

ICC-ES Evaluation Report

ESR-4791

Reissued December 2024


This report also contains:

- CA Supplement

Subject to renewal December 2025

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<p>DIVISION: 07 00 00 — THERMAL AND MOISTURE PROTECTION</p> <p>Section: 07 54 19 — Polyvinyl-Chloride Roofing</p>	<p>REPORT HOLDER:</p> <p>HOLCIM SOLUTIONS AND PRODUCTS US, LLC</p>	<p>EVALUATION SUBJECT:</p> <p>ELEVATE PVC SINGLE-PLY ROOF SYSTEMS OVER STEEL, CONCRETE, AND RECOVER</p>	
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1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, 2012, 2009, and 2006 [International Building Code® \(IBC\)](#)
- 2021, 2018, 2015, 2012, 2009, and 2006 [International Residential Code® \(IRC\)](#)

Properties evaluated:

- Weather resistance
- Wind uplift resistance
- Roof covering fire classification
- Impact resistance

2.0 USES

Elevate single-ply roofing membranes are used as roof coverings in mechanically fastened or fully adhered Class A roofing systems as described in [Tables 1](#) and [2](#).

3.0 DESCRIPTION

3.1 General: Elevate roofing membranes are polyvinyl chloride (PVC) and are installed on either a combustible or noncombustible roof deck.

3.2 PVC Membranes:

3.2.1 Elevate PVC: Elevate PVC complies with ASTM D4434, Type III, and is a thermoplastic polyvinyl chloride membrane utilizing a polyester weft-inserted reinforcement. The membrane is nominally 50 to 80 mils [0.05 to 0.08 inches (1.27 to 2.03 mm)] thick. The membrane has a nominal weight of between 0.34 and 0.54 lb/ft² (1.66 kg/m² and 2.6 kg/m²) and is supplied in rolls 5 to 10 feet wide (1.5 m to 3.0 m) by 65 to 100 feet long (19.8 m to 30.5 m).

3.2.2 Elevate PVC XR: Elevate PVC XR complies with ASTM D4434, Type III, and is a thermoplastic polyvinyl chloride membrane utilizing a polyester weft-inserted reinforcement and a 5.5 ounce (171 g) non-woven spunbonded polyester fleece backing. The membrane is nominally 50 to 80 mils [0.05 to 0.08 inches (1.27 to 2.03 mm)] thick. The membrane has a nominal weight of between 0.34 and 0.56 lb/ft² (1.66 kg/m² and 2.7 kg/m²) and is supplied in rolls 6.3 to 10 feet wide (1.9 m to 3.0 m) by 65 to 90 feet long (19.8 m to 27.4 m).

3.3 Insulation Boards: Foam plastic insulation, where used, must have a flame-spread index of not more than 75 when tested at the maximum thickness intended for use in accordance with ASTM E84 (UL 723). See [Tables 1A](#) through [2B](#) for insulations for use with specific roofing systems.

3.4 Mechanical Fasteners: Fasteners used to mechanically fasten insulation and membranes to the roof deck, shall be corrosion-resistant and shall be one of the fasteners noted in [Tables 1B](#) and [2B](#).

3.4.1 Elevate All-Purpose Fastener: Elevate All-Purpose fastener is a corrosion-resistant, self-drilling fastener with a 0.180-inch (4.57 mm) shank diameter and 0.237-inch (6.02 mm) thread diameter.

3.4.2 Elevate Heavy-Duty Fastener: Elevate Heavy-Duty fastener is a corrosion-resistant, self-drilling fastener with a 0.275-inch (6.99 mm) thread diameter.

3.4.3 Elevate Heavy-Duty Plus Fastener: Elevate Heavy-Duty Plus fastener is a corrosion-resistant, self-drilling fastener with a 0.330-inch (8.4 mm) thread diameter.

3.4.4 Elevate Insulation Fastening Plate: Elevate Insulation Fastening Plate is a 3-inch-diameter (76 mm), 0.017-inch-thick (0.432 mm), AZ-50 Galvalume coated plate.

3.4.5 Dekfast DF-#14-PH3 Fastener: Dekfast DF-#14-PH3 fastener is a corrosion-resistant, self-drilling fastener with a 0.164-inch (4.17 mm) shank diameter and 0.242-inch (6.15 mm) thread diameter.

3.4.6 Dekfast PLT-R-3 Plate: Dekfast PLT-R-3 is a 3-inch-diameter (76 mm), 0.019-inch-thick (0.483 mm), AZ-50 Galvalume coated plate.

3.4.7 OMG Heavy Duty Fastener: OMG Heavy Duty fastener is a corrosion-resistant, self-drilling fastener with a 0.190-inch (4.83 mm) shank diameter and 0.245-inch (6.22 mm) thread diameter.

3.4.8 OMG #15 RoofGrip Fastener: OMG #15 RoofGrip fastener is a corrosion-resistant, self-drilling fastener with a 0.202-inch (5.13 mm) shank diameter and 0.265-inch (6.73 mm) thread diameter.

3.4.9 Elevate HD Seam Plate: Elevate HD Seam plate is a $2\frac{3}{8}$ -inch-diameter (60 mm), 0.034-inch-thick (0.86 mm), AZ-50 Galvalume coated plate.

3.4.10 Elevate HD Plus Seam Plate: Elevate HD Plus Seam plate is a $2\frac{3}{4}$ -inch-diameter (69.8 mm), 0.037-inch-thick (0.94 mm), AZ-50 or AZ 55 Galvalume coated plate.

3.5 Primers:

3.5.1 Elevate SA-Solvent Based (SB) Primer: Elevate SA-Solvent Based (SB) Primer is a synthetic polymer primer used to prime and prepare exterior surfaces to enhance the adhesion of roofing membranes. The primer is supplied in 5-gallon (18.9 liter) containers with a shelf life of 2 years.

