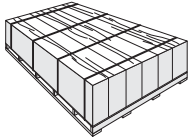


**SELECT CEDARMILL® • SMOOTH • COLONIAL SMOOTH® • COLONIAL ROUGHSAWN® • BEADED CEDARMILL
BEADED SMOOTH • STRAIGHT-EDGE SHINGLE PLANK®**

IMPORTANT: FAILURE TO INSTALL AND FINISH THIS PRODUCT IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND JAMES HARDIE'S WRITTEN APPLICATION INSTRUCTIONS MAY AFFECT SYSTEM PERFORMANCE, VIOLATE LOCAL BUILDING CODES, AND VOID THE PRODUCT ONLY WARRANTY.

HANDLING & STORAGE:

Store flat and keep dry prior to installation. Installing siding wet or saturated may result in shrinkage at butt joints. Carry planks on edge.



RECOMMENDED CUTTING INSTRUCTIONS

OUTDOORS

1. Position cutting station so that wind will blow dust away from user or others in work area.
2. Use one of the following methods based on the required cutting rate:
 - a. Best:
 - i. Score and snap
 - ii. Shears (Pneumatic or Handheld)
 - b. Better:
 - i. Dust reducing circular saw equipped with Hardiblade and HEPA vacuum extraction
 - c. Good:
 - i. Dust reducing circular saw with Hardiblade

INDOORS

1. Position cutting station in well-ventilated area; otherwise, additional mechanical ventilation (e.g. box fan, HEPA vacuum, etc.) is required
2. Cut only using score and snap, or shears (manual, electric or pneumatic).

- NEVER use a power saw indoors
- NEVER use a circular saw blade that does not carry the Hardiblade logo
- NEVER dry sweep

Additional exposure information is available at www.jameshardie.com to help you determine the most appropriate cutting method for your job requirements. If concern still exists about exposure levels or protection levels, you should always consult a qualified industrial hygienist.

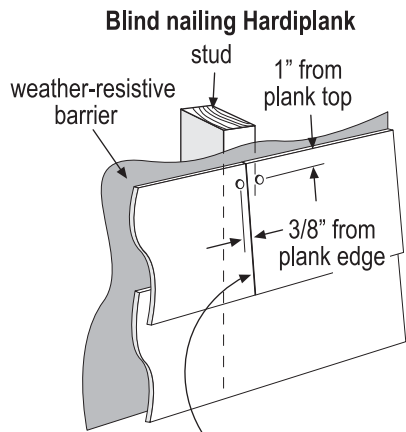
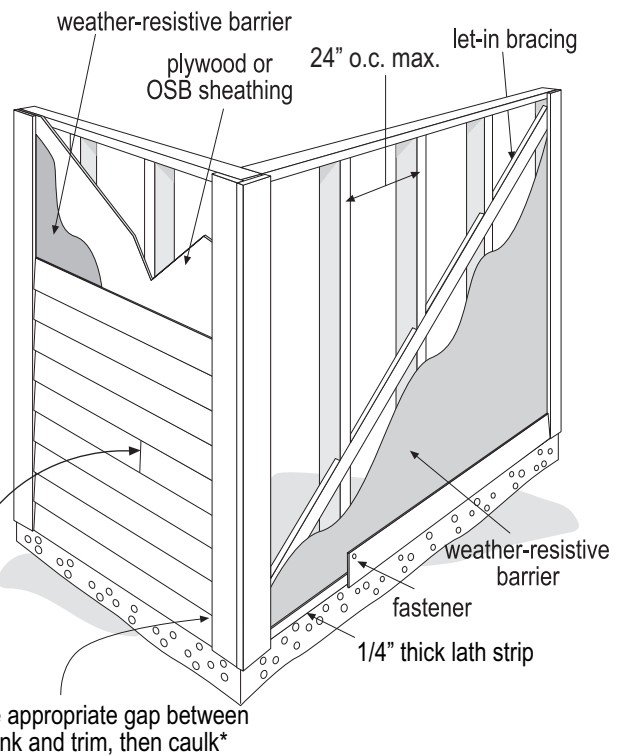
FRAMING REQUIREMENTS:

Hardiplank® lap siding can be installed over braced wood or steel studs spaced a maximum of 24" o.c. or directly to minimum 7/16" thick OSB sheathing. Hardiplank lap siding can also be installed over foam insulation up to 1" thick.† Irregularities in framing, sheathing, and/or foam insulation can mirror through the finished application.

