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ICC-ES Evaluation Report
ESR-1844

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DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES
Section: 06 16 00—Sheathing

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
Section: 07 46 46—Fiber-Cement Siding

REPORT HOLDER:

JAMES HARDIE BUILDING PRODUCTS, INC.

EVALUATION SUBJECT:

HARDIE®PANEL (PREVAIL™, CEMPANEL®) SIDING, HARDIE® ARCHITECTURAL PANELS HARDIFLEX® SIDING AND HARDITEX BASEBOARD

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)
- 2006 *International Energy Conservation Code®* (IECC)
- 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.

Properties evaluated:

- Weather protection
- Structural
- Noncombustible (Types I, II, III and IV) construction
- Fire-resistance-rated construction
- Thermal resistance

2.0 USES

The James Hardie fiber-cement panels described in this report are used as exterior wall coverings. The panels may be used in fire-resistance-rated construction as set forth in Section 4.3 and may be used on exterior walls of Types I, II, III, IV and V construction.

3.0 DESCRIPTION

3.1 General:

The panels are single-faced, cellulose fiber–reinforced cement (fiber-cement) products identified as Hardie® Panel (Prevail™, Cempanel®) panel siding, Hardie® Architectural Panels Hardiflex® panel siding and Harditex® Baseboard; the panels are supplied either unprimed or primed for subsequent application of a compatible primer and/or exterior-grade topcoat(s).

The panels comply with ASTM C1186, Grade II, Type A. They have a nominal density of 83 lbs/ft^3 (1332 kg/m^3); a flame-spread index of 0 or less and a smoke-developed index of 5 or less when tested in accordance with ASTM E84; and are classified as noncombustible when tested in accordance with ASTM E136. Thermal conductance (*K*) and thermal resistance (*R*) values for the panels are as shown in Table 2. When tested in accordance with ASTM E96, products with a thickness of $^1/_4$ inch (6.4 mm) and $^5/_{16}$ inch (7.5 mm) have permeance values given in Table 3.

3.2 Materials:

3.2.1 Hardie® Panel (Prevail™, Cempanel®) Siding: Hardie® Panel Prevail™, Cempanel® siding is available with various surface textures including smooth. Nominal product dimensions are noted in Table 1 of this report.

3.2.2 Hardie® Architectural Panels: Hardie® Architectural Panels are available as non-grooved or as grooved panels with various surface textures. Nominal product dimensions are noted in Table 1 of this report (see note 1 in Table 1 regarding nominal dimensions of grooved panels).

3.2.3 Hardiflex® Siding: Hardiflex® siding is available in various textures including smooth. Nominal product dimensions are noted in Table 1 of this report.

3.2.4 Harditex® Baseboard: Harditex® Baseboard is used as a starter strip for exterior applications of walls and soffits. Harditex® Baseboard has an untextured finish and is available with either tapered or trough edges on the two long sides for joint treatment or all square edges. Harditex® Baseboard is supplied either sealed or unsealed for the subsequent application of a primer or sealer by the end user as a component in a direct-applied exterior coating or finish

system. Nominal dimensions are noted in Table 1 of this report.

3.3 Fasteners:

Fastener type, size and spacing must be as shown in Table 4.

4.0 DESIGN AND INSTALLATION

4.1 Design:

The maximum basic wind speeds for positive and negative transverse load resistance are presented in Table 4.

4.2 Installation:

4.2.1 General: The manufacturer's published installation instructions and this report must be strictly adhered to and a copy of this report and the instructions must be available on the jobsite during construction. The panels must be installed in accordance with 2021 and 2018 IBC Section 1404.16; 2015, 2012, and 2009 IBC Section 1405.16; and 2006 IBC Section 1405.15;and 2021 and 2018 and 2015 IRC Table R703.3 and Section R703.10; 2012, 2009, and 2006 IRC Table R703.4 and Section R703.10, and the manufacturer's installation instructions.

4.2.2 Hardie® Panel (Prevail™, Cempanel®) Siding: The panels are applied with the long dimension either parallel or perpendicular to framing. Vertical joints are fastened at abutting sheet edges. Vertical joints must occur over framing or wood furring members except where the panels are installed and fastened to wood structural panel sheathing in accordance with Table 4. The vertical joints must be sealed with caulking covered with battens, or must be designed to comply with 2021 and 2018 IBC Section 1402.2; and 2015, 2012, 2009, and 2006 IBC Section 1403.2; and IRC Section R703.1 Horizontal joints must be flashed with Z-flashing. Fasteners must be installed with a minimum $^3/_8$-inch (9.5 mm) edge distance and a minimum 2-inch (51 mm) clearance from corners. Where a specified level of wind resistance is required, the panel siding is attached to framing members, furring members, or wood structural panel sheathing, appropriately spaced, with fastener types, lengths, and spacing described in Table 4.

4.2.3 Hardie® Architectural Panels: The panels are applied with the long dimension parallel or perpendicular to framing. Vertical joints are fastened at abutting sheet edges. Vertical joints must occur over framing except where the panels are installed and fastened directly to wood structural panel sheathing in accordance with Table 4. The vertical joints must be sealed with caulking covered with battens, or must be designed to comply with 2021 and 2018 IBC Section 1402.2; and 2015, 2012, 2009, and 2006 IBC Section 1403.2; and IRC Section R703.1. Horizontal joints must be flashed with Z-flashing. Fasteners must be installed with a minimum $^3/_8$-inch (9.5 mm) edge distance and a minimum 2-inch (51 mm) clearance from corners. Where a specified level of wind resistance is required, the panel siding is attached to framing members, furring members, or wood structural panel sheathing, appropriately spaced, with fastener types, lengths, and spacing described in Table 4.

