CERTIFICATE OF APPROPRIATENESS

APPLICATION FORM

PROPERTY

Address 1345 & 1343 CORTLANDT / 212 E. 14th ST

Historic District / Landmark HOUSTON HEIGHTS EAST HCAD # 020-165-000-0001

Subdivision JOHN AUSTIN A-1 Lot 1 & 2 Block 169

DESIGNATION TYPE

- ☐ Landmark
- ☐ Protected Landmark
- ☐ Archaeological Site
- ☐ Contributing
- ☒ Noncontributing
- ☐ Vacant

PROPOSED ACTION

- ☐ Alteration or Addition
- ☒ Restoration
- ☐ New Construction
- ☐ Relocation
- ☐ Demolition
- ☐ Excavation

SEE ATTACHED SCOPE OF WORK

DOCUMENTS

☐ Application checklist for each proposed action and all applicable documentation listed within are attached

OWNER

Name STEPHEN & CATHERINE COCHRAN

Company 14th ST FLATS, LLC

Mailing Address 702 MALONE ST

HOUSTON, TX 77007

Phone 713-875-1397

Email [redacted]

Signature

Date

APPLICANT (if other than owner)

Name STEVE MORSE

Company MORSE CONSTRUCTION, LLC

Mailing Address 448 W/ 19th ST #305

HOUSTON TX 77008

Phone 832-884-5998

Email [redacted]

Signature

Date 3/3/2015

ACKNOWLEDGEMENT OF RESPONSIBILITY

Requirements: A complete application includes all applicable information requested on checklists to provide a complete and accurate description of existing and proposed conditions. Preliminary review meeting or site visit with staff may be necessary to process the application. Owner contact information and signature is required. Late or incomplete applications will not be considered.

Deed Restrictions: You have verified that the work does not violate applicable deed restrictions.

Public Records: If attached materials are protected by copyright law, you grant the City of Houston, its officers, agencies, departments, and employees, non-exclusive rights to reproduce, distribute and publish copyrighted materials before the Houston Archaeological and Historical Commission, the Planning Commission, City Council, and other City of Houston commissions, agencies, and departments, on a City of Houston website, or other public forum for the purposes of application for a Certificate of Appropriateness or building permit, and other educational and not for profit purposes. You hereby represent that you possess the requisite permission or rights being conveyed here to the City.

Compliance: If granted, you agree to comply with all conditions of the COA. Revisions to approved work require staff review and may require a new application and HAHC approval. Failure to comply with the COA may result in project delays, fines or other penalties.

