a precipitation event.
 6. The PV system should be designed to resist or accommodate movement due to weather changes, seismic activity, thermal expansion, and/or structural load.
 7. All waterproofing membrane T-joints are to be closely examined in areas where the PV array will conceal access. Non-reinforced T-joint patches of the same membrane material as the primary waterproofing membrane are to be utilized for single ply systems. JM PermaFlash or JM SeamFree PMMA is to be applied at bituminous cap sheet T-Joints.
 8. Seaming of Single Ply membranes is to be thoroughly examined and stripped-in with a membrane appropriate cover strip in areas where the PV array will conceal access.
 9. Thin Film PV is not to be applied directly to the waterproofing membrane. Thin Film blankets are to be laminated to a compatible sacrificial layer of like membrane then the sacrificial sheet can be applied to the waterproofing membrane in accordance with an approved method.

Submitted by:

Print Name

Date

Company Name

Primary Contact Person for Project Access:

Print Name

Phone

Email



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Johns Manville Peak Advantage Guarantee Photovoltaic Overburden Waiver

Date: _____

Owner: _____

Project Name: _____

JM Guarantee #: _____

Peak Advantage Roofing
Contractor performing alterations: _____

Name/Type of Photovoltaic System: _____

Square Footage of Photovoltaic System: _____

This document must be signed and submitted to Johns Manville in order for the Guarantee to be put back in "Active" status.

1. Upon receiving notice, the Undersigned agrees to remove and replace within a reasonable period of time the roof top photovoltaic system at the above-referenced project to the extent reasonably required, at their expense, in order to provide access to the roofing system for Johns Manville ("JM") and/or its designates to conduct a leak investigation and/or to make repairs to the roofing system. In addition, the Undersigned agrees to be responsible for all costs associated with this removal work - whether the resulting repair work is covered by the JM Guarantee or not and that JM is not responsible for any changes or alterations in either the appearance or the performance of the roofing system as a result of this removal work.
2. The Undersigned further agrees that all electricity connected with the solar system will be rendered inoperable, at their expense, prior to any investigation or repair of a leak and shall remain so until all such investigation and/or repair work is fully completed. The Undersigned understands that JM is not responsible for any loss (loss of income, building use, etc.) or damages (consequential, direct or indirect) which may result from rendering the photovoltaic system inoperable.
3. The Undersigned agrees to have the roof system repaired by any JM Peak Advantage Contractor or pay JM, for any and all repair, removal or replacement costs necessary to return the roofing system to a watertight condition should any damage occur during the installation, removal, or replacement of the photovoltaic System.
4. The Undersigned understands and agrees that the JM Guarantee does not cover any leaks, changes in appearance, damage, or loss of performance in the roofing system resulting from the installation, operation, or the presence of a photovoltaic system on the roofing system. The Undersigned further understands and agrees that JM is not responsible for any claims related to the JM Guarantee that are attributable, either in whole or in part to the installation, the operation, and/or presence of a photovoltaic system.
5. The Undersigned acknowledges and understands JM's Roof System Recommendations for PV installations.

Signed: _____ Date: _____

Printed Name: _____

Building Owner or Building Owner's Authorized Agent Title: _____