

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

**Section: 07 18 13—Pedestrian Traffic Coatings**

**REPORT HOLDER:**

**PLI-DEK LLC**

**EVALUATION SUBJECT:**

**PLI-DEK AND CON-DEK WALKING DECK AND ROOF COVERING SYSTEMS**

**1.0 EVALUATION SCOPE**

**Compliance with the following codes:**

- 2018, 2015, 2012, 2009, and 2006 *International Building Code*® (IBC)
- 2018, 2015, 2012, 2009 and 2006 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)†

†The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

- Other Code (see Section 8.0.)

For evaluation for compliance with codes adopted by Los Angeles Department of Building and Safety (LADBS), see [ESR-2097 LABC and LARC Supplement](#).

**Properties evaluated:**

- Durability
- Wind resistance
- Fire classification
- Fire resistance
- Surface burning characteristics

**2.0 USES**

The Pli-Dek and Con-Dek systems are walking deck and roof covering systems for use directly over plywood (Pli-Dek) or concrete (Con-Dek) decks. The systems are also used as components of one-hour fire-resistance-rated roof assemblies as described in Section 4.4. The systems provide a Class A or Class B roof covering fire classification as described in Tables 1, 1A and 2. The systems have Class B surface burning characteristics as described in Sections 3.1 and 3.2.

**3.0 DESCRIPTION**

**3.1 Pli-Dek System:**

The Pli-Dek system is a polymer-modified, cementitious walking deck and roof covering system that consists

of a plywood substrate covered with expanded metal lath; a polymer-modified cementitious base coat; an optional reinforcing fabric layer; and intermediate and sealer coats. See Section 4.0 and Tables 1 and 2 for recognized system configurations and corresponding component requirements. The surface of the Pli-Dek system has a Class B classification, with a flame-spread index of 75 or less and a smoke developed index of 450 or less, based on testing in accordance with ASTM E84.

**3.1.1 Materials:**

**3.1.1.1 Substrate:** Exterior-grade plywood must comply with U.S. DOC PS-1 or PS-2. Minimum thickness is specified in Tables 1 and 2 of this report.

**3.1.1.2 Metal Lath:** Metal lath must be a minimum 2.5-pound-per-square-yard (1.36 kg/m<sup>2</sup>), hot-dipped galvanized lath, complying with ASTM C847.

**3.1.1.3 Staples:** Staples must be No. 16 gage, 7/8-inch-crown (22.2 mm), 5/8-inch-long (15.9 mm), corrosion-resistant staples complying with ASTM F1667.

**3.1.1.4 Pli-Dek GU-80-1 Gray Base:** A proprietary mixture of portland cement and silica sand packaged in 46-pound (20.9 kg) bags that is mixed on-site with the GU-80-1 Liquid Admix, at a ratio of 1 gallon (3.8 L) of Liquid Admix for each 46-pound (20.9 kg) bag of GU-80-1 Gray Base, in accordance with the manufacturer's instructions. The mixture is used as a component of the base coat and intermediate coat of Pli-Dek systems.

**3.1.1.5 Pli-Dek GU-80-1 Top Coat:** A proprietary mixture of portland cement and silica sand packaged in 46-pound (20.9 kg) bags that is mixed on-site with the GU-80-1 Liquid Admix, at a ratio of 1.25 gallons (4.7 L) of GU-80-1 Liquid Admix for each 46-pound (20.9 kg) bag of GU-80-1 Top Coat, in accordance with the manufacturer's instructions. The mixture is used as a component of the intermediate coat of Pli-Dek systems and as a component of the third coat of the Con-Dek system.

**3.1.1.6 Pli-Dek GU-80-1 Custom Top Coat:** A proprietary mixture of portland cement and silica sand packaged in 46-pound (20.9 kg) bags that is mixed on-site with the GU-80-1 Liquid Admix, at a ratio of 1.25 gallons (4.7 L) of GU-80-1 Liquid Admix for each 46-pound (20.9 kg) bag of GU-80-1 Custom Top Coat, in accordance with the manufacturer's instructions. The mixture is used as a component of the intermediate coat and third coat of the Pli-Dek CF System, and as a component of the third coat of the Con-Dek system.