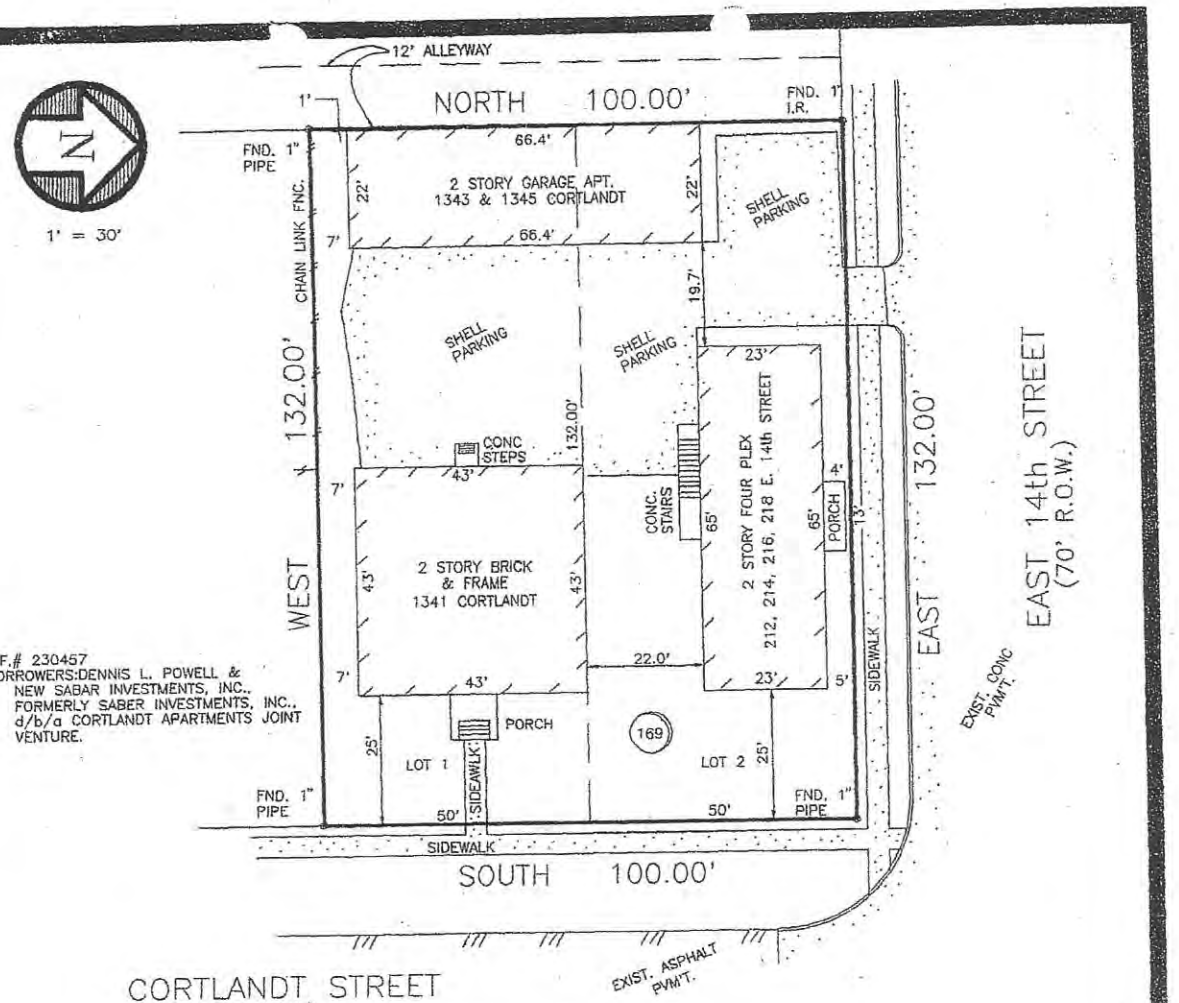
Planner: _____ *Application received:* ___/___/___ *Application complete:* ___/___/___

Scope of work

1. Remove and replace existing windows with new Simonton Single hung energy efficient windows.
2. Remove existing siding and install new Hardie board smooth 7" plank siding.
3. Install new 1 x 4 Hardie board trim around windows and door.
4. Install new Hardie board soffit material.
5. Paint, trim and siding.
6. Remove and Replace existing composition roof with new galvalume 5-V Crimp roof.

NOTE: All materials to be installed per the manufactures' specifications.

Attached are manufactures Specification on all materials to be installed.



BOUNDARY SURVEY
LOTS 1 & 2, BLOCK 169
HOUSTON HEIGHTS
VOLUME 1, PAGE 114, H.C.M.R.
A SUBDIVISION IN THE JOHN AUSTIN, A-1
HARRIS COUNTY, TEXAS

TO PARK NATIONAL BANK, EXCLUSIVELY,
I HEREBY CERTIFY THIS SURVEY WAS MADE ON THE GROUND, AND THAT THIS PLAT CORRECTLY REPRESENTS THE FACTS FOUND AT THE TIME OF SURVEY AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE TEXAS SOCIETY OF PROFESSIONAL SURVEYORS STANDARDS AND SPECIFICATIONS FOR A CATEGORY 1-A, CONDITION II SURVEY, AND THAT THERE ARE NO ENCROACHMENTS EXCEPT AS MAY BE SHOWN.