4.2.4 Hardiflex® Siding: The panels are applied with the long dimension either parallel or perpendicular to framing and with all panel edges supported by framing. Fasteners must be installed with a minimum $^3/_8$-inch (9.5 mm) edge distance and a minimum 2-inch (51 mm) clearance from corners. Joints must be fastened at abutting sheet edges. Vertical joints must occur over framing members and must be protected by PVC joint treatment, lumber battens, or sealant. Horizontal joints must be flashed with metal Z-flashing and blocked with solid framing. Where a specified level of wind resistance is required, the panel siding is attached to framing members, appropriately spaced, with fastener types, lengths, and spacing as noted in Table 4.

4.2.5 Harditex® Baseboard: The panels are applied with the long dimension either parallel or perpendicular to framing and with all panel edges supported by framing. Vertical and horizontal joints must be sealed with a sealant or bedding compound, including any required joint reinforcing mesh or tape, specified by the coating or finish system manufacturer. Fasteners must be installed with a minimum $^3/_8$-inch (9.5 mm) edge distance and a minimum 2-inch (51 mm) clearance from corners. Where a specified level of wind resistance is required, the baseboard is attached to framing members, appropriately spaced, with fasteners types, lengths, and spacing as noted in Table 4.

4.3 Fire-resistance-rated Assemblies:

4.3.1 Assembly 1—One-hour Asymmetrical Nonload-bearing:

4.3.1.1 Interior Face: The asymmetrical, nonload-bearing, one-hour fire-resistance-rated wall assembly consists of minimum $3^5/_8$-inch-deep (92 mm), No. 20 gage [0.0359-inch (0.91 mm)] steel "C" studs spaced at a maximum of 24 inches (610 mm) on center, with corresponding top and bottom tracks. One layer of $^5/_8$-inch-thick (15.9 mm), Type X gypsum board complying with ASTM C1396, 48 inches (1219 mm) wide, is applied vertically to the interior side of the studs and secured with $1^1/_4$-inch-long (32 mm), Type S, gypsum board screws, spaced 8 inches (203 mm) on center at board edges and 12 inches (305 mm) on center at intermediate framing members. All board joints must be backed by framing members. The $^5/_8$-inch-thick (15.9 mm) gypsum board joints and screw heads must be finished in accordance with ASTM C840.

4.3.1.2 Exterior Face: The exterior side of the studs must be covered with one layer of $^1/_2$-inch-thick (12.7 mm), Type X, water-resistant gypsum board complying with ASTM C1396, followed by one layer of minimum $^1/_4$-inch-thick (6.4 mm) Hardie® Panel (Prevail™, Cempanel®), or Hardiflex® siding or Harditex® Baseboard or Hardie® Architectural Panels (non-grooved). The Type X gypsum boards must be applied vertically to framing members with vertical edges staggered 24 inches (610 mm). The $^1/_2$-inch-thick (12.7 mm), Type X gypsum board must be fastened to the framing members with $1^1/_4$-inch-long (32 mm), Type S, gypsum board screws spaced 24 inches (610 mm) on center. All gypsum board joints must be backed by framing members. Hardie® Panel (Prevail™, Cempanel®), or Hardiflex® siding or Harditex® Baseboards, or Hardie® Architectural Panels (non-grooved) must be fastened through the gypsum board to the framing members with minimum $1^5/_8$-inch-long 41 mm) by minimum 0.323-inch (8.2 mm) HD self-drilling, corrosion-resistant, ribbed buglehead or ribbed waferhead screws located a maximum of 8 inches (203 mm) on center. Hardie® Panel (Prevail™, Cempanel®), Hardiflex® siding, Harditex® Baseboard or Hardie® Architectural Panels (non-grooved) joints require treatment similar to that described in Sections 4.2.2, 4.2.3 and 3.2.3, respectively.

4.3.2 Assembly 2—One-hour Nonload-bearing: The nonload-bearing, one-hour, fire-resistance-rated wall assembly consists of minimum $3^5/_8$-inch-deep (92 mm), No. 20 gage [0.0359 inch (0.91 mm)], steel "C" studs spaced at a maximum of 24 inches (610 mm) on center, with corresponding top and bottom tracks. Both sides of the wall must be covered with one layer of $^1/_2$-inch-thick (12.7 mm),

Type X gypsum board (interior side)/gypsum sheathing (exterior side) complying with ASTM C1396, followed by one layer of minimum $^1/_4$-inch-thick (6.4 mm) Hardie® Panel (Prevail™, Cempanel®), or Hardiflex® siding, Harditex® Baseboard or Hardie® Architectural Panels (non-grooved). The panels must be applied either perpendicular (horizontally) or parallel (vertically) to framing members. All board joints must be backed by framing. Base layer and face layer board joints of both wall sides must be offset by 24 inches (610 mm). The $^1/_2$-inch-thick (12.7 mm), Type X gypsum board/sheathing must be fastened to the framing members with minimum 1-inch-long (25.4 mm), Type S, gypsum board screws spaced a maximum of 24 inches (610 mm) on center. The panels must be fastened through the gypsum board to the framing members with minimum $1^5/_8$-inch-long (41 mm) by minimum 0.323-inch (8.2 mm) HD self-drilling, corrosion-resistant, ribbed, buglehead or ribbed waferhead screws located a maximum of 8 inches (203 mm) on center. Panel joints and fasteners require treatment similar to that described in Section 4.2.2, 4.2.3 or 4.2.4, of this report.