The use of a Weather-resistive barrier is required in frame construction with siding. James Hardie recommends the use of asphalt saturated felt or equivalent non-woven, non-perforated, vapor permeable building paper or housewrap. Note: *James Hardie does not recommend the use of water repellent wood based panel sheathing as the primary weather resistive barrier.* The weather resistive barrier must be appropriately incorporated with penetration and junction flashings. Materials must be lapped such that water will drain down and to the outside. James Hardie will assume no responsibility for water infiltration within the wall.

The first course of any wall should be installed over a 1/4" lath strip to ensure a consistent plank angle (see figure 1).

figure 1 Double Wall Construction Single Wall Construction



* Space plank according to joint treatment either in "moderate contact" (joints not caulked) or in accordance with the caulking manufacturer's written application instructions (joints caulked), see detail at right.

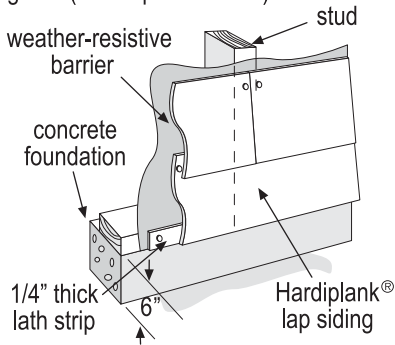
† For application over foam insulation, the length of the specified fastener shall be increased by the thickness of the foam insulation.

WARNING: AVOID BREATHING SILICA DUST

James Hardie Building Products contain silica. Inhalation of respirable silica can cause silicosis, a disabling lung disease, which is known to the State of California to cause lung cancer and potentially death. When drilling, cutting, or abrading products during installation or handling: (1) Work outdoors where feasible, otherwise use mechanical ventilation, (2) Wear a dust mask, or if dust may exceed PEL, use NIOSH/MSHA approved respirator, (3) Warn others in area. According to medical experts, and the Surgeon General for the United States, cigarette smoking can significantly increase your likelihood for contracting lung-related diseases, including silica-related lung diseases. For further information, refer to our installation instructions and Material Safety Data Sheet available at www.jameshardie.com or by calling 1-800-9HARDIE. FAILURE TO ADHERE TO WARNINGS, MSDS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY.

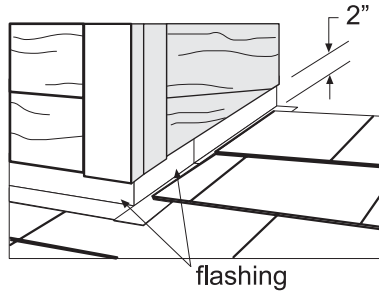
GRADE CLEARANCE figure 2

Install Hardiplank® lap siding in compliance with local building code requirements for clearance between the bottom edge of plank and the adjacent finished grade (see Important Note).



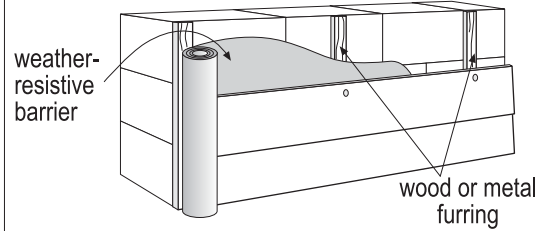
ROOF CLEARANCE figure 3

At the juncture of the roof and vertical surfaces, flashing and counterflashing shall be provided per the roofing manufacturer's Instructions. Provide a minimum of a 2" clearance between the roofing and bottom edge of siding.



CONCRETE CONSTRUCTION figure 4

Hardiplank lap siding can be installed directly to masonry block. Hardiplank siding can also be installed to concrete construction when the wall is furred out with wood framing or minimum No. 20 gauge steel framing anchored to the wall. Framing can be spaced up to 24" OC. Consult applicable code compliance report for recognized application to masonry block. A weather-resistive barrier is recommended between the framing and the siding.



IMPORTANT NOTE

- Install James Hardie® products with a minimum 6" clearance to the earth on the exterior of the building or in accordance with local building codes if greater than 6" is required.
- Maintain a minimum 2" clearance between James Hardie® products and roofs, decks, paths, steps and driveways.
- Adjacent finished grade must slope away from the building in accordance with local building codes - typically a minimum of 6" in the first 10'.
- Do not install Hardiplank® lap siding, such that it may remain in contact with standing water.