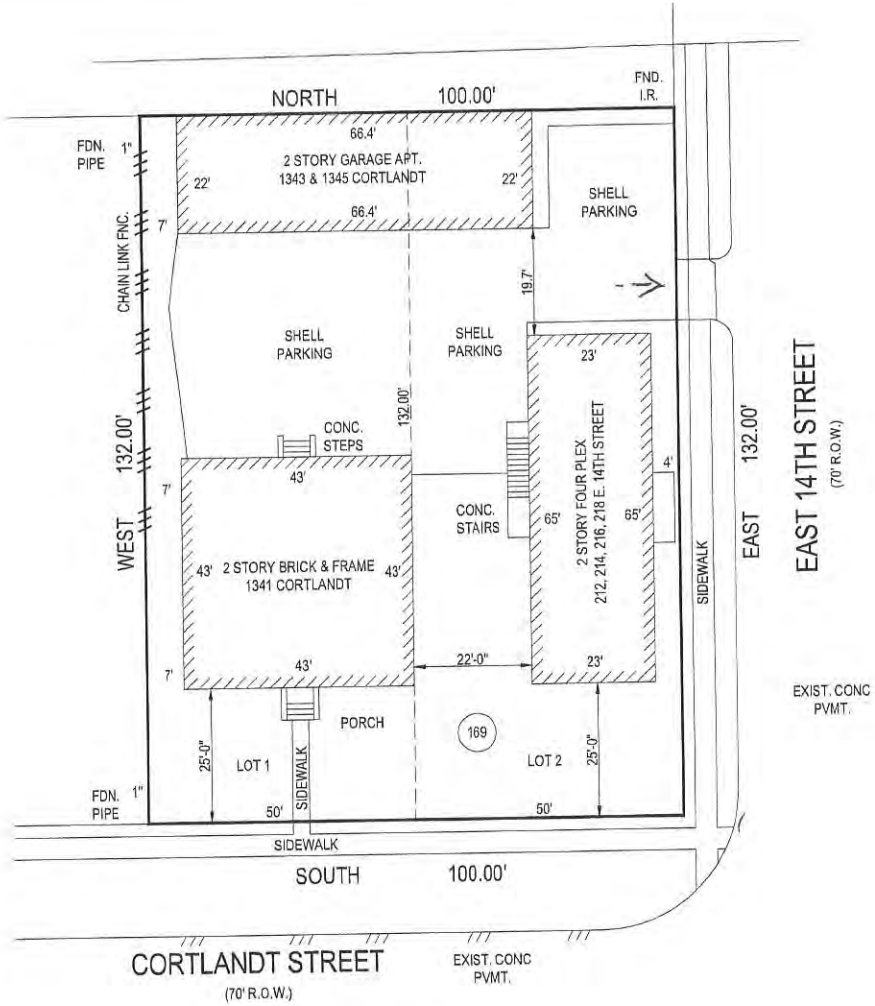
JOHN J. RODRIQUEZ, R.P.L.S. #2634

THIS TRACT IS OUT OF THE 100 YEAR FLOOD PLAIN PER PANEL #48201C0235G, SEPT. 28, 1990

STATE OF TEXAS REGISTERED JOHN J. RODRIQUEZ 2634 PROFESSIONAL LAND SURVEYOR

7/15/25

ESOR Consulting Engineers, Inc.
121 Lou Lane #104
Spring, Texas 77388
(713) 350-3767



1 SITE PLAN
SCALE 3/32" = 1'-0"

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS
0 1 2 3

	COCHRAN+COCHRAN DESIGN STUDIO 702 MALONE STREET HOUSTON TX. 77007	14TH STREET FLATS, LLC 702 MALONE STREET HOUSTON TX, 77007	LOTS 1 & 2 , BLOCK 169 HOUSTON TX, 77008	Apv. / Revisions / Date / No.	Chkd By: C.C Dwn By: K.T Date: 7/28/14 Design By: C.C	JOB NUMBER: 000-000-000 SCALE: 3/32"=1'-0" SHEET: A-1.00

SIMONTON WINDOWS®

For products available in your area, please set your ZIP Code. Set Location

WINDOWS | DOORS | LEARN | WHERE TO BUY | SUPPORT | FOR THE PROS

ENERGY STAR Windows and Doors - Simonton

As an ENERGY STAR partner, Simonton Windows® is committed to meeting the strict criteria of the U.S. Environmental Protection Agency and the U.S. Department of Energy to help conserve energy and reduce heating and cooling costs for all our customers. When you purchase Simonton vinyl windows and doors that meet ENERGY STAR® guidelines, you know you'll have optimum energy efficiency and comfort for wherever you live. That's why Simonton has developed ENERGY STAR glass packages for each climate zone. Select the glass package custom made for your region, and you'll be assured of the right combination of components to deliver impressive year-round thermal performance.