**3.1.1.7 Pli-Dek GU-80-1 Liquid Admix:** A polyacrylic emulsion available in 5-gallon (18.9 L) containers, and used as a component of the base coat and intermediate coat of

Pli-Dek systems, and as a component of the third coat of the Con-Dek system.

**3.1.1.8 PD Epoxy:** A two-part amide epoxy, either clear or pigmented, packaged in 1-gallon (3.8 L) containers for on-site mixing in equal parts by volume. The workable time of the epoxy mixture is 45 minutes, with curing in eight hours at 75°F (23.8°C). The epoxy is used as a sealer coat in the Pli-Dek T system.

**3.1.1.9 Pli-Dek GS-88-1:** A proprietary water-based acrylic mixture available in 5-gallon (18.9 L) containers. Curing time is two hours at 75°F (23.8°C). The mixture is used as a sealer coat for both Pli-Dek and Con-Dek systems.

**3.1.1.10 Pli-Dek GS-99-1:** A proprietary water-based acrylic mixture available in 5-gallon (18.9 L) containers. The mixture is used as a sealer coat for both Pli-Dek and Con-Dek systems.

**3.1.1.11 PD Resin:** PD Resin is a liquid polymer bonding resin used as an optional coating for the Pli-Dek B and Pli-Dek U systems, and as the base and intermediate coats for the Con-Dek system, as noted in Table 1 of this report. The resin is supplied in 5-gallon (18.9 L) containers.

**3.1.1.12 Fiberglass Mat:** The fiberglass mat must be a multidirectional chopped strand mat weighing 0.75 ounce per square foot (0.23 kg/m<sup>2</sup>).

**3.1.1.13 Pli-Dek Seam Paper:** Pli-Dek Seam Paper is a 2-inch-wide (51 mm), water-resistant, reinforced, asphalt-laminated Kraft paper material that is used to cover plywood joints.

**3.1.1.14 Aggregate:** Natural sand, pebble or crushed rock, ranging in size from ASTM E11 No. 60 sieve up to, and including, <sup>3</sup>/<sub>8</sub> inch (9.5 mm).

### 3.2 Con-Dek System:

The Con-Dek system is a fiberglass fabric reinforced cementitious walking deck and roof covering system that consists of a 0.75-ounce-per-square-foot (0.23 kg/m<sup>2</sup>) fiberglass mat, a liquid polymer resin, polymer-modified cementitious coats, and sealer coats applied directly to a concrete substrate. See Sections 3.1.1 and 4.3.2 and Table 1A for system configuration and component requirements. The surface of the Con-Dek system has a Class B classification, with a flame-spread index of 75 or less and a smoke developed index of 450 or less, based on testing in accordance with ASTM E84.

#### 3.2.1 Materials:

**3.2.1.1 Substrate:** The concrete substrate must comply with the applicable code and must have a minimum compressive strength of 2500 psi (17238 kPa) [minimum of 24 MPa is required under ADIBC Appendix L, Section 5.1.1].

**3.2.1.2 Other Components:** The Con-Dek system consists of components as described in Sections 3.1.1.5 through 3.1.1.7, 3.1.1.9 through 3.1.1.12, and 3.1.1.14.

## 4.0 INSTALLATION

### 4.1 General:

The Pli-Dek and the Con-Dek systems must be installed by applicators trained and approved by Pli-Dek Systems LLC, in accordance with this report, the manufacturer's published installation instructions and the applicable code. The manufacturer's published installation instructions must be available on the jobsite during installation.