5.0 CONDITIONS OF USE

The Hardie® Pane® (Prevail™, Cempanel®), or Hardie® Architectural Panels and Hardiflex® panel sidings, and Harditex® baseboard products, 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 panels must be installed in accordance with the applicable code, this report and the manufacturer's published installation instructions. In the event of a conflict between this report and the manufacturer's instructions, this report governs.

5.2 Design wind loads applied to the siding panels must be determined in accordance with the applicable code and must be equal to, or less than, the allowable loads shown in Table 4.

5.3 Use of the products listed in this report as a lateral-force-resisting element of a shear wall that resists wind or seismic forces is beyond the scope of this report. Walls must be braced by other means as required by the applicable code.

5.4 The exterior plank and panel products installed on exterior walls must be installed over a weather-resistive barrier in accordance with applicable codes.

5.5 In jurisdictions adopting the 2021, 2018, 2015, and 2012 IBC, vertical and lateral flame propagation 2021 and 2018 IBC Section 1402.5; and 2015 and 2012 IBC Section 1403.5, exterior walls on buildings of Type I, II, III or IV construction that are greater than 40 feet (12 192 mm) in height above grade plane and that contain a combustible water-resistive barrier must be shown to comply with NFPA 285, except as permitted under Exception 2 of the 2021 and 2018 IBC Section 1402.5 and 2015 IBC Section 1403.5.

Flashing must be installed at all penetrations and terminations in accordance with the applicable code and the manufacturer's instructions.

5.6 The products are manufactured at the following locations under a quality-control program with inspections by ICC-ES:

- Cleburne, Texas
- Plant City, Florida
- Tacoma, Washington
- Waxahachie, Texas
- Peru, Illinois
- Pulaski, Virginia
- Sparks, Nevada
- Fontana, California

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Fiber Cement Siding Used as Exterior Wall Siding (AC90), dated October 2020 (editorially revised December 2020).

7.0 IDENTIFICATION

7.1 For field identification, James Hardie Building Products, Inc., Hardie® Panel (Prevail™, Cempanel®), or Hardie® Architectural Panels and Hardiflex® panel sidings, and Harditex® baseboards, must bear a label with the manufacturer's name and telephone number, the product name, and the evaluation report number (ESR-1844).

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

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(909) 942-7343
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TABLE 1—STANDARD NOMINAL PANEL DIMENSIONS

PRODUCT	WIDTH (inches)	LENGTH (feet)	THICKNESSES (inch)
Hardie® Panel siding	48	8, 9, & 10	$^1/_4$ & $^5/_{16}$
Cempanel® siding	48	8, 9, 10, & 12	$^5/_{16}$
Prevail™ siding	48	8, 10, & 12	$^5/_{16}$
Hardie® Architectural Panels[1]	48	8, 10, & 12	$^5/_{16}$
Hardiflex® panel	48	8, 9, & 10	$^1/_4$ & $^5/_{16}$
Harditex® baseboard	48	8, 9, & 10	$^1/_4$ & $^5/_{16}$

For **SI:** 1 inch = 25.4 mm, 1 ft = 305 mm.
[1] The grooved panels are 0.213 inch (5.4 mm) thick at groove locations.

TABLE 2—"*K*" and "*R*" VALUES FOR FIBER-CEMENT PRODUCTS

PRODUCT THICKNESS[3] (inch)	THERMAL CONDUCTANCE[1] K_{eff} = Btu/hr-ft^2-°F	THERMAL RESISTANCE[1] $R = 1/K_{eff}$	ACTUAL THERMAL CONDUCTANCE[2] (K_{eff})	ACTUAL THERMAL RESISTANCE[2] (R)
$^1/_4$	1.95	0.51	7.80	0.13
$^5/_{16}$	2.07	0.48	6.62	0.15

For **SI:** 1 inch = 25.4 mm, 1 Btu/h-ft^2-°F = 5.678 W/m^2-K.

[1]Based on 1 inch of panel thickness.
[2]Actual value for panel thickness shown.

TABLE 3—PERMEANCE VALUES FOR FIBER-CEMENT PRODUCTS

PRODUCT THICKNESS[1] (inch)	PERMEANCE (perms)
$^1/_4$	1.75
$^5/_{16}$	1.54

For **SI:** 1 inch = 25.4 mm, 1 perm = 57 mg/(s·m^2·Pa).

TABLE 4—MAXIMUM WIND SPEEDS FOR EXPOSURE CATEGORY (mph)[2]