Why buy ENERGY STAR qualified windows and doors?

Heating and Cooling Costs

Purchasing ENERGY STAR windows can help you save money on heating and cooling throughout the year.

Get Comfortable

ENERGY STAR windows can help create a consistent temperature throughout the house season after season.

Reduce Your Carbon Footprint

With ENERGY STAR qualified windows and doors, you will use less energy, which reduces greenhouse gas emissions from power plants.

Free In-Home Estimate

Connect with an expert to learn about our products.

GET STARTED

Request A Brochure

Get all your helpful product information from a single source.

DOWNLOAD FREE BROCHURES

Express Your Unique Style

Protect Your Furniture and Floors

Many ENERGY STAR windows have a special Low E coating on the glass that's like a sunscreen for your house and helps block UV rays from damaging your floors, photos and rugs.

How does ENERGY STAR measure its criteria?

By measuring four different parts of the window: the glass, the gas, the spacer and the reinforcement. The combination of these factors influences the unit's U-value and solar heat gain, both of which are drivers for meeting ENERGY STAR performance level. By adjusting any one or more of these four factors allows us to meet the new 2015 ENERGY STAR criteria.

The Glass

Low E coatings help deflect the sun's ultraviolet rays and block them from entering your home

The Gas

Six times more dense than air, Argon gas helps provide insulation

The Spacer

Designed to reduce heat transfer at the edge of the insulating glass unit

The Reinforcement

Non-metal reinforcement prevents heat transfer

To be labeled as an ENERGY STAR product, the U-factor and SHGC (Solar Heat Gain Coefficient) ratings must be less than or equal to those established by ENERGY STAR.

- **U-value** The U-value or U-factor is commonly described as the amount of heat transferred through a material. The lower the U-factor, the slower the rate of heat flow and the better the insulating value.
- **Solar Heat Gain Coefficient (SHGC)** The SHGC refers to the amount of heat from the sun that windows and doors allow into the home. The lower the number, the greater the ability to reduce the amount of heat absorbed into the home.

The following is the new 2015 ENERGY STAR criteria:

2015 ENERGY STAR Criteria

WINDOWS		
	U-Factor	SHGC
Northern	<= 0.30	Any
	0.31	>= 0.35
	0.32	>= 0.40
North Central	<= 0.30	<= 0.40
South Central	<= 0.30	<= 0.25
Southern	<= 0.40	<= 0.25
DOORS		
	U-Factor	SHGC
Northern	<= 0.30	<= 0.40
North Central		
South Central		<= 0.25
Southern		

Learn more about the ENERGY STAR program visit their website at www.energystar.gov.

Back to top

ICC-ES Evaluation Report

ESR-1844*

Reissued November 2013
This report is subject to renewal November 1, 2015.

www.icc-es.org | (800) 423-6587 | (562) 699-0543 *A Subsidiary of the International Code Council®*

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
(800) 942-7343
info@jameshardie.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®* (IRC)
- 2006 *International Energy Conservation Code®* (IECC)

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™, 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^3; 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 $^1/_4$ inch (6.4 mm) and $^5/_{16}$ inch (7.5 mm) have permeance values given in Table 3.

3.2 Materials:

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

3.2.3 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 IBC Section 1405.15 and IRC

***Revised May 2014**

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 © 2014

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 $^3/_8$-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, 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 $^3/_8$-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) HardiePanel® (Prevail™, 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 $^1/_2$-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. HardiePanel® (Prevail™, Cempanel®), or Hardiflex® siding and Harditex® Baseboards, 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. HardiePanel® (Prevail™, 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 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) HardiePanel® (Prevail™, Cempanel®), or Hardiflex® 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 $^1/_2$-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 HardiePanel® (Prevail™, Cempanel®) 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.