### 4.2 Pli-Dek System:

**4.2.1 Preparation of Substrates:** The plywood substrate must be installed in accordance with the applicable code, and must be clean, dry and free from dirt and other foreign material that may prevent adhesion of the base coat. All

substrate joints must be tongue-and-groove or be blocked with nominally 2-by-4 wood members. All substrate joints must be gapped <sup>1</sup>/<sub>8</sub> inch (3.2 mm) and covered with Pli-Deck Seam Paper, which then must be tacked in place. Seam paper ends must overlap a minimum of 2 inches (51 mm). All valleys, openings, parapets, walls, sliders, door thresholds, jambs, posts, scuppers, penetrations, fascia or adjuncts must be flashed with minimum No. 26 gage [0.019 inch (0.48 mm)] corrosion-resistant metal, and caulked. Adequate drainage must be provided in accordance with the applicable code.

**4.2.2 Metal Lath:** Metal lath must be laid out over the entire substrate surface, with joints overlapping a minimum of <sup>3</sup>/<sub>4</sub> inch (19.1 mm). The lath must overlap metal flashings a minimum of 1<sup>1</sup>/<sub>2</sub> inches (38 mm). The lath must be stapled in place with No. 16 gage, <sup>5</sup>/<sub>8</sub>-inch-long-by-<sup>7</sup>/<sub>8</sub>-inch-wide (15.9 mm by 22.2 mm), corrosion-resistant staples, no less than twelve per square foot (129 per m<sup>2</sup>). The metal lath must be stapled together at the lath lap joints and where the lath overlaps the seam paper, with staples not more than 2 inches (51 mm) apart.

**4.2.3 Coating Application:** One bag of GU-80-1 must be mixed with 1 gallon (3.8 L) of GU-80-1 Liquid Admix for use as the base coat for the systems described in Tables 1 and 2. This mixture must be applied at the coverage rate noted in Tables 1 and 2 and must be troweled into the metal lath in such a manner that all holes and voids are filled to full depth and none of the lath or staples is exposed. Under normal working conditions at an ambient air temperature of 70°F (21.1°C), finish coatings can be applied within 24 hours of the base coat application. The intermediate coat and sealer coat must be applied over the base coat, in accordance with the schedule in Tables 1 and 2 of this report.

An optional fiberglass and resin coating may be applied over the base coat of systems (contact Pli-Dek for installations that require this application), as outlined in Footnote 2 of Table 1. The fiberglass mat must be laid over the deck with minimum and maximum overlaps of <sup>1</sup>/<sub>4</sub> and <sup>1</sup>/<sub>2</sub> inch (6.4 and 12.7 mm), respectively, and extending to the furthest edge of the deck. PD Resin must then be applied over the mat at a rate of 1 gallon per 50 square feet (0.815 L/m<sup>2</sup>), and must be worked into the mat using a <sup>1</sup>/<sub>2</sub>-inch (12.7 mm) nap roller or trowel. After the resin is allowed to dry for a minimum of eight hours, the surface must be checked for any blemishes, air pockets, or bubbles, and for any items that may have become embedded. Areas containing such items must be cut out and filled with a fiberglass mat and PD Resin as described above. Pinholes, if found, must be sealed by applying PD Resin over the affected area at a rate of 1 gallon per 100 square feet (0.408 L/m<sup>2</sup>) until the pinholes are sealed. The fiberglass and resin coating must cure for a minimum of two to six hours before application of the other coats required in Tables 1 and 2.

The temperature range for application is a minimum of 50°F (10°C) and a maximum of 110°F (43°C), with ideal conditions being between 60°F (15.6°C) and 90°F (32.2°C) in high humidity. The coatings must not be applied in moist or inclement weather. Pot life and curing time vary with temperature and humidity. At 70°F (21.1°C), the maximum working life is one hour.

**4.2.4 Pli-Dek U—Underlayment for Ceramic Tile:** The system must be applied in accordance with the schedule in Table 1 of this report. After curing for eight hours at 75°F (23.8°C), the surface can be used as a backing for exterior adhered veneer, such as ceramic tiles, applied in accordance with the veneer manufacturer's instructions and the applicable code.

