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

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. Use one of the following methods:
   a. Best: i. Score and snap ii. Shears (manual, electric or pneumatic)
   b. Better: i. Dust reducing circular saw equipped with a HardieBlade® saw blade and HEPA vacuum extraction
   c. Good: i. Dust reducing circular saw with a HardieBlade saw blade (only use for low to moderate cutting)

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

Important Note: For maximum protection (lowest respirable dust production), James Hardie recommends always using “Best”-level cutting methods where feasible. NIOSH-approved respirators can be used in conjunction with above cutting practices to further reduce dust exposures. 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 you do not comply with the above practices, you should always consult a qualified industrial hygienist or contact James Hardie for further information.

GENERAL REQUIREMENTS:
- HardiePlank® 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. 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. 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, 4, 5, 6, 7, 8, & 9 must be followed.
- 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 use HardiePlank® lap siding in Fascia or Trim applications.
- Do NOT use stain on James Hardie® products.
- 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. James Hardie Lap Siding Products at www.JamesHardie.com.

INSTALLATION:
JOINT TREATMENT†
(Required for ColorPlus® Finish. Recommended for Primed product) James Hardie does not recommend the use of caulk at field butt joints. Install factory finished edges together at butt joints.

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 clean-up, 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.

†For other jointing options, refer to local building code or NER 405
**As required by local building code
***Apply caulk in accordance with caulk manufacturers written application instructions

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

Maintain a 2" minimum clearance between James Hardie products and decking material.

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.

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

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

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

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

OSB minimum 7/16"
- 11ga. roofing nail (0.121" shank x 0.371" HD x 1.25" long)
- Ribbed Wafer-head or equivalent (No. 8 x 1 5/8" long x 0.375" HD).

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)
- Ribbed Wafer-head or equivalent (No. 8 x 1 5/8" long x 0.375" HD).

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).

FASTENING

Because of the volume of water that can pour down a sloped roof, one of the most critical flashing details occurs where a roof intersects a sidewall. The roof must be flashed with step flashing. Where the roof terminates, install a kickout to deflect water away from the siding.

It is best to install a self-adhering membrane on the wall before the subfascia and trim boards are nailed in place, and then come back to install the kickout.

To prevent water from dumping behind the siding and the end of the roof intersection, install a “kickout” of sufficient length and angle to direct the water running down the roof away from the siding.

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" wide and fasteners must be 12" o.c. or less.

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

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


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.

COVERED AREA

<table>
<thead>
<tr>
<th>COVERED AREA OF OPENINGS</th>
<th>HARDIEPLANK® LAP SIDING WIDTH</th>
<th>S Q (1 SQ = 100 sq.ft)</th>
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<td>5 1/4</td>
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</tbody>
</table>

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ADDITIONAL HANDLING REQUIREMENTS

IMPORTANT: To prevent damage to the drip edge, extra care should be taken when removing planks from the pallet, while handling, and when installing with a lap gauge. Planks are interlocked together on the pallet, therefore they should be removed from the pallet horizontally (side to side) to allow planks to unlock themselves from one another.

Pull from across the stack

Do not go down the stack