							2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[1,5,8])			2012 IBC and 2015 IBC/IRC (Ultimate Design Wind Speed, V_{ult}[6,7]), 2018 and 2021 IBC/IRC (Basic Design Wind Speed, V[9,10])		
							EXPOSURE CATEGORY			EXPOSURE CATEGORY		
Product	Minimum Product Thickness (in.)	Fastener Type[12]	Fastener Spacing (in.)	Frame Type	Stud Spacing (in.)	Building Height (ft.)	B	C	D	B	C	D
Hardiflex® Hardie® Panel	¼	4d common, 1½-in long	8	2 x 4 wood[3]	16	20	105	-	-	136	-	-
						40	95	-	-	123	-	-
						60	85	-	-	110	-	-
Hardiflex® Hardie® Panel	¼	4d common, 1½-in long	8	2 x 4 wood[3]	24	20	85	-	-	110	-	-
Hardiflex® Hardie® Panel	¼	6d common, 2 in. long	6	2 x 4 wood[3]	16	20	137	116	-	177	150	-
						40	137	105	-	177	136	-
						60	137	105	-	177	136	-
Hardiflex® Hardie® Panel	¼	No. 11 ga. x 1¼-in. long galvanized roofing nail	6	2 x 4 wood[3]	16	20	126	95	-	163	123	-
						40	121	95	-	156	123	-
Hardiflex® Hardie® Panel Harditex®	¼	No. 11 ga. x 1¼-in. long galvanized roofing nail	6	2 x 4 wood[3]	24	20	95	-	-	123	-	-
						40	95	-	-	123	-	-
Hardiflex® Hardie® Panel Harditex®	¼	No. 11 ga. x 1¼-in. long galvanized roofing nail	4 edge, 12 field	2 x 4 wood[3]	16	20	137	105	-	177	136	-
						40	137	105	-	177	136	-
						60	126	95	-	163	123	-
Hardiflex® Hardie® Panel	5/16	0.091-in. shank x .225-in HD x 1½-in. long ring shank nail	4 edge, 8 field	2 x 4 wood[3]	16	20	112	98	90	145	127	116
						40	107	92	85	138	119	110
						60	101	88	-	130	114	-
Hardiflex® Hardie® Panel	5/16	4d common, 1½-in long	8	2 x 4 wood[3]	16	40	126	95	-	163	123	-
Hardiflex® Hardie® Panel	5/16	4d common, 1½-in long	8	2 x 4 wood[3]	24	20	105	-	-	136	-	-
						40	95	-	-	123	-	-
Hardiflex® Hardie® Panel	5/16	6d common, 2 in. long	4	2 x 4 wood[3]	16	0-15	181	164	149	234	212	192
						20	181	159	146	234	205	188
						40	174	148	137	225	191	177
						60	164	142	132	212	183	170
Hardiflex® Hardie® Panel	5/16	6d common, 2 in. long	4	2 x 4 wood[3]	24	0-15	141	128	116	182	165	150
						20	141	124	113	182	160	146
						40	135	116	107	174	150	138
						60	128	111	103	165	143	133
Hardiflex® Hardie® Panel	5/16	6d common, 2 in. long	6	2 x 4 wood[3]	16	0-15	144	130	118	186	168	152
						20	144	127	116	186	164	150
						40	138	118	109	178	152	141
						60	130	113	105	168	146	136
Hardiflex® Hardie® Panel	5/16	6d common, 2 in. long	6	2 x 4 wood[3]	24	0-15	114	103	94	147	133	121
						20	114	101	92	147	130	119
						40	109	94	86	141	121	111
						60	103	90	-	133	116	-

TABLE 4—MAXIMUM WIND SPEEDS FOR EXPOSURE CATEGORY (mph)[2] (Continued)

							2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[1,5,8])			2012 IBC and 2015 IBC/IRC (Ultimate Design Wind Speed, V_{ult}[6,7]), 2018 and 2021 IBC/IRC (Basic Design Wind Speed, V[9,10])		
							EXPOSURE CATEGORY			EXPOSURE CATEGORY		
Product	Minimum Product Thickness (in.)	Fastener Type[12]	Fastener Spacing (in.)	Frame Type	Stud Spacing (in.)	Building Height (ft.)	B	C	D	B	C	D
Hardie® Panel	5/16	6D siding nails (0.092" shank X 0.222" HD x 2" long)	6	2 x 4 wood[3]	16	0-15	148	134	122	191	173	158
						20	148	131	119	191	169	154
						40	142	121	112	183	157	145
						60	134	117	108	173	150	140
Hardiflex® Hardie® Panel	5/16	6d common, 2 in. long	6 edge, 12 field	2 x 4 wood[3]	16	40	137	105	-	177	136	-
						60	126	100	-	163	129	-
Hardiflex® Hardie® Panel	5/16	0.091-in. shank x .225-in HD x 1½-in. long ring shank nail	3 edge, 8 field	2 x 4 wood[4]	16	20	126	95	-	163	123	-
						40	110	90	-	142	116	-
						60	100	85	-	129	110	-
Hardie® Panel	5/16	No. 8 X 1-5/8 in. long X 0.375 in. HD ribbed waferhead screw	6" OC vertically / 12" OC horizontally	Attached to 7/16" wood structural panel sheathing only	7/16" WSP attached per code	0-15	150	136	123	194	176	159
						20	150	132	120	194	170	155
						40	143	123	113	185	159	146
						60	136	118	109	176	152	141
Hardiflex® Hardie® Panel	¼	Min. No. 8 x 1-in. long x 0.323-in. HD ribbed buglehead screw	6	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud	16	20	137	105	-	177	136	-
						40	126	105	-	163	136	-
						60	116	95	-	150	123	-
Hardiflex® Hardie® Panel	¼	Min. No. 8 x 1-in. long x 0.323-in. HD ribbed buglehead screw	6	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud	24	20	105	85	-	136	110	-
						40	95	-	-	123	-	-
Hardiflex® Hardie® Panel	5/16	ET & F 0.10-in. knurled shank x 1½-in. long x 0.25-in. HD pin fastener (AKN100-0150NA)	4 edge, 8 field	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud	16	15	153	139	127	198	179	164
						20	153	135	124	198	174	160
						40	147	126	116	190	163	150
						60	139	121	112	179	156	145
Hardiflex® Hardie® Panel	5/16	ET & F 0.10-in. knurled shank x 1½-in. long x 0.25-in. HD pin fastener (AKN100-0150NA)	4 edge, 8 field	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud	24	15	118	107	98	152	138	127
						20	118	104	95	152	134	123
						40	114	97	90	147	125	116
						60	107	93	87	138	120	112

TABLE 4—MAXIMUM WIND SPEEDS FOR EXPOSURE CATEGORY (mph)[2] (Continued)

