



# Certificate of Compliance

This certificate is issued for the following:

924 Eterna-Sil Premium Silicone Roof Coating, 996 Eterna-Sil Premium Asphalt Bleed Blocker and 9900 Eterna Sil TPO Primer (Maintenance Coatings)

**Prepared for:**

Tropical Roofing Products  
1818 SW 31 Ave  
Hallandale FL 33009  
United States

FM Approvals Class: 4470

Approval Identification: PR444052 Approval Granted: 8/9/19

To verify the availability of the Approved product, please refer to [www.roofnav.com](http://www.roofnav.com)

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in RoofNav, an online resource of FM Approvals.

A handwritten signature in black ink that reads 'Phillip J. Smith'.

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Phillip J. Smith  
VP - Manager of Materials  
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# APPROVAL REPORT

**Project No:** PR444052  
**Class:** 4470  
**Product Name:** 924 Eterna-Sil Premium Silicone Roof Coating, 996 Eterna-Sil Premium Asphalt Bleed Blocker and 9900 Eterna Sil TPO Primer  
**Name of Listing Company:** Tropical Roofing Products  
**Address of Listing Company:** 1818 SW 31 Ave  
Hallandale FL 33009  
United States  
**Customer ID:** 242834-1  
**Customer website:** [www.tropicalroofingproducts.com](http://www.tropicalroofingproducts.com)

**Prepared by**



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Christian Lopez  
Engineer

**Reviewed by**



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Joanna Blaney  
AVP, Technical Team Manager, Materials



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Phillip J. Smith  
VP, Manager of Materials

**8/9/19**

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**Date of Approval**

## 1 INTRODUCTION

**1.1** Tropical Roofing Products requested Approval of their 924 Eterna-Sil Premium Silicone Roof Coating, 996 Eterna-Sil Premium Asphalt Bleed Blocker and 9900 Eterna Sil TPO Primer to determine if they meet the Approval requirements of the standard listed in Section 1.3.

**1.2** This report may be freely reproduced only in its entirety and without modification.

### 1.3 Standard

Title	Number	Issue Date
Single-Ply, Polymer-Modified Bitumen Sheet, Built-Up Roof (BUR) and Liquid Applied Roof Assemblies for use in Class 1 and Noncombustible Roof Deck Construction	4470	12/2016

### 1.4 Listing

The products and assemblies will be listed in RoofNav, an on-line resource of FM Approvals. Formulations, drawings and specifications are on file at FM Approvals.

## 2 DESCRIPTION

The 924 Eterna-Sil Premium Silicone Roof Coating, 996 Eterna-Sil Premium Asphalt Bleed Blocker and 9900 Eterna Sil TPO Primer are described as follows:

### 2.1 Maintenance Coating

Trade Name	924 Eterna-Sil Premium Silicone Roof Coating
Material	Silicone
Substrates Used With	Standing Seam Roof BUR (Built Up Roofs) Mod Bit (APP & SBS) TPO
Comments	Coating is applied by brush, roller or spray  Coat: 924 Eterna-Sil Premium Silicone Roof Coating at a rate of 2.5 gal/sq (1.02 L/m <sup>2</sup> ) Substrate: Existing FM Approved Non-Insulated Standing Seam Roof ASTM E108 Rating: Meets rating of existing roof up to a maximum of 5 in 12  Top Coat: 924 Eterna-Sil Premium Silicone Roof Coating at a rate of 2.5 gal/sq (1.02 L/m <sup>2</sup> ) Base Coat: 996 Eterna-Sil Premium Asphalt Bleed Blocker at a rate of 1.5 gal/sq (0.61 L/m <sup>2</sup> ) Substrate: Existing FM Approved Built-Up roof cover ASTM E108 rating: Meets rating of existing roof up to a maximum of 1 in 12

	<p>Top Coat: 924 Eterna-Sil Premium Silicone Roof Coating at a rate of 2.5 gal/sq (1.02 L/m<sup>2</sup>)</p> <p>Base Coat: 996 Eterna-Sil Premium Asphalt Bleed Blocker at a rate of 1.5 gal/sq (0.61 L/m<sup>2</sup>)</p> <p>Substrate: Existing FM Approved Mod Bit (APP &amp;SBS)</p> <p>ASTM E108 Rating: Meets rating of existing roof up to a maximum of 1 in 12 [SBS] and 2 in 12 [APP]</p> <p>Top Coat: 924 Eterna-Sil Premium Silicone Roof Coating at a rate of 2.5 gal/sq (1.02 L/m<sup>2</sup>)</p> <p>Base Coat: 9900 Eterna Sil TPO Primer at a rate of 0.125 gal/sq (0.051 L/M2)</p> <p>Substrate: Existing FM Approved TPO roof cover</p> <p>ASTM E108 Rating: Meets rating of existing roof up to a maximum of 2 in 12</p> <p>Application of coating will not increase the fire, wind, or hail resistance performance of the existing roof.</p>
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Trade Name	996 Eterna-Sil Premium Asphalt Bleed Blocker
Material	Acrylic
Substrates Used With	BUR (Built Up Roofs) Mod Bit (APP & SBS)
Comments	This is Approved as a base coat used in the maintenance coating system 924 Eterna-Sil Premium Silicone Roof Coating

Trade Name	9900 Eterna Sil TPO Primer
Material	Silicone
Substrates Used With	TPO
Comments	This is Approved as a base coat used in the maintenance coating system 924 Eterna-Sil Premium Silicone Roof Coating

- 2.2** All other products are as described in RoofNav. Formulations, drawings and specifications are on file at FM Approvals.

