

ICC-ES Evaluation Report

ESR-2563

Reissued March 2024 This report also contains:

- CBC Supplement

- FBC Supplement Subject to renewal March 2025

ICC-ES Evaluation Reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, LLC, express or implied, as to any finding or other matter in this report, or as to any product covered by the report.

Copyright © 2024 ICC Evaluation Service, LLC. All rights reserved.

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

Section: 07 24 00-**Exterior Insulation and**

Finish Systems

REPORT HOLDER:

PAREX USA, INC.

EVALUATION SUBJECT:

PAREX STANDARD SYSTEM AND LAHABRA **INSUL-FLEX STANDARD SYSTEM (STANDARD**

SYSTEMS)



1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, 2012 and 2009 International Building Code® (IBC)
- 2021, 2018, 2015, 2012 and 2009 International Residential Code (IRC)

Properties evaluated:

PROPERTY	IBC CHAPTER	IRC CHAPTER
Exterior insulation and finish systems (EIFS)	14	R7
Fire-resistance-rated construction	7	R3
Weather resistance	14	R7
Special inspections	17	NA
Structural – transverse wind load resistance	16	R6
Types I – IV (noncombustible) construction	26	NA
Surface burning characteristics	26	R3
Ignition resistance	26	NA

2.0 USES

The Standard Systems are an exterior insulation and finish system (EIFS) complying with 2021 and 2018 IBC Section 1407 (2015, 2012 and 2009 IBC Section 1408) and IRC Section R703.9. The systems may be used in fire-resistance-rated construction and any construction Type (IBC Types I through V), with the exception of Type V, framed walls in a Group R1, R2, R3 or R4 occupancy Group. Under the IRC, the systems are limited to use on concrete or masonry walls.

3.0 DESCRIPTION

3.1 System Components:

See <u>Table 1</u>. The Standard Systems consist of an optional water-resistive barrier coating, adhesively applied EPS, reinforcing mesh, base coat and finish coat.

3.2 Insulation Board:

Insulation board must be one of the following:

- a. EPS insulation board must comply with ASTM C578, Type I, and ASTM E2430 and must be produced by a molder with a current evaluation report.
- b. EPS insulation board may be produced by a molder that participates in an approved third-party quality-assurance program. The board must comply with ASTM C578, Type I, and ASTM E2430, have a flame spread index of 25 or less and a smoke developed index of 450 or less when tested in accordance with ASTM E84 or UL723, and be labeled in accordance with the code.

3.3 Substrates (see Table 2):

- Gypsum sheathing complying with ASTM C1396 or ASTM C1177
- Fiber cement panels complying with the ICC-ES Acceptance Criteria for Fiber Cement Siding Used as Exterior Wall Siding (AC90), and ASTM C1186
- Fiber cement panels complying with the ICC-ES Acceptance Criteria for Reinforced Cementitious Sheets Used as Wall and Ceiling Sheathing and Floor Underlayment (AC376), and ASTM C1325
- · Concrete-masonry complying with the code
- · Concrete complying with the code
- · Exterior plaster complying with the code
- Exposure 1 wood structural panels complying with DOC PS 1 or PS-2
- · Brick masonry complying with the code

3.4 Sealants:

Sealants must comply with ASTM C920, Type S or M, minimum Grade NS, minimum Class 25 and Use O.

4.0 DESIGN AND INSTALLATION

4.1 General:

The Standard Systems must be installed in accordance with the manufacturer's installation instructions, specifications and details available at www.parexusa.com.

4.2 Drainage Options:

The Standard Systems have not been qualified as an EIFS with drainage, as described in 2021 and 2018 IBC Section 1407.4.1 (2015, 2012 and 2009 IBC Section 1408.4.1) and IRC Section R703.9.2.

4.3 Wind Design:

<u>Table 3</u> describes specific assemblies for which test data has been submitted. Other assemblies may be considered for approval by local officials based on testing and/or calculations of a qualified design professional.

4.4 Weather Protection:

The Standard Systems comply with 2021 and 2018 IBC Section 1402.2 (2015, 2012, and 2009 IBC Section 1403.2) and IRC Section R703.1.1.

4.5 Use in Types I through IV Construction:

Table 4 describes the assemblies qualified for use in Types I through IV construction.