3.5.2 Elevate V-Force SB Primer: Elevate V-Force SB Primer is a synthetic polymer primer used to prime and prepare exterior surfaces to enhance the adhesion of roofing membranes. The primer is supplied in 5-gallon (18.9 liter) containers with a shelf life of 2 years.

3.5.3 Elevate SA-LVOC Primer: Elevate SA-LVOC Primer is a synthetic polymer primer used to prime and prepare exterior surfaces to enhance the adhesion of roofing membranes. The primer is supplied in 5-gallon (18.9 liter) containers with a shelf life of 5 years.

3.6 Adhesives: Adhesives used to adhere membranes to the insulation or roofing substrates or insulation to substrates shall be one of the following and as noted in [Tables 1A](#) through [2B](#).

3.6.1 Elevate PVC Bonding Adhesive: Elevate PVC Bonding Adhesive is used for bonding Elevate PVC membranes and flashings to substrates. It has a coverage rate of 50 to 70 ft²/gallon (1.2 to 1.7 m²/liter) The adhesive has a shelf life of 12 months.

3.6.2 Elevate PVC LVOC Bonding Adhesive: Elevate PVC LVOC Bonding Adhesive is used for bonding Elevate PVC membranes and flashings to substrates. It has a coverage rate of 50 to 60 ft²/gallon (1.2 to 1.5 m²/liter) The adhesive has a shelf life of 12 months.

3.6.3 Elevate PVC Water Based Bonding Adhesive: Elevate PVC Water Based Bonding Adhesive is used for bonding Elevate PVC and Elevate PVC XR membranes and flashings to substrates. It has a coverage rate of 140 to 180 ft²/gallon (3.4 to 4.4 m²/liter) for Elevate PVC and 100 to 120 ft²/gallon (2.5 to 2.9 m²/liter) for Elevate PVC XR. The adhesive has a shelf life of 12 months.

3.6.4 Elevate XR Stick Adhesive: Elevate XR Stick adhesive is an elastomeric, two-part, foamable polyurethane adhesive. The coverage rate varies based on application type and thickness. The adhesive is supplied in 5-gallon (18.9 liter) containers with a shelf life of 18 months.

3.6.5 XR Stick Membrane Adhesive: Elevate XR Stick membrane adhesive is an elastomeric, two-part, foamable polyurethane adhesive. The coverage rate varies based on application type and thickness. The adhesive is supplied in 5-gallon (18.9 liter) containers with a shelf life of 18 months.

3.6.6 I.S.O. Twin Pack™ Insulation Adhesive: I.S.O. Twin Pack™ Insulation Adhesive is an elastomeric, two-part, foamable polyurethane adhesive. It has a coverage rate of 150 ft (45.7 m) in a 0.5-inch (12.7 mm) bead. The adhesive is supplied in 0.2-gallon (750 mL) containers with a shelf life of 12 months.

3.6.7 I.S.O. Spray™ R Part A and B: I.S.O. Spray™ R Part A and B is a two-part polyurethane, foamable adhesive. The coverage rate varies based on application type and thickness. The adhesive is supplied in 5, 15 and 50-gallon (18.9, 56.7 and 189 liter) containers with a shelf life of 18 months.

3.6.8 I.S.O. Stick™: I.S.O. Stick™ is a two-part polyurethane, foamable adhesive. The coverage rate varies based on application type and thickness. The adhesive is supplied in 5, 15 and 50-gallon (18.9, 56.7 and 189 liter) containers with a shelf life of 18 months.

3.6.9 Twin Jet: Twin Jet is a two-part polyurethane, foamable adhesive. The coverage rate varies based on application type and thickness. The adhesive is supplied in pressurized containers with a shelf life of 12 months.

3.7 Asphalt: The asphalt primer must meet ASTM D41 specifications. The asphalt must meet ASTM D312, Type III or IV, specifications.

3.8 Barrier Board: Barrier board, where used, must be either Georgia-Pacific Gypsum LLC DensDeck® or DensDeck Prime® Roofboard, or USG Corporation SECUROCK® Gypsum-Fiber Roof Board. Cover board must be UL-classified for roofing applications or UL-classified gypsum board. The minimum thickness shall be as stated in [Tables 1A](#) through [2B](#).

3.9 Cover Board: Cover board, where used, must be either Georgia-Pacific Gypsum LLC DensDeck® or DensDeck Prime® Roofboard, USG Corporation SECUROCK® Gypsum-Fiber Roof Board, or Elevate ISO GARD HD, Blue Ridge Fiberboard STRUCTODECK HD. Cover board must be UL-classified for roofing applications. The minimum thickness shall be as stated in [Tables 1A](#) through [2B](#).

3.10 Vapor Barrier: The vapor barrier, where used, must be Elevate V-Force Vapor Barrier Membrane.

3.11 Flashing: Flashing must be provided in accordance with IBC Section 1503.2 or IRC Section R903.2, as applicable. Where flashing is metal, the metal must be corrosion-resistant, minimum No. 26 gage [0.019 inch (0.483 mm)] galvanized steel.

3.12 Impact Resistance: The single-ply membranes described in this report meet the Resistance to Foot Traffic Test described in Section 4.6 of FM 4470, as referenced in IBC Section 1504.7.

4.0 INSTALLATION

4.1 Installation: Installation of the Elevate PVC membrane roof covering systems described in this report must comply with the applicable code, the manufacturer's published installation instructions and this report. The manufacturer's published installation instructions must be available at all times on the jobsite during installation.

Elevate PVC membranes are components of roof covering systems that may be installed over new roofs as described in [Table 1A](#) through [Table 2B](#). The roof slope must be a minimum of 1/4:12 (2 percent slope) and must not be more than maximum slope for the particular system as specified in [Table 1A](#) and [1B](#).

4.2 Fire Classification:

4.2.1 New Construction: Elevate PVC roof covering systems described in [Table 1A](#) and [1B](#), when installed in accordance with this report, are classified as Class A roof covering systems in accordance with UL790 or ASTM E108.

