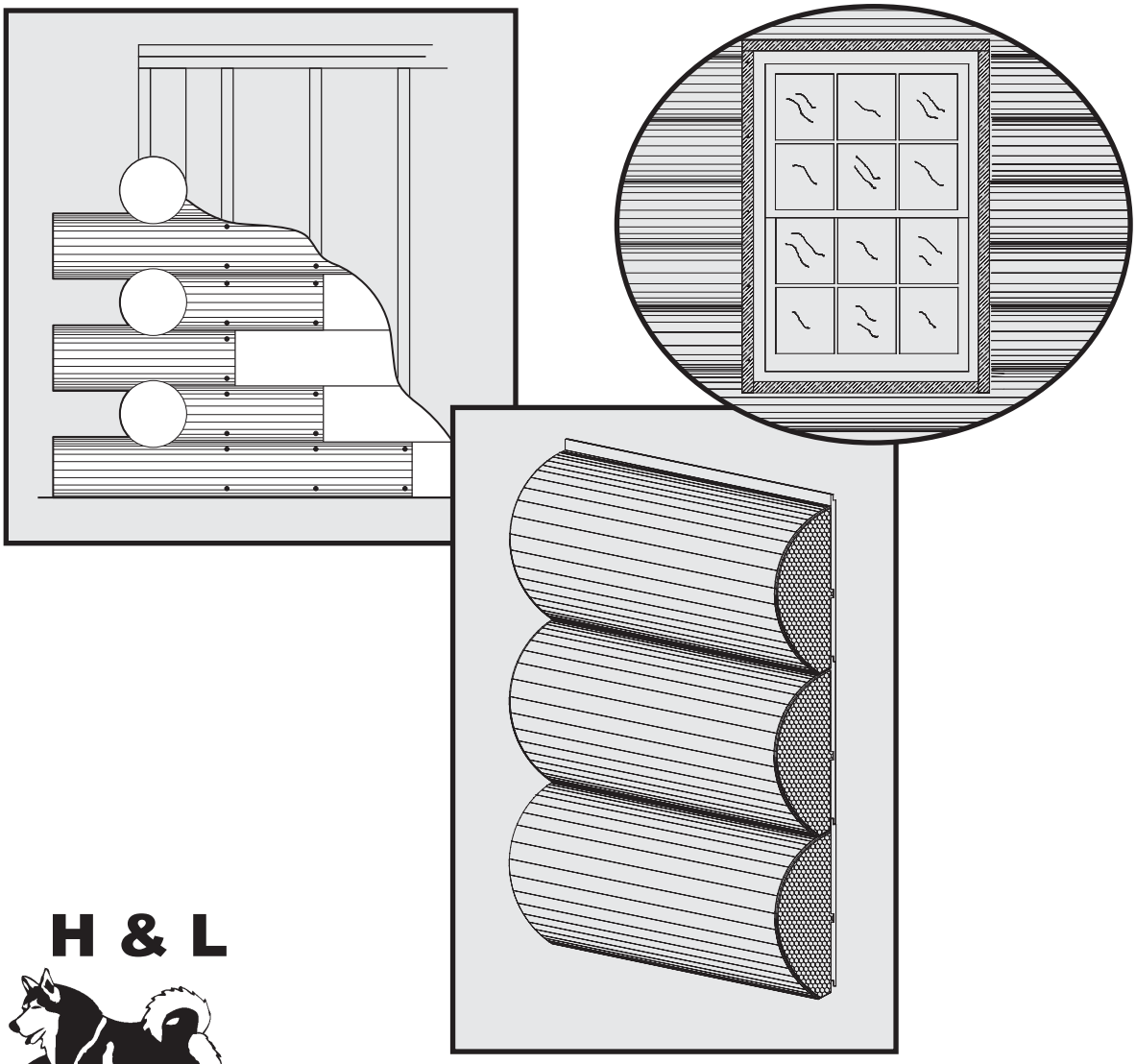
The H&L Half-Log™

Rustic Insulated Building System

Installation/Estimating Manual



H & L

HALF-LOG™

H & L Industries

Table of Contents

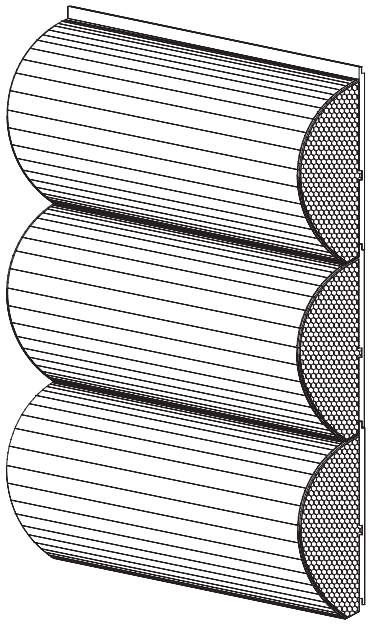
H & L HALF-LOG
Installation Manual

H & L HALF-LOG
Estimating Manual

Introduction/Warranty Information

The H&L Half-Log

The patented H&L Half-Log™ is a laminated and insulated wood veneer siding that saves energy by delivering 400% greater R-values than competing log siding products. By using 80% less timber, the H&L Half-Log conserves valuable natural resources. The H&L Half-Log also cuts labor costs, because it weighs less than solid log siding. In addition, the H&L Half-Log system saves time and money by combining siding, sheeting, pre-finishing (with the Van Tech factory stain system) and insulation into a single application step using stick-building techniques.



The H&L Industries Warranty

H&L Industries provides a Warranty on materials (solid log detailing, including saddle-notch corners and trim, is not included). A copy of this Warranty is included in this manual. Please read it carefully. You are responsible for knowing the content.