**4.2.5 Method of Repair:** The damaged area must be completely removed, including the base coat and lath. New metal lath must be stapled to the clean, dry substrate, and the system reapplied as described in Sections 4.2.1 through 4.2.4 of this report. If substrate damage occurs, the retention of the fire-resistance and strength properties of the system must be investigated.

#### 4.3 Con-Dek System:

**4.3.1 Preparation of Substrate:** Concrete substrates must be designed and installed in accordance with the requirements of the applicable code. The concrete surface must be free of loose particles, fins, ridges, voids or air-entrained holes, curing agents, bond breakers, oil, grease, dust or any foreign matter which would prevent bonding. Control and expansion joints must be installed at stress concentration points to control cracking. The concrete surface to receive coatings must be roughened by water/sand/bead/shot blasting, etching or grinding in accordance with the manufacturer's published installation instructions.

The concrete surface must be sloped to a minimum of  $1/4:12$  for proper drainage in accordance with the requirements of the applicable code. The concrete surface must be properly cured prior to installation. Flashing must be provided in accordance with the applicable code.

**4.3.2 Con-Dek Application:** The fiberglass mat must be laid over the substrate with minimum and maximum overlaps of  $1/4$  and  $1/2$  inch (6.4 and 12.7 mm), respectively, and extend to the furthest edge of the deck. PD Resin must then be applied over the mat at a rate of 50 square feet per gallon (1.23 m<sup>2</sup>/L), and must be worked into the mat using a  $1/2$ -inch (12.7 mm) nap roller or trowel. After the resin is allowed to dry for a minimum of eight hours, the surface is inspected and prepared for a second coat of PD Resin at a rate of approximately 100 square feet per gallon (2.46 m<sup>2</sup>/L). The fiberglass and resin coating must cure for a minimum of two to six hours before application of the third and sealer coats noted in Table 1A.

The desired third coat (GU-80-1 Top Coat or Custom Coat mixed with the GU-80-1 Liquid Admix) is applied, and the finished product is sealed with either the GS-88-1 or GS-99-1.

The temperature range for application is a minimum of 50°(10°C) and a maximum of 110°F (43°C), with ideal conditions being between 60°F (15.6°C) and 90°F (32.2°C) in high humidity. The coatings must not be applied in moist or inclement weather. Pot life and curing time vary with temperature and humidity. At 70°F (21.1°C), the maximum working life is one hour.

#### 4.4 One-hour Fire-resistance-rated Construction:

**4.4.1 Pli-Dek System:** Pli-Dek systems identified in Table 1, having a minimum base coat thickness of  $3/16$  inch (4.8 mm) and installed in accordance with this report over  $5/8$ -inch-thick (15.9 mm) exterior-grade plywood, with minimum 2-by-8 solid sawn lumber joists spaced at 16 inches (406 mm) on center, and with all substrate joints blocked, or tongue-and-groove exterior-grade plywood, may be substituted for the double wood floor described in Item 13 of 2018, 2015 and 2012 IBC Table 721.1(3) [2009 and 2006 IBC Table 720.1(3)]. When installation is over 2-by-8 joists, the design bending stress assigned to the joists must be limited to 78 percent of the code-prescribed design values.

**4.4.2 Con-Dek System:** When the Con-Dek system is installed, as described in Section 4.3, over a concrete roof with a one-hour fire-rated resistance per 2018, 2015 and 2012 IBC Table 721.1(3) [2009 and 2006 IBC Table 720.1

(3)], the Con-Dek system will not change the rating of the assembly.

#### 4.5 Roof Covering Fire Classification:

**4.5.1 Pli-Dek System:** When installation is in accordance with this report, the assemblies have the fire classifications noted in Tables 1 and 2.

