## **GreenCircle Certified, LLC**

certifies that an independent, third-party evaluation has been conducted for:



## **GAF**

Cedar City, UT; Gainesville, TX; New Columbia, PA; & Statesboro, GA

## EnergyGuard™ Polyiso Insulation

This product meets all the necessary qualifications to be certified for the following claims:

	2020	2024	% Reduction
Global Warming Potential (kg CO₂ eq per 1 m²)	2.11	1.85	12%
Ozone Depletion Potential (kg CFC-11 eq per 1 m²)	1.51 x 10 <sup>-7</sup>	4.68 x 10 <sup>-8</sup>	69%
Eutrophication Potential (kg N eq per 1 m²)	3.70 x 10 <sup>-3</sup>	4.21 x 10 <sup>-4</sup>	88%
Smog Formation Potential (kg O <sub>3</sub> eq per 1 m²)	1.09 x 10 <sup>-1</sup>	7.97 x 10 <sup>-2</sup>	26%
Fossil Fuel Depletion (MJ-surplus per 1 m²	6.22	6.15	1%

GAF's Life Cycle Assessment (LCA) Optimized Certification was completed on February 1, 2025. The LCA Optimized Certification analysis compared an industry-wide Environmental Product Declaration (EPD) completed in 2020 by Long Trail Sustainability to GAF's LCA for their EnergyGuard™ Polyiso Insulation completed by Sustainable Solutions Corporation in 2024.

The 2020 EPD and the 2024 LCA were prepared utilizing Product Category Rules for Building-Related Products and Services Part A: Life Cycle Assessment Calculation Rules and Report Requirements (UL 10010, Version 3.2), and Product Category Rule (PCR) Guidance for Building-Related Products and Services Part B: Building Thermal Insulation EPD Requirements (UL10010-1, Version 2.0), and ISO 21930: 2017, and UL Part B v2.0: Building Envelope Thermal Insulation EPD Requirements, respectively. The 2020 EPD and the 2024 LCA are both cradle to grave. Both the 2020 and 2024 EPD's Program Operators were NSF International.

The 2020 EPD and 2024 LCA were prepared using SimaPro (Version 9.0.0.35) and LCA for Experts v. 10.6, respectively. The impact categories listed above, and subsequent optimization information comes from life cycle product stages A1 through A3 using the TRACI 2.1 methodology for both the 2020 and 2024 LCA.

The analysis of the LCAs and documentation of material and operational changes to optimize the product stage (A1-A3) were third-party certified by GreenCircle. GreenCircle verified that the LCAs were conducted per applicable standards (ISO 14040/14044, ISO 21930), and that proper documentation and evidence was provided by GAF to verify the product optimization compared to 2020 EPD.

Certification Number: 24-5827

Certification Period: February 1, 2025 - January 31, 2028

Compliant with GreenCircle Product Optimization: Carbon Footprint Reduction Certification Standard Audit Plan 7.2024, GreenCircle Certification Scheme 3.2024

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PRODUCT CERTIFICATION
BODY