

# GAF Elastuff® 103

Polyurethane Roof Coating



## Description:

Elastuff® 103 Top Coat Roof Coating is a UV-resistant, low VOC aliphatic polyurethane top coat. It is used in a system that consists of Elastuff® 101 base coat and Elastuff® 103 top coat. This combination provides an excellent balance of tensile strength, elongation and hardness, resulting in superior durability, dirt and mildew resistance, chemical resistance and weatherproofing. High abrasion and impact resistance also offer protection from maintenance traffic and severe weather conditions. Elastuff® 101 & Elastuff® 103 system is a permanently flexible “breathing” membrane, allowing moisture vapor to pass through the film while preventing

## Approved Substrates:

New and existing metal, structural concrete, TPO, PVC, EPDM, Hypalon®, SPF, and asphaltic roofs. New TPO and asphaltic roofs should be weathered for at least 30 days. Do NOT use on gravel-surfaced roofs or shingle roofs.

## Packaging Sizes:

- 5 gallon (19 L) kit
  - Part A: 5 gal. (18 L) pail
  - Part B: 1 qt. (0.75 L) unit
- 55 gallon (208 L) drum
  - Part A: 55 gal. (208 L) drum
  - Part B: 2 gal. (7.57 L) unit



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For additional information, contact GAF Design Services at 1-877-423-7663 or [designservices@gaf.com](mailto:designservices@gaf.com)

## Storage and Shelf Life:

**Product Storage Temperature:** 40°F – 90°F (4°C – 32°C) do not allow coating to freeze.

**Shelf Life:** 6 months from date of manufacture in unopened containers, if stored properly in a clean and well-ventilated area.

## Application Instructions:

**Substrate Preparation:** Roof must have positive drainage, and be clean and dry with no trapped moisture. Repair damaged membrane, flashings, and penetrations. Conduct test patches to verify adhesion of coating prior to start of work. Priming of substrate is recommended and may be required. See Liquid-Applied Roofing Manual at [gaf.com](http://gaf.com).

**Mixing:** Mix one quart (0.94 L) of Part B catalyst / booster unit per 5 gallons (19.1 L) of Part A, 2 gallons (7.6 L) of Part B catalyst / booster per 55 gallon (208 L) drum of Part A, for larger quantities. Mix uniformly for 5 minutes prior to use. Do NOT attempt to thin or self-tint.

**Application:** Apply by brush, roller, or airless sprayer. Do NOT apply more than 1.5 gallons per 100 ft<sup>2</sup> (6.1 L per 10 m<sup>2</sup>) per pass. Total coverage is dependent on the substrate. All surfaces must be uniformly coated and free from voids, pinholes, or blisters. Moisture curing in hot humid weather requires application of thinner coats. Drier weather may require misting of the membrane.

## Limitations and Precautions:

**Application Air Temperature:** min. 40°F (4°C). Do not heat containers.

**Application Surface Temperature:** 40°F (4°C) and rising. Care should be taken when coating surfaces above 120°F. Contact GAF Design Services if you have application questions. Do NOT apply if rain, dew, fog, heavy moisture, condensation, or freezing temperatures are in the 8-hour forecast to ensure proper cure. Cool temperatures/high humidity may slow curing.

## Safety and Handling:

For specific information regarding safe handling of this material, please refer to the Safety Data Sheet (SDS).

## Clean Up:

Use xylene or Naphtha to thoroughly flush equipment.

## Warranty:

Refer to applicable warranties and guarantees, available at [gaf.com](http://gaf.com), for complete coverage and restrictions.

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### Liquid Physical Properties

| Type          | ASTM Test Method | Test Values* |
|---------------|------------------|--------------|
| Volume Solids | ASTM D2697       | 58%          |
| Weight Solids | ASTM D1644       | 68%          |

### Cured Film Physical Properties

| Type                       | ASTM Test Method | Test Values* |
|----------------------------|------------------|--------------|
| Initial Percent Elongation | ASTM D2370       | 400%         |
| Initial Tensile Strength   | ASTM D2370       | 2500 psi     |

### Additional Physical Properties

| Type            | ASTM Test Method | Test Values*                                                           |
|-----------------|------------------|------------------------------------------------------------------------|
| VOC             | —                | <250 g/L                                                               |
| Hardness        | ASTM D2240       | 90 to 95 Shore A                                                       |
| Tear Strength   | ASTM D1004       | 285 lb. per inch                                                       |
| Dry Time        | ASTM D5895       | 8 – 12 hrs @ 16 wet mils with booster Dry Times at 70°F (21°C), 50% RH |
| Standard Colors | —                | White                                                                  |

### Additional Physical Properties for Combined Elastuff® 101 & Elastuff® 103 System

| Type                                           | ASTM Test Method                  | Test Values*                                                                                                                                                                                                                                                         |
|------------------------------------------------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Abrasion Resistance                            | ASTM D4060                        | Less than 35 milligrams weight loss using CS-17 abrasive wheels and 1000 gram weights after 1000 cycles on Taber Abraser                                                                                                                                             |
| High Temperature Stability                     | ASTM D794                         | Tested in thermostatically controlled heat chamber. Will not age harden or slump at temperatures up to 200°F (93°C)                                                                                                                                                  |
| Low Temperature Flexibility                    | Federal Test Method No. 141a-6221 | Passes 180 degree flex over 1/8" (3 mm) mandrel at -7°F (-22°C)                                                                                                                                                                                                      |
| Low Temperature Impact Resistance              | —                                 | No surface cracks or breaks when impacted with 4.6 oz (130 gram), 1 ¼" (3.18 cm) steel ball dropped from a height of 5' (1.5 m) at -12°F (-25°C)                                                                                                                     |
| Service Temperature Limits (Installed Coating) | —                                 | -30°F – 200°F (-34°C – 93°C)                                                                                                                                                                                                                                         |
| Ponded Water Adhesion                          | —                                 | 5" (12.7 cm) column of water over polyurethane foam coated with the Elastuff® 101 & Elastuff® 103 system. No significant loss of adhesion after 30 days of continuous testing. No blistering or other deleterious effects. No migration of water into the substrate. |

### Approvals



**CRRC (Cool Roof Rating Council)**  
coolroofs.org

| Product ID                 | Type    | Solar Reflectance | Thermal Emittance | Solar Reflectance Index (SRI) |
|----------------------------|---------|-------------------|-------------------|-------------------------------|
| Smooth White<br>0676-0110a | Initial | 0.85              | 0.91              | 108                           |
|                            | Aged    | 0.72              | 0.90              | 89                            |



**UL Listed**  
ANSI/UL 790 Class A. Refer to UL Product iQ for actual assemblies.



**Title 24**  
Can be used to comply with Title 24, Part 6, Cool Roof Requirements of the California Code of Regulations.

\* Values are approximate and subject to normal manufacturing variations. These values are not guaranteed and are provided solely as a guide