It is important to comprehend the following partial list of conditions, which will nullify your Warranty:

BUILDING PREPARATION ISSUES: improper on-site storage, moisture in the wall cavity, improper HVAC exhausting, uncontrolled water runoff, inadequate flashing

CONSTRUCTION ISSUES: inadequate spacing and caulking around trim and corners, nailing or screwing the siding through the veneer face, siding in direct contact with masonry, exterior siding less than 12" above ground, exterior butt-joints without foam spacers and caulk, using mitered H&L Half-Logs as an exterior outside corner

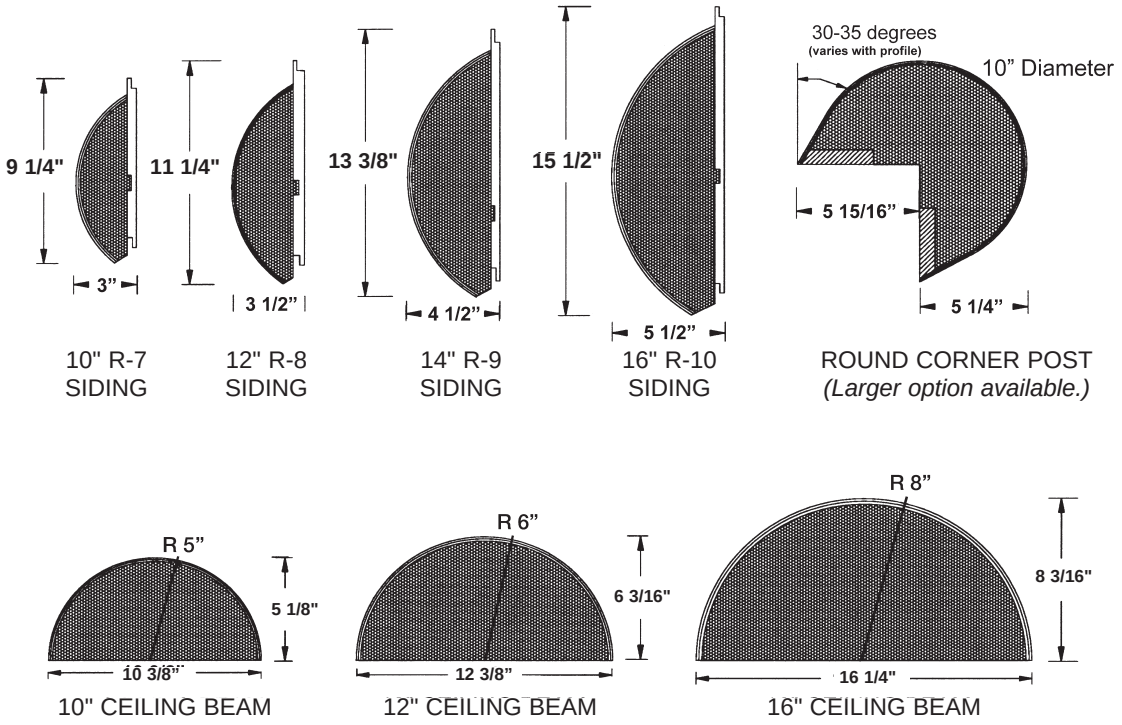
FINISHING ISSUES: sprinklers spraying on the siding, failure of the stain system, insufficient stain coverage on the face and exposed edges, mold/mildew/algae on the siding surface, using a maintenance topcoat other than Van Technologies™ Stain

NOTE:
A document must be signed to activate the Warranty. See page 22 for details.

