

### **ESR-4736**

Reissued December 2023 This report also contains:

- CBC Supplement

Subject to renewal December 2025 - FBC Supplement

- LABC Supplement

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DIVISION: 07 00 00— THERMAL AND MOISTURE PROTECTION

Section: 07 18 13—

Pedestrian Traffic Coatings

REPORT HOLDER: POLYCOAT PRODUCTS

**ADDITIONAL LISTEE:** 

POLY-TUFF SYSTEMS INTERNATIONAL

**EVALUATION SUBJECT:** 

POLY-I-GARD™ 575FR VEHICULAR TRAFFIC DECK SYSTEM



# 1.0 EVALUATION SCOPE

## Compliance with the following codes:

- 2021 and 2018 International Building Code® (IBC)
- 2021 and 2018 International Residential Code® (IRC)

For evaluation for compliance with codes adopted by Los Angeles Department of Building and Safety (LADBS), see ESR-4736 LABC and LARC Supplement.

#### Properties evaluated:

- Durability
- Wind resistance
- Fire classification

### **2.0 USES**

Poly-I-Gard<sup>™</sup> 575FR Vehicular Traffic Deck System (Poly-I-Gard<sup>™</sup> 575FR) (Poly-Tuff Systems International FLEXIDECK<sup>®</sup> B-306 – see <u>Table 1</u> for the corresponding system component names) is a walking deck and roof covering system for use directly over a concrete deck. The systems have a Class A roof classification when installed in accordance with Section 4.6.

## 3.0 DESCRIPTION

# 3.1 General:

**Poly-I-Gard™ 575FR:** Poly-I-Gard™ 575FR is a fast setting, rapid curing, 100% solids, polyurethane/polyurea, liquid-applied, chemically-cured waterproofing coating system. Poly-I-Gard™ 575FR consists of a primer (Section 3.2.2), base coat (Section 3.2.3) and Poly-I-Gard™ 295P top coat (Section 3.2.4) and sand (Section 3.2.5) applied over a concrete deck.

## 3.2 Materials:

- **3.2.1 Concrete Substrate:** The concrete substrate must comply with the applicable requirements of the applicable code and must have a minimum compressive strength of 2500 psi (17.2 MPa) after a minimum 28-day cure time.
- **3.2.2 Primers:** The primer used with the system consist of one of the following:



- **3.2.2.1 Polyprime**<sup>®</sup> **21:** Polyprime<sup>®</sup> **21** is a two-component, high solids, liquid-applied, epoxy-polyamine primer and is packaged in 3.5- and 5-gallon (13.25 and 18.9 liter) kits.
- **3.2.2.2 Polyprime® 2180SC:** Polyprime® 2180SC is a two-component, liquid-applied, epoxy-polyamine primer and is packaged in 3.5- and 5-gallon (13.25 and 18.9 liter) kits.
- 3.2.3 Base Coats: The base coat used with the system consist of one of the following:
- **3.2.3.1 PC-260 Base Coat:** PC-260 is a two-component, fast setting, fast curing, solvent free, high solids polyurethane elastomeric coating and is packaged in 1- and 5-gallon (3.79 and 18.9 liter) kits.
- **3.2.3.2 PC-280 Base Coat:** PC-280 is a two-component, fast setting, fast curing, solvent free, high solids polyurethane elastomeric coating and is packaged in 1- and 5-gallon (3.79 and 18.9 liter) kits.
- **3.2.4** Poly-I-Gard™ **295P** Top Coat: Poly-I-Gard™ 295P is a two-component, fast setting, rapid curing, solvent free, high solids, hybrid aliphatic polyurea elastomeric membrane and is packaged in 4.4-gallon (16.7 liter) kits.
- **3.2.5** Sand: Sand must be washed, dry, rounded sand with a 2-16 or 16-30 mesh (1.19 mm) and 6.5+ Mohs minimum hardness.