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

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™, 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[1, 2]

PRODUCT	WIDTH (inches)	LENGTH (feet)	THICKNESSES (inch)
HardiePanel® siding	48	8, 9 & 10	$^1/_4$ & $^5/_{16}$
Cempanel® siding	48	8, 9, 10, 12	$^5/_{16}$
Prevail™ siding	48	8, 10, & 12	$^5/_{16}$
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.

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 (Ultimate Design Wind Speed, V_{ult}[6,7])		
							EXPOSURE CATEGORY			EXPOSURE CATEGORY		
Product	Minimum Product Thickness (in.)	Fastener Type	Fastener Spacing (in.)	Frame Type	Stud Spacing (in.)	Building Height (ft.)	B	C	D	B	C	D
Hardiflex® HardiePanel™	¼	4d common, 1½-in long	8	2 x 4 wood[3]	16	20	105	-	-	136	-	-
						40	95	-	-	123	-	-
						60	85	-	-	110	-	-
Hardiflex® HardiePanel™	¼	4d common, 1½-in long	8	2 x 4 wood[3]	24	20	85	-	-	110	-	-
Hardiflex® HardiePanel™	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® HardiePanel™	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® HardiePanel™ 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® HardiePanel™ 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® HardiePanel™	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® HardiePanel™	5/16	4d common, 1½-in long	8	2 x 4 wood[3]	16	40	126	95	-	163	123	-
Hardiflex® HardiePanel™	5/16	4d common, 1½-in long	8	2 x 4 wood[3]	24	20	105	-	-	136	-	-
						40	95	-	-	123	-	-
Hardiflex® HardiePanel™	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® HardiePanel™	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® HardiePanel™	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® HardiePanel™	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 (Ultimate Design Wind Speed, V_{ult}[6,7])		
							EXPOSURE CATEGORY			EXPOSURE CATEGORY		
Product	Minimum Product Thickness (in.)	Fastener Type	Fastener Spacing (in.)	Frame Type	Stud Spacing (in.)	Building Height (ft.)	B	C	D	B	C	D
Hardiflex® HardiePanel™	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® HardiePanel™	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	-
HardiePanel™	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® HardiePanel™	¼	Min. No. 8 x 1-in. long x 0.323-in. HD ribbed buglehead screw	6	Min. No. 20 ga. 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® HardiePanel™	¼	Min. No. 8 x 1-in. long x 0.323-in. HD ribbed buglehead screw	6	Min. No. 20 ga. X 3 5/8 in. x 1 3/8 in. metal C-stud	24	20	105	85	-	136	110	-
						40	95	-	-	123	-	-
Hardiflex® HardiePanel™	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. 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® HardiePanel™	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. 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

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

ICC-ES Evaluation Report

ESR-1844 CBC and CRC Supplement*

Reissued November 2013

This report is subject to renewal November 1, 2015.

www.icc-es.org | (800) 423-6587 | (562) 699-0543 *A Subsidiary of the International Code Council®*

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 Panels

REPORT HOLDER:

JAMES HARDIE BUILDING PRODUCTS, INC.
10901 ELM AVENUE
FONTANA, CALIFORNIA 92337
(800) 942-7343
www.jameshardie.com
info@jameshardie.com

EVALUATION SUBJECT:

HARDIEPANEL® (PREVAIL™, 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® (Prevail™, Cempanel®) siding, HardiFlex® siding and Harditex® 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®* (CBC) and with Chapters R3 and R7 of the *California Residential Code®* (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® (Prevail™, Cempanel®) siding, HardiFlex® siding and Harditex® 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® (Prevail™, Cempanel®) siding, HardiFlex® siding and Harditex® 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.

***Revised May 2014**

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.