							2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[1,5,8,11])			2012 IBC and 2015 IBC/IRC(Ultimate Design Wind Speed, V_{ult}[6,7]), 2018 and 2021 IBC (Basic Design Wind Speed, V[9,10])		
							EXPOSURE CATEGORY			EXPOSURE CATEGORY		
Product	Minimum Product Thickness (in.)	Fastener Type[12]	Fastener Spacing (in.)	Frame Type	Framing Spacing (in.)	Building Height (ft.)	B	C	D	B	C	D
Hardie® Panel	$^5/_{16}$	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	6" O.C.	Min. No. 20 ga. (33 mil) X $3^5/_8$ in. x $1^3/_8$ in. metal C-stud or 2 X 4 wood studs[3]	16	15	149	135	123	193	175	159
						20	149	132	120	193	170	155
						40	143	122	113	185	158	146
						60	135	117	109	175	152	141
Hardie® Panel	$^5/_{16}$	No. 8 X 1.25"long X 0.323" HD ribbed bugle head screws	8" O.C.	Min. No. 20 ga. (33 mil) X $3^5/_8$ in. x $1^3/_8$ in. metal C-stud or 2 X 4 wood studs[3]	16	0-15	135	122	111	174	158	144
						20	135	119	109	174	154	140
						40	129	111	102	167	143	132
						60	122	106	99	158	137	127
Hardie® Panel	$^5/_{16}$	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	10" O.C.	Min. No. 20 ga. (33 mil) X $3^5/_8$ in. x $1^3/_8$ in. metal C-stud or 2 X 4 wood studs[3]	16	0-15	127	115	105	164	149	135
						20	127	112	102	164	145	132
						40	122	104	96	157	134	124
						60	115	100	93	149	129	120
Hardie® Panel	$^5/_{16}$	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	12" O.C.	Min. No. 20 ga. (33 mil) X $3^5/_8$ in. x $1^3/_8$ in. metal C-stud or 2 X 4 wood studs[3]	16	0-15	121	110	100	157	142	129
						20	121	107	98	157	138	126
						40	116	100	92	150	128	119
						60	110	95	89	142	123	114
Hardie® Panel	$^5/_{16}$	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	8" O.C.	Min. No. 20 ga. (33 mil) X $3^5/_8$ in. x $1^3/_8$ in. metal C-stud or 2 X 4 wood studs[3]	24	0-15	107	97	88	138	125	114
						20	107	94	86	138	122	111
						40	103	88	81	133	113	105
						60	97	84	78	125	109	101
Hardie® Panel	$^5/_{16}$	HardieNail Studless Siding Fastener (TetraGrip), .117" x 1.125" x .3" (PART #650867)	12"x12" O.C.	Attached to $^7/_{16}$" Wood Structural Panel sheathing only	$^7/_{16}$" WSP Sheathing attached per code	0-15	108	98	89	139	126	115
						20	108	95	87	139	123	112
						40	104	88	-	134	114	-
						60	98	-	-	126	-	-
Hardie® Panel	$^5/_{16}$	HardieNail Studless Siding Fastener (TetraGrip), .117" x 1.125" x .3" (PART #650867)	12"x8" O.C.	Attached to $^7/_{16}$" Wood Structural Panel sheathing only	$^7/_{16}$" WSP Sheathing attached per code	0-15	127	115	105	164	149	135
						20	127	112	102	164	144	132
						40	122	104	96	157	134	124
						60	115	100	93	149	129	120

For **SI:** 1 ft = 305 mm, 1 inch = 25.4 mm, 1 mph = 0.44 m/s.
[1] Wind speed design assumptions per Section 6.5, Method 2, of ASCE 7-05: I = 1.0, Kzt = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[2] Installation must be in accordance with Section 4.2 of this report.
[3] Values are for species of wood having a specific gravity of 0.42 or greater.
[4] Values are for species of wood having a specific gravity of 0.36 or greater.
[5] Vasd = nominal design wind speed.
[6] Vult = ultimate design wind speed
[7] Wind speed design assumptions per Section 30.4, of ASCE 7-10: Kzt = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[8] 2015 and 2012 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd} = V_{ult}\sqrt{0.6}$
[9] V = basic design wind speed
[10] Wind speed design assumptions per Section 30.3, of ASCE 7-16: K_{zt} = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[11] 2021 IBC Section 1609.3.1, Eqn. 16-17 and 2018 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd} = V\sqrt{0.6}$
[12] Smooth-shank stainless steel nails are outside of the scope of this report unless specifically noted.

TABLE 4—MAXIMUM WIND SPEEDS FOR EXPOSURE CATEGORY (mph)[2] (Continued)