4.6 Fire-resistance-rated Construction:

Table 5 describes the assemblies qualified for use in nonload-bearing fire-resistance-rated construction (the assemblies are rated from both sides, therefore the exterior wall does not require a minimum fire separation distance from adjacent construction as specified in IBC Section 705.5). In addition, in Type V construction, the Standard Systems may be attached to the surface of combustible exterior fire-resistance-rated assemblies described in the 2021, 2018, 2015 and 2012 IBC Table 721.1(2) (2009 IBC Table 720.1(2)) without changing the assigned hourly rating of the assembly. The Type V exterior wall must have a minimum fire separation distance of 10 feet (3048 mm) from adjacent construction.

4.7 Special Inspections:

For installations under the IBC, special inspections must be conducted in accordance with the 2021 IBC 1705.17 {2018 and 2015 IBC Section 1705.16 [2012 IBC Section 1705.15 (2009 IBC Section 1704.14)]}. Refer to the Parex USA, Inc., Third Party Inspection Guidelines for verifying field preparation of materials.

5.0 CONDITIONS OF USE:

The Standard Systems described in this report comply with, or are 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 must comply with this report, the manufacturer's published installation instructions and the applicable code. In the event of a conflict between the manufacturer's instructions and this report governs.
- **5.2** The insulation board must be separated from the building interior by a thermal barrier complying with the applicable code.
- **5.3** Use in Type V framed construction in Occupancy Groups R1, R2, R3 and R4 is not permitted.
- 5.4 Installation must be by applicators listed by Parex USA, Inc.
- 5.5 Termination of the systems must not be less than 6 inches (152 mm) above finished grade in accordance with the 2021, 2018 and 2015 IBC Section 2603.8 (2012 IBC Section 2603.9, 2009 IBC Section 2603.8) and the IRC Section R318.4 and the 2021, 2018 and 2015 IRC Section R703.9.1 (2012 and 2009 IRC Section R703.9.4.1).

6.0 EVIDENCE SUBMITTED

- **6.1** Data in accordance with the ICC-ES Acceptance Criteria for Exterior Insulation and Finish Systems (AC219), dated October 2009 (editorially revised December 2022).
- **6.2** Data in accordance with the ICC-ES Acceptance Criteria for Foam Plastic Insulation (AC12), dated June 2015 (editorially revised December 2020).
- 6.3 Reports of tests in accordance with ASTM E2568.
- 6.4 Reports of test in accordance with NFPA 285 and NFPA 268.

7.0 IDENTIFICATION

- **7.1** The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-2563) along with the name, registered trademark, or registered logo of the report holder must be included in the product label.
- 7.2 In addition, each container or package of the coating or reinforcing mesh used as part of the Standard Systems must be labeled with the Parex USA, Inc., name and address; the product name; lot or batch number; quantity of material; storage instructions; pot life; expiration date; and the evaluation report number (ESR-2563). Foam plastic insulation must be labeled in accordance with the current ICC-ES evaluation report in which it is recognized, or as described in Section 3.2.2.
- **7.3** The report holder's contact information is the following:

PAREX USA, INC. 2150 EASTRIDGE AVENUE RIVERSIDE, CALIFORNIA 92507 (714) 333-3269 www.parexusa.com

TABLE 1—SYSTEM COMPONENTS

SYSTEM	WATER-RESISTIVE BARRIER (optional)	ADHESIVE	BASE COAT	REINFORCING MESH	FINISH
Standard Systems	WeatherSeal Spray & Roll-On	Parex 121, Parex 302ABC-N1, Parex 303, Parex 395 Keycoat, Insul-Bond LaHabra Sheathing Adhesive	Parex 121, or Parex Base Coat and Adhesive 301, or Parex Base Coat and Adhesive 302 ABC-N1, or Insul-Bond	Standard Reinforcing Mesh, 4.5 oz/yd², minimum¹	DPR Acrylic Finish 300 Series DPR Acrylic Finish 500 Series DPR Optimum Finish, LaHabra Perma-Finish,

¹Higher weight meshes are allowable.

