INSTALLATION REQUIREMENTS - PRIMED & COLORPLUS® PRODUCTS

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

IMPORTANT: FAILURE TO INSTALL AND FINISH THIS PRODUCT IN ACCORDANCE WITH APPLICABLE BUILDING CODES AND JAMES HARDIE WRITTEN APPLICATION INSTRUCTIONS MAY LEAD TO PERSONAL INJURY, AFFECT SYSTEM PERFORMANCE, VIOLATE LOCAL BUILDING CODES, AND VOID THE PRODUCT ONLY WARRANTY. BEFORE INSTALLATION, CONFIRM THAT YOU ARE USING THE CORRECT HARDIEZONE® PRODUCT INSTRUCTIONS.

INSTALLATION OF HZ10® PRODUCTS OUTSIDE AN HZ10® LOCATION WILL VOID YOUR WARRANTY. TO DETERMINE WHICH HARDIEZONE® APPLIES TO YOUR LOCATION, VISIT WWW.HARDIEZONE.COM OR CALL 1-866-942-7343 (866 9HARDIE)

STORAGE & HANDLING:
Store flat and keep dry and covered prior to installation. Installing siding wet or saturated may result in shrinkage at butt joints. Carry planks on edge. Protect edges and corners from breakage. James Hardie is not responsible for damage caused by improper storage and handling of the product.

OUTDOORS
1. Position cutting station so that wind will blow dust away from user and others in working area.
2. Choose one of the following methods:
   a. Best: i. Score and snap
      b. Better: i. Dust reducing circular saw equipped with a HardieBlade saw blade and HEPA vacuum extraction
         ii. Dust reducing circular saw with a HardieBlade saw blade (only use for low to moderate cutting)
   c. Good: i. Dust reducing circular saw with a HardieBlade saw blade

INDOORS
1. Cut only using score and snap, or shears (manual, electric or pneumatic).
2. Position cutting station in well-ventilated area

• NEVER use a power saw indoors
• NEVER use a circular saw blade that does not carry the HardieBlade saw blade trademark
• NEVER dry saw – Use wet suppression or HEPA Vacuum

Important Note: For maximum protection (lowest respirable dust production), James Hardie recommends always using “Best”-level cutting methods where feasible.

NOTE: Field painting over caulking may produce a sheen difference when compared to the field painted PrimePlus. Refer to Caulking section in these instructions.

GENERAL REQUIREMENTS:
• HardiePlank® lap siding can be installed over braced wood or steel studs spaced a maximum of 24 in. o.c. or directly to minimum 7/16 in. thick OSB sheathing. See general fastening requirements. Irregularities in framing and sheathing can mirror through the finished application.
• Information on installing James Hardie products over foam can be located in JH Tech Bulletin 19 at www.jameshardie.com
• A water-resistant barrier is required in accordance with local building code requirements. The water-resistant barrier must be appropriately installed with penetration and juncture flashing in accordance with local building code requirements. James Hardie will assume no responsibility for water infiltration. James Hardie does manufacture HardieWrap® Weather Barrier, a non-woven non-perforated housewrap¹, which complies with building code requirements.
• When installing James Hardie products all clearance details in figs. 3-14 must be followed.
• Adjacent finished grade must slope away from the building in accordance with local building codes - typically a minimum of 6 in. in the first 10 ft.
• Do not use HardiePlank lap siding in fascia or trim applications.
• Do not install James Hardie products, such that they may remain in contact with standing water.
• HardiePlank lap siding may be installed on flat vertical wall applications only.
• For larger projects, including commercial and multi-family projects, where the span of the wall is significant in length, the designer and/or architect should take into consideration the coefficient of thermal expansion and moisture movement of the product in their design. These values can be found in the Technical Bulletin "Expansion Characteristics of James Hardie® Siding Products” at www.JamesHardie.com.
• DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.

INSTALLATION: JOINT TREATMENT
One or more of the following joint treatment options are required by code (as referenced 2009 IRC R703.10.2)
A. Joint Flashing (James Hardie recommended)
B. Caulking* (Caulking is not recommended for ColorPlus for aesthetic reasons as the Caulking and ColorPlus will weather differently. For the same reason, do not caulk nail heads on ColorPlus products.)
C. “H” (jinter cover