### 3 EXAMINATIONS AND TESTS

- 3.1** All components, except those in Section 2.1, were produced under the FM Approvals Surveillance Audit program as indicated by FM Approvals labels. All samples were considered to be representative of standard production and were examined and tested as indicated below. Components incorporated into test samples were selected by FM Approvals personnel. Test samples were prepared by, or under the supervision of, FM Approvals personnel. All data is on file at FM Approvals along with other documents and correspondence applicable to this program.
- 3.2** Several performance requirements and tests required by the Standard have been waived due to previous successful testing. See Table 1 below for details.

Table 1

FM Standard 4470 Performance Requirement	Original Project ID(s)
Combustibility From Above the Roof Deck	Required
Combustibility From Below the Roof Deck	Waived, Not Required <sup>1</sup>

Hail Damage Resistance Test	Waived, Not Required <sup>1</sup>
Water Leakage Resistance Test	Waived, Not Required <sup>1</sup>
Foot Traffic Resistance Test	Waived, Not Required <sup>1</sup>
Susceptibility to Heat Damage Test	Waived, Not Required <sup>1</sup>
Corrosion Resistance Test	Waived, Not Required <sup>1</sup>
Wind Uplift Resistance	Waived, Not Required <sup>1</sup>
Identification Testing	Waived, Not Required <sup>2</sup>

<sup>1</sup> These performance requirements are not required for maintenance coating Approval.

<sup>2</sup> Identification testing for liquids, is not being performed at this time.

### 3.3 ASTM E108 Spread of Flame test samples were constructed and tested with the following construction

#### Sample #1-2

- Top Coat: 924 Eterna-Sil Premium Silicone Roof Coating at a rate of 2.5 gal/sq (1.02 L/m<sup>2</sup>)
- Existing Roof:
  - 2500 Series Stand Seam, mechanically fastened, 0.049 in (1.24 mm) thickness
- Deck: Plywood

#### Sample #3-4

- Top Coat: 924 Eterna-Sil Premium Silicone Roof Coating at a rate of 2.5 gal/sq (1.02 L/m<sup>2</sup>)
- Base Coat: 996 Eterna-Sil Premium Asphalt Bleed Blocker at a rate of 1.5 gal/sq (0.61 L/m<sup>2</sup>)
- Existing Roof:
  - GAFglas Ply (4 plies), fully adhered with hot asphalt at 25 lbs/sq (1.2 kg/m<sup>2</sup>)
  - 1.5 in (38.1 mm) Energyguard RH (2 layers), mechanically fastened
- Deck: Plywood

#### Sample #5-6

- Top Coat: 924 Eterna-Sil Premium Silicone Roof Coating at a rate of 2.5 gal/sq (1.02 L/m<sup>2</sup>)
- Base Coat: 996 Eterna-Sil Premium Asphalt Bleed Blocker at a rate of 1.5 gal/sq (0.61 L/m<sup>2</sup>)
- Existing Roof:
  - Ruberoid Mop Smooth, 4 in (101.6 mm) side lap, fully adhered with hot asphalt at 25 lbs/sq (1.2 L/m<sup>2</sup>)
  - Ruberoid 20 Smooth, 4 in (101.6 mm) side lap, fully adhered with hot asphalt at 25 lbs/sq (1.2 L/m<sup>2</sup>)
  - GAFglas Ply 4, 1 ply. fully adhered with hot asphalt at 25 lbs/sq (1.2 L/m<sup>2</sup>)
  - DensDeck, 0.25 in (6.35 mm) thick, Olybond Classic at 0.75 in (19.1 mm) beads and 12 in (25 mm) o.c.
  - 1.5 in (38.1 mm) Energyguard RH polyiso insulation, mechanically fastened
- Deck: Plywood

#### Sample #7-8

- Top Coat: 924 Eterna-Sil Premium Silicone Roof Coating at a rate of 2.5 gal/sq (1.02 L/M<sup>2</sup>)

- Base Coat: 996 Eterna-Sil Premium Asphalt Bleed Blocker at a rate of 1.5 gal/sq (0.61 L/m<sup>2</sup>)
- Existing Roof:
  - Ruberoid Torch Smooth, 3 in (76.2 mm) lap, torched
  - Ruberoid Torch Smooth, 3 in (76.2 mm) lap, torched
  - Ruberoid Torch Smooth, 3 in (76.2 mm) lap, torched
  - DensDeck Prime, 0.25 in (6.35 mm) thick, mechanically fastened
  - 1.5 in (38.1 mm) Energyguard RH polyiso insulation
- Deck: Plywood

