



# ICC-ES Evaluation Report

Reissued February 2022

## ESR-1284

This report is subject to renewal February 2023.

**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION**  
**Section: 07 18 13—Pedestrian Traffic Coatings**

**REPORT HOLDER:**

**FIRESTONE BUILDING PRODUCTS COMPANY, LLC**

**EVALUATION SUBJECT:**

**GACOFLEX URETHANE RUBBER WALKING DECK AND ROOF COVERING**

**1.0 EVALUATION SCOPE**

**Compliance with the following codes:**

- 2018, 2015, 2012 and 2009 *International Building Code*® (IBC)
- 2018, 2015, 2012 and 2009 *International Residential Code*® (IRC)

For evaluation for compliance with codes adopted by Los Angeles Department of Building and Safety (LADBS), see [ESR-1284 LABC and LARC Supplement](#).

**Properties evaluated:**

- Roof covering
- Roof classification
- Durability
- Physical properties
- Wind resistance

**2.0 USES**

Gacoflex Urethane Rubber Walking Deck and Roof Covering is intended for use as a walking deck and classified roof covering applied over plywood or concrete decks.

**3.0 DESCRIPTION**

**3.1 General:**

The Gacoflex urethane rubber system is an elastomeric walking deck and roof covering system consisting of three layers of urethane rubber and granules, applied over plywood or concrete decks. When installed in accordance with this report, the system has a Class C roof classification over plywood decks, and a Class A roof classification over concrete decks.

**3.2 Materials:**

**3.2.1 Substrates:**

**3.2.1.1 Plywood:** Plywood substrates must be exterior-grade, 5/8-inch-thick (15.9 mm) plywood complying with PS-1-09. Plywood must be installed in accordance with the applicable code, with all edges blocked.

**3.2.1.2 Concrete:** Concrete decks must comply with the applicable code.

**3.2.2 Gacoflex UB-64:** UB-64 is a two-part liquid urethane used in the base and trowel coats of the Gacoflex walking deck system. Parts A and B must be mixed separately, then combined in equal volumes and mixed thoroughly. The mixture must be applied by spray, brush or roller, and has a pot life of approximately one hour at 70°F (21.1°C). The components are available in 1- and 5-gallon (3.785 and 18.9 L) pails, and have a shelf life of one year when stored at temperatures between 50°F (10°C) and 80°F (26.7°C).

**3.2.3 Granules:** Granules are crushed walnut shells 18-40 or 30-60 mesh, and are used in the trowel coat of the walking deck system.

**3.2.4 Gacoflex U-66:** U-66 is a two-part liquid urethane used in the top coat of the walking deck system. Parts A and B must be mixed separately, then combined in equal volumes and mixed thoroughly. The mixture must be applied by spray, brush or roller, and has a pot life of approximately one hour at 78°F (25.5°C). The components are available in 1- and 5-gallon (3.785 and 18.9 L) pails, and have a shelf life of one year when stored at temperatures between 50°F (10°C) and 80°F (26.7°C).

**3.2.5 Gacoflex U-5677 Sealer:** U-5677 sealer must be used as a seal coat for concrete decks. The product is available in 1- and 5-gallon (3.785 and 18.9 L) pails, and has a shelf life of one year when stored at temperatures between 50°F (10°C) and 80°F (26.7°C).

**3.2.6 Gacoflex E-5320 Primer:** E-5320 primer must be used as a primer for concrete decks. The product is available in 1- and 5-gallon (3.785 and 18.9 L) pails, and has a shelf life of one year when stored at temperatures between 50°F (10°C) and 80°F (26.7°C).

**3.2.7 Gacoflex 66B Tape:** 66B tape is a 4-inch-wide (102 mm) woven polyester tape used to cover joints in plywood decks.

## 4.0 INSTALLATION

### 4.1 General:

The walking deck material must be applied when the weather is dry and the ambient temperature is not less than 40°F (4.4°C) and not more than 100°F (37.7°C).