Primers, base and topcoats have a shelf life of 1 year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

# 4.0 INSTALLATION

# 4.1 General:

Installation of the Poly-I-Gard<sup>™</sup> 575FR system must be in accordance with the manufacturer's published installation instructions, the applicable code and this report. The manufacturer's installation instructions must be available on the jobsite during application. The system must be installed only when the ambient temperature is 50°F (10°C) and at least 5°F (3°C) above the dew point or higher and the weather is dry. The minimum total thickness of the finished membrane system is 56 mils [0.056 inch (1.42 mm)].

# 4.2 Preparation of Substrate:

The concrete substrate must be structurally sound, clean, dry and free of oil, grease, paint and dust. The substrate must be sloped for proper drainage, with a minimum slope of 1/4 unit vertical in 12 units horizontal (2% slope).

## 4.3 Primer:

The primer coat consists of mixing the two components at a volume mixing ratio at 2 parts Side-A Blue Liquid to 1 part Side-B Yellow Liquid, (2A:1B) for Polyprime 21 and 1 part Side-A Blue Liquid to 1 part Side-B Yellow Liquid, (1A:1B) for Polyprime 2180, in accordance with the manufacturer's published installation instructions.

The approximate coverage is 1 gallon/300 ft<sup>2</sup> (0.14 l/sqm) and is applied using an airless sprayer, brush, or phenolic resin core roller. The approximate tack free time is 4 to 6 hours at 75°F (24°C) and 50% relative humidity.

Surface temperature should be greater than 50°F (10°C) and at least 5°F (3°C) above the dew point at the time of application.

#### 4.4 Base Coat:

The base coat consists of mixing the two components at a volume mixing ratio of 4 parts Side-A to 1 part Side-B (4A:1B) for both PC-260 and PC-280, in accordance with the manufacturer's published installation instructions.

The approximate coverage is 1.5 gallon/100 ft<sup>2</sup> (0.61 l/sqm) for PC-260 and PC-280. The approximate cure time is 2 to 4 hours at 75°F (24°C) and 50% relative humidity.

Surface temperature should be greater than 50°F (10°C) and at least 5°F (3°C) above the dew point.

#### 4.5 Top Coat:

The top coat consists of 10 parts of Poly-I-Gard™ 295 Side-A that is pre-mixed using a mechanical mixer at slow speed and then 1 part of Poly-I-Gard™ 295 Side-B is then added and mixed in accordance with the manufacturer's published installation instructions.

The Poly-I-Gard™ 295 coating must be applied evenly, over the entire deck using a 10:1 ratio machine or mixed material. The top coat consists of two coats. The first coat is applied at a rate of up to 1.2 gallons/100 ft² (0.49 l/sqm) in a single application. The coating is then smoothed using a squeegee or notched trowel over the entire deck and immediately broadcast with the sand described in Section 3.1.5.

The second coat must be applied at a rate of 1.0 gallons/100 ft<sup>2</sup> (0.41 l/sqm) in a single application within 8-12 hours after the application of the first coat. The coating is then smoothed using a squeegee or notched trowel over the entire deck and immediately broadcast with the sand described in Section 3.1.5. If more than 24 hours passes between coats, re-prime the surface in accordance with the manufacturer's published installation instructions before application of the second coat.

Each layer of the coating must be allowed to cure for a minimum of 2-4 hours at 75°F (24°C) and 50% relative humidity.

Allow a minimum of 2 to 4 hours before permitting light pedestrian traffic and 48 hours before permitting heavy pedestrian or vehicular traffic on the finished surface.

## 4.6 Fire Classification:

The Poly-I-Gard<sup>™</sup> 575FR system has a Class A roof classification when applied over a concrete deck and installed in accordance with Section 4.0 at a maximum roof slope of <sup>1</sup>/<sub>4</sub> unit vertical in 12 units horizontal (2% slope).