4.2.2 Reroofing: Prior to installation of new roof coverings, inspection in accordance with 2021, 2018 and 2015 IBC Section 1511 (2012, 2009 and 2006 IBC Section 1510), IRC Section R907 and approval from the code official having jurisdiction, is required. The existing noncombustible deck must be inspected to verify that the structure to be reroofed is structurally sound and adequate to support and secure the roofing membrane. Prior to installation of new roof coverings, there must be inspection of the deck by the code official having jurisdiction, and written approval by that code official.

Class A, B, or C roof covering systems may be installed over existing classified roof covering systems without additional roof classification tests, provided the resulting classification is the lower of the new and existing roofing classifications under the following conditions:

- New uninsulated systems installed only over existing uninsulated systems.
- New insulated systems installed over existing uninsulated systems only.

4.3 Wind Resistance:

4.3.1 New Construction: The Elevate PVC roof covering systems described in this report have a maximum allowable wind uplift capacity as noted in [Table 2A](#) and [2B](#). Metal edge securement systems must be listed in accordance with ANSI/SPRI/FM 4435-ES-1 (dated 2003, 2011 or 2017, as applicable) and designed and installed for wind loads in accordance with 2021 IBC Section 1504.6 or 2018, 2015, 2012 2009 and 2006 IBC Section 1504.5 and IBC Chapter 16.

4.3.2 Reroofing: Roof covering systems employing mechanical fasteners must be qualified to the satisfaction of the code official as to the adequacy of fasteners penetrating through existing roof coverings into structural substrates. Since the composition and/or condition of any particular underlying existing roofing material may vary widely, reroofing with adhered systems is outside the scope of this report.

5.0 CONDITIONS OF USE

The Elevate PVC membranes 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** Installation and application of the Elevate PVC membranes must comply with the IBC, the manufacturer's published installation instructions, and this report. The instructions within this report govern if there are any conflicts between the manufacturer's installation instructions and this report.
- 5.2** Elevate PVC membranes must be installed by professional roofing contractors trained and approved by the manufacturer.
- 5.3** Any foam plastic insulation, where used, must bear the label of an approved agency indicating that the foam plastic has a flame-spread index of not more than 75 when tested at the maximum thickness intended for use in accordance with ASTM E84 (UL 723), subject to the approved of the code official.
- 5.4** Above deck thermal insulation board must comply with the applicable standards listed in IBC Table 1508.2 or IRC Table R906.2. Foam plastic insulation must be separated from the interior of the building by an approved thermal barrier in accordance with IBC Section 2603.4.
- 5.5** Design wind uplift pressure on any roof area, including edge and corner zones, must not exceed the allowable wind uplift pressure listed for the system installed in that particular roof area. Refer to allowable wind uplift pressure for systems as listed in [Table 2A](#) and [2B](#).
- 5.6** The allowable wind uplift pressures listed in [Table 2A](#) and [2B](#) are for the roof covering only. The deck and framing to which the system is attached must be designated for the applicable components and cladding wind loads in accordance with the IBC.
- 5.7** Calculations demonstrating that the required wind resistance is less than the allowable wind resistance must be submitted to the code official for approval.
- 5.8** Where DensDeck®, DensDeck Prime® Roofboard, or SECUROCK® Gypsum-Fiber Roof Board is used as barrier board in the roofing assembly, weather protection must be provided to prevent damage to the barrier board prior to application of the roofing membrane.
- 5.9** The membranes are manufactured in Hillside, NJ under quality-control programs with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

- 6.1** Data in accordance with the [ICC-ES Acceptance Criteria for Membrane Roof-covering Systems \(AC75\)](#), dated July 2010 (editorially revised April 2021).

7.0 IDENTIFICATION

- 7.1 Each roll of Elevate PVC and Elevate PVC XR are labeled with the company name (Holcim Solutions and Products US, L2LC) and address, product name, date code and the evaluation report number (ESR-4791).
- 7.2 The report holder's contact information is the following:

HOLCIM SOLUTIONS AND PRODUCTS US, LLC
26 CENTURY BLVD., SUITE 205
NASHVILLE, TENNESSEE 37214
(800) 428-4442
www.holcimelevate.com/us-en

