

Issue Date: 12-20-2020
Revision Date: 10-04-2024
Renewal Date: 04-30-2025

DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION
Section: 07 18 13 – Pedestrian Traffic Coatings
Section: 07 54 19 – Polyvinyl-Chloride PVC Roofing

REPORT HOLDER:
IB Roof Systems
506 East Dallas Road, Suite 300
Grapevine, TX 76051

REPORT SUBJECT:
DeckShield™ Walking Deck and Roofing Membrane

1.0 SCOPE OF EVALUATION

1.1. This research report addresses compliance with the following Codes:

- 2024, 2021, 2018 *International Building Code*® (IBC)
- 2024, 2021, 2018 *International Residential Code*® (IRC)
- 2023 *Florida Building Code* (FBC), including HVHZ (see Section 9.0)

Note: This report references the most recent edition of the Codes cited. Section numbers in earlier editions may differ.

1.2. DeckShield™ has been evaluated for the following properties (see Table 1):

- Physical Properties
- Wind Resistance
- Fire Classification

1.3. DeckShield™ has been evaluated for the following uses:

- As a walking surface applied to a wood deck substrate
- As a roofing surface applied to combustible and non-combustible substrates

2.0 STATEMENT OF COMPLIANCE

DeckShield™ complies with the Codes listed in Section 1.1, for the properties stated in Section 1.2, and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in section 6.0.

3.0 DESCRIPTION

DeckShield™ is a calendared poly vinyl chloride (PVC) membrane that is laminated to a polyethylene non-woven scrim-back ply. The membrane is printed and embossed with a variety of patterns and colors. The tri-laminate membrane weighs approximately 54 ounces per square yard and is nominally 60 mils thick.

The roofing membrane is adhered to wood, cement board or concrete substrates with either ITW Miracle Deck Adhesive (V206), Ashland Pliobond 7008 Adhesive or IB Water Borne Adhesive.

4.0 PERFORMANCE CHARACTERISTICS

4.1. DeckShield™ complies with ASTM D4434, Type II.

4.2. Class A roof covering and walking deck when installed over concrete, or minimum 1/2-inch gypsum sheathing complying with ASTM C1177, or 1/2-inch DensDeck Roof Board.

4.3. Class C roof covering and walking deck when installed over minimum 15/32-inch plywood deck.

4.4. Wind Uplift resistance as described in Section 5.2 of this report.

4.5. DeckShield™ complies with the requirements of FM 470, Resistance to Foot Traffic test.

5.0 INSTALLATION

5.1. General: DeckShield™ must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation.

Substrates must be structurally sound and in accordance with applicable Code. Surface shall be dry and free from all debris with installation being limited to time periods where precipitation is not expected.



Flashing shall be installed in accordance with applicable Codes, must be applied to all door thresholds, jambs, fascia, and walls.

Subsequent sheets of membrane are installed with a 1 inch overlap and melted together with an approved heat gun and nozzle. A seam roller is used to bond the two surfaces together.

DeckShield™ must be installed with ITW Miracle Decking Adhesive (V206), applied to both the substrate and membrane at 1 gal/60 ft², or with Ashland Pliodeck 7008 or IB Water Borne Adhesive, applied to the substrate at 1 gal/160 ft².

Repairs to the membrane require that the damaged film be cut and removed. Application of the patch is as described in Section 5.3.

5.2. Wind Uplift Resistance: See assemblies described in Table 2.

6.0 CONDITIONS OF USE

6.1. Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2. Use of DeckShield™ as a walking deck is limited to a level walking surface.

6.3. Wind uplift pressure based upon nominal wind speed (V_{asd}) on any roof area, including edge and corner zones, must not exceed the allowable wind uplift pressure for the system installed in that particular roof area.

6.4. DeckShield™ is manufactured under a quality program with inspections by Intertek Testing Services NA, Inc.

7.0 SUPPORTING EVIDENCE

7.1. Reports of tests in accordance with UL 1897, Uplift Tests for Roof Covering Systems.

7.2. Fire classification testing in accordance with ASTM E108 Standard test Methods for Fire Tests of Roof Coverings.

7.3. Reports of tests in accordance with FM 4470, Resistance to Foot Traffic.

7.4. Data in accordance with the ICC-ES AC309, Acceptance Criteria for Walking Decks, approved June 2017.

7.5. Reports of testing in accordance with ICC-ES AC75, Acceptance Criteria for Roofing Membrane Roof-Covering Systems, July 2010, editorially revised March 2018.