# 4.7 Wind Resistance:

- **4.7.1 IBC:** Installation must be limited to buildings with a maximum height of 40 feet (12.2 m) above grade, in Exposure B areas, with a basic wind speed (V) of 130 miles per hour (209 km/h). The concrete deck must be adequate to resist the required wind load.
- **4.7.2 IRC:** Installation must be limited to buildings with a maximum height of 40 feet (12.2 m) above grade, in Exposure B areas, with an ultimate design wind speed (V<sub>ult</sub>) of 130 miles per hour (209 km/h). The concrete deck must be adequate to resist the required wind load.

## 5.0 CONDITIONS OF USE:

The Poly-I-Gard™ 575FR system described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 The Poly-I-Gard™ 575FR system must be installed in accordance with this report, the applicable code and the manufacturer's published installation instructions, by applicators trained by Polycoat Products. If there is a conflict between the manufacturer's published installation instructions and this report, this report governs.
- **5.2** The concrete deck on which the Poly-I-Gard<sup>™</sup> 575FR system is installed must be adequate to resist the design wind pressures of the applicable code.
- **5.3** The use of the Poly-I-Gard™ 575FR system is not recognized on decks adjacent to swimming pools or spas or in areas subject to related chemical exposure.
- **5.4** The products are manufactured at the Polycoat Products facility in Santa Fe Springs, California, under a quality control program with inspections by ICC-ES.

# **6.0 EVIDENCE SUBMITTED**

Data in accordance with the Acceptance Criteria for Walking Decks (AC39), dated June 2017 (editorially revised November 2020).

# 7.0 IDENTIFICATION

- **7.1** Each container or package of material is labeled with the name and address of Polycoat Products or Poly-Tuff Systems International, the product designation, the lot or batch number and the evaluation report number (ESR-4736).
- 7.2 The report holder's contact information is the following:

POLYCOAT PRODUCTS
14772 SPRING AVE
SANTA FE SPRINGS, CALIFORNIA 90670
(562) 802-8834
http://www.polycoatusa.com

7.3 The Additional Listee's contact information is the following:

POLY-TUFF SYSTEMS INTERNATIONAL 8550 WEST DESERT INN ROAD SUITE #102-451 LAS VEGAS, NEVADA 89117 (866) 977-8833 sales@polytuffus.com

# TABLE 1 - SYSTEM COMPONENT DESIGNATIONS

POLY-I-GARD™ 575FR SYSTEM	FLEXIDECK® B-306
Polyprime® 21 Primer	Enviro-Grip EP#1 Primer
Polyprime® 2180SC Primer	Enviro-Grip EP#2SC Primer
PC-260 Base Coat	B-Tuff 306
PC-280 Base Coat	N/A
Poly-I-Gard™ 295P Top Coat	Topshield 5600



# **ESR-4736 LABC and LARC Supplement**

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**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION** 

Section: 07 18 13—Pedestrian Traffic Coatings

REPORT HOLDER:

**POLYCOAT PRODUCTS** 

**EVALUATION SUBJECT:** 

POLY-I-GARD™ 575FR VEHICULAR TRAFFIC DECK SYSTEM

#### 1.0 REPORT PURPOSE AND SCOPE

#### **Purpose:**

The purpose of this evaluation report supplement is to indicate that Poly-I-Gard™ 575FR Vehicular Traffic Deck System, described in ICC-ES evaluation report ESR-4736, has also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

## Applicable code editions:

- 2020 City of Los Angeles Building Code (LABC)
- 2020 City of Los Angeles Residential Code (LARC)

# 2.0 CONCLUSIONS

The Poly-I-Gard™ 575FR Vehicular Traffic Deck System, described in Sections 2.0 through 7.0 of the evaluation report ESR-4736, complies with the LABC and the LARC, and is subject to the conditions of use described in this supplement.