TABLE 1A—ROOFING SYSTEM FIRE CLASSIFICATION¹

SYSTEM NO.	CLASS	ROOF DECK ³	MAX ROOF SLOPE	INSULATION/BARRIER BOARDS				ROOF COVER
				VAPOR BARRIER	INSULATION ^{2,3}	COVERBOARD	ATTACHMENT	MEMBRANE
A-1	A	Noncombustible	1/2:12	V-Force, self-adhered	Min. 1 1/2-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. 1/4-inch DensDeck Prime	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in 1/2-inch-wide beads 12-inch o.c.	Elevate PVC, fully adhered with PVC LVOC Bonding Adhesive or PVC Bonding Adhesive applied at 1 gal./120 ft ²
A-2	A	Noncombustible	1 1/2:12	V-Force, self-adhered	Min. 1 1/2-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. 1/4-inch DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or 1/2-inch ISOGARD HD	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in 1/2-inch-wide beads 12-inch o.c.	Elevate PVC XR, fully adhered with PVC Water Based Bonding Adhesive applied at 1 gal./100 ft ² or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq.
A-3	A	Noncombustible	1 1/2:12	V-Force, self-adhered	Min. 1 1/2-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. 1/4-inch SECUROCK Gypsum-Fiber Roof Board or 1/2-inch ISOGARD HD	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive (except with SECUROCK), I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in 1/2-inch-wide beads 12-inch o.c.	Elevate PVC XR, fully adhered with PVC Water Based Bonding Adhesive applied at 1 gal./100 ft ² or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq.
A-4	A	Noncombustible	1/2:12	V-Force, self-adhered	Min. 1 1/2-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	—	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive applied in 1/2-inch-wide beads 12-inch o.c.	Elevate PVC, fully adhered with PVC Bonding Adhesive applied at 1.67 gal./100 ft ²
A-5	A	Noncombustible	1/2:12	—	Min. 1 1/2-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	—	Ribbon adhered with I.S.O. Spray R Part A and B applied in 1/2-inch-wide beads 12-inch o.c.	Elevate PVC, fully adhered with PVC Bonding Adhesive applied at 1.67 gal./100 ft ²
A-6	A	Noncombustible	1:12	—	Min. 1 1/2-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	—	I.S.O. Stick or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	Elevate PVC, fully adhered with PVC Water Based Bonding Adhesive applied at 0.56 gal./sq. to the top side of the substrate
								Elevate PVC XR, fully adhered with PVC Water Based Bonding Adhesive applied at 0.56 gal./sq. to the top side of the substrate
A-7	A	Noncombustible	1:12	—	Min. 1.5-inch ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	—	I.S.O. Stick or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	Elevate PVC, fully adhered with PVC Bonding Adhesive or PVC LVOC Bonding Adhesive applied at 0.71 gal./sq. or 0.84 gal./sq., respectively to the top side of the substrate and bottom side of the roof cover for a total of 1.42 gal./sq. or 1.67 gal./sq., respectively.
A-8	A	Noncombustible	2:12	—	—	Min. 1/2-inch Structodek High Density Fiberboard Roof Insulation, DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or ISOGARD HD	I.S.O. Stick or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	Elevate PVC, fully adhered with PVC Bonding Adhesive or PVC LVOC Bonding Adhesive applied at 0.71 gal./sq. or 0.84 gal./sq., respectively to the top side of the substrate and bottom side of the roof cover for a total of 1.42 gal./sq. or 1.67 gal./sq., respectively

TABLE 1A (CONTINUED)—ROOFING SYSTEM FIRE CLASSIFICATION¹

SYSTEM NO.	CLASS	ROOF DECK ³	MAX ROOF SLOPE	INSULATION/BARRIER BOARDS				ROOF COVER
				VAPOR BARRIER	INSULATION ²	COVERBOARD	ATTACHMENT	MEMBRANE
A-9	A	Noncombustible	2:12	—	—	Min. ½-inch Structodek High Density Fiberboard Roof Insulation, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or ISOGARD HD	I.S.O. Stick or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	Elevate PVC, fully adhered with PVC Water Based Bonding Adhesive applied at 0.56 gal./sq. to the top side of the substrate
	A	Noncombustible	1½:12	—	—	Min. ½-inch Structodek High Density Fiberboard Roof Insulation, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or ISOGARD HD	I.S.O. Stick or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	Elevate PVC XR, fully adhered with PVC Water Based Bonding Adhesive applied at 0.56 gal./sq. to the top side of the substrate
A-10	A	Noncombustible	1:12	—	Min. 1.5-inch ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	—	I.S.O. Spray R Part A and B applied in 0.75-inch-thick ribbons 4-inch o.c.	Elevate PVC XR, fully adhered with I.S.O Spray R Part A and B, applied in 0.5-inch-thick ribbons 12-inch o.c., or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq. or XR Stick Membrane Adhesive applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.
A-11	A	Noncombustible	1½:12	—	—	Min. ½-inch Structodek High Density Fiberboard Roof Insulation, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or ISOGARD HD	I.S.O. Stick or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	Elevate PVC XR, fully adhered with I.S.O Spray R Part A and B, applied in 0.5-inch-thick ribbons 12-inch o.c., or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq.

TABLE 1B—ROOFING SYSTEM FIRE CLASSIFICATION¹

SYSTEM NO.	CLASS	ROOF DECK ³	MAX ROOF SLOPE	BARRIER BOARD	INSULATION/BARRIER BOARDS				ROOF COVER
					VAPOR BARRIER	INSULATION ^{2,3}	COVERBOARD	ATTACHMENT	MEMBRANE
B-1	A	Noncombustible	1 ¹ / ₂ :12	Min. ½-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, fastened 1 per 4 ft ² with Dekfast DF-#14-PH3 fasteners and Dekfast PLT-R-3 plates, OMG Heavy Duty fasteners and OMG 3" Galvalume Steel Plates or Elevate All-Purpose fasteners Elevate Insulation Fastening Plates; primed with SA-Solvent Based (SB) Primer or V-Force SB Primer applied at ½ gal./100 ft ²	V-Force, self-adhered	Min. 1.5-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. ¼-inch DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or min. ½-inch ISOGARD HD	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in ½-inch-wide beads 12-inch o.c.	Elevate PVC XR, fully adhered with PVC Water Based Bonding Adhesive applied at 1 gal./100 ft ² or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq.
B-2	A	Noncombustible	1 ¹ / ₂ :12	Min. ½-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, fastened 1 per 4 ft ² with Dekfast DF-#14-PH3 fasteners and Dekfast PLT-R-3 plates, OMG Heavy Duty fasteners and OMG 3" Galvalume Steel Plates or Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates; primed with SA-Solvent Based (SB) Primer or V-Force SB Primer applied at ½ gal./100 ft ²	V-Force, self-adhered	Min. 1.5-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. ¼-inch DensDeck Prime	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in ½-inch-wide beads 12-inch o.c.	Elevate PVC, fully adhered with PVC LVOC Bonding Adhesive or PVC Bonding Adhesive applied at 1 gal./120 ft ²
B-3	A	Noncombustible	1 ¹ / ₂ :12	Min. ½-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, fastened 1 per 4 ft ² with Dekfast DF-#14-PH3 fasteners and Dekfast PLT-R-3 plates, OMG Heavy Duty fasteners and OMG 3" Galvalume Steel Plates or Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates; primed with SA-Solvent Based (SB) Primer or V-Force SB Primer applied at ½ gal./100 ft ²	V-Force, self-adhered	Min. 1.5-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. ¼-inch SECUROCK Gypsum-Fiber Roof Board	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive (except with SECUROCK), I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in ½-inch-wide beads 12-inch o.c.	Elevate PVC, fully adhered with PVC LVOC Bonding Adhesive or PVC Bonding Adhesive applied at 1 gal./120 ft ²
B-4	A	Noncombustible	2:12	—	—	Min. 1.5-inch ISO 95+ GL, loose-laid	Min. ½-inch Structodek High Density Fiberboard Roof Insulation, DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or ISOGARD HD	Fastened 1 per 2 ft ² with Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates	Elevate PVC, fully adhered with PVC Bonding Adhesive or PVC LVOC Bonding Adhesive applied at 0.71 gal./sq. or 0.84 gal./sq., respectively to the top side of the substrate and bottom side of the roof cover for a total of 1.42 gal./sq. or 1.67 gal./sq., respectively