							2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[1,5,8,15])			2012 IBC and 2015 IBC/IRC(Ultimate Design Wind Speed, V_{ult}[6,7]), 2018 and 2021 IBC/IRC (Basic Design Wind Speed, V[13,14])		
							EXPOSURE CATEGORY			EXPOSURE CATEGORY		
Product	Minimum Product Thickness (in.)	Fastener Type[16]	Fastener Spacing (in.)	Frame Type	Furring Spacing (in.)	Building Height (ft.)	B	C	D	B	C	D
Hardie® Panel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	6" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring [9,10,11,12]	16	15	149	135	123	193	175	159
						20	149	132	120	193	170	155
						40	143	122	113	185	158	146
						60	135	117	109	175	152	141
Hardie® Panel	5/16	No. 8 X 1.25"long X 0.323" HD ribbed bugle head screws	8" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring [9,10,11,12]	16	0-15	135	122	111	174	158	144
						20	135	119	109	174	154	140
						40	129	111	102	167	143	132
						60	122	106	99	158	137	127
Hardie® Panel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	10" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring [9,10,11,12]	16	0-15	127	115	105	164	149	135
						20	127	112	102	164	145	132
						40	122	104	96	157	134	124
						60	115	100	93	149	129	120
Hardie® Panel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	12" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring [9,10,11,12]	16	0-15	121	110	100	157	142	129
						20	121	107	98	157	138	126
						40	116	100	92	150	128	119
						60	110	95	89	142	123	114
Hardie® Panel	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	8" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring [9,10,11,12]	24	0-15	107	97	88	138	125	114
						20	107	94	86	138	122	111
						40	103	88	81	133	113	105
						60	97	84	78	125	109	101
Hardie® Panel	5/16	0.090" shank X 0.215" HD x 1.5" long ring shank nail	6" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring [9,10,11]	16	0-15	143	130	118	185	168	152
						20	143	126	115	185	163	149
						40	137	117	108	177	151	140
						60	130	113	105	168	145	135

For **SI:** 1 ft = 305 mm, 1 inch = 25.4 mm, 1 mph = 0.44 m/s.

[1] Wind speed design assumptions per Section 6.5, Method 2, of ASCE 7-05: I = 1.0, K_{zt} = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.

[2] Installation must be in accordance with Section 4.2 of this report.

[3] Values are for species of wood having a specific gravity of 0.42 or greater.

[4] Values are for species of wood having a specific gravity of 0.36 or greater.

[5] V_{asd} = nominal design wind speed.

[6] V_{ult} = ultimate design wind speed.

[7] Wind speed design assumptions per Section 30.4, of ASCE 7-10: K_{zt} = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.

[8] 2015 and 2012 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd} = V_{ult}\sqrt{0.6}$.

[9] Furring attachment to structural members (framing) or alternative furring width shall be designed by the project engineer.

[10.] Wood furring shall be preservative treated per AWPA.

[11.] Wood furring shall be specific gravity of 0.42 or greater per AFPA/NDS, or wood structural panel, conforming to DOC PS-1 or DOC PS-2 or APA PRP-108.

[12] The design and attachment of steel furring shall be the responsibility of the project engineer.

[13] V = basic design wind speed

[14] Wind speed design assumptions per Section 30.3, of ASCE 7-16: K_{zt} = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.

[15] 2021 IBC Section 1609.3.1, Eqn. 16-17 and 2018 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd} = V\sqrt{0.6}$

[16] Smooth-shank stainless steel nails are outside of the scope of this report unless specifically noted.

TABLE 4—MAXIMUM WIND SPEEDS FOR EXPOSURE CATEGORY (mph)[2] (Continued)

							2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[1,5,8,11])			2012 IBC and 2015 IBC/IRC(Ultimate Design Wind Speed, V_{ult}[6,7]), 2018 and 2021 IBC/IRC (Basic Design Wind Speed, V[9,10])		
							EXPOSURE CATEGORY			EXPOSURE CATEGORY		
Product	Minimum Product Thickness (in.)	Fastener Type[12]	Fastener Spacing (in.)	Frame Type	Stud Spacing (in.)	Building Height (ft.)	B	C	D	B	C	D
Hardie® Architectural Panels (non-grooved)	5/16	6d common, 2in. long	4	2x4 wood[3]	16	0-15	181	164	149	234	212	192
						20	181	159	146	234	205	188
						40	174	148	137	225	191	177
						60	164	142	132	212	183	170
Hardie® Architectural Panels (non-grooved)	5/16	6d common, 2in. long	6	2x4 wood[3]	16	0-15	144	130	118	186	168	152
						20	144	127	116	186	164	150
						40	138	118	109	178	152	141
						60	130	113	105	168	146	136
Hardie® Architectural Panels (non-grooved)	5/16	6d common, 2in. long	4	2x4 wood[3]	24	0-15	141	128	116	182	165	150
						20	141	124	113	182	160	146
						40	135	116	107	174	150	138
						60	128	111	103	165	143	133
Hardie® Architectural Panels (non-grooved)	5/16	6d common, 2in. long	6	2x4 wood[3]	24	0-15	114	103	94	147	133	121
						20	114	101	92	147	130	119
						40	109	94	86	141	121	111
						60	103	90	-	133	116	-
Hardie® Architectural Panels (non-grooved)	5/16	4d, 0.091 in shank x 0.225in. HD x 1.5 in. long ring shank nail	4 edge 8 field	2x4 wood[3]	16	20	112	98	90	144	127	116
						40	107	92	85	138	119	110
						60	101	88	-	130	114	-
Hardie® Architectural Panels (non-grooved)	5/16	16-ga. x 1.5" long stainless steel finish nails	4" O.C. along studs	2X4 wood[3]	16	0-15	119	108	98	153	139	126
						20	119	105	95	153	135	123
						40	114	97	90	147	126	116
						60	108	93	87	139	120	112
Hardie® Architectural Panels (non-grooved)	5/16	16-ga. x 1.5" long stainless steel finish nails	4" O.C. along studs	2X4 wood[4]	16	0-15	124	113	102	160	145	132
						20	124	109	100	160	141	129
						40	119	102	94	154	131	121
						60	113	98	91	145	126	117
Hardie® Architectural Panels (non-grooved)	5/16	16-ga. x 1.5" long stainless steel finish nails	4" O.C. along studs and vertical panel edges[13]	2X4 wood[4] with 7/16" Wood Structural Panel sheathing attached	16	0-15	133	121	110	172	156	142
						20	133	117	107	172	152	138
						40	128	109	101	165	141	130
						60	121	105	97	156	135	126