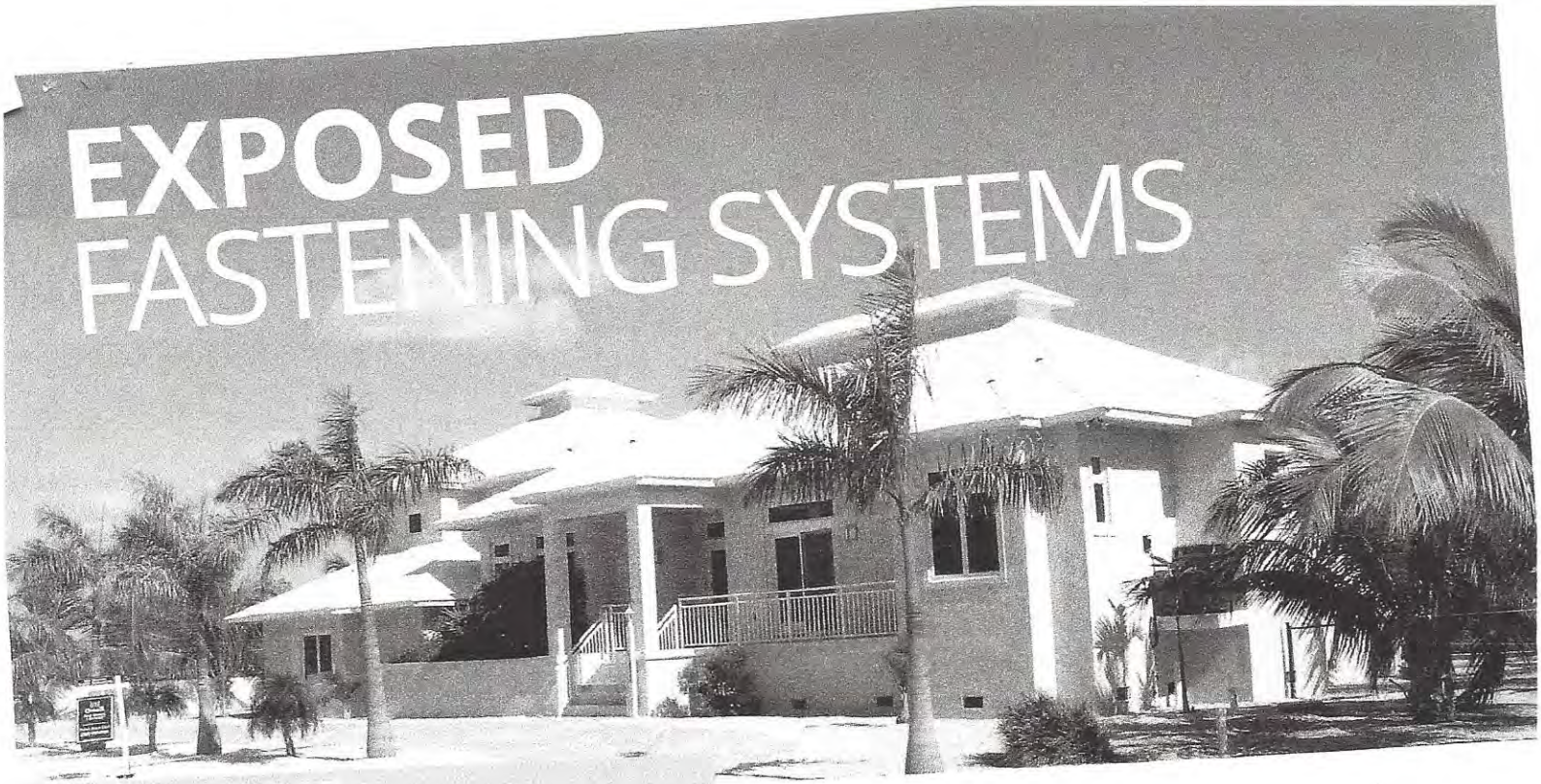
Copyright © 2014

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*®.

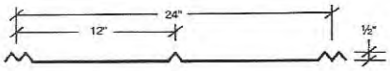
This supplement expires concurrently with the master report reissued November 2013, revised May 2014.