TABLE 1B (CONTINUED)—ROOFING SYSTEM FIRE CLASSIFICATION¹

SYSTEM NO.	CLASS	ROOF DECK ³	MAX ROOF SLOPE	BARRIER BOARD	INSULATION/BARRIER BOARDS			ROOF COVER	
					VAPOR BARRIER	INSULATION ^{2,3}	COVERBOARD	ATTACHMENT	MEMBRANE
B-5	A	Noncombustible	1½:12	—	—	Min. 1.5-inch ISO 95+ GL, loose-laid	Min. ½-inch Structodek High Density Fiberboard Roof Insulation, DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or ISOGARD HD	Fastened 1 per 1.45 ft² with Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates	Elevate PVC XR, fully adhered with I.S.O Spray R Part A and B, applied in 0.5-inch-thick ribbons 12-inch o.c., or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq.
B-6	A	Noncombustible	1:12	—	—	Min. 1.5-inch ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA, fastened 1 per 1 ft² with Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates	—	—	Elevate PVC, fully adhered with PVC Water Based Bonding Adhesive applied at 0.56 gal./sq. to the top side of the substrate
B-7	A	Noncombustible	1:12	—	—	Min. 1.5-inch ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA, fastened 1 per 1 ft² with Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates	—	—	Elevate PVC, fully adhered with PVC Bonding Adhesive or PVC LVOC Bonding Adhesive applied at 0.71 gal./sq. or 0.84 gal./sq., respectively to the top side of the substrate and bottom side of the roof cover for a total of 1.42 gal./sq. or 1.67 gal./sq., respectively
B-8	A	Noncombustible	1:12	—	—	Min. 1.5-inch ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA, fastened 1 per 1 ft² with Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates	—	—	Elevate PVC XR, fully adhered with I.S.O Spray R Part A and B, applied in 0.5-inch-thick ribbons 12-inch o.c., or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq. or XR Stick Membrane Adhesive applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.

TABLE 1B (CONTINUED)—ROOFING SYSTEM FIRE CLASSIFICATION¹

SYSTEM NO.	CLASS	ROOF DECK ³	MAX ROOF SLOPE	BARRIER BOARD	INSULATION/BARRIER BOARDS				ROOF COVER
					VAPOR BARRIER	INSULATION ^{2,3}	COVERBOARD	ATTACHMENT	MEMBRANE
B-9	A	Noncombustible	1:12	Min. ½-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board, loose-laid	V-Force, self-adhered or primed with V-Force SB Primer, SA-Solvent Based (SB) Primer or SA-LVOC Primer applied to the substrate at a rate of 0.42 gal./sq.	Min. 2.75-inch ISO 95+ GL, RESISTA or ISOGARD CG	(Optional) Min. ¼-inch DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or min. ½-inch Structodek High Density Fiberboard Roof Insulation or ISOGARD HD	Preliminary attached	Elevate PVC or Elevate PVC XR with a 6-inch lap, fastened to the deck with Elevate Heavy-Duty fasteners and Elevate HD Seam Plates spaced in 114-inch rows 6-inch o.c.
B-10	A	Noncombustible	1:12	Min. ½-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board, loose-laid	V-Force, self-adhered or primed with V-Force SB Primer, SA-Solvent Based (SB) Primer or SA-LVOC Primer applied to the substrate at a rate of 0.42 gal./sq.	Min. 2.75-inch ISO 95+ GL, RESISTA or ISOGARD CG	(Optional) Min. ¼-inch DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or min. ½-inch Structodek High Density Fiberboard Roof Insulation or ISOGARD HD	Preliminary attached	Elevate PVC or Elevate PVC XR with a 6-inch lap, fastened to the deck with Elevate Heavy-Duty fasteners and Elevate HD Seam Plates spaced in 54-inch rows 12-inch o.c.
B-11	A	Noncombustible	1:12	Min. ½-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board, loose-laid	V-Force, self-adhered or primed with V-Force SB Primer, SA-Solvent Based (SB) Primer or SA-LVOC Primer applied to the substrate at a rate of 0.42 gal./sq.	Min. 2.75-inch ISO 95+ GL, RESISTA or ISOGARD CG	(Optional) Min. ¼-inch DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or min. ½-inch Structodek High Density Fiberboard Roof Insulation or ISOGARD HD	Preliminary attached	Elevate PVC or Elevate PVC XR with a 6-inch lap, fastened to the deck with Elevate Heavy-Duty fasteners and Elevate HD Seam Plates spaced in 114-inch rows 12-inch o.c.
B-12	A	Noncombustible	1½:12	—	—	Min. 1.5-inch RESISTA	—	Preliminary attached	Elevate PVC or Elevate PVC XR with a 6-inch lap, fastened to the deck with Elevate Heavy-Duty Plus fasteners and Elevate HD Plus Seam Plates spaced in 54-inch rows 12-inch o.c.

