## **Solar Roofing System Specifications**

Commercial

Updated: 8/13





# Solar Roofing System Specifications (Commercial)

#### **Ballasted & Rack Mounted Solar Installations**

Years*	TPO New/Tear Off	Spec #
20	FA 45 mil	T-FA-N-I-45 T-FA-N-I-45FB
25	FA 60 mil	T-FA-N-I-60
	FA Extreme 50 mil	T-FA-N-I-60FB
		T-FA-N-I-50EX
		T-FA-N-I-50EXFB
30		T-FA-N-I-80
	FA 80 mil	T-FA-N-I-80FB
		T-FA-N-I-60EX
	FA Extreme 60 & 70 mil	T-FA-N-I-60EXFB
		T-FA-N-I-70EX
		T-FA-N-I-70EXFB
35	FA Extreme 80 mil	T-FA-N-I-80EX
		T-FA-N-I-80EXFB
Years*	TPO Re-cover	Spec #
20	FA 45 mil	T-FA-N-I-45
		T-FA-N-I-45FB

<sup>\*</sup>Minimum guarantee length available

#### **Direct Attached Solar Installations**

Years*	TPO New/Tear Off	Spec #
25	FA Extreme 50 mil	T-FA-N-I-50EX
		T-FA-N-I-50EXFB
30		T-FA-N-I-60EX
	FA Extreme 60 & 70 mil	T-FA-N-I-60EXFB
		T-FA-N-I-70EX
		T-FA-N-I-70EXFB
35	FA Extreme 80 mil	T-FA-N-I-80EX
		T-FA-N-I-80EXFB
Years*	TPO Re-cover	Spec #
20	FA Extreme 50 mil	T-FA-N-I-50EX
		T-FA-N-I-50EXFB

<sup>\*</sup>Minimum guarantee length available

### Solar Guarantee Requirements\*\*

- 1. Minimum 2 layers of insulation with a cover board as the top layer.
  - a. Top layer to be adhered.
  - b. Cover board (3/8" or 1/2" min. thickness) must be:
    - i. HD Fiberboard
    - ii. DensDeck®
    - iii. DensDeck® Prime™
    - iv. DensDeck® DuraGuard™
    - v. SECUROCK®
    - vi. HD Polyiso
- 2. Solar pre- and post-inspection.
- 3. Follow standard industry roofing practices.
- 4. Adhered EverGuard roofing systems only.
- Use EverGuard TPO accessories with EverGuard TPO systems only.
- Slip-sheets of like materials are to be heat welded or adhered directly to the roof under the contact areas of the ballasted PV system.
- 7. Primers & adhesives for direct attached solar installations are to be compatible with GAF membrane.
- 8. All solar PV installations on an existing GAF roofing system should follow the 6-Step Solar Guarantee Issuance Process.
- 9. Consult GAF Guarantee Services for solar installations on roofing systems beyond what is mentioned here.

#### Note:

Building-integrated photovoltaics (BIPV) systems are typically mounted directly to a low-slope roofing membrane. Membrane surface temperatures can be as high as 190°F in close proximity to solar panels mounted directly to a reflective (white) roofing membrane. Standard TPO formulations may fail in accelerated heat-aging studies in as little as 40 days under these conditions. Without enhanced UV and heat-protection packages, thermoplastic membranes may be subject to premature failures.

<sup>\*\*</sup> GAF's guarantee does not cover damage resulting from any third-party products or systems which are attached to GAF's EverGuard® TPO or Extreme<sup>™</sup> TPO. See guarantee for complete coverage and restriction.