**INSTALLATION REQUIREMENTS - PRIMED & COLORPLUS® PRODUCTS**

**INSTALLATION:**
- DO NOT use stain on James Hardie® products.
- HardiePlank lap siding may be installed on vertical wall applications only.
- Do not use HardiePlank lap siding in Fascia or Trim applications.
- Adjacent finished grade must slope away from the building in accordance with local building codes - typically a minimum of 6” in the first 10’.
- Install kickout flashing at roof-wall junctions (fig. 9).
- Maintain a 1/4” clearance between James Hardie products and horizontal flashing (fig. 7).
- Ensure gutters have end caps. Maintain a minimum 1” gap between end caps and siding & trim (fig. 8).
- Install kickout flashing at roof-wall junctions (fig. 9).
- 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 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 vertical wall applications only.
- DO NOT use stain on James Hardie® products.

**GENERAL REQUIREMENTS:**
- HardiePlank® lap siding can be installed over wood or steel studs spaced a maximum of 24” o.c. or directly to minimum 7/16” thick OSB sheathing. Irregularities in framing and sheathing can mirror through the finished application.
- HardiePlank lap siding can also be installed over foam insulation/sheathing up to 1” thick. When using foam insulation/sheathing, avoid over-driving nails (fasteners), which can result in dimpling of the siding due to the compressible nature of the foam insulation/sheathing. Extra caution is necessary if power-driven nails (fasteners) are used for attaching siding over foam insulation/sheathing.
- A water-resistive barrier is required in accordance with local building code requirements. The water-resistive barrier must be appropriately installed with penetration and junction flashing in accordance with local building code requirements. James Hardie will assume no responsibility for water infiltration.
- Install James Hardie® products with a minimum 6” clearance to the finished grade on the exterior of the building or in accordance with local building codes if greater than 6” is required (fig. 3).
- Maintain a 2” clearance between James Hardie products and roofs, decks, paths, steps and driveways (figs. 4, 5 & 6).
- Maintain a 1/4” clearance between James Hardie products and horizontal flashing (fig. 7).
- Ensure gutters have end caps. Maintain a minimum 1” gap between end caps and siding & trim (fig. 8).
- Install kickout flashing at roof-wall junctions (fig. 9).
- 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 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 vertical wall applications only.
- DO NOT use stain on James Hardie® products.

**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.

**CUTTING INSTRUCTIONS**

<table>
<thead>
<tr>
<th>OUTDOORS</th>
<th>INDOORS</th>
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<tbody>
<tr>
<td>1. Position cutting station so that wind will blow dust away from user and others in working area.</td>
<td>- NEVER use a power saw indoors</td>
</tr>
<tr>
<td>2. Use one of the following methods:</td>
<td>- NEVER use a circular saw blade that does not carry the HardieBlade saw blade trademark</td>
</tr>
<tr>
<td>a. Best:</td>
<td>- NEVER dry sweep – Use wet suppression or HEPA Vacuum</td>
</tr>
<tr>
<td>i. Score and snap</td>
<td></td>
</tr>
<tr>
<td>ii. Shears (manual, electric or pneumatic)</td>
<td></td>
</tr>
<tr>
<td>b. Better:</td>
<td></td>
</tr>
<tr>
<td>i. Dust reducing circular saw equipped with a HardieBlade saw blade and HEPA vacuum extraction</td>
<td></td>
</tr>
<tr>
<td>c. Good:</td>
<td></td>
</tr>
<tr>
<td>i. Dust reducing circular saw with a HardieBlade saw blade (only use for low to moderate cutting)</td>
<td></td>
</tr>
</tbody>
</table>

**JOINT TREATMENT**

(Required for ColorPlus® Finish, Recommended for Primed product)

James Hardie does not recommend the use of caulk at field butt joints.

**INSTALLATION:**

**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) warn 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. During cleanup, use HEPA vacuums or wet cleanup methods - never dry sweep. 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.
CLEARANCES
Install siding and trim products in compliance with local building code requirements for clearance between the bottom edge of the siding and the adjacent finished grade.

Maintain a 1/4" clearance between the bottom of James Hardie products and horizontal flashing. Do not caulk gap.

Maintain a minimum 1" gap between gutter end caps and siding & trim.

Maintain a 2" minimum clearance between James Hardie products and paths, steps and driveways.

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

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

The illustration (figure 9) and associated text was reprinted with permission of THE JOURNAL OF LIGHT CONSTRUCTION. For subscription information, visit www.jlconline.com.

** Also see General Fastening Requirements.

FASTENER REQUIREMENTS**

Blind Nailing is the preferred method of installation for all HardiePlank® lap siding products

BLIND NAILING

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

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

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

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

FACE NAILING

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

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

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

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

Face Nailing should only be used where required for high wind areas and must not be used in conjunction with Blind Nailing

FACE NAILING

Nails - Wood Framing
- Siding nail (0.09" shank x 0.221" HD x 2" long)

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

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

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

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

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

** Also see General Fastening Requirements.
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.

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 - Do not apply for installation to steel framing).

CUT EDGE TREATMENT

Caulk, paint or prime all field cut edges.

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 or ASTM C1193.

COLORPLUS® TECHNOLOGY CAULKING, TOUCH-UP & LAMINATE

- Touch up nicks, scrapes and nail heads using the ColorPlus® Technology touch-up applicator. Touch-up paint 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.

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
- Re priming is normally not necessary
- 100% acrylic topcoats are recommended
- DO NOT use stain or oil/alkyd base paints on James Hardie® products
- Apply finish coat in accordance with paint manufacturers written instructions regarding coverage, application methods, and application temperature
- 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.

PAINTING

DO NOT use stain 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.

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.