Siding On-Site Storage Requirements

All H&L Half-Logs should be stored flat and off the ground. Opened bundles should be covered, to enable protection from dirt and moisture. If the siding is to be stored over damp ground or new concrete, it is necessary to place a moisture barrier under the siding bundle. The siding should be stored four to six inches above the ground, to allow air to circulate around the bottom of the stack. Bundles are individually protected with lumber wrap prior to shipping. Opened bundles should always be wrapped when not in use.

Specifications



Note: *Specifications are approximate. Actual dimensions may vary slightly.*
20" CEILING BEAM ALSO AVAILABLE (CALL FOR SPECS)

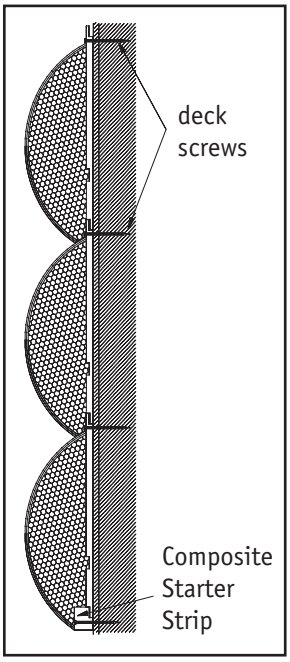
Profiles for Standard H&L Engineered Products are shown above.

SIDING PROFILE (diameter x length)	**THICKNESS** (inches)	**STACK HEIGHT** (inches)	**APPROX. WEIGHT** (pounds)	**BUNDLE CONFIG.** (rows x columns)	**PIECES PER BUNDLE**	**SQUARE FEET PER BUNDLE**	**APPROX. SHIPPING WEIGHT PER BUNDLE**
10" x 8' 12" x 8' 14" x 8' 16" x 8'	3" 3-1/2" 4-1/2" 5-1/2"	8" 10" 12" 14"	14 17 23 27	14 x 5 11 x 4 9 x 3 8 x 3	70 44 27 24	365 287 216 224	1193 1022 886 864

Measurements listed above can be used for sizing window and door trim and calculating shipping weights for log siding.