For SI: 1 inch = 25.4 mm; 1ft = 0.305 m; 1 square (100ft²) = 9.29 m²; 1 gal = 3.785L

FOOTNOTES:

- ¹ Unless otherwise specified, the barrier/cover board, insulation, base sheets, ply sheets, and membranes must be UL-Classified for roofing system applications.
- ² Polyisocyanurate must comply with ASTM C1289 Type I or Type II. Wood fiberboard insulation boards must comply with ASTM C208.
- ³ Foam plastic insulation thickness is limited to the lesser of the maximum thickness specified in this table or the maximum thickness stated on the label, that limits the flame spread index to not more than 75 when tested in accordance with ASTM E84 or UL723. See Sections 5.3 and 5.4 of this report for conditions of use. Polystyrene insulation must be covered with either G-P Gypsum Corp. DensDeck[®] or USG Corp. SECUROCK[®] at the thicknesses listed in [Tables 1A](#) through [2B](#).
- ⁴ Combustible wood decks must be minimum 15/32-inch-thick (11.9 mm) plywood, 7/16-inch-thick (11.1 mm) non-veneer APA rated oriented strand board (OSB) complying with DOC PS-1, DOC P-2 or ANSI/APA PRP 201, as applicable.

TABLE 2A—WIND UPLIFT RESISTANCE¹

SYSTEM NO.	SUBSTRATE	INSULATION/BARRIER BOARDS				ROOF COVER	ALLOWABLE UPLIFT CAPACITY (psf)
		VAPOR BARRIER	INSULATION ^{2,3}	COVERBOARD	ATTACHMENT	MEMBRANE	
A-1	Structural concrete, primed with SA-Solvent Based (SB) Primer or V-Force SB Primer applied at ½ gal./100ft ²	V-Force, self-adhered	Min. 1.5-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. ¼-inch DensDeck Prime	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in ½-inch-wide beads 12-inch o.c.	Elevate PVC, fully adhered with PVC LVOC Bonding Adhesive or PVC Bonding Adhesive applied at 1 gal./120 ft ²	67.5
A-2	Structural concrete, primed with SA-Solvent Based (SB) Primer or V-Force SB Primer applied at ½ gal./100ft ²	V-Force, self-adhered	Min. 1.5-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. ¼-inch DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or min. ½-inch ISOGARD HD	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in ½-inch-wide beads 12-inch o.c.	Elevate PVC XR, fully adhered with PVC Water Based Bonding Adhesive applied at 1 gal./100ft ² or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq.	45.0
A-3	Structural concrete, primed with SA-Solvent Based (SB) Primer or V-Force SB Primer applied at ½ gal./100ft ²	V-Force, self-adhered	Min. 1.5-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. ¼-inch SECUROCK Gypsum-Fiber Roof Board or min. ½-inch ISOGARD HD	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive (except with SECUROCK), I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in ½-inch-wide beads 12-inch o.c.	Elevate PVC XR, fully adhered with PVC Water Based Bonding Adhesive applied at 1 gal./100 ft ² or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq.	45.0
A-4	Structural concrete	—	Min. 1.5-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	—	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive applied in ½-inch-wide beads 12-inch o.c.	Elevate PVC, fully adhered with PVC Bonding Adhesive applied at 1.67 gal./100 ft ²	195.0
A-5	Structural concrete	—	Min. 1.5-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	—	Ribbon adhered with I.S.O. Spray R Part A and B applied in ½-inch-wide beads 12-inch o.c.	Elevate PVC, fully adhered with PVC Bonding Adhesive applied at 1.67 gal./100 ft ²	157.5
A-6	Structural concrete	—	Min. 1.5-inch ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	—	I.S.O. Stick or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	Elevate PVC, fully adhered with PVC Water Based Bonding Adhesive applied at 0.56 gal./sq. to the top side of the substrate Elevate PVC XR, fully adhered with PVC Water Based Bonding Adhesive applied at 0.56 gal./sq. to the top side of the substrate	337.5
A-7	Structural concrete	—	Min. 1.5-inch ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	—	I.S.O. Stick or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	Elevate PVC, fully adhered with PVC Bonding Adhesive or PVC LVOC Bonding Adhesive applied at 0.71 gal./sq. or 0.84 gal./sq., respectively to the top side of the substrate and bottom side of the roof cover for a total of 1.42 gal./sq. or 1.67 gal./sq., respectively.	52.5
A-8	Structural concrete)	—	—	Min. ½-inch Structodek High Density Fiberboard Roof Insulation, DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or ISOGARD HD	I.S.O. Stick or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	Elevate PVC, fully adhered with PVC Bonding Adhesive or PVC LVOC Bonding Adhesive applied at 0.71 gal./sq. or 0.84 gal./sq., respectively to the top side of the substrate and bottom side of the roof cover for a total of 1.42 gal./sq. or 1.67 gal./sq., respectively	67.5

TABLE 2A (CONTINUED)—WIND UPLIFT RESISTANCE¹

SYSTEM NO.	SUBSTRATE	INSULATION/BARRIER BOARDS				ROOF COVER	ALLOWABLE UPLIFT CAPACITY (psf)
		VAPOR BARRIER	INSULATION ^{2,3}	COVERBOARD	ATTACHMENT	MEMBRANE	
A-9	Structural concrete	—	—	Min. ½-inch Structodek High Density Fiberboard Roof Insulation, DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or ISOGARD HD	I.S.O. Stick or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	Elevate PVC, fully adhered with PVC Water Based Bonding Adhesive applied at 0.56 gal./sq. to the top side of the substrate	97.5
A-10	Structural concrete	—	Min. 1.5-inch ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	—	I.S.O. Spray R Part A and B applied in 0.75-inch-thick ribbons 4-inch o.c.	Elevate PVC XR, fully adhered with I.S.O Spray R Part A and B, applied in 0.5-inch-thick ribbons 12-inch o.c., or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq. or XR Stick Membrane Adhesive applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	495.0
A-11	Structural concrete	—	—	Min. ½-inch Structodek High Density Fiberboard Roof Insulation, DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or ISOGARD HD	I.S.O. Stick or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c.	Elevate PVC XR, fully adhered with I.S.O Spray R Part A and B, applied in 0.5-inch-thick ribbons 12-inch o.c., or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq.	382.5

