1.0 EVALUATION SCOPE
Compliance with the following codes:

- 2018 and 2015 International Building Code® (IBC)
- 2018 and 2015 International Residential Code® (IRC)

For evaluation of compliance with codes adopted by the Los Angeles Department of Building and Safety (LADBS), see ESR-1474 LABC and LARC Supplement.

Properties evaluated:
- Weather resistance
- Air leakage

2.0 USES
ZIP System® Wall Sheathing panels are used as combination wall sheathing, air barrier, and water-resistive barrier. This report recognizes the use of ZIP System® Sheathing, when installed with ZIP System™ flexible flashing seam tape, in walls of Type V construction (IBC) and dwellings under the IRC, and as an alternate to the water-resistive barrier required in Chapter 14 of the IBC and Chapter 7 of the IRC, and to the air barrier required by Sections R402.4 and C402.5.1 of the 2018 and 2015 IECC.

3.0 DESCRIPTION
3.1 Sheathing Panel:
The ZIP System® Wall Sheathing panel is a wood structural panel having a laminated exterior face. The Exposure 1 wood structural panel complies with US DOC PS 1 for plywood structural panels or US DOC PS 2 for OSB wood structural panels. The exterior facer is a medium-density, phenolic-impregnated, polymer-modified sheet material qualifying as a Grade D water-resistive barrier (required by Section 2510.6 of the 2018 and 2015 IBC). The panels are nominally 4 feet wide by 8, 9, 10, 11 or 12 feet long and have a square-finished-edge or machined-edge profile.

When tested in accordance with ASTM E96 (water method), the polymer-modified sheet overlay has a minimum vapor permeance of 12 perms \([68.6 \times 10^{-11} \text{ kg/(Pa-s-m}^2\text{)}]\). Equivalent Water Vapor Transmission rate (WVT) of the polymer-modified sheet overlay is 83.4 g/(24h-m²) when tested at 73.4°F (23°C).

The water-resistive barrier and air barrier properties of the ZIP System® Wall Sheathing Panels are not affected when the panels are manufactured to comply as facing materials for SIPs in accordance with Section R610.3 of the 2018 IRC (Section R610.3.2 and Table R610.3.2 of the 2015 IRC).

3.2 Seam Tape:
The ZIP System™ seam tape is a pressure sensitive self-adhering membrane tape consisting of acrylic adhesive laminated to a polyolefin backing. The tape is 0.012 inch (0.30 mm) thick with a minimum width of 3 3/4 inches (95.2 mm), and comes in rolls of various lengths.

4.0 INSTALLATION
4.1 General:
Installation of ZIP System® Wall Sheathing panels must comply with the applicable code, this report and the manufacturer’s published installation instructions. The manufacturer’s published installation instructions must be available at the jobsite during installation.

4.2 Application:
4.2.1 General:
The ZIP System® Wall Sheathing panels must be attached to wall framing in accordance with the applicable code for wood structural panels, and in compliance with their panel span rating. The panels must be installed with the polymer-modified sheet overlay facing the exterior. In accordance with the manufacturer’s published installation instructions, it is recommended that the square edges of the panels be installed with a gap between adjacent panels and between panels and dissimilar materials. All ZIP System® Wall Sheathing panel seams must be sufficiently sealed with ZIP System™ seam tape. All overlay surfaces must be dry and free of sawdust and dirt prior to application of the ZIP System™ seam tape. The ZIP System™ seam tape must extend a minimum of 1 inch (25.4 mm) past the panel edge T-joint intersections and must be centered within 1/2 inch (12.7 mm) over the middle of panel seams. The tape must be pressed firmly to
adhere to the surfaces and seal the seams. Wrinkles in the ZIP System™ seam tape are acceptable unless they create a leak path to the panel seam.