### 4.2 Preparation of Substrates:

**4.2.1 Plywood:** Plywood substrates must be structurally sound, clean and dry, and free of oil, grease, paint and dust. The plywood substrate must be supported by framing with a maximum spacing of 16 inches (406 mm) on center. The substrate must be sloped for proper drainage, with minimum and maximum slopes of 1/4:12 and 1/2:12 (2 and 4.2 percent slope), respectively. All plywood joints must be blocked with minimum nominal 2-by-4 supports. Plywood joints and planar depressions must be filled with UB-64 urethane. A minimum 5-inch-wide (127 mm) swath of UB-64 urethane must be applied over the joint, and 66B tape must be laid into the coating. A second coat of UB-64 must then be applied over the tape, so that the tape is completely covered. The materials must be allowed to dry a minimum of 1 1/2 hours before application of the base coat.

**4.2.2 Concrete:** Concrete substrates must be structurally sound, clean, and dry, and free of oil, grease, paint and dust. The substrate must be sloped for proper drainage, with minimum and maximum slopes of 1/4:12 and 1:12 (2 and 8.3 percent slope), respectively. U-5677 sealer must be applied over the concrete at a coverage rate of 1/3 gallon per 100 square feet (0.137 L/m<sup>2</sup>), and must be allowed to dry for a minimum of 1 hour. E-5320 primer must be applied over the dried sealer coat at a coverage rate of 1/2 gallon per 100 square feet (0.206 L/m<sup>2</sup>), and must be allowed to dry for a minimum of 24 hours before application of the base coat. All joints, cracks and changes of plane must be treated as described for plywood joints in Section 4.2.1 of this report.

### 4.3 Base Coat:

The UB-64 mixture must be applied to the substrate at a coverage rate of 1 1/2 gallons per 100 square feet (0.617 L/m<sup>2</sup>), resulting in a dry-film thickness of approximately 18 mils (0.46 mm). The coating must be allowed to dry a minimum of eight hours at 70°F (21.1°C) prior to application of the trowel coat.

### 4.4 Trowel Coat:

Two gallons (7.6 L) of UB-64 mixture must be mixed with 1 1/4 gallons (4.73 L) of granules. The resulting mixture must be applied to the base coat, with a trowel or roller, at a coverage rate of 1 1/2 gallons per 100 square feet (0.617 L/m<sup>2</sup>), resulting in a dry-film thickness of approximately 27 mils (0.69 mm), including granules. The coating must be allowed to dry a minimum of 8 hours at 70°F (21.1°C) prior to application of the finish coat.

### 4.5 Finish Coat:

The U-66 mixture must be applied over the trowel coat at a coverage rate of 1/2 gallon per 100 square feet (0.206 L/m<sup>2</sup>), resulting in a dry-film thickness of approximately 6 mils (0.15 mm). The coating must be allowed to dry a minimum of 24 hours. The total system thickness is approximately 51 mils (1.30 mm).

**4.6 Method of Repair:** All loose coating must be removed from the damaged area, cutting back to a firm, secured membrane or substrate. The area must be cleaned

thoroughly. Concrete substrates shall be primed with Gacoflex E-5320 primer, applied at a rate of 1/2 gallon per 100 square feet (0.205 L/m<sup>2</sup>). The primer must be extended several inches onto the existing membrane, and must be allowed to dry a minimum of 24 hours prior to application of subsequent coats. When the substrate has dried, Gacoflex U-66 urethane must be applied at a rate of 1 gallon per 100 square feet (0.411 L/m<sup>2</sup>), extending the coating onto the edge of the existing membrane and feathering it out so as not to leave an abrupt edge. When cured, a second coat of Gacoflex U-66 urethane must be applied at a rate of 1 gallon per 100 square feet (0.411 L/m<sup>2</sup>). Granules are distributed into the wet coating, to a uniformly covered surface. When the texture coat has cured, loose granules shall be swept from the area and two coats of Gacoflex U-66 urethane must be applied, each at a rate of 1 gallon per 100 square feet (0.411 L/m<sup>2</sup>). A minimum curing time of 48 hours must be required for the final coat. If substrate damage occurs, the retention of the fire-resistive and strength properties of the system must be investigated.

