

TECHNICAL ADVISORY BULLETIN

To: GAF Commercial Sales, GAF Contractors, GAF Field Services

From: Technical Services Department

Subject: Solar Installations & GAF Guaranteed Roofing Systems Guidelines



Quality You Can Trust...
From North America's
Largest Roofing Manufacturer!™

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Can Solar Systems Be Installed On GAF Guaranteed Roofing Systems?

Yes! We recognize that many property owners are investing in photovoltaic systems as an alternative energy source and most often these systems are installed on the roof top.

- The requirements to maintain or obtain guarantee coverage vary; depending on whether the photovoltaic (PV) system is being installed on an existing GAF guaranteed system or is included in a new roofing project.

For PV System Installations On An Existing GAF Guaranteed Roofing System...

For PV system installations on an existing GAF guaranteed roofing system, these steps must be followed:

- **An initial inspection** of the existing roofing system must be performed by GAF Field Services to assess the condition of the roof. *The fee for this inspection is \$600.*
- **Shop drawings** of the PV system layout and installation specifics must be provided to GAF for our guarantee records, including **all flashing details** that will be used to install the PV system. **NOTE: GAF does not approve mounting systems; GAF only reviews the flashings to be incorporated into the GAF Guaranteed roofing system. GAF reserves the right to decline coverage** where it believes that the installation may be deleterious to the long term performance of the GAF roofing system.
- **Any repairs/modifications to the existing roof system identified by GAF Field Services** must be done at the owner's cost prior to the installation of the PV system.
- **An inspection of the roofing system must be completed by GAF Field Services after the installation of the PV system** and any deficiencies/damage caused by the installation must be repaired. *The fee for this inspection is \$600.*

GAF reserves the right to require additional inspections as necessary to insure that our requirements are met. *The fee for any re- inspection is \$600.*

- After all requirements are met and fees paid, GAF will issue an addendum to the guarantee confirming coverage of the GAF products installed on the roof, subject to all terms and conditions set forth in the guarantee.

For PV System Installations On A New GAF Guaranteed Roofing System...

For PV system installations as a part of a new GAF guaranteed roofing system, use the following steps:

1. **Shop drawings** of the PV system layout and installation specifics must be provided to GAF for our guarantee records, including **all flashing details** that will be used to install the PV system. **NOTE: GAF does not approve mounting systems; GAF only reviews the flashings to be incorporated into the proposed GAF Guaranteed roofing system. GAF reserves the right to decline coverage** where it believes that the installation may be deleterious to the long-term performance of the GAF roofing system.
2. **GAF must conduct its final inspection of the GAF roofing system PRIOR TO the installation of the PV system...** if this inspection is not completed; guarantee issuance may not be possible.

3. **An additional inspection of the roofing system must be completed by GAF Field Services after the installation of the PV system** and any deficiencies/damage caused by the installation must be repaired. *The fee for this inspection is \$600.*

GAF reserves the right to require additional inspections as necessary to insure that our requirements are met. *The fee for any re-inspection is \$600.*

After all requirements are met and fees paid, GAF will issue an addendum with the guarantee confirming coverage of the GAF products installed on the roof, subject to all terms and conditions set forth in the guarantee.

Note: Recover applications are not allowed on Extended-length Guarantees (greater than 20 years).

What About "Thin Film" PV Installations?

Because temperatures directly under the PV film will far exceed the in-service temperature of a TPO membrane, **do not install these films directly to a thermoplastic membrane that has not been specifically formulated for such elevated temperatures (EverGuard Extreme® TPO has been specifically formulated for these temperatures).**

- GAF will **not** issue any type of product or system guarantee for this type of installation unless EverGuard Extreme® TPO membrane is used and GAF has approved the adhesive for the PV panel/film prior to the installation. If there are areas of the roof that are separated from the PV installation, GAF may, in its discretion, provide warranty or guarantee coverage for the GAF products installed in those separated areas.

What Are The Guarantee Recommendations For A GAF Roofing System With Ballasted, Penetrating or Direct Attached Solar Installation?

For **Ballasted, Penetrating or Direct Attached** solar installations:

1. **Minimum 2 layers** of insulation with a cover board as the top layer.
 - a. Top layer must be adhered.
 - b. Hard board (3/8" or 1/2" min. thickness) must be:
 - EnergyGuard™ HD or HD Plus Polyiso or
 - HD Fiberboard or
 - DensDeck® or DensDeck® Prime™ Roof Board or
 - SECUROCK® Gypsum-Fiber Roof Board
2. Solar pre- and post-inspection.
3. Follow standard roofing practices.
4. **Adhered EverGuard® TPO roofing systems only:** You must use EverGuard Extreme® TPO for direct attached installations.
5. Use EverGuard® TPO accessories with EverGuard® TPO systems only.
6. Slip-sheet of like material required, heat welded or adhered on the roof, directly under contact areas of the ballasted PV system.
7. Primers & adhesives for direct attached solar installations are to be compatible with GAF membranes.
8. All solar installations on an existing GAF roofing system should be coordinated with GAF Guarantee Services.
9. **NOTE:** The owner assumes sole responsibility for removing and subsequently replacing all over burden materials including solar arrays and panels as necessary to allow for the inspection and repair of the GAF roofing materials subject to any GAF Roof Guarantee. All leaks and/or damages to the GAF Roofing System that are related in any manner to the over burden materials is excluded from coverage under this any GAF Roof Guarantee.

**What If You Are Going To
Install A New GAF
Guaranteed Roofing
System And Plan On
Adding “Thin Film” PV In
A Few Years?**

Even if you’re not ready to install solar today, the GAF EverGuard Extreme® TPO roof system allows the installation of a solar system within **10 years** without guarantee disruption (subject to the requirements outlined above) and without the need for a sacrificial sheet!

To Avoid Hassles...

Communicate with our Guarantee Services Department... open a dialogue *as soon as a PV system is being considered!*

- What is the job name, where is it located, who is the building owner?
- When is a PV system going to be installed?
- What type of PV system is going to be installed?

For information on solar installations on other roofing systems not specifically discussed in this Bulletin, consult GAF Guarantee Services.

**Where Can I Get More
Information?**

GAF Technical Services Can Assist You... with these and other questions you may have regarding your new roof installation. GAF Technical Services can be contacted at **800-ROOF-411** (800-766-3411). Also, the GAF website is a great resource for just about any question you may have or for additional information you may require. Please visit www.gaf.com to find the latest information on our products and their installation.

Important: This document supersedes any prior GAF Technical Advisory Bulletins on this topic. Please always check www.gaf.com to make sure you have the most up to date information.