**4.5.2 Con-Dek System:** When the Con-Dek system is installed as described in Section 4.3 and Table 1A, at a maximum slope of  $1/4$  inch per foot (2 percent slope), the system has a Class A roof classification.

#### 4.6 Wind Resistance:

The wind uplift resistance of the Pli-Dek and Con-Dek walking deck and roof covering systems is limited to the wind uplift capacity of the roof deck construction on which the system is installed.

### 5.0 CONDITIONS OF USE

The Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1** The systems must be installed by applicators trained and approved by Pli-Dek LLC, in accordance with this report, the manufacturer's published installation instructions and the applicable code. If there is a conflict between the manufacturer's published installation instructions and this report, this report governs.
- 5.2** The roof deck on which the Pli-Dek system is installed must be designed to resist the design wind pressures of the applicable code.
- 5.3** The roof deck on which the Con-Dek system is installed must be designed to resist the design wind pressures of the applicable code.
- 5.4** The products are manufactured for Pli-Dek LLC at manufacturing locations identified in the approved quality manual, under a quality-control program with inspections by ICC-ES.

### 6.0 EVIDENCE SUBMITTED

- 6.1** Data in accordance with the ICC-ES Acceptance Criteria for Walking Decks (AC39), dated June 2017 (editorially revised May 2018).
- 6.2** Report of small-scale fire tests in accordance with ASTM E119.
- 6.3** Report of testing in accordance with ASTM E84.

### 7.0 IDENTIFICATION

- 7.1** Each component container is identified with a permanent label bearing the report holder's name (Pli-Dek LLC) and address, the product designation, the lot number, and the evaluation report number (ESR-2097). The label includes the one-year shelf life, date of manufacture and the flame spread index and smoke developed index of the installed system. Rolls of Pli-Dek Seam Paper are identified with the product name (PD Seam Paper) and the Pli-Dek LLC name.
- 7.2** The report holder's contact information is the following:

**PLI-DEK LLC**  
**150 DASCAMB ROAD**  
**ANDOVER, MASSACHUSETTS 01810**  
**(978) 623-9980**  
[www.plidek.com](http://www.plidek.com)

**8.0 OTHER CODES**

In addition to the codes referenced in Section 1.0, the products described in this report were evaluated for compliance with the requirements of the 1997 *Uniform Building Code*™ (UBC). The products comply with the (UBC) as described in Sections 2.0 through 7.0, but with revisions to Sections 3.1.1.1, 4.4.1 and 6.2 as follows:

- **3.1.1.1 Substrate:** Exterior-grade plywood must comply with UBC Standard 23-2 or 23-3. Minimum thickness is specified in Tables 1 and 2 of this report.
- **4.4.1 Pli-Dek System:** Pli-Dek systems identified in Table 1, having a minimum base-coat thickness of

<sup>3</sup>/<sub>16</sub> inch (4.8 mm) and installed in accordance with this report over <sup>5</sup>/<sub>8</sub>-inch-thick (15.9 mm) exterior-grade plywood, with minimum 2-by-8 solid sawn lumber joists spaced at 16 inches (406 mm) on center, and with all substrate joints blocked, or tongue-and-groove exterior-grade plywood, may be substituted for the double wood floor described in Assembly 13 of UBC Table 7-C. When installation is over 2-by-8 joists, the design bending stress assigned to the joists must be limited to 78 percent of the code-prescribed design values.

- **6.2** Report of small-scale fire tests in accordance with UBC Standard 7-1.