FACE NAIL: (All Lap Products) **

figure 5

Corrosion Resistant Nails (galvanized or stainless steel)

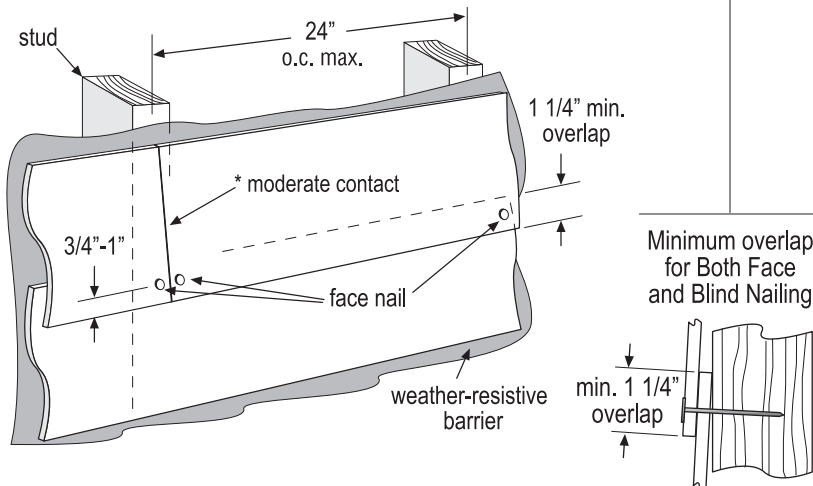
- 6d (0.113" shank x 0.267" HD x 2" long)
- Siding nail (0.089" shank x 0.221" HD x 1-1/4" long)
- Siding nail (0.091" shank x 0.221" HD x 1-1/2" long) ‡

Corrosion Resistant Screws

- Ribbed Wafer-head or equivalent (No. 8-18 x 0.323" HD x 1-5/8" long) Screws must penetrate 1/4" or 3 threads into metal framing.

Corrosion Resistant Fasteners

- ET & F pin (0.100" shank x 0.25" HD x 1-1/2" long)



BLIND NAIL: **

figure 6

Corrosion Resistant Nails (galvanized or stainless steel)

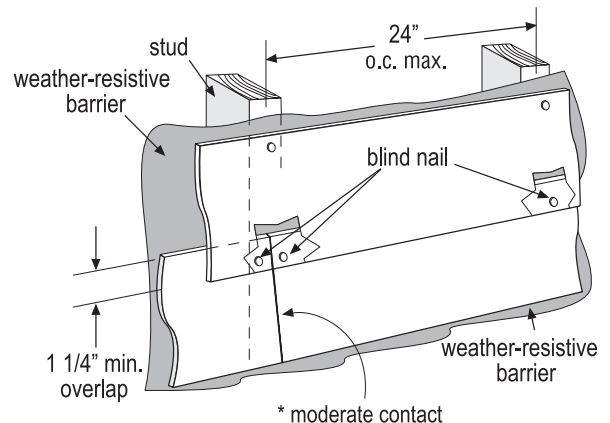
- Siding nail (0.089" shank x 0.221" HD x 2" long)
- 11ga. roofing nail (0.121" shank x 0.371" HD x 1-1/4" long)

Corrosion Resistant Screws

- Ribbed Wafer-head or equivalent (No. 8-18 x 0.323" HD x 1-5/8" long) Screws must penetrate 1/4" or 3 threads into metal framing.

Corrosion Resistant Fasteners

- ET & F Panelfast™ (0.100" shank x 0.313" HD x 1-1/2" long)



‡ When face nailing to OSB, planks must be no greater than 9 1/2" wide and fasteners must be 12" o.c. or less.

** See Fastening Requirements.

FASTENING REQUIREMENTS:

Fasteners must be corrosion resistant, galvanized, or stainless steel. Electro-galvanized are acceptable may exhibit premature corrosion. James Hardie® recommends the use of quality, hot-dipped galvanized nails. James Hardie is not responsible for the corrosion resistance of fasteners. Stainless steel fasteners are recommended when installing James Hardie products near the ocean, large bodies of water, or in very humid climates. **Do not use aluminum fasteners, staples, or clipped head nails.**



DO NOT STAPLE

- Consult applicable code compliance report for correct fasteners type and placement to achieve specified design wind loads and shear values.
- NOTE: Published shear values and wind loads may not be applicable to all areas where Local Building Codes have specific jurisdiction. Consult James Hardie Technical Services if you are unsure of applicable Building Code jurisdiction.
- Drive fasteners perpendicular to siding and framing.
- Fastener heads should fit snug against siding (no air space). (Fig. A & B)
- Do not over-drive nail heads or drive nails at an angle.
- If nail is countersunk, caulk nail hole and add a nail. (Fig. C)
- Under driven nails should be hit flush to the plank with a hammer.