TABLE 2—SUBSTRATES

ADHESIVE	SUBSTRATES
Parex 121, Insul-Bond	WeatherSeal Spray & Roll-On Water-resistive Barrier All substrates noted in Section 3.3 except Plywood and OSB
Parex Base Coat and Adhesive 302 ABC-N1	ASTM C1396 Sheathing ASTM C1177 Sheathing
Parex 303 Adhesive, LaHabra Sheathing Adhesive	ASTM C1396 Sheathing ASTM C1177 Sheathing Plywood & OSB
Parex 395 Keycoat	WeatherSeal Spray & Roll-On Water-resistive Barrier All substrates noted in Section 3.3

TABLE 3—WIND LOAD DESIGN

FRAMING ³		SUBSTRATE	EPS			
Туре	Max. Spacing (inch)		EPS Minimum Thickness (inch)	Coating	Allowable Wind Load (psf)	
2x4 Wood ¹		Any substrate noted in Section 3.3; attached to				
3 ⁵ / ₈ -inch-by-No. 20 gage-steel Minimum f _y = 33Ksi	16	wood framing with 11/4 inch, No. 6 bugle-head Type W screws at 6 inches on center along studs; or to steel framing with 11/4 inch, No. 8, wafer-head type S screws, spaced 8 inches on center along studs. Fastener length must be increased by the addition sheathing thickness for sheathing greater than 1/2 inch.	1	Standard Systems described in <u>Table 1</u>	80 positive, 50 negative	
N/A	N/A	Concrete, or Concrete-masonry	1		Positive – see note 2, 50, negative	

SI: 1 inch = 25.4 mm; 1 psf = 0.0479 kPa.

The framing members must be designed to resist all positive and negative transverse design loads with a maximum allowable deflection of 1/240 of the span.

FRAMING MEMBERS			INTERIOR SHEATHING ^{3,4}			EXTERIOR SHEATHING ³			Insulation		
Me	etal	Max.		Min.	Max.		Min.	Max.	Board		
Min. Depth	Min. Gage	Spacing (inches)	Туре	Thickness (inch)	Fastener Spacing (inches)	Туре	Thickness (inch)	Fastener Spacing (inches)	Thickness Maximum (inches)	Assembly	
3 ⁵ /8"	No. 18 (0.0428 inch) ⁵	16 o.c.	ASTM C36 or ASTM C1396 Type X	⁵ /8"	8 o.c. ¹	ASTM C1396	1/2	8 o.c.	4	Water-resistive Barrier Coating: Optional Adhesive: Parex 121 / Parex 302 ABC-N1, Insul-Bond Base Coat: Parex 121, Insul-Bond Finish Coat: Any noted in Table 1	
35/8"	No. 20 (0.0320 inch) ⁶	16 o.c.	ASTM C36 or ASTM C1396	1/2"	8 o.c. ²	ASTM C1396	1/2	8 o.c.	13	Water-resistive Barrier Coating: Optional Adhesive: Parex 121, Insul-Bond Base Coat: Parex 121, Insul-Bond	

Finish Coat: Any noted in Table 1

TABLE 4—ASSEMBLIES FOR USE IN TYPES I THROUGH IV CONSTRUCTION

Type X

¹Minimum 2x4 Wood Framing, minimum specific gravity 0.42.

² Maximum positive pressure is limited to the capacity of the concrete or concrete masonry substrate, determined in accordance with the applicable code.

¹Fasteners are minimum No. 6, 1¹/₄-in-long corrosion-resistant steel, Type S, self-drilling buglehead screws.

²Fasteners are minimum No. 8, 1¹/₄-in-long corrosion-resistant steel, Type S, self-drilling buglehead screws.

³Where the sheathing exceeds ¹/₂ inch in thickness, the screw length must be increased by the additional sheathing thickness.

⁴All joints must be taped and treated with joint compound. Intermediate fastener heads are treated with joint compound in accordance with ASTM C840 or GA216.

⁵Openings must be framed with minimum 0.0428-inch-thick steel framing.

⁶Openings must be framed with minimum 0.0320-inch-thick steel framing.

⁷At floor levels, Thermafiber insulation batts must be fitted between studs. Insulation density must be a nominal 4 pcf. Batts may be either friction-fitted or supported.

