



# **ICC-ES Report**

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ESR-1844

Reissued 11/2015 This report is subject to renewal 11/2017.

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

10901 ELM AVENUE FONTANA, CALIFORNIA 92337

#### **EVALUATION SUBJECT:**

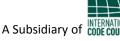
# HARDIEPANEL® (PREVAIL™, CEMPANEL®) SIDING, HARDIFLEX® SIDING AND HARDITEX® BASEBOARD



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**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. 10901 ELM AVENUE FONTANA, CALIFORNIA 92337 (909) 356-6300 info@jhresearchusa.com www.jameshardie.com

#### **EVALUATION SUBJECT:**

HARDIEPANEL® (PREVAIL™, CEMPANEL®) SIDING, HARDIFLEX® SIDING AND HARDITEX® BASEBOARD

#### 1.0 EVALUATION SCOPE

#### Compliance with the following codes:

- 2012, 2009 and 2006 International Building Code® (IBC)
- 2012, 2009 and 2006 International Residential Code<sup>®</sup> (IRC)
- 2006 International Energy Conservation Code® (IECC)
- 2013 Abu Dhabi International Building Code (ADIBC)<sup>†</sup>

<sup>†</sup>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 HardiePanel® (Prevail<sup>TM</sup>, Cempanel®) panel siding, Hardiflex® panel siding and Harditex® Baseboard; and are supplied either unprimed or primed for subsequent application of a compatible primer and/or exterior-grade top coat(s).

The panels comply with ASTM C1186, Grade II, Type A. They have a nominal density of 83 lbs/ft<sup>3</sup>; a flame-spread index of 5 or less and a smoke-developed index of 50 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  $\frac{1}{4}$  inch (6.4 mm) and  $\frac{5}{16}$  inch (7.5 mm) have permeance values given in Table 3.

#### 3.2 Materials:

- **3.2.1** HardiePanel® (Prevail<sup>TM</sup>, Cempanel®) Siding: HardiePanel® Prevail<sup>TM</sup>, Cempanel® siding is available with various surface textures including smooth. Nominal product dimensions are noted in Table 1 of this report.
- **3.2.2 Hardiflex<sup>®</sup> Siding:** Hardiflex<sup>®</sup> siding is available in various textures including smooth. Nominal product dimensions are noted in Table 1 of this report.
- **3.2.3** Harditex<sup>®</sup> Baseboard: Harditex<sup>®</sup> Baseboard is used as a starter strip for exterior applications of walls and soffits. Harditex<sup>®</sup> 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<sup>®</sup> 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 IBC Section 1405.15 and IRC



Tables R703.4 and R703.10.2, and the manufacturer's installation instructions.

- 4.2.2 HardiePanel® (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 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 and covered with battens, or must be designed to comply with IBC Section 1403.2 and IRC Section R703.1 Horizontal joints must be flashed with Z-flashing. Fasteners must be installed with a minimum <sup>3</sup>/<sub>8</sub>-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, appropriately spaced, with fastener types, lengths, and spacing described in Table 4.
- **4.2.3** 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.
- **4.2.4 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 <sup>3</sup>/<sub>8</sub>-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, nonloadbearing, one-hour fire-resistance-rated wall assembly consists of minimum 3<sup>5</sup>/<sub>8</sub>-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 <sup>5</sup>/<sub>8</sub>-inchthick (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<sup>1</sup>/<sub>4</sub>-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 <sup>5</sup>/<sub>8</sub>-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) HardiePanel® (PrevailTM, Cempanel®), or Hardiflex® siding or Harditex® Baseboard. The Type X gypsum boards must be applied vertically to framing members with vertical edges staggered 24 inches (610 mm). The  $\frac{1}{2}$ -inch-thick (12.7 mm), Type X gypsum board must be fastened to the framing members with 1<sup>1</sup>/<sub>4</sub>-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. HardiePanel® (Prevail<sup>TM</sup>, Cempanel<sup>®</sup>), or Hardiflex<sup>®</sup> siding and Harditex<sup>®</sup> Baseboards, must be fastened through the gypsum board to the framing members with minimum 15/8-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. HardiePanel® (Prevail<sup>TM</sup>, Cempanel®), Hardiflex® siding and Harditex® Baseboard 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 assembly consists of minimum 3<sup>5</sup>/<sub>8</sub>-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 <sup>1</sup>/<sub>2</sub>-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 <sup>1</sup>/<sub>4</sub>-inch-thick (6.4 mm) HardiePanel<sup>®</sup> (Prevail<sup>TM</sup>, Cempanel<sup>®</sup>), or Hardiflex<sup>®</sup> siding, or Harditex® Baseboard. 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 <sup>1</sup>/<sub>2</sub>-inchthick (12.7 mm), Type X gypsum board/sheathing must be fastened to the framing members with minimum 1-inchlong (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 15/8-inch-long (41 mm) by minimum 0.323-inch (8.2 mm) HD self-drilling, corrosionresistant, 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 HardiePanel<sup>®</sup> (Prevail<sup>TM</sup>, Cempanel<sup>®</sup>) and Hardiflex<sup>®</sup> panel sidings, and Harditex<sup>®</sup> 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 lateralforce-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 weatherresistive barrier in accordance with applicable codes.