**Sample #9-10**

- Top Coat: 924 Eterna-Sil Premium Silicone Roof Coating at a rate of 2.5 gal/sq (1.02 L/M<sup>2</sup>)
- Base Coat: 9900 TPO Primer at a rate of 0.125 gal/sq (0.051 L/M<sup>2</sup>)
- Existing Roof:
  - Everguard TPO FB Ultra, 3 in (76.2 mm) wide lap with a 1.5 in (38.1 mm) wide heat weld
  - LRF Adhesive 1 in (25.4 mm) wide ribbons spaced 4 in (101.6 mm) o.c.
  - DensDeck Prime, 0.25 in (6.35 mm) thick, mechanically fastened
  - 1.5 in (38.1 mm) Energyguard RH polyiso insulation
- Deck: Plywood

**Results:**

Sample Number	Slope	Maximum Flame Spread	Class Passed
1	5 in 12	58 in (1.47 m)	A
2	5 in 12	48 in (1.22 m)	A
3	1 in 12	34 in (0.86 m)	A
4	1 in 12	29 in (0.74 m)	A
5	1 in 12	27 in (0.69 m)	A
6	1 in 12	21 in (0.53 m)	A
7	2 in 12	34 in (0.86 m)	A
8	2 in 12	36 in (0.91 m)	A
9	2 in 12	43 in (1.09 m)	A
10	2 in 12	45 in (1.14 m)	A

**4 MARKING**

- 4.1** The manufacturer shall mark each product and/or packaging with the manufacturer's name and product trade name. In addition, product and/or packaging must be marked with the Approval Mark of FM Approvals.
- 4.2** Markings denoting Approval by FM Approvals shall be applied by the manufacturer only within and on the premises of manufacturing locations that are under the FM Approvals Surveillance Audit program.
- 4.3** The manufacturer agrees that use of the FM Approvals name or Approval Mark is subject to the conditions and limitations of the Approval by FM Approvals. Such conditions and limitations must be included in all references to Approval by FM Approvals.

**5 REMARKS**

- 5.1 The securement of the roof system must be enhanced at the building corners and perimeter as outlined in FM Global Property Loss Prevention Data Sheet 1-29.
- 5.2 The roof cover must be installed using a roof perimeter flashing system Approved by FM Approvals. See RoofNav.

## 6 SURVEILLANCE AUDIT

The manufacturing facility at the following location shall be visited on a routine basis. The facility processes and quality control procedures in place have been determined to be satisfactory to manufacture products identical to that tested and Approved. An FM Approved Products/Specification-Tested Revision Request Form shall be submitted to FM Approvals for requesting to manufacture products at any additional or alternate manufacturing facilities which are not listed below.

### Audit Location

1904 SW 31<sup>st</sup> Ave  
Hallandale FL 33009  
United States

## 7 MANUFACTURER'S RESPONSIBILITIES

- 7.1 The manufacturer shall notify FM Approvals of any planned change in the Approved products, prior to general sale or distribution, using the FM Approved Products/Specification-Tested Revision Request Form. No changes of any nature shall be made unless notice of the proposed change has been given and written authorization obtained from FM Approvals.
- 7.2 To ensure compliance with his procedures in the field, the manufacturer shall supply to the installer such necessary instruction or assistance required to produce the desired performance achieved in the tests.
- 7.3 In accordance with the Master Agreement, the manufacturer shall make full and immediate disclosure to FM Approvals of all information concerning any defect in, or potential hazard of, the product or service manufactured or provided by the Customer which is Approved by, or being examined by, FM Approvals. The manufacturer shall make all necessary arrangements for the investigation of complaints / anomalies applicable to this approval and shall keep records of all complaints / anomalies including actions taken.

## 8 DOCUMENTATION

The following document describes the 924 Eterna-Sil Premium Silicone Roof Coating, 996 Eterna-Sil Premium Asphalt Bleed Blocker and 9900 Eterna Sil TPO Primer is on file at FM Approvals.

Document Title	Issue Date
Surveillance Audit Manual	07/2019

## **9 CONCLUSIONS**

- 9.1** Test results from this program indicate that the submitted products as evaluated, meet the requirements of the FM Approvals Standard listed in section 1.3 when installed as outlined in Section 2.
- 9.2** Tests show that the tested roof constructions in and of themselves would not create a need for automatic sprinklers.
- 9.3** Since a duly signed Master Agreement is on file for this customer, Approval is effective as of the date of this report.
- 9.4** Continued Approval will depend upon satisfactory field experience and periodic Facilities and Procedures Audits.

**PROJECT DATA RECORD:** PR444052

**ORIGINAL TEST DATA:** None