8.0 IDENTIFICATION

DeckShield™ is identified with the company name, IB Roof Systems, the address and telephone number, the product name DeckShield™, the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0395).



9.0 FLORIDA BUILDING CODE

The DeckShield™ membrane, described in Sections 2 through 8 of this report, complies with the 2023 *Florida Building Code – Building* and 2023 *Florida Building Code – Residential*, subject to the following conditions:

Installation shall be in accordance with Section 5 of this report except as follows:

The DeckShield™ membrane is adhered to 0.5-in. Georgia Pacific DensDeck Prime boards, which are attached to minimum 19/32-in.-thick plywood using one of the following fasteners at a density of one fastener per square foot:

- OMG Inc.: OMG XHD & OMG 3-in Galvalume Steel Plate
- SFS Group USA, Inc.: Dekfast DF-#15-PH3 & Dekfast PLT-R-3

The membrane is adhered to the DensDeck substrate with ITW Miracle Decking Adhesive (V206), applied to both the substrate and membrane at 1 gal/60 ft², or with Ashland Pliodeck 7008 or IB Water Borne Adhesive, applied to the substrate at 1 gal/160 ft².

The allowable design pressure for this assembly is 60 psf.



**10.0 CODE COMPLIANCE RESEARCH REPORT USE**

10.1. Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2. Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3. Reference to the Intertek website address: bpdirectory.intertek.com is recommended to ascertain the current version and status of this report.

TABLE 1 – PROPERTIES EVALUATED

| PROPERTY | APPLICABLE CODE SECTIONS | | | |
|---------------------|--------------------------|------------------------|-------------------------------|---------------------|
| | IBC | IRC | FBC - Building | FBC - Residential |
| Physical Properties | 104.2.3, 1507.12 | R104.2.2.4, R905.12 | 104.11, 1504.6, 1507.12 | R104.11, R905.13 |
| Wind Resistance | 1504.4 | R301.2.1 | 1504.3 | R301.2 |
| Fire Classification | 1505 | R902 | 1505 | R902 |
| Impact | 1504.7 | Not applicable | 1504.7 | Not applicable |
| HVHZ | Not applicable | Not Applicable | 1523.6 | R4402 |

Section numbers are applicable for the most recent Code cited in Section 1.1.

This Code Compliance Research Report ("Report") is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Report. Only the Client is authorized to permit copying or distribution of this Report and then only in its entirety, and the Client shall not use the Report in a misleading manner. Client further agrees and understands that reliance upon the Report is limited to the representations made therein. The Report is not an endorsement or recommendation for use of the subject and/or product described herein. This Report is not the Intertek Listing Report covering the subject product and utilized for Intertek Certification and this Report does not represent authorization for the use of any Intertek certification marks. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.





TABLE 2 – WIND RESISTANCE (IBC/IRC)

| ROOF DECK | ROOF COVERING | ADHESIVE | ALLOWABLE WIND UPLIFT RESISTANCE (psf) |
|--|---------------|---|--|
| Min. 1/2-in. ASTM C1177 sheathing mechanically attached to plywood sheathing with No 12 by 1-5/8-in. self-drilling pan head screws with 3-in.-diameter galvanized steel roofing plates spaced 16 inches on center through the sheathing to framing. Plywood sheathing is attached to framing in accordance with the applicable code. | DeckShield™ | ITW Miracle Decking Adhesive (V206) applied to both substrate and membrane at 1 gal/60 ft ² , or Asland Pliodeck 7008 or IB Water Borne Adhesive applied to the substrate at 1 gal/160 ft ² | 30 |
| Concrete | DeckShield™ | ITW Miracle Decking Adhesive (V206) applied to both substrate and membrane at 1 gal/60 ft ² , or Asland Pliodeck 7008 or IB Water Borne Adhesive applied to the substrate at 1 gal/160 ft ² | 120 |
| Plywood sheathing attached to framing in accordance with the applicable code | DeckShield™ | ITW Miracle Decking Adhesive (V206) applied to both substrate and membrane at 1 gal/60 ft ² , or Ashland Pliodeck 7008 or IB Water Borne Adhesive applied to the substrate at 1 gal/160 ft ² | 145 |