# 3.0 CONDITIONS OF USE

The Poly-I-Gard™ 575FR Vehicular Traffic Deck System described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report ESR-4736.
- The design, installation, conditions of use and identification of the Poly-I-Gard™ 575FR Vehicular Traffic Deck System are
  in accordance with the 2018 International Building Code® (IBC) provisions or the 2018 International Residential Code® (IRC)
  provisions, as applicable, noted in the evaluation report ESR-4736.
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 15, 16 and 17 or LARC Chapter 9, as applicable.
- Under the LARC, an engineered design in accordance with LARC Section R301.1.3 must be submitted.
- The installation of Poly-I-Gard™ 575FR Vehicular Traffic Deck System must comply with the City of Los Angeles Information Bulletin P/BC 2020-16, "Dwellings in High Wind Velocity Areas (HWA)."

This supplement expires concurrently with the evaluation report, reissued December 2023.





# **ESR-4736 CBC and CRC Supplement**

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A Subsidiary of the International Code Council®

**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION** 

Section: 07 18 13—Pedestrian Traffic Coatings

**REPORT HOLDER:** 

**POLYCOAT PRODUCTS** 

**EVALUATION SUBJECT:** 

POLY-I-GARD™ 575FR VEHICULAR TRAFFIC DECK SYSTEM

#### 1.0 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that Poly-I-Gard™ 575FR Vehicular Traffic Deck System, described in ICC-ES evaluation report ESR-4736, has also been evaluated for compliance with the codes noted below.

# Applicable code editions:

■ 2019 California Building Code (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

■ 2019 California Residential Code (CRC)

# 2.0 CONCLUSIONS

# 2.1 CBC:

The Poly-I-Gard™ 575FR Vehicular Traffic Deck System, described in Sections 2.0 through 7.0 of the evaluation report ESR-4736, complies with CBC Chapter 15, provided the design and installation are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 15, 16 and 17, as applicable.

# 2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

## 2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

### 2.2 CRC:

The Poly-I-Gard™ 575FR Vehicular Traffic Deck System, described in Sections 2.0 through 7.0 of the evaluation report ESR-4736, complies with CRC Chapter 9, provided the design and installation are in accordance with the 2018 *International Residential Code*® (IRC) provisions noted in the evaluation report and the additional requirements of CRC Chapter 9, as applicable.

This supplement expires concurrently with the evaluation report, reissued December 2023.





# **ESR-4736 FBC Supplement**

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**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION** 

Section: 07 18 13—Pedestrian Traffic Coatings

**REPORT HOLDER:** 

**POLYCOAT PRODUCTS** 

**EVALUATION SUBJECT:** 

POLY-I-GARD™ 575FR VEHICULAR TRAFFIC DECK SYSTEM

#### 1.0 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that Poly-I-Gard™ 575FR Vehicular Traffic Deck System (Poly-I-Gard™ 575FR) (Poly-Tuff Systems International FLEXIDECK® B-306), described in ICC-ES evaluation report ESR-4736, has also been evaluated for compliance with the codes noted below.

### Applicable code editions:

- 2020 Florida Building Code—Building
- 2020 Florida Building Code—Residential

### 2.0 CONCLUSIONS

The Poly-I-Gard™ 575FR Vehicular Traffic Deck System, described in Sections 2.0 through 7.0 of ICC-ES evaluation report ESR-4736, complies with the 2020 Florida Building Code—Building and 2020 Florida Building Code—Residential. The design requirements shall be determined in accordance with the Florida Building Code—Building or the Florida Building Code—Residential, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-4736 for the 2018 International Building Code® meet the requirements of the Florida Building Code—Building or the Florida Building Code—Residential.

Use of the Poly-I-Gard™ 575FR Vehicular Traffic Deck System for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* or the *Florida Building Code—Residential* has not been evaluated and is outside the scope of this supplemental report.

For products falling under Florida Rule 61G20-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

This supplement expires concurrently with the evaluation report, reissued December 2023.