**TABLE 1—PLI-DEK CLASS A WALKING DECK AND ROOF COVERING SYSTEMS<sup>1,2,3</sup>**

| SYSTEM   | SUBSTRATE <sup>4</sup>                             | MAXIMUM DECK SLOPE | BASE COAT   | INTERMEDIATE COAT  | THIRD COAT   | SEALER COAT                                | MINIMUM BASE COAT THICKNESS (inch) |
|--|--|--------------------|---|--|--|--|------------------------------------|
| Pli-Dek K—<br>Knock Down                       | <sup>5</sup> / <sub>8</sub> -inch-thick<br>plywood | 1/4:12             | GU-80-1 Gray Base<br>applied at 30 sq. ft. per<br>bag mixture | GU-80-1 Top<br>Coat applied at<br>100 sq. ft. per<br>bag mixture   | —  | GS-88-1 applied at<br>100 sq. ft. per gal. | <sup>3</sup> / <sub>16</sub>       |
| Pli-Dek S—<br>Smooth                           | <sup>5</sup> / <sub>8</sub> -inch-thick<br>plywood | 1/4:12             | GU-80-1 Gray Base<br>applied at 30 sq. ft. per<br>bag mixture | GU-80-1 Top<br>Coat applied at<br>110 sq. ft. per<br>bag mixture   | —  | GS-88-1 applied at<br>100 sq. ft. per gal. | <sup>3</sup> / <sub>16</sub>       |
| Pli-Dek C—<br>Polyacrylic<br>Sand              | <sup>5</sup> / <sub>8</sub> -inch-thick<br>plywood | 1/4:12             | GU-80-1 Gray Base<br>applied at 30 sq. ft. per<br>bag mixture | GU-80-1 Gray<br>Base applied at<br>100 sq. ft. per<br>bag mixture; with<br>No. 16 silica sand<br>broadcast over<br>the entire area at<br>100 lbs. per 300<br>sq. ft. | —  | GS-88-1 applied at<br>100 sq. ft. per gal. | <sup>3</sup> / <sub>16</sub>       |
| Pli-Dek CF—<br>Custom Finish                   | <sup>5</sup> / <sub>8</sub> -inch-thick<br>plywood | 1/4:12             | GU-80-1 Gray Base<br>applied at 30 sq. ft. per<br>bag mixture | GU-80-1 Custom<br>Top Coat applied<br>at 120 sq. ft. per<br>bag mixture  | GU-80-1<br>Custom Top<br>Coat applied at<br>150 sq. ft. per<br>bag mixture | GS-99-1 applied at<br>200 sq. ft. per gal. | <sup>3</sup> / <sub>16</sub>       |
| Pli-Dek B—<br>Sand Finish                      | <sup>5</sup> / <sub>8</sub> -inch-thick<br>plywood | 1/4:12             | GU-80-1 Gray Base<br>applied at 30 sq. ft. per<br>bag mixture | PD Resin applied<br>at 75 sq. ft. per<br>gallon; with No.<br>16 silica sand<br>broadcast over<br>the entire area at<br>100 lbs. per 300<br>sq. ft.                   | —  | GS-88-1 applied at<br>100 sq. ft. per gal. | <sup>3</sup> / <sub>16</sub>       |
| Pli-Dek U—<br>Underlayment<br>for Ceramic Tile | <sup>5</sup> / <sub>8</sub> -inch-thick<br>plywood | 1/4:12             | GU-80-1 Gray Base<br>applied at 30 sq. ft. per<br>bag mixture | PD Resin applied<br>at 100 sq. ft. per<br>gal.   | —  | —  | <sup>3</sup> / <sub>16</sub>       |

For **SI**: 1 inch = 25.4 mm, 1 ft<sup>2</sup> = 0.0920 m<sup>2</sup>, 1 gallon = 3.785 L, 1 pound = 0.45 kg.

<sup>1</sup>When applied over <sup>1</sup>/<sub>2</sub>-inch-thick plywood at any slope, systems provide a Class B roof covering fire classification.  
<sup>2</sup>Optional fiberglass mat and resin coating may be applied over the base coat as described in Section 4.2.3 of this report.  
<sup>3</sup>Minimum slope is 1/4:12.  
<sup>4</sup>Substrate thickness is minimum thickness.