TABLE 4—MAXIMUM WIND SPEEDS FOR EXPOSURE CATEGORY (mph)[2] (Continued)

							2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[1,5,8,11])			2012 IBC and 2015 IBC/IRC(Ultimate Design Wind Speed, V_{ult}[6,7]), 2018 and 2021 IBC/IRC (Basic Design Wind Speed, V[9,10])		
							EXPOSURE CATEGORY			EXPOSURE CATEGORY		
Product	Minimum Product Thickness (in.)	Fastener Type[12]	Fastener Spacing (in.)	Frame Type	Stud Spacing (in.)	Building Height (ft.)	B	C	D	B	C	D
Hardie® Architectural Panels (non-grooved)	5/16	16-ga. x 1.5" long stainless steel finish nails	4" O.C. along studs and vertical panel edges[13]	2X4 wood [4] with 7/16" Wood Structural Panel sheathing attached per code	24	0-15	114	103	94	147	133	121
						20	114	100	92	147	130	118
						40	109	93	86	141	121	111
						60	103	90	-	133	116	-
Hardie® Architectural Panels (non-grooved)	5/16	16-ga. x 1.5" long stainless steel finish nails	4" O.C. along studs and vertical panel edges[13]	2X4 wood [3] with 7/16" Wood Structural Panel sheathing attached per code	24	0-15	108	98	89	139	126	115
						20	108	95	87	139	123	112
						40	104	89	-	134	114	-
						60	98	-	-	126	-	-
Hardie® Architectural Panels (non-grooved)	5/16	16-ga. x 1.5" long stainless steel finish nails	4" O.C. along studs	2X4 wood [4]	24	0-15	110	100	91	142	129	117
						20	110	97	88	142	125	114
						40	105	90	-	136	116	-
						60	100	86	-	129	112	-
Hardie® Architectural Panels (non-grooved)	5/16	4d stainless steel ring shank siding nails (0.09" SD x 0.215 HD x 1.5" long)	4" O.C. along studs	2X4 wood [4]	24	0-15	111	100	91	143	129	118
						20	111	97	89	143	126	115
						40	106	91	-	137	117	-
						60	100	87	-	129	112	-
Hardie® Architectural Panels (non-grooved)	5/16	No. 8, 1-5/8 in. long x 0.375" HD Ribbed wafer head screw	6" vert. 12" horiz.	Attached to 7/16" Wood Structural Panel sheathing only	7/16" WSP Sheathing attached per code	0-15	150	136	123	194	176	159
						20	150	132	120	194	170	155
						40	143	123	113	185	159	146
						60	136	118	109	176	152	141

For **SI:** 1 ft = 305 mm, 1 inch = 25.4 mm, 1 mph = 0.44 m/s.[1] Wind speed design assumptions per Section 6.5, Method 2, of ASCE 7-05: I = 1.0, K_{zt} = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[2] Installation must be in accordance with Section 4.2 of this report.
[3] Values are for species of wood having a specific gravity of 0.42 or greater.
[4] Values are for species of wood having a specific gravity of 0.50 or greater.
[5] V_{asd} = nominal design wind speed.
[6] V_{ult} = ultimate design wind speed.
[7] Wind speed design assumptions per Section 30.4, of ASCE 7-10: K_{zt} = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[8] 2015 and 2012 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd} = V_{ult}\sqrt{0.6}$.
[9] V = basic design wind speed
[10] Wind speed design assumptions per Section 30.3, of ASCE 7-16: K_{zt} = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[11] 2021 IBC Section 1609.3.1, Eqn. 16-17 and 2018 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd} = V\sqrt{0.6}$
[12] Smooth-shank stainless steel nails are outside of the scope of this report unless specifically noted.
[13] Vertical edges of each panel permitted to be fastened to WSP sheathing only (remainder of panel must be fastened to the studs through the sheathing).

TABLE 4—MAXIMUM WIND SPEEDS FOR EXPOSURE CATEGORY (mph)[2] (Continued)