4.2.2 Flushing: Flushing complying with the applicable code must be installed at the perimeter of door and window assemblies, penetrations and terminations of exterior wall assemblies, exterior wall intersections with roofs, chimneys, porches, decks, balconies, and similar projections, and at built-in gutters and similar locations where moisture could enter the wall. An adhesive-backed flashing tape recognized in a current ICC-ES evaluation report must be installed to seal all ZIP System® Wall Sheathing flashing joints. Penetration items must be sealed to the panels. The adhesive-backed flashing tape must comply with the ICC-ES Acceptance Criteria for Flexible Flashing Materials (AC148) and must be installed in accordance with the manufacturer’s published installation instructions. See Figures 1 through 7 of this report for typical flashing, water-resistive barrier and air barrier assembly installation details.

4.2.3 Air Barrier Assembly: ZIP System® Wall Sheathing fastened to maximum 24-inch-on-center (610 mm) wood wall framing, using minimum 6d nails spaced at 6 inches (152 mm) around panel edges and at 12 inches (305 mm) in the field, leaving a 1/8-inch (3.18 mm) gap between panels, forms an air barrier assembly when the gaps between panels and the perimeter of penetrations are sealed with ZIP System™ seam tape as required by Section 4.2.1. The assembly has demonstrated a maximum air leakage of 0.0072 cfm/ft² [0.037 L/(s•m²)] infiltration and 0.0023 cfm/ft² [0.012 L/(s•m²)] exfiltration at a pressure differential of 1.57 psf (75 Pa) when tested in accordance with ASTM E2357.

5.0 CONDITIONS OF USE

The ZIP System® Wall Sheathing panel and tape system 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 This evaluation report and the manufacturer’s published installation instructions, when required by the code official, must be submitted at the time of permit application.

5.2 The ZIP System® Wall Sheathing panels must be manufactured, identified and installed in accordance with this report and the manufacturer’s published installation instructions. In the event of a conflict between the instructions and this report, this report must govern.

5.3 The ZIP System® Wall Sheathing panels must be covered with a code-complying exterior wall covering, or one that is recognized in a current ICC-ES evaluation report.

5.4 The plywood sheathing must comply with US DOC PS-1, and the OSB sheathing must comply with US DOC PS-2, as applicable.

5.5 Fire-resistance-rated construction is outside the scope of this report.

5.6 The Zip System® Wall Sheathing panels are manufactured by Huber Engineered Woods, LLC, in Crystal Hill, Virginia; Easton, Maine; Commerce, Georgia; Broken Bow, Oklahoma; Spring City, Tennessee; Dillard, Oregon; and Shawinigan, Quebec Canada, 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 Water-resistive Membranes Factory-bonded to Wood-based Structural Sheathing, Used as Water-resistive Barriers (AC310), dated May 2008 (editorially revised June 2019).

6.2 Air leakage data in accordance with ASTM E2357.

7.0 IDENTIFICATION

7.1 Each ZIP System® Wall Sheathing panel described in this report must bear a label that includes the manufacturer’s name (Huber Engineered Woods LLC), the product name, nominal panel thickness, the evaluation report number (ESR-1474), and the words “Mill 229, Crystal Hill, Virginia”; “Mill 228, Easton, Maine”; “Mill 227, Commerce, Georgia”; “Mill 290, Broken Bow, Oklahoma”; “Mill 230, Spring City, Tennessee”; “Mill 480, Dillard, Oregon” or “Mill 390, Shawinigan, Quebec Canada.” The sheathing must also bear a label from an approved inspection agency demonstrating compliance with US DOC PS 1 or US DOC PS 2, as applicable. The ZIP System™ seam tape roll must be labeled with the ZIP System logo and the evaluation report number ESR-1474 (see Figure 8).