TABLE 2B—WIND UPLIFT RESISTANCE¹

SYSTEM NO.	SUBSTRATE	BARRIER BOARD	INSULATION/BARRIER BOARDS				ROOF COVER	ALLOWABLE UPLIFT CAPACITY (psf)
			VAPOR BARRIER	INSULATION ^{2,3}	COVERBOARD	ATTACHMENT	MEMBRANE	
B-1	Min. 22 ga., steel	Min. ½-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, fastened 1 per 4ft ² with Dekfast DF-#14-PH3 fasteners and Dekfast PLT-R-3 plates, OMG Heavy Duty fasteners and OMG 3" Galvalume Steel Plates or Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates; primed with SA-Solvent Based (SB) Primer or V-Force SB Primer applied at ½ gal./100 ft ²	V-Force, self-adhered	Min. 1.5-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. ¼-inch DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or min. ½-inch ISOGARD HD	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in ½-inch-wide beads 12-inch o.c.	Elevate PVC XR, fully adhered with PVC Water Based Bonding Adhesive applied at 1 gal./100 ft ² or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq..	45.0
B-2	Min. 22 ga., steel	Min. ½-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, fastened 1 per 4ft ² with Dekfast DF-#14-PH3 fasteners and Dekfast PLT-R-3 plates, OMG Heavy Duty fasteners and OMG 3" Galvalume Steel Plates or Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates; primed with SA-Solvent Based (SB) Primer or V-Force SB Primer applied at ½ gal./100 ft ²	V-Force, self-adhered	Min. 1.5-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. ¼-inch DensDeck Prime	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive, I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in ½-inch-wide beads 12-inch o.c.	Elevate PVC, fully adhered with PVC LVOC Bonding Adhesive or PVC Bonding Adhesive applied at 1 gal./120ft ²	45.0
B-3	Min. 22 ga., steel	Min. ½-inch DensDeck Prime or SECUROCK Gypsum-Fiber Roof Board, fastened 1 per 4ft ² with Dekfast DF-#14-PH3 fasteners and Dekfast PLT-R-3 plates, OMG Heavy Duty fasteners and OMG 3" Galvalume Steel Plates or Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates; primed with SA-Solvent Based (SB) Primer or V-Force SB Primer applied at ½ gal./100 ft ²	V-Force, self-adhered	Min. 1.5-inch ACFoam-II, ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA	Min. ¼-inch SECUROCK Gypsum-Fiber Roof Board	Ribbon adhered with I.S.O. Twin Pack Insulation Adhesive (except with SECUROCK), I.S.O. Spray R Part A and B, I.S.O. Stick or Twin Jet applied in ½-inch-wide beads 12-inch o.c.	Elevate PVC, fully adhered with PVC LVOC Bonding Adhesive or PVC Bonding Adhesive applied at 1 gal./120 ft ²	45.0
B-4	Min. 22 ga., steel	—	—	Min. 1.5-inch ISO 95+ GL, loose-laid	Min. ½-inch Structodek High Density Fiberboard Roof Insulation, DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or ISOGARD HD	Fastened 1 per 2 ft ² with Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates	Elevate PVC, fully adhered with PVC Bonding Adhesive or PVC LVOC Bonding Adhesive applied at 0.71 gal./sq. or 0.84 gal./sq., respectively to the top side of the substrate and bottom side of the roof cover for a total of 1.42 gal./sq. or 1.67 gal./sq., respectively	45.0
B-5	Min. 22 ga., steel	—	—	Min. 1.5-inch ISO 95+ GL, loose-laid	Min. ½-inch Structodek High Density Fiberboard Roof Insulation, DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or ISOGARD HD	Fastened 1 per 1.45 ft ² with Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates	Elevate PVC XR, fully adhered with I.S.O. Spray R Part A and B, applied in 0.5-inch-thick ribbons 12-inch o.c., or Twin Jet applied in continuous 0.75- to 1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq.	45.0

TABLE 2B (CONTINUED)—WIND UPLIFT RESISTANCE¹

SYSTEM NO.	SUBSTRATE	BARRIER BOARD	INSULATION/BARRIER BOARDS				ROOF COVER	ALLOWABLE UPLIFT CAPACITY (psf)
			VAPOR BARRIER	INSULATION ^{2,3}	COVERBOARD	ATTACHMENT	MEMBRANE	
B-6	Min. 22 ga., steel	—	—	Min. 1.5-inch ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA, fastened 1 per 1 ft ² with Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates	—	—	Elevate PVC, fully adhered with PVC Water Based Bonding Adhesive applied at 0.56 gal./sq. to the top side of the substrate Elevate PVC XR, fully adhered with PVC Water Based Bonding Adhesive applied at 0.56 gal./sq. to the top side of the substrate	67.5
B-7	Min. 22 ga., steel	—	—	Min. 1.5-inch ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA, fastened 1 per 1 ft ² with Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates	—	—	Elevate PVC, fully adhered with PVC Bonding Adhesive or PVC LVOC Bonding Adhesive applied at 0.71 gal./sq. or 0.84 gal./sq., respectively to the top side of the substrate and bottom side of the roof cover for a total of 1.42 gal./sq. or 1.67 gal./sq., respectively	82.5
B-8	Min. 22 ga., steel	—	—	Min. 1.5-inch ISO 95+ GL, ISOGARD GL, ISOGARD CG or RESISTA, fastened 1 per 1 ft ² with Elevate All-Purpose fasteners and Elevate Insulation Fastening Plates	—	—	Elevate PVC XR, fully adhered with I.S.O Spray R Part A and B, applied in 0.5-inch-thick ribbons 12-inch o.c., or Twin Jet applied in continuous 0.75-1.0-inch-wide beads 4-inch o.c. or a spatter coat applied at 0.318 gal./sq. or XR Stick Membrane Adhesive applied in continuous 0.75-1.0-inch-wide beads 4-inch o.c.	82.5
B-9	Min. 22 ga., steel	Min. ½-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board, loose-laid	V-Force, self-adhered or primed with V-Force SB Primer, SA-Solvent Based (SB) Primer or SA-LVOC Primer applied to the substrate at a rate of 0.42 gal./sq.	Min. 2.75-inch ISO 95+ GL, RESISTA or ISOGARD CG	(Optional) Min ¼-inch DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or min. ½-inch Structodek High Density Fiberboard Roof Insulation or ISOGARD HD	Preliminary attached	Elevate PVC or Elevate PVC XR with a 6-inch lap, fastened to the deck with Elevate Heavy-Duty fasteners and Elevate HD Seam Plates spaced in 114-inch rows 6-inch o.c.	45.0