In jurisdictions adopting the 2012 IBC, vertical and lateral flame propagation, 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.

- 5.5 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 June 2012.

#### 7.0 IDENTIFICATION

For field identification, James Hardie Building Products, Inc., HardiePanel® (Prevail<sup>TM</sup>, Cempanel®) 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).

TABLE 1—STANDARD NOMINAL PANEL DIMENSIONS<sup>1, 2</sup>

PRODUCT	WIDTH (inches)	LENGTH (feet)	THICKNESSES (inch)		
HardiePanel <sup>®</sup> siding	48	8, 9 & 10	<sup>1</sup> / <sub>4</sub> & <sup>5</sup> / <sub>16</sub>		
Cempanel <sup>®</sup> siding	48	8, 9, 10, 12	<sup>5</sup> / <sub>16</sub>		
Prevail <sup>™</sup> siding	48	8, 10, & 12	<sup>5</sup> / <sub>16</sub>		
Hardiflex® panel	48	8, 9 & 10	<sup>1</sup> / <sub>4</sub> & <sup>5</sup> / <sub>16</sub>		
Harditex <sup>®</sup> baseboard	48	8, 9 & 10	<sup>1</sup> / <sub>4</sub> & <sup>5</sup> / <sub>16</sub>		

For **SI:** 1 inch = 25.4 mm, 1 ft = 305 mm.

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

PRODUCT THICKNESS <sup>3</sup>	THERMAL CONDUCTANCE <sup>1</sup>	THERMAL RESISTANCE <sup>1</sup>	ACTUAL THERMAL CONDUCTANCE <sup>2</sup>	ACTUAL THERMAL RESISTANCE <sup>2</sup>		
(inch)	K <sub>eff</sub> = Btu/hr-ft²-°F	$R = 1/K_{eff}$	(K <sub>eff</sub> )	(R)		
1/4	1.95	0.51	7.80	0.13		
<sup>5</sup> / <sub>16</sub>	2.07	0.48	6.62	0.15		

For **SI**: 1 inch = 25.4 mm, 1 Btu/h-ft<sup>2</sup>- $^{\circ}$ F = 5.678 W/m<sup>2</sup>-K.

TABLE 3—PERMEANCE VALUES FOR FIBER-CEMENT PRODUCTS

PRODUCT THICKNESS <sup>1</sup> (inch)	PERMEANCE (perms)					
1/4	1.75					
<sup>5</sup> / <sub>16</sub>	1.54					

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

<sup>&</sup>lt;sup>1</sup>Based on 1 inch of panel thickness.

<sup>&</sup>lt;sup>2</sup>Actual value for panel thickness shown.

### TABLE 4—MAXIMUM WIND SPEEDS FOR EXPOSURE CATEGORY $(mph)^2$

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

## TABLE 4—MAXIMUM WIND SPEEDS FOR EXPOSURE CATEGORY (mph)<sup>2</sup> (Continued)

							2012 IRC, 2009 IBC/IRC, 2006 IBC/IRC (Basic Wind Speed, V <sub>asd</sub> <sup>1,5,8</sup> )			2012 IBC (Ultimate Design Wind Speed, V <sub>ult</sub> <sup>6,7</sup> )			
								XPOSUR ATEGOR			E Y		
Product	Minimum Product Thickness (in.)	Fastener Type	Fastener Spacing (in.)	Frame Type	Stud Spacing (in.)	Building Height (ft.)	В	С	D	В	С	D	
Hardiflex® HardiePanel™	<sup>5</sup> / <sub>16</sub>	6d common, 2 in. long	6 edge, 12 field	2 x 4 wood <sup>3</sup>	16	40 60	137 126	105 100	-	177 163	136 129	-	
Hardiflex® HardiePanel™	<sup>5</sup> / <sub>16</sub>	0.091-in. shank x .225-in HD x 1½-in. long ring shank nail	3 edge, 8 field	2 x 4 wood <sup>4</sup>	16	20 40 60	126 110 100	95 90 85	-	163 142 129	123 116 110	- -	
HardiePanel™	<sup>5</sup> / <sub>16</sub>	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/ <sub>16</sub> " wood structural panel sheathing only	7/16" WSP attached per code	0-15 20 40 60	150 150 143 136	136 132 123 118	123 120 113 109	194 194 185 176	176 170 159 152	159 155 146 141	
Hardiflex® HardiePanel™	1/4	Min. No. 8 x 1-in. long x 0.323-in. HD ribbed buglehead screw	6	Min. No. 20 ga. X 3 <sup>5</sup> / <sub>8</sub> in. x 1 <sup>3</sup> / <sub>8</sub> in. metal C- stud	16	20 40 60	137 126 116	105 105 95	- -	177 163 150	136 136 123		
Hardiflex® HardiePanel™	1/4	Min. No. 8 x 1-in. long x 0.323-in. HD ribbed buglehead screw	6	Min. No. 20 ga. X 3 <sup>5</sup> / <sub>8</sub> in. x 1 <sup>3</sup> / <sub>8</sub> in. metal C- stud	24	20 40	105 95	85	-	136 123	110	-	
Hardiflex® HardiePanel™	<sup>5</sup> / <sub>16</sub>	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. X 3 <sup>5</sup> / <sub>8</sub> in. x 1 <sup>3</sup> / <sub>8</sub> in. metal C- stud	16	15 20 40 60	153 153 147 139	139 135 126 121	127 124 116 112	198 198 190 179	179 174 163 156	164 160 150 145	
Hardiflex® HardiePanel™	<sup>5</sup> / <sub>16</sub>	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. X $3^{5}/_{8}$ in. x $1^{3}/_{8}$ in. metal C-stud	24	15 20 40 60	118 118 114 107	107 104 97 93	98 95 90 87	152 152 147 138	138 134 125 120	127 123 116 112	

