HARDIPLANK® LAP SIDING INSTALLATION INSTRUCTIONS

MARCH 2000

SELECT CEDARMILL® • SMOOTH • COLONIAL SMOOTH™ • COLONIAL ROUGHSAWN™ • BEADED CEDARMILL • BEADED SMOOTH

IMPORTANT: FAILURE TO INSTALL AND FINISH HARDIPLANK® IN ACCORDANCE WITH APPLICABLE BUILDING CODE COMPLIANCE REPORTS AND JAMES HARDIE'S WRITTEN APPLICATION INSTRUCTIONS, MAY AFFECT SYSTEM PERFORMANCE, VIOLATE LOCAL BUILDING CODES REQUIREMENTS, 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.

CUTTING OPTIONS:
Circular saw with dust collector
Circular saw blade with carbide-tipped teeth
Electric or pneumatic hand shears
Pneumatic shears
Carbide score and snap knife

- JH recommends Makita® #504KB 4" or #5057KB 7-1/4" saw with dust collection. Call 800-4MAKITA.
- Hitachi® HARDIGLIDE™ w/ PCD Diamond Teeth. Call Hitachi® at 800-546-1668 for nearest dealer.
- SNAPPER SHEAR™ electric, pneumatic, or hand shears. Call 800-297-7487 for tool information.

Always wear safety glasses and dust protection when operating power tools. For more information on avoiding inhalation refer to the MATERIAL SAFETY DATA SHEET available wherever James Hardie fiber-cement products are sold.

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. A weather-resistant barrier is required. Install Hardiplank siding with joints butted in moderate contact. Optionally, install the lap siding with a maximum 1/8" gap and caulk the joint ** (see detail at right).

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

![Diagram of Hardiplank installation](image)

**figure 1**

Double Wall Construction

![Diagram of Double Wall Construction](image)

Single Wall Construction

![Diagram of Single Wall Construction](image)

Blind nailing Hardiplank

**Moderate contact, or maximum 1/8" gap**

3/8" from plank edge

1" from plank top

3/8" from plank edge

1/8" gap between plank and trim, then caulk

1/4" thick lath strip

Weather-resistant barrier

Plywood or OSB sheathing

Let-in bracing

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

* Use a weather-resistant barrier in accordance with: BOCA National Building Code Section 1403.3; SBCC Standard Building Code Section 2303.3; ICBO Uniform Building Code Section 1402.1; or CABO One-and-Two Family Dwelling Code Section 703.2.1.

NOTE: Some Building Codes exempt the use of weather-resistant barriers over "water-repellent panel sheathing" or exterior panels classified as "weather-resistant barriers." James Hardie recommends the use of "building paper type" weather-resistant barriers with all siding products. James Hardie will assume no responsibility for water infiltration within the wall.

WARNING: AVOID BREATHING SILICA DUST

Product contains Silica. Inhalation of respirable silica dust can cause silicosis a potentially disabling lung disease, and is known to the State of California to cause lung cancer. When drilling, cutting, or abrading product 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. For further information, refer to material safety data sheet or consult employer.

FAILURE TO ADHERE TO WARNINGS, MSDS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY.
GRADE CLEARANCE  
Install Hardiplank/Hardiplank in compliance with local Building Code requirements for clearance between the bottom edge of panel/framing and the adjacent finished grade.

ROOF CLEARANCE  
At the juncture of the roof and vertical surfaces, flashing and counterflashing shall be provided per the roofing manufacturer’s instructions. Provide a 1” - 2” clearance between the roofing and bottom edge of siding or as recommended by the roofing manufacturer.

CONCRETE CONSTRUCTION  
Hardiplank 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 National Evaluation Service report NER-405 for recognized applications to masonry block and wood or metal framing. A weather-resistant barrier is recommended between the framing and the siding.

FACE NAIL: (All Lap Products)

Corrosion Resistant Nails (galvanized or stainless steel)
- 6d (0.118” shank x 0.267” HD x 2” long)
- Siding nail (0.089” shank x 0.221” HD x 2” long) **
- Siding nail (0.091” shank x 0.221” HD x 1 1/2” long) †

Corrosion Resistant Screws
- Ribbed Bugle-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.

BLIND NAIL:

Hardiplank siding cannot be blind nailed 24” o.c. 12” wide Hardiplank siding cannot be blind nailed. When blind nailing 9 1/4” or 9 1/2” Hardiplank, use 11 ga. roofing nail x 1 1/4” long.

Corrosion Resistant Nails (galvanized or stainless steel)
- 6d (0.118” shank x 0.267” HD x 2” long)
- 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” L)

Corrosion Resistant Screws
- Ribbed Bugle-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.

PNEUMATIC FASTENING:
Hardiplank can be hand nailed or fastened with the use of a pneumatic tool. Set your air pressure so that the fastener is driven snug with the shingle surface.