TABLE 2B (CONTINUED)—WIND UPLIFT RESISTANCE¹

SYSTEM NO.	SUBSTRATE	BARRIER BOARD	INSULATION/BARRIER BOARDS				ROOF COVER	ALLOWABLE UPLIFT CAPACITY (psf)
			VAPOR BARRIER	INSULATION ^{2,3}	COVERBOARD	ATTACHMENT	MEMBRANE	
B-10	Min. 22 ga., steel	Min. ½-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board, loose-laid	V-Force, self-adhered or primed with V-Force SB Primer, SA-Solvent Based (SB) Primer or SA-LVOC Primer applied to the substrate at a rate of 0.42 gal./sq.	Min. 2.75-inch ISO 95+ GL, RESISTA or ISOGARD CG	(Optional) Min. ¼-inch DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or min. ½-inch Structodek High Density Fiberboard Roof Insulation or ISOGARD HD	Preliminary attached	Elevate PVC or Elevate PVC XR with a 6-inch lap, fastened to the deck with Elevate Heavy-Duty fasteners and Elevate HD Seam Plates spaced in 54-inch rows 12-inch o.c.	52.5
B-11	Min. 22 ga., steel	Min. ½-inch DensDeck or SECUROCK Gypsum-Fiber Roof Board, loose-laid	V-Force, self-adhered or primed with V-Force SB Primer, SA-Solvent Based (SB) Primer or SA-LVOC Primer applied to the substrate at a rate of 0.42 gal./sq.	Min. 2.75-inch ISO 95+ GL, RESISTA or ISOGARD CG	(Optional) Min. ¼-inch DensDeck, DensDeck Prime, SECUROCK Gypsum-Fiber Roof Board or min. ½-inch Structodek High Density Fiberboard Roof Insulation or ISOGARD HD	Preliminary attached	Elevate PVC or Elevate PVC XR with a 6-inch lap, fastened to the deck with Elevate Heavy-Duty fasteners and Elevate HD Seam Plates spaced in 114-inch rows 12-inch o.c.	45.0
B-12	Min. 22 ga., steel	—	—	Min. 1.5-inch RESISTA	—	Preliminary attached	Elevate PVC or Elevate PVC XR with a 6-inch lap, fastened to the deck with Elevate Heavy-Duty Plus fasteners and Elevate HD Plus Seam Plates spaced in 54-inch rows 12-inch o.c.	60.0

For SI: 1 inch = 25.4 mm; 1 ft = 0.305 m; 1 square (100 ft²) = 9.29 m²; 1 gal = 3.785 L

FOOTNOTES:

¹ Unless otherwise specified, the barrier/cover board, insulation, base sheets, ply sheets, and membranes must be UL-Classified for roofing system applications.

² Polyisocyanurate must comply with ASTM C1289 Type I or Type II. Wood fiberboard insulation boards must comply with ASTM C208.

³ Foam plastic insulation thickness is limited to the lesser of the maximum thickness specified in this table or the maximum thickness stated on the label, that limits the flame spread index to not more than 75 when tested in accordance with ASTM E84 or UL723. See Sections 5.3 and 5.4 of this report for conditions of use. Polystyrene insulation must be covered with either G-P Gypsum Corp. DensDeck[®] or USG Corp. SECUROCK[®] at the thicknesses listed in [Tables 1A](#) through [2B](#).

⁴ Combustible wood decks must be minimum 1⁵/₃₂-inch-thick (11.9 mm) plywood, 7¹/₁₆-inch-thick (11.1 mm) non-veneer APA rated oriented strand board (OSB) complying with DOC PS-1, DOC P-2 or ANSI/APA PRP 201, as applicable.

DIVISION: 07 00 00—THERMAL AND MOISTURE
Section: 07 54 19—Polyvinyl-Chloride Roofing

REPORT HOLDER:

HOLCIM SOLUTIONS AND PRODUCTS US, LLC

EVALUATION SUBJECT:

ELEVATE PVC SINGLE-PLY ROOF SYSTEMS OVER STEEL, CONCRETE, AND RECOVER

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Elevate PVC singly-ply roof systems over steel, concrete and recover, described in ICC-ES evaluation report ESR-4791, have also been evaluated for compliance with the codes noted below.

Applicable code edition(s):

- 2022 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.

- 2022 California Residential Code (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Elevate PVC singly-ply roof systems over steel, concrete and recover, described in Sections 2.0 through 7.0 of the evaluation report ESR-4791, comply with CBC Chapter 15, provided the design and installation are in accordance with the 2021 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapter 15, as applicable.

The products have not been evaluated under Chapter 7A for use 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.

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 Elevate PVC singly-ply roof systems over steel, concrete and recover, described in Sections 2.0 through 7.0 of the evaluation report ESR-4791, comply with CRC Chapter 9, provided the design and installation are in accordance with the 2021 *International Residential Code*® (IRC) provisions noted in the evaluation report and the additional requirements of CRC Chapter 9, as applicable.

The products have not been evaluated under CRC Section R337 for use 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.

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 December, 2024.