Figure 2
Figure 1

WARNING: AVOID BREATHING SILICA DUST
James Hardie® products contain respirable crystalline silica, which is known to the State of California to cause cancer and is considered by IARC and NIOSH to be a cause of cancer from some occupational sources. Breathing excessive amounts of respirable silica dust can also cause a disabling and potentially fatal lung disease called silicosis, and has been linked with other diseases. Some studies suggest smoking may increase these risks. During installation or handling: (1) work in outdoor areas with ample ventilation; (2) use fiber cement shears for cutting or, where not feasible, use a HardieBlade saw blade and dust-reducing circular saw attached to a HEPA vacuum; (3) wear others in the immediate area; (4) wear a properly-fitted, NIOSH-approved dust mask or respirator (e.g. N-95) in accordance with applicable government regulations and manufacturer instructions to further limit respirable silica exposures. For further information, refer to our installation instructions and Material Safety Data Sheet available at www.jameshardie.com or by calling 1-800-9HARDIE (1-800-942-7343). FAILURE TO ADHERE TO OUR WARNINGS, MSDS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH.
**FASTENER REQUIREMENTS**

Blind Nailing is the preferred method of installation for HardiePlank® lap siding products. Face nailing should only be used where required by code for high wind areas and must not be used in conjunction with Blind nailing (Please see JH Tech bulletin 17 for exemption when doing a repair). Pin-backed corners may be done for aesthetic purposes Only. Pin-backs shall be done with finish nails only, and are not a substitute for blind or face nailing.

### BLIND NAILING

- **Nails - Wood Framing**
  - Siding nail (0.09 in. shank x 0.221 in. HD x 2 in. long)
  - 11ga. roofing nail (0.121 in. shank x 0.371 in. HD x 1.25 in. long)

- **Screws - Steel Framing**
  - Ribbed Wafer-head or equivalent (No. 8 x 1 1/4 in. long x 0.375 in. HD) Screws must penetrate 3 threads into metal framing.

- **Nails - Steel Framing**
  - ET & F Panelfast® nails or equivalent (0.10 in. shank x 0.313 in. HD x 1-1/2 in. long)
  - Nails must penetrate minimum 1/4 in. into metal framing.

- **OSB minimum 7/16 in.**
  - 11ga. roofing nail (0.121 in. shank x 0.371 in. HD x 1.75 in. long)
  - Ribbed Wafer-head or equivalent (No. 8 x 1 5/8 in. long x 0.375 in. HD).

### FACE NAILING

- **Nails - Wood Framing**
  - 6d (0.113 in. shank x 0.267 in. HD x 2 in. long)
  - Siding nail (0.09 in. shank x 0.221 in. HD x 2 in. long)

- **Screws - Steel Framing**
  - Ribbed Bugle-head or equivalent (No. 8-18 x 1-5/8 in. long x 0.323 in. HD) Screws must penetrate 3 threads into metal framing.

- **Nails - Steel Framing**
  - ET & F pin or equivalent (0.10 in. shank x 0.25 in. HD x 1-1/2 in. long)
  - Nails must penetrate minimum 1/4 in. into metal framing.

- **OSB minimum 7/16 in.**
  - Siding nail (0.09 in. shank x 0.221 in. HD x 1-1/2 in. long)*

---

*Laminate sheet to be removed immediately after installation of each course for ColorPlus® products.*

*When face nailing to OSB, planks must be no greater than 9 1/4 in. wide and fasteners must be 12 in. o.c. or less.

**Also see General Fastening Requirements; and when considering alternative fastening options refer to James Hardie Technical Bulletin USTB 17 - Fastening Tips for HardiePlank® Lap Siding.
GENERAL FASTENING REQUIREMENTS

Fasteners must be corrosion resistant, galvanized, or stainless steel. Electro-galvanized are acceptable 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. Stainless steel fasteners are recommended when installing James Hardie® products near the ocean, large bodies of water, or in very humid climates.

Manufacturers of ACO and CA preservative-treated wood recommend spacer materials or other physical barriers to prevent direct contact of ACO or CA preservative-treated wood and aluminum products. Fasteners used to attach HardieTrim Tabs to preservative-treated wood shall be of hot-dipped zinc-coated galvanized steel or stainless steel and in accordance to 2009 IRC R317.3 or 2009 IBC 2304.9.5.

- Consult applicable product evaluation or listing for correct fasteners type and placement to achieve specified design wind loads.
- NOTE: Published 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 compliance documentation.
- Drive fasteners perpendicular to siding and framing.
- Fastener heads should fit snug against siding (no air space). (fig. A)
- Do not over-drive nail heads or drive nails at an angle.
- If nail is countersunk, fill nail hole and add a nail. (fig. B)
- For wood framing, under driven nails should be hit flush to the plank with a hammer (for steel framing, remove and replace nail).
- NOTE: Whenever a structural member is present, HardiePlank should be fastened with even spacing to the structural member. The tables allowing direct to OSB or plywood should only be used when traditional framing is not available.
- Do not use aluminum fasteners, staples, or clipped head nails.