**TABLE 1A—CON-DEK CLASS A WALKING DECK AND ROOF COVERING SYSTEM<sup>1</sup>**

| SYSTEM         | SUBSTRATE             | MAXIMUM DECK SLOPE | BASE COAT   | INTERMEDIATE COAT                        | THIRD COAT  | SEALER COAT  |
|----------------|-----------------------|--------------------|---|--|---|--|
| Con-Dek System | Concrete <sup>2</sup> | 1/4:12             | PD Resin applied to 3/4-oz. fiberglass mat at a rate of 50 sq. ft per gal | PD Resin applied at 100 sq. ft. per gal. | GU-80-1 Top Coat applied at 175 sq. ft. per bag mixture or Custom Top Coat applied at 175 sq. ft. per bag mixture | GS-88-1 applied at 100 sq. ft. per gal. or GS-99-1 applied at 200 sq. ft. per gal. |

For **SI**: 1 inch = 25.4 mm, 1 ft<sup>2</sup> = 0.0920 m<sup>2</sup>, 1 gallon = 3.785l.

<sup>1</sup>Minimum slope is 1/4:12.

<sup>2</sup>Concrete substrate must comply with the applicable code and have a minimum compressive strength of 2500 psi (17238 kPa) [minimum of 25 MPa is required under ADIBC Appendix L, Section 5.1.1].

**TABLE 2—PLI-DEK CLASS B WALKING DECK AND ROOF COVERING SYSTEM<sup>1</sup>**

| SYSTEM                               | SUBSTRATE <sup>3</sup> | MAXIMUM DECK SLOPE | BASE COAT   | INTERMEDIATE COAT                       | SEALER COAT  | MINIMUM BASE COAT THICKNESS (inch) |
|--------------------------------------|------------------------|--------------------|---|---|--|------------------------------------|
| PLI-DEK T—Troweled Pebbles and Epoxy | 1/2-inch-thick plywood | 5:12               | GU-80-1 Gray Base applied at 35 sq. ft. per bag mixture | PD Resin applied at 80 sq. ft. per gal. | 3/4 gallon of PD Epoxy thoroughly mixed with 100 lbs. of selected aggregate <sup>2</sup> and troweled over a 30-square-foot area | 3/16                               |

For **SI**: 1 inch = 25.4 mm, 1 ft<sup>2</sup>= 0.0920 m<sup>2</sup>, 1 gallon = 3.785 L, 1 pound = 0.45 kg.

<sup>1</sup>Minimum slope is 1/4:12.

<sup>2</sup>Aggregate is specified in Section 3.1.1.14 of this report.

<sup>3</sup>Substrate thickness is minimum thickness.



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**1.0 REPORT PURPOSE AND SCOPE**

**Purpose:**

The purpose of this evaluation report supplement is to indicate that Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems, described in ICC-ES evaluation report [ESR-2097](#), 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 Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems, described in Sections 2.0 through 7.0 of the evaluation report [ESR-2097](#), comply with the LABC and the LARC, and are subjected to the conditions of use described in this supplement.

**3.0 CONDITIONS OF USE**

The Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-2097](#).
- The design, installation, conditions of use and identification of the Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems are in accordance with the 2018 *International Building Code*® (IBC) or the 2018 *International Residential Code*® (IRC), as applicable, provisions noted in the evaluation report [ESR-2097](#).
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 15, 16 and 17 or LARC Chapter 9, as applicable.
- The installation of Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems must comply with the City of Los Angeles Information Bulletin P/BC 2020-16, "Dwellings in High Wind Velocity Areas (HWA)."
- The Pli-Dek and Con-Dek Roof Covering Systems may be used in the exterior design and construction of new buildings located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area, provided installation is in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of Sections 701A.3 and 705A of the LABC. The Pli-Dek and Con-Dek Walking Deck Systems comply with the performance requirements of ASTM E84 with a Class B flame spread rating in accordance with the Exception to Item 6 of LABC Section 709A.3 and may be used in the exterior design and construction of decking in new buildings located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area.
- The Pli-Dek and Con-Dek Roof Covering Systems may be used in the exterior design and construction of new buildings located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area, provided installation is in accordance with the 2018 *International Residential Code*® (IRC) provisions noted in the evaluation

report and the additional requirements of Sections R337.1.3.1 and R337.5 of the LARC. The Pli-Dek and Con-Dek Walking Deck Systems comply with the performance requirements of ASTM E84 with a Class B flame spread rating in accordance with the Exception to Item 6 of LARC Section R337.9.3 and may be used in the exterior design and construction of decking in new buildings located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area.