EXPOSED FASTENING SYSTEMS



5V CRIMP

The 5V Crimp roof panel offers an ideal old-time, residential appearance. 5V Crimp is also an aesthetically-pleasing solution for light commercial applications. The 5V Crimp panels require a solid roof deck with a waterproof membrane.



Features and Benefits:

- UL 580 rating is available, as well as UL 790, Class A for external fire, roof assembly for UL 263 for internal fire and the UL 2218 Class 4 impact rating.
- 5-V Crimp carries Florida and Dade County approvals.

Product Specifications

- **Applications:** Roof
- **Coverage Widths:** 24"
- **Rib Spacing:** 12" on center
- **Rib Height:** ½"
- **Minimum Slope:** 3:12
- **Panel Attachment:** Exposed Fastening System
- **Gauges:** 29 (standard); 26 (optional)
- **Finishes:** Smooth (standard)
- **Coatings:** Galvalume Plus®, Signature® 200

EXPOSED FASTENING SYSTEM

S-V CRIMP

CATEGORY	CHARACTERISTIC	TEST METHOD	PURPOSE	RESULT
ENVIRONMENTAL	Impact Resistance	UL 2218	Determines Impact Resistance of prepared Roof Covering Materials	Class 4 Rating
FIRE RESISTANCE	Room Fire Performance	UL 790	Standard for Standard Test Methods for Fire Tests of Roof Coverings	See Class A Fire Rating Data Sheet
	Room Fire Performance	UL 263	Standard for Fire Tests of Building Construction and Materials	For use in Design Nos. P225, P227, P230, P237, P265, P268, P508, P510, P512, P701, P711, P720, P722, P726, P731 P734, P801, P815, P819.
STRUCTURAL	Uplift Resistance	AISI S100	Provides a standard procedure to evaluate or confirm structural performance under uniform static air pressure difference	See Section Properties and Allowable Load Table Section
	Gravity Loads	AISI S100	North American Specification for the Design of Cold-Formed Steel Structural Members	See Section Properties and Allowable Load Table Section
ROOF LISTINGS	Roof Performance -Underwriters Laboratories	UL 580	Determines the uplift resistance of roof assemblies consisting of the roof and roof coverings materials	Class 90 Rating - Construction Number 453.
	Roof Performance - Miami-Dade County	TAS 125 TAS 100	The Product Control Approval System establishes a protocol to evaluate the standards of products used in construction in Miami-Dade County. Miami-Dade County, with its inclusion in the High Velocity Hurricane Zone (HVHZ) has the most stringent code requirements of the Florida Building Code. Therefore, all products that comprise the structure's building envelope — doors, shutters, windows, prefabricated buildings and truss plates — require the issuance of an approval in order to be used for construction in Miami-Dade County	See NOA # 11-0810.10
	Roof Performance - Florida Approval	TAS-125 UL 580 UL 1897 U790	Florida product approval is the approval of products and systems, which comprise the building envelope and structural frame, for compliance with the structural requirements of the Florida Building Code	See FI # 11903.1
	Roof Performance - Texas Department of Insurance	UL 580 UL 1897	TWIA provides windstorm and hail insurance in areas exposed to hurricanes and currently provides windstorm and hail coverage in the following 14 "first tier" Texas coastal counties: Aransas, Brazoria, Calhoun, Cameron, Chambers, Galveston, Jefferson, Kenedy, Kleberg, Matagorda, Nueces, Refugio, San Patricio and Willacy.	See RC392

MBCI
Metal Roof and Wall Systems

Descriptions and specifications contained herein were in effect at the time this publication was approved for printing. In a continuing effort to refine and improve products, MBCI reserves the right to discontinue products at any time or change specifications and/or designs without incurring obligation. To ensure you have the latest information available, please inquire or visit our website at www.mbci.com. Application details are for illustration purposes only and may not be appropriate for all environmental conditions, building designs or panel profiles. Projects should be designed to conform to applicable building codes, regulations and accepted industry practices. If there is a conflict between this manual and project erection drawings, the erection drawings will take precedence.

HIPPIES
U
BACK DOOR

HIPPIES
USE
BACKDOOR

1
2

2