							2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[1,5,8,11])			2012 IBC and 2015 IBC/IRC(Ultimate Design Wind Speed, V_{ult}[6,7]), 2018 and 2021 IBC/IRC (Basic Design Wind Speed, V[9,10])		
							EXPOSURE CATEGORY			EXPOSURE CATEGORY		
Product	Minimum Product Thickness (in.)	Fastener Type[12]	Fastener Spacing (in.)	Frame Type	Stud Spacing (in.)	Building Height (ft.)	B	C	D	B	C	D
Hardie® Architectural Panels (grooved)	5/16	Metabo 16-ga.(0.063" SD) x 1.5" long stainless steel finish nails	4" O.C. along studs	2X4 wood [4]	24	0-15	89	-	-	115	-	-
						20	89	-	-	115	-	-
						35	87	-	-	112	-	-
						40	-	-	-	-	-	-
Hardie® Architectural Panels (grooved)	5/16	4d stainless steel ringshank siding nails (0.09" SD x 0.215" HD x 1.5" long)	6" O.C. vertical, 16" O.C. Horizontal	Attached to 7/16" Wood Structural Panel sheathing only	7/16" WSP Sheathing attached per code	0-15	118	107	97	153	138	126
						20	118	104	95	153	135	123
						40	113	97	90	146	125	116
						60	107	93	86	138	120	112
Hardie® Architectural Panels (grooved)	5/16	6d siding nails (0.092" SD x 0.222" HD x 2" long)	6" O.C. along studs, 16" O.C. along top and bottom plates	2X4 wood [3]	16	0-15	148	134	122	191	173	158
						20	148	131	119	191	169	154
						40	142	121	112	183	157	145
						60	134	117	108	173	150	140
Hardie® Architectural Panels (grooved)	5/16	No. 8 X 1.25"long x 0.323" HD ribbed bugle head screws	8" O.C.	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud or 2 X 4 wood studs[3]	16	0-15	135	122	111	174	158	144
						20	135	119	109	174	154	140
						40	129	111	102	167	143	132
						60	122	106	99	158	137	127
Hardie® Architectural Panels (grooved)	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	10" O.C.	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud or 2 X 4 wood studs[3]	16	0-15	127	115	105	164	149	135
						20	127	112	102	164	145	132
						40	122	104	96	157	134	124
						60	115	100	93	149	129	120
Hardie® Architectural Panels (grooved)	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	12" O.C.	Min. No. 20 ga. (33 mil) X 3 5/8 in. x 1 3/8 in. metal C-stud or 2 X 4 wood studs[3]	16	0-15	121	110	100	157	142	129
						20	121	107	98	157	138	126
						40	116	100	92	150	128	119
						60	110	95	89	142	123	114
Hardie® Architectural Panels (grooved)	5/16	0.090" shank X 0.215" HD x 1.5" long ring shank nail	6" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring [9,10,11]	16	0-15	143	130	118	185	168	152
						20	143	126	115	185	163	149
						40	137	117	108	177	151	140
						60	130	113	105	168	145	135
Hardie® Architectural Panels (grooved)	5/16	No. 8 X 1.25"long X 0.323" HD ribbed bugle head screws	8" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring [9,10,11,12]	16	0-15	135	122	111	174	158	144
						20	135	119	109	174	154	140
						40	129	111	102	167	143	132
						60	122	106	99	158	137	127

TABLE 4—MAXIMUM WIND SPEEDS FOR EXPOSURE CATEGORY (mph)[2] (Continued)

							2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V_{asd}[1,5,8,11])			2012 IBC and 2015 IBC/IRC(Ultimate Design Wind Speed, V_{ult}[6,7]), 2018 and 2021 IBC/IRC (Basic Design Wind Speed, V[9,10])		
							EXPOSURE CATEGORY			EXPOSURE CATEGORY		
Hardie® Architectural Panels (grooved)	5/16	No. 8 X 1.25"long X 0.323" HD ribbed bugle head screws	10" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring [9,10,11,12]	16	0-15	127	115	105	164	149	135
						20	127	112	102	164	145	132
						40	122	104	96	157	134	124
						60	115	100	93	149	129	120
Hardie® Architectural Panels (grooved)	5/16	No. 8 X 1.25" long X 0.323" HD ribbed bugle head screws	12" O.C. into furring only	2X4 wood or 20 ga. (33 mil) steel framing with 3/4" thick by 3.5" wide wood furring or 20 ga. (33 mil.) steel furring [9,10,11,12]	16	0-15	121	110	100	157	142	129
						20	121	107	98	157	138	126
						40	116	100	92	150	128	119
						60	110	95	89	142	123	114

For **SI:** 1 ft = 305 mm, 1 inch = 25.4 mm, 1 mph = 0.44 m/s.
[1] Wind speed design assumptions per Section 6.5, Method 2, of ASCE 7-05: I = 1.0, K_{zt} = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[2] Installation must be in accordance with Section 4.2 of this report.
[3] Values are for species of wood having a specific gravity of 0.42 or greater.
[4] Values are for species of wood having a specific gravity of 0.50 or greater.
[5] V_{asd} = nominal design wind speed.
[6] V_{ult} = ultimate design wind speed.
[7] Wind speed design assumptions per Section 30.4, of ASCE 7-10: K_{zt} = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[8] 2015 and 2012 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd} = V_{ult}\sqrt{0.6}$.
[9] V = basic design wind speed
[10] Wind speed design assumptions per Section 30.3, of ASCE 7-16: K_{zt} = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.
[11] 2021 IBC Section 1609.3.1, Eqn. 16-17 and 2018 IBC Section 1609.3.1, Eqn. 16-33, $V_{asd} = V\sqrt{0.6}$
[12] Smooth-shank stainless steel nails are outside of the scope of this report unless specifically noted.

DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES
Section: 06 16 00—Sheathing

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
Section: 07 46 46—Fiber-Cement Siding

REPORT HOLDER:

JAMES HARDIE BUILDING PRODUCTS, INC.

EVALUATION SUBJECT:

HARDIE®PANEL (PREVAIL™, CEMPANEL®) SIDING, HARDIE® ARCHITECTURAL PANELS HARDIFLEX® SIDING AND HARDITEX BASEBOARD

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Hardie® Panel (Prevail™, Cempanel®) siding, Hardie® Architectural Panels, HardiFlex® siding and Harditex® baseboard, described in ICC-ES evaluation report ESR-1844, have 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 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 Hardie® Pane® (Prevail™, Cempanel®) siding, Hardie® Architectural Panels, HardiFlex® siding and Harditex® baseboard, described in Sections 2.0 through 7.0 of the evaluation report ESR-1844, comply with CBC Chapter 14, 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 14 and 17, as applicable.

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 Hardie® Panel (Prevail™, Cempanel®) siding, Hardie® Architectural Panels, HardiFlex® siding and Harditex® baseboard, described in Sections 2.0 through 7.0 of the evaluation report ESR-1844, comply with CRC Chapter 7, provided the design and installation are in accordance with the 2018 *International Residential Code®* (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued November 2021 and revised March 2022.