This supplement expires concurrently with the evaluation report, reissued August 2020 and revised January 2021.

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

PLI-DEK LLC

**EVALUATION SUBJECT:**

PLI-DEK AND CON-DEK WALKING DECK AND ROOF COVERING SYSTEMS

**1.0 REPORT PURPOSE AND SCOPE****Purpose:**

The purpose of this evaluation report supplement is to indicate that Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems, described in ICC-ES evaluation report ESR-2097, have also been evaluated for compliance with the code(s) 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 Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-2097, comply 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.

The Pli-Dek and Con-Dek Roof Covering Systems may be used in the exterior design and construction of new buildings located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area, provided installation is in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of Sections 701A.3 and 705A of the CBC. The Pli-Dek and Con-Dek Walking Deck Systems comply with the performance requirements of ASTM E84 with a Class B flame spread rating in accordance with the Exception to Item 6 of CBC Section 709A.3 and may be used in the exterior design and construction of decking in new buildings located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area.

**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 Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-2097, comply 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 additional requirements of CRC Chapter 9, as applicable.

The Pli-Dek and Con-Dek Roof Covering Systems may be used in the exterior design and construction of new buildings located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area, provided installation is in accordance with the 2018 *International Residential Code*® (IRC) provisions noted in the evaluation report and the additional requirements of Sections R337.1.3.1 and R337.5 of the CRC. The Pli-Dek and Con-Dek Walking Deck Systems



comply with the performance requirements of ASTM E84 with a Class B flame spread rating in accordance with the Exception to Item 6 of CRC Section R337.9.3 and may be used in the exterior design and construction of decking in new buildings located in a Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area.

The products recognized in this supplement have not been evaluated for compliance with the International Wildland–Urban Interface Code®.

This supplement expires concurrently with the evaluation report, reissued August 2020 revised January 2021.

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

**REPORT HOLDER:**

PLI-DEK LLC

**EVALUATION SUBJECT:**

PLI-DEK AND CON-DEK WALKING DECK AND ROOF COVERING SYSTEMS

**1.0 REPORT PURPOSE AND SCOPE****Purpose:**

The purpose of this evaluation report supplement is to indicate that the Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems, described in ICC-ES evaluation report ESR-2097, have 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 Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems, described in Sections 2.0 through 7.0 of ICC-ES evaluation report, ESR-2097, comply with the *Florida Building Code—Building* and the *Florida Building Code—Residential*, provided the design requirements are determined in accordance with *Florida Building Code—Building* and the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES Evaluation Report ESR-2097 for the 2018 International Building Code® meet the requirements of the *Florida Building Code—Building* and the *Florida Building Code—Residential*, as applicable, with the following conditions:

1. Flashing must be in accordance with Section 1503.2 of the *Florida Building Code—Building* or Section R903.2 of the *Florida Building Code—Residential*, as applicable.
2. Roof drainage must be installed in accordance with Section 1503.4 of the *Florida Building Code—Building* or Section R903.4 of the *Florida Building Code—Residential*, as applicable.
3. Fasteners must be in accordance with Section 1506.5, 1506.6, or 1506.7 of the *Florida Building Code—Building* or Sections R904.5 of the *Florida Building Code—Residential*, as applicable

Use of the Pli-Dek and Con-Dek Walking Deck and Roof Covering Systems for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and 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).

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