PNEUMATIC FASTENER:

Hardiplank® lap siding products can be hand nailed or fastened with a pneumatic tool. Pneumatic fastening is highly recommended. Set air pressure so that the fastener is driven snug with the surface of the siding. A flush mount attachment on the pneumatic tool is recommended. This will help control the depth the nail is driven. If setting the nail depth proves difficult, choose a setting that under drives the nail. Hit the under driven nails snug with a smooth faced hammer. **Do not over drive nails into Hardiplank® lap siding.**



Countersunk, Caulk & add nail



do not under drive nails

COVERAGE CHART/ESTIMATING GUIDE

1. Figures shown are in pieces - all 12 long 2. 5% cutting and fitting waste factor included 3. Computations based on minimum overlap of 1-1/4 4. Actual usage subject to variables such as building design and installers

COVERAGE AREA LESS OPENINGS		HARDIPLANK® SIDING WIDTH									
		(exposure)	5-1/4" (4)	6-1/4" (5)	7-1/4" (6)	7-1/2" (6-1/4)	8" (6-3/4)	8-1/4" (7)	9-1/4" (8)	9-1/2" (8-1/4)	12" (10-3/4)
100 sf	1 SQ		26	21	18	17	16	15	13	13	10
200 sf	2 SQ		53	42	35	34	31	30	26	25	20
300 sf	3 SQ		79	63	53	50	47	45	39	38	29
400 sf	4 SQ		105	84	70	67	62	60	53	51	39
500 sf	5 SQ		131	105	88	84	78	75	66	64	49
600 sf	6 SQ		158	126	105	101	93	90	79	76	59
700 sf	7 SQ		184	147	123	118	109	108	92	89	68
800 sf	8 SQ		210	168	140	134	124	120	105	102	78
900 sf	9 SQ		236	189	158	151	140	135	118	115	88
1000 sf	10 SQ		263	210	175	168	156	150	131	127	98
1100 sf	11 SQ		289	231	193	185	171	165	144	140	107
1200 sf	12 SQ		315	252	210	202	187	180	158	153	117
1300 sf	13 SQ		341	273	228	218	202	195	171	165	127
1400 sf	14 SQ		368	294	245	235	218	210	184	178	137
1500 sf	15 SQ		394	315	263	252	233	225	197	191	147
1600 sf	16 SQ		420	336	280	269	249	240	210	204	156
1700 sf	17 SQ		446	357	298	286	264	255	223	216	166
1800 sf	18 SQ		473	378	315	302	280	270	236	229	176
1900 sf	19 SQ		499	399	333	319	296	285	249	242	186
2000 sf	20 SQ		525	420	350	336	311	300	263	255	195
2100 sf	21 SQ		551	441	368	353	327	315	276	267	205
2200 sf	22 SQ		578	462	385	370	342	330	289	280	215
2300 sf	23 SQ		604	483	403	386	358	345	302	293	225
2400 sf	24 SQ		630	504	420	403	373	360	315	305	234
2500 sf	25 SQ		656	525	438	420	389	375	328	318	244
2600 sf	26 SQ		683	546	455	437	404	390	341	331	254
2700 sf	27 SQ		709	567	473	454	420	405	354	344	264
2800 sf	28 SQ		735	588	490	470	436	420	368	356	273
2900 sf	29 SQ		761	609	508	487	451	435	381	369	283
3000 sf	30 SQ		788	630	525	504	467	450	394	382	293

PATCHING

Dents, chips and cracks can be filled with a cementitious patching compound.

CAULKING

For best results use a latex sealant that complies with either ASTM C834 or ASTM C920 (Grade NS, Class 25). Caulking should be applied in accordance with the caulking manufacturer's written instructions.

PAINTING

It is recommended that James Hardie products be painted with 100% acrylic topcoats. Do not paint when wet. For application rates refer to paint manufacturers specifications. Back-rolling is recommended if the siding is sprayed.

RECOGNITION: In accordance with ICC-ES Legacy Report NER-405, Hardiplank lap siding is recognized as a suitable alternate to that specified in: the BOCA National Building Code/1999, the 1997 Standard Building Code, the 1997 Uniform Building Code, the 1998 International One- and Two-Family Dwelling Code, the 2003 International Building Code, and the 2003 International Residential Code for One-and Two-Family Dwellings. Hardiplank lap siding is also recognized for application in the following: City of Los Angeles Research Report No. 24862, State of Florida listing FL#889, Dade County, Florida NOA No. 02-0729.02, U.S. Dept. of HUD Materials Release 1263c, Texas Department of Insurance Product Evaluation EC-23, City of New York MEA 223-93-M, and California DSA PA-019. These documents should also be consulted for additional information concerning the suitability of this product for specific applications.

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JH91513SL 10/04