RECOMMENDED:
Use a flush mount attachment on pneumatic tool. This will help control the depth that the nail is driven. This will be especially helpful when more than one pneumatic tool is driven off the same compressor.

NAIL TYPE:
Fasteners must be corrosion resistant, galvanized or stainless steel. Electro-galvanized nails are acceptable for use with James Hardie Siding Products, but 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.)
### 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

<table>
<thead>
<tr>
<th>COVERAGE AREA</th>
<th>HARDIPLANK® WIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>LESS OPENINGS</td>
<td>5-1/4&quot;</td>
</tr>
<tr>
<td></td>
<td>10-1/4&quot;</td>
</tr>
<tr>
<td>100 sf</td>
<td>1 SQ</td>
</tr>
<tr>
<td>200 sf</td>
<td>2 SQ</td>
</tr>
<tr>
<td>300 sf</td>
<td>3 SQ</td>
</tr>
<tr>
<td>400 sf</td>
<td>4 SQ</td>
</tr>
<tr>
<td>500 sf</td>
<td>5 SQ</td>
</tr>
<tr>
<td>600 sf</td>
<td>6 SQ</td>
</tr>
<tr>
<td>700 sf</td>
<td>7 SQ</td>
</tr>
<tr>
<td>800 sf</td>
<td>8 SQ</td>
</tr>
<tr>
<td>900 sf</td>
<td>9 SQ</td>
</tr>
<tr>
<td>1000 sf</td>
<td>10 SQ</td>
</tr>
<tr>
<td>1100 sf</td>
<td>11 SQ</td>
</tr>
<tr>
<td>1200 sf</td>
<td>12 SQ</td>
</tr>
<tr>
<td>1300 sf</td>
<td>13 SQ</td>
</tr>
<tr>
<td>1400 sf</td>
<td>14 SQ</td>
</tr>
<tr>
<td>1500 sf</td>
<td>15 SQ</td>
</tr>
<tr>
<td>1600 sf</td>
<td>16 SQ</td>
</tr>
<tr>
<td>1700 sf</td>
<td>17 SQ</td>
</tr>
<tr>
<td>1800 sf</td>
<td>18 SQ</td>
</tr>
<tr>
<td>1900 sf</td>
<td>19 SQ</td>
</tr>
<tr>
<td>2000 sf</td>
<td>20 SQ</td>
</tr>
<tr>
<td>2100 sf</td>
<td>21 SQ</td>
</tr>
<tr>
<td>2200 sf</td>
<td>22 SQ</td>
</tr>
<tr>
<td>2300 sf</td>
<td>23 SQ</td>
</tr>
<tr>
<td>2400 sf</td>
<td>24 SQ</td>
</tr>
<tr>
<td>2500 sf</td>
<td>25 SQ</td>
</tr>
<tr>
<td>2600 sf</td>
<td>26 SQ</td>
</tr>
<tr>
<td>2700 sf</td>
<td>27 SQ</td>
</tr>
<tr>
<td>2800 sf</td>
<td>28 SQ</td>
</tr>
<tr>
<td>2900 sf</td>
<td>29 SQ</td>
</tr>
<tr>
<td>3000 sf</td>
<td>30 SQ</td>
</tr>
</tbody>
</table>

**Notes and Calculations:** \((sq \text{ ft} + \text{ exposure})\times 1.05 = \text{number of boards})

### Finishing Hardiplank:

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

**Caulking:**  
A high quality, paintable caulk is recommended. For best results use caulks that comply with either ASTM C 834 or ASTM C 920. Caulking should be applied in accordance with caulking manufacturer's written instructions. (Leave 1/8" gap at trim for caulk. Caulking at butt joints is optional.)

**Painting:**  
James Hardie products must be painted. For best results install Hardiplank siding with our exclusive Prime Plus™ factory priming system and a 100% acrylic topcoat (S). *If our Prime Plus™ factory priming is not being used, Hardie recommends the application of an alkali-resistant primer along with 100% acrylic topcoat (S).  
(For paint manufacturer's paint specifications, refer to JH Technical Bulletin No. S-100.)  
*Note: Please refer to paint manufacturers' specifications for application rates.

**Approvals:** Hardiplank lap siding is recognized as an exterior wall cladding in National Evaluation Report No. NER405 (BOCA, ICBO, SBCC): City of Los Angeles, Research Report No. 24862; Dade County, Florida, Acceptance No. 99-0223.07, US Dept. of HUD Materials Release 1263a, California DSA PS-019 and City of New York MEA 223-93-M. These documents should also be consulted for additional information concerning the suitability of this product for specific applications.

---

Corporate Headquarters  
28300 La Amada, Suite 250  
Mission Viejo, CA 92691  
© 2000 James Hardie Building Products  
Printed in USA