TABLE 5—FIRE-RESISTANCE-RATED ASSEMBLIES^{2,3}

FRAMING MEMBERS		SHEATHING (INTERIOR AND EXTERIOR)						
Min. Depth	Min. Gage	Max. Spacing	Туре	Min. Thickness	Max. Fastener Spacing	Fastener	Board Thickness Maximum (inches)	Rating
35/8"	20 (0.0320 inch)	16" o.c.	Type X FR Gypsum Wallboard ¹	5/8"	8 inches (203 mm) on center along the perimeter and 12 inches (305 mm) on center on all intermediate studs.	No. 6 by 1 ¹ / ₄ -inch-long (32 mm), self- tapping, bugle Phillips head drywall screws	4	1 hour
3 ⁵ /8"	20 (0.0320 inch)	16" o.c.	Two layers of Type X FR gypsum board.	⁵ /8"	Layer 1: 16 inches (406 mm) on center at the stud locations Layer 2 (interior): 16 inches (406 mm) on center: Layer 2 (exterior):8 inches (203 mm) on center	Layer 1: 6 by 1 ¹ / ₄ -inch-long (32 mm), self-tapping, bugle Phillips head drywall screws Layer 2 (interior); No 6 by 1 ⁷ / ₈ -inch-long (48 mm), self-tapping, bugle Phillips head drywall screws Layer 2 (exterior): g No. 6 by 1 ⁷ / ₈ -inch-long (48 mm), self-tapping, bugle Phillips head drywall screws	4	2 hour
3 ⁵ / ₈ "	20 (0.0320 inch)	16" o.c.	Three layers of Type X FR gypsum board.	5/8"	Layer 1: 24 inches (610 mm) on center along the perimeter and intermediate studs. Layer 2 (interior): Offset from first layer seams by 12 inches, spaced 24 inches (610 mm) on center Layer 3: oriented identically to the first layer; 12 inches (305 mm) on center.		4	3 hour

¹All joints are taped and treated with joint compound in accordance with ASTM C840 or GA216. Intermediate fastener heads are treated with joint compound. ²EIFS Assembly: Water-resistive Barrier Coating: Optional, Adhesive: Parex 121, Insul-Bond, Base Coat: Parex 121, Insul-Bond, Finish Coat: Any. ³Rated from both sides.



ICC-ES Evaluation Report

ESR-2563 CBC and CRC Supplement

Reissued March 2024

This report is subject to renewal March 2025.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION Section: 07 24 00—Exterior Insulation and Finish Systems

REPORT HOLDER:

PAREX USA, INC.

EVALUATION SUBJECT:

PAREX STANDARD SYSTEM AND LAHABRA INSUL-FLEX STANDARD SYSTEM (STANDARD SYSTEMS)

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Parex Standard System and LaHabra Insul-Flex Standard System, described in ICC-ES evaluation report ESR-2563, have also been evaluated for compliance with the code(s) 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 Parex Standard System and LaHabra Insul-Flex Standard System, described in Sections 2.0 through 7.0 of the evaluation report ESR-2563, comply with CBC Chapters 7, 14 and 26, 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 Chapters 16 and 17, as applicable.

2.1.1 OSHPD:

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

2.1.2 DSA:

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

2.2 CRC:

The Parex Standard System and LaHabra Insul-Flex Standard System, described in Sections 2.0 through 7.0 of the evaluation report ESR-2563, comply with CRC Chapters 3 and 7, provided the design and installation are in accordance with the 2022 *International Residential Code®* (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued March 2024.





ICC-ES Evaluation Report

ESR-2563 FBC Supplement

Reissued March 2024

This report is subject to renewal March 2025.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION Section: 07 24 00—Exterior Insulation and Finish Systems

REPORT HOLDER:

PAREX USA, INC.

EVALUATION SUBJECT:

PAREX STANDARD SYSTEM AND LAHABRA INSUL-FLEX STANDARD SYSTEM (STANDARD SYSTEMS)

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that the Standard Systems, described in ICC-ES evaluation report ESR-2563, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

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

2.0 CONCLUSIONS

The Standard Systems, described in Sections 2.0 through 7.0 of the evaluation report ESR-2563, comply with the Florida Building Code—Building and the Florida Building Code—Residential. The design requirements must be determined in accordance with the Florida Building Code—Building or the Florida Building Code—Residential, as applicable. The installation requirements noted in ICC-ES evaluation report ESR-2563 for the 2018 International Building Code® (IBC) meet the requirements of the Florida Building Code—Building or the Florida Building Code—Residential, as applicable, with the following conditions:

- 1. Design wind loads must be based on Section 1609 of the *Florida Building Code—Building* or Section 301.2.1 of the *Florida Building Code—Residential*, as applicable.
- 2. Load combinations must be in accordance with Section 1605 of the Florida Building Code—Building, as applicable.
- 3. Installation must meet the requirements of Section 1403.8 of the *Florida Building Code—Building* or Section R318.7 of the *Florida Building Code—Residential*, as applicable.

Use of the Standard 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).

This supplement expires concurrently with the evaluation report, reissued March 2024.