7.2 The report holder’s contact information is the following:

HUBER ENGINEERED WOODS, LLC
ONE RESOURCE SQUARE
10925 DAVID TAYLOR DRIVE, SUITE 300
CHARLOTTE, NORTH CAROLINA 28262
(800) 933-9220
www.huberwood.com
FIGURE 1—TYPICAL DETAIL OF FLANGED WINDOW INSTALLATION

FIGURE 2—TYPICAL DETAIL OF BRICK MOLD WINDOW INSTALLATION
FIGURE 3—ROOF TO WALL DETAIL WITH ZIP SYSTEM® ROOF SHEATHING

FIGURE 4—ROOF TO WALL DETAIL WITH WOOD STRUCTURAL PANEL ROOF SHEATHING
FIGURE 5—TYPICAL WALL-SILL INTERSECTION AND FLASHING DETAIL FOR BRICK SIDING

FIGURE 6—TYPICAL WALL-SILL INTERSECTION AND FLASHING DETAIL FOR LAPPED SIDING
FIGURE 7—INSTALLATION AT PENETRATION OPENING (NON-FIRE-RESISTANCE RATED)

FIGURE 8—LABELING FOR THE ZIP SYSTEM™ SEAM TAPE ROLL
1.0 REPORT PURPOSE AND SCOPE

Purpose:
The purpose of this evaluation report supplement is to indicate that the ZIP System® Wall Sheathing, described in ICC-ES evaluation report ESR-1474, has 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 ZIP System® Wall Sheathing, described in Sections 2.0 through 7.0 of the evaluation report ESR-1474, complies with LABC Chapter 14, and LARC Section R703, and is subject to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The ZIP System® Wall Sheathing, described in this evaluation report must comply with all of the following conditions:
- All applicable sections in the evaluation report ESR-1474.
- The design, installation, conditions of use and identification are in accordance with the 2018 International Building Code® (IBC) and 2018 International Residential Code® (IRC) provisions noted in the evaluation report ESR-1474.
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16 and 17, as applicable.

This supplement expires concurrently with the evaluation report, reissued October 2018 and revised March 2020.
1.0 REPORT PURPOSE AND SCOPE

Purpose:
The purpose of this evaluation report supplement is to indicate that ZIP System® Wall Sheathing, recognized in ICC-ES evaluation report ESR-1474, has also been evaluated for compliance with the codes noted below.

Applicable code editions:
- 2019 California Building Code (CBC)
  For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of the 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 ZIP System® Wall Sheathing, described in Sections 2.0 through 7.0 of the evaluation report ESR-1474, complies with CBC Chapters 14 and 23, 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 the CBC Chapters 16 and 17, as applicable.

The ZIP System® Wall Sheathing has not been evaluated under Chapter 7A for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Area.

2.1.1 OSHPD:
OSHPD requirements as indicated in the CBC are beyond the scope of this supplement.

2.1.2 DSA:
DSA requirements as indicated in the CBC are beyond the scope of this supplement.

2.2 CRC
The ZIP System® Wall Sheathing, as described in Sections 2.0 through 7.0 of the evaluation report ESR-1474, complies with the CRC, provided the design and installation are in accordance with the 2018 International Residential Code® (IRC) provisions noted in the evaluation report.

The ZIP System® Wall Sheathing has not been evaluated under CRC Section R337 for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland-Urban Interface Area.

The ZIP System® Wall Sheathing recognized in this supplement has not been evaluated for compliance with the International Wildland-Urban Interface Code®.

This supplement expires concurrently with the evaluation report, reissued October 2018 and revised March 2020.
1.0 REPORT PURPOSE AND SCOPE

Purpose:
The purpose of this evaluation report supplement is to indicate that ZIP System® Wall Sheathing panels, recognized in ICC-ES master evaluation report ESR-1474, have also been evaluated for compliance with the codes noted below.

Applicable code editions:
- 2017 Florida Building Code—Building
- 2017 Florida Building Code—Residential

2.0 CONCLUSIONS

The ZIP System® Wall Sheathing panels, described in Sections 2.0 through 7.0 of the master evaluation report ESR-1474, comply with the Florida Building Code—Building and the Florida Building Code—Residential, provided the design and installation are in accordance with the 2015 International Building Code® provisions noted in the master report.

Use of the ZIP System® Wall Sheathing panels 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 evaluation report.

For products falling under Florida Rule 9N-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 master report, reissued October 2018 and revised March 2020.