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

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.

<sup>&</sup>lt;sup>2</sup> Installation must be in accordance with Section 4.2 of this report.

<sup>&</sup>lt;sup>3</sup> Values are for species of wood having a specific gravity of 0.42 or greater.

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

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

Vasd = nominal design wind speed.

<sup>6</sup> Vult = ultimate design wind speed

<sup>&</sup>lt;sup>7</sup> Wind speed design assumptions per Section 30.4, of ASCE 7-10: Kzt = 1, Kd = 0.85, GCpi = 0.18, GCp = -1.4.

 $<sup>^{8}</sup>$  2012 IBC Section 1609.3.1, Eqn. 16-33,  $\text{ V}_{asd} = \text{V}_{ult} \, \sqrt{0.6}$ 



# **ICC-ES Evaluation Report**

## **ESR-1844 CBC and CRC Supplement**

Reissued November 2015

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

Section: 07 46 46—Fiber-Cement Panels

REPORT HOLDER:

JAMES HARDIE BUILDING PRODUCTS, INC. 10901 ELM AVENUE FONTANA, CALIFORNIA 92337 (909) 356-6300 www.jameshardie.com info@jhresearchusa.com

#### **EVALUATION SUBJECT:**

HARDIEPANEL® (PREVAILTM, CEMPANEL®) SIDING, HARDIFLEX® SIDING AND HARDITEX® BASEBOARD

#### 1.0 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that HardiePanel<sup>®</sup> (Prevail™, Cempanel<sup>®</sup>) siding, HardiFlex<sup>®</sup> siding and Harditex<sup>®</sup> baseboard, recognized in ICC-ES master evaluation report ESR-1844, have also been evaluated for compliance with Chapters 7A and 14 of the *California Building Code*<sup>®</sup> (CBC) and with Chapters R3 and R7 of the *California Residential Code*<sup>®</sup> (CRC).

#### Applicable code edition(s):

- 2013 and 2010 California Building Code® (CBC)
- 2013 and 2010 California Residential Code® (CRC)

#### 2.0 CONCLUSIONS

#### 2.1 CBC:

The HardiePanel<sup>®</sup> (Prevail™, Cempanel<sup>®</sup>) siding, HardiFlex<sup>®</sup> siding and Harditex<sup>®</sup> baseboard, described in Sections 2.0 through 7.0 of the master evaluation report ESR-1844, may be used where noncombustible or ignition-resistant exterior walls complying with Chapter 7A and 14 of the CBC are required, provided installation is in accordance with the master report and the additional requirements in Sections 1405.16 and 1405.17 of the CBC.

The use of the products in construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Area requires installation in accordance with the master report and the additional requirements of CBC Sections 701A.3, 704A.3, 707A.3 as applicable.

The products recognized in this supplement have not been evaluated for compliance with the *International Wildland–Urban Interface Code*®.

#### 2.2 CRC:

The HardiePanel<sup>®</sup> (Prevail™, Cempanel<sup>®</sup>) siding, HardiFlex<sup>®</sup> siding and Harditex<sup>®</sup> baseboard, described in Sections 2.0 through 7.0 of the master evaluation report ESR-1844, may be used where noncombustible or ignition-resistant exterior walls complying with Chapter R3 and R7 of the CRC are required, provided installation is in accordance with the master report and the additional requirements in Section R703.10 of the CRC.



The use of the products in construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Area requires installation in accordance with the master report and the additional requirements of CRC Sections R327.1.1.3.1, R327.4.3 and R327.7 as applicable.

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 master report reissued November 2015.