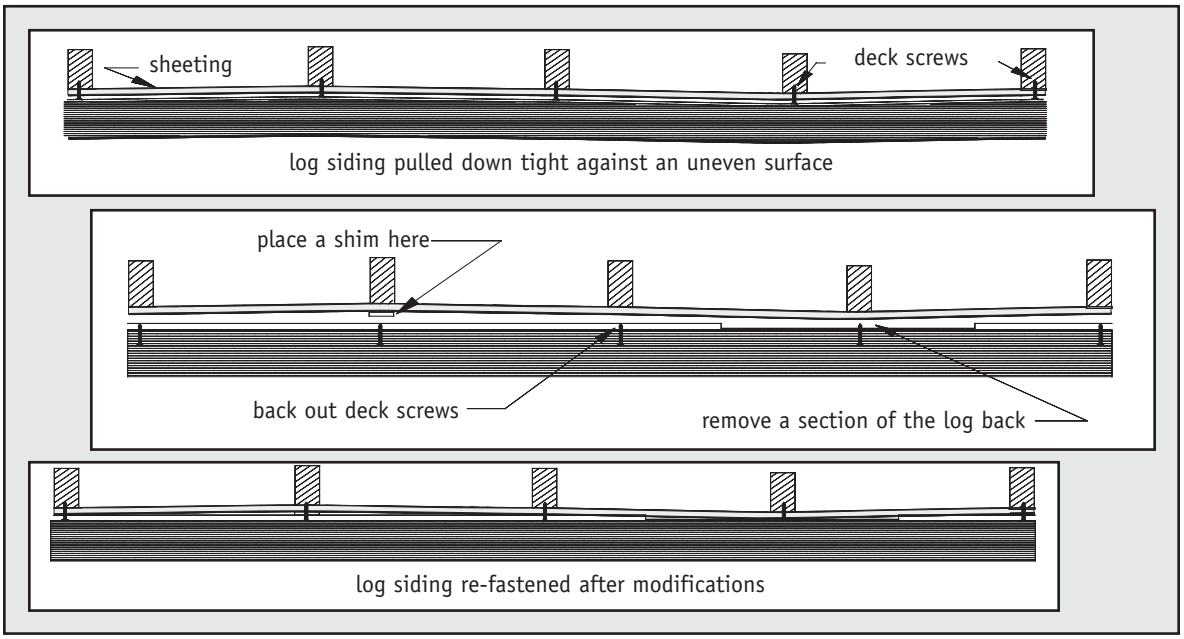
Before Starting the Job

Install the siding from the bottom up. Fasten each log through the top Oriented Strand Board (OSB) flange, slide the next log over and lock it in place. The bottom course has a special cut to enable it to fit over the Composite Starter Strip, as shown in the diagram to the left. When the logs lock together, the row of fasteners becomes hidden and protected from the elements. All-weather deck screws are recommended for installing the siding. **The length of the screw should penetrate into solid wood 1" or more.** For example, when applying siding over wood sheathing or directly to wood studs, 1-5/8" (minimum length) screws should be used for the installation.



The basic method for installing H&L Half-Logs is shown above.

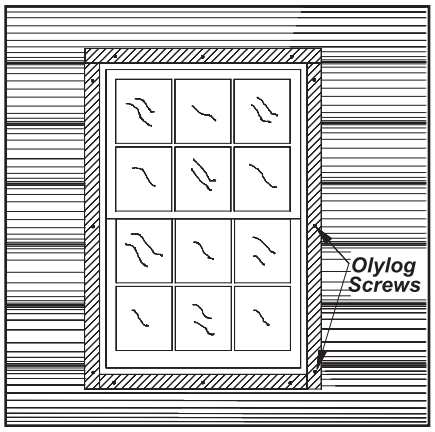
The use of screws is important when using the siding for remodeling projects. When re-siding existing structures or building an addition to an existing structure, an uneven wall section area may be encountered. Driving the fastener all the way in these areas will cause the logs to follow the contour of the uneven wall. This can lead to poor asthetics, and will make it more difficult to lock succeeding courses of siding together. As shown below, screws can be backed out without damaging the siding. The siding can then be shimmed out, or part of the back can be removed to allow the siding to be pulled in further. The screws can be driven back in, to even out the wall section and preserve the curb appeal.



The three drawings above illustrate that by using screws, it is possible to adjust the siding in problem areas to achieve aesthetically pleasing results.

Before Starting The Job

The use of Olylog™ fasteners is recommended for fastening trim, because the Olylogs can be driven straight through the trim without pre-drilling. To calculate the approximate number of screws needed, add up the lineal footage of the trim material and count one Olylog screw per lineal foot (LF). Because of the holding strength of the Olylogs, trim can be fastened at 1' - 2' spacings, figuring one per foot will result in a few extra screws for a safety margin.

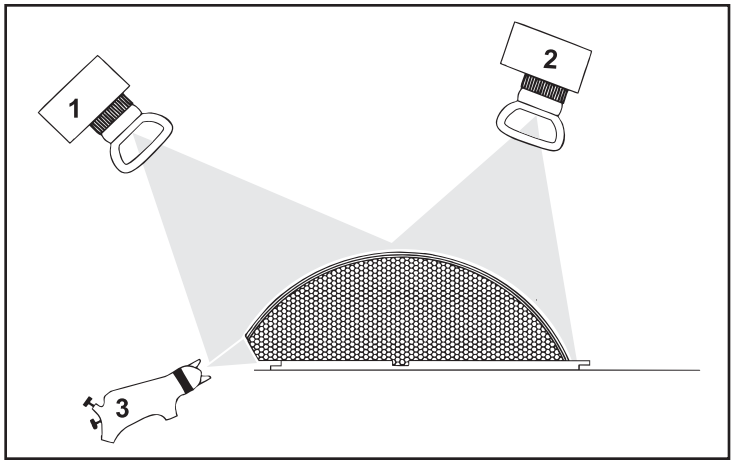


Olylog screws are used to fasten window trim as shown here.

The hex head on the Olylog screw can be left exposed, or it can be buried in the trim and caulked or plugged for a cleaner look.

Stain System

All exterior H&L Half-Logs are prefinished with the Van Technologies™ semi-transparent stain system. This waterborne environmentally friendly stain is flexible and water-resistant, with excellent adhesion. This system consists of a factory applied basecoat and three top finishing coats for a durable finish. Cut ends and bevel also receive a sealing coat. Color choices are available, but it should be noted that the final color of the siding may vary slightly due to natural variances in color of the pine and cedar embossed hard board veneers.