### 4.7 Wind Resistance:

The roof deck and framing over which the system is installed must be designed to resist the minimum design wind pressure requirements in accordance with the applicable code.

## 5.0 CONDITIONS OF USE

The Gacoflex Urethane Rubber Walking Deck and Roof Covering 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 system must be installed in accordance with this report and the manufacturer's published installation instructions, by applicators approved by Firestone Building Products Company, LLC.
- 5.2** The products are manufactured at the Firestone Building Products Company, LLC, facility in Waukesha, Wisconsin, under a quality control program with inspections by ICC-ES.

## 6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Walking Decks (AC39), dated June 2017 (editorially revised May 2018).

## 7.0 IDENTIFICATION

- 7.1** All components of the Gacoflex system shall be identified with a label bearing the Firestone Building Products Company, LLC., name and address; the product name; the shelf life and date of manufacture, if applicable; and the evaluation report number (ESR-1284).
- 7.2** The report holder's contact information is the following:

**FIRESTONE BUILDING PRODUCTS COMPANY,  
LLC**  
**200 4<sup>th</sup> AVENUE SOUTH**  
**NASHVILLE, TENNESSEE 37201**  
**(615) 937-2710**  
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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 18 13—Pedestrian Traffic Coatings

## REPORT HOLDER:

FIRESTONE BUILDING PRODUCTS COMPANY, LLC

## EVALUATION SUBJECT:

GACOFLEX URETHANE RUBBER WALKING DECK AND ROOF COVERING

## 1.0 REPORT PURPOSE AND SCOPE

## Purpose:

The purpose of this evaluation report supplement is to indicate that Gacoflex Urethane Rubber Walking Deck and Roof Covering, described in ICC-ES evaluation report [ESR-1284](#), have 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 Gacoflex Urethane Rubber Walking Deck and Roof Covering, described in Sections 2.0 through 7.0 of the evaluation report [ESR-1284](#), complies with the LABC Chapter 15, the LARC Chapter 9, and is subjected to the conditions of use described in this supplement.

## 3.0 CONDITIONS OF USE

The Gacoflex Urethane Rubber Walking Deck and Roof Covering described in this evaluation report must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-1284](#).
- The design, installation, conditions of use and identification are in accordance with the 2018 *International Building Code*® (2018 IBC) and 2018 *International Residential Code*® (2018 IRC) provisions noted in the evaluation report [ESR-1284](#).
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16 and 17, as applicable.
- All slider and door thresholds, jambs, posts, scuppers and fascia shall have metal flashing in accordance with the 2020 Los Angeles City Building Code.
- The installation of the Gacoflex Urethane Rubber Walking Deck and Roof Covering must comply with City of Los Angeles Information Bulletin P/BC 2020-16, "Dwellings in High Wind Velocity Areas (HWA)".
- The Building Inspector shall be notified 24 hours in advance prior to installation of the roof membranes.

This supplement expires concurrently with the evaluation report, reissued February 2022.

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**1.0 REPORT PURPOSE AND SCOPE**

**Purpose:**

The purpose of this evaluation report supplement is to indicate that Gacoflex Urethane Rubber Walking Deck and Roof Covering, described in ICC-ES evaluation report ESR-1284, 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) and 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 Gacoflex Urethane Rubber Walking Deck and Roof Covering, described in Sections 2.0 through 7.0 of the evaluation report ESR-1284, 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 Chapters 15, 16 and 17, as applicable.

**2.1.1 OSHPD:**

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

**2.1.2 DSA:**

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

**2.2 CRC:**

The Gacoflex Urethane Rubber Walking Deck and Roof Covering, described in Sections 2.0 through 7.0 of the evaluation report ESR-1284, 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.

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