PNEUMATIC FASTENING

James Hardie 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. (Drive under driven nails snug with a smooth faced hammer - Does not apply for installation to steel framing).

COLORPLUS® TECHNOLOGY CAULKING, TOUCH-UP & LAMINATE

- Care should be taken when handling and cutting James Hardie® ColorPlus® products. During installation use a wet soft cloth or soft brush to gently wipe off any residue or construction dust left on the product, then rinse with a garden hose.
- Touch up nicks, scrapes and nail heads using the ColorPlus® Technology touch-up applicator. Touch-up should be used sparingly. If large areas require touch-up, replace the damaged area with new HardiePlank® lap siding with ColorPlus Technology.
- Laminate sheet must be removed immediately after installation of each course.
- Terminate non-factory cut edges into trim where possible, and caulk. Color matched caulks are available from your ColorPlus® product dealer.
- Treat all other non-factory cut edges using the ColorPlus Technology edge coaters, available from your ColorPlus product dealer.

Note: James Hardie does not warrant the usage of third party touch-up or paints used as touch-up on James Hardie ColorPlus products.

PAINTING

DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products. James Hardie products must be painted within 180 days for primed product and 90 days for unprimed. 100% acrylic topcoats are recommended. Do not paint when wet. For application rates refer to paint manufacturers specifications. Back-rolling is recommended if the siding is sprayed.

CUT EDGE TREATMENT

Caulk, paint or prime all field cut edges. James Hardie touch-up kits are required to touch-up ColorPlus products.

CAULKING

For best results use an Elastomeric Joint Sealant complying with ASTM C920 Grade NS, Class 25 or higher or a Latex Joint Sealant complying with ASTM C834. Caulking/Sealant must be applied in accordance with the caulking/sealant manufacturer’s written instructions. Note: OSI Quad as well as some other caulking manufacturers do not allow tooling.

PAINTING JAMES HARDIE® SIDING AND TRIM PRODUCTS WITH COLORPLUS® TECHNOLOGY

When repainting ColorPlus products, James Hardie recommends the following regarding surface preparation and topcoat application:

- Ensure the surface is clean, dry, and free of any dust, dirt, or mildew
- Repriming is normally not necessary
- 100% acrylic topcoats are recommended
- DO NOT use stain, oil/alkyd base paint, or powder coating on James Hardie® Products.
- Apply finish coat in accordance with paint manufacturers written instructions regarding coverage, application methods, and application temperature
- DO NOT caulk nail heads when using ColorPlus products, refer to the ColorPlus touch-up section
### COVERAGE CHART/ESTIMATING GUIDE

Number of 12 ft. planks, does not include waste

<table>
<thead>
<tr>
<th>SQ (1 SQ = 100 sq.ft.)</th>
<th>HARDIEPLANK® LAP SIDING WIDTH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 1/4</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>75</td>
</tr>
<tr>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>125</td>
</tr>
<tr>
<td>6</td>
<td>150</td>
</tr>
<tr>
<td>7</td>
<td>175</td>
</tr>
<tr>
<td>8</td>
<td>200</td>
</tr>
<tr>
<td>9</td>
<td>225</td>
</tr>
<tr>
<td>10</td>
<td>250</td>
</tr>
<tr>
<td>11</td>
<td>275</td>
</tr>
<tr>
<td>12</td>
<td>300</td>
</tr>
<tr>
<td>13</td>
<td>325</td>
</tr>
<tr>
<td>14</td>
<td>350</td>
</tr>
<tr>
<td>15</td>
<td>375</td>
</tr>
<tr>
<td>16</td>
<td>400</td>
</tr>
<tr>
<td>17</td>
<td>425</td>
</tr>
<tr>
<td>18</td>
<td>450</td>
</tr>
<tr>
<td>19</td>
<td>475</td>
</tr>
<tr>
<td>20</td>
<td>500</td>
</tr>
</tbody>
</table>

This coverage chart is meant as a guide. Actual usage is subject to variables such as building design. James Hardie does not assume responsibility for over or under ordering of product.


© 2016 James Hardie Building Products. All rights reserved. TM, SM, and ® denote trademarks or registered trademarks of James Hardie Technology Limited. HARDIEPLANK® is a registered trademark of James Hardie Technology Limited.

Panelfast is a registered trademark of ET&F Fastening Systems, Inc.

Additional Installation Information, Warranties, and Warnings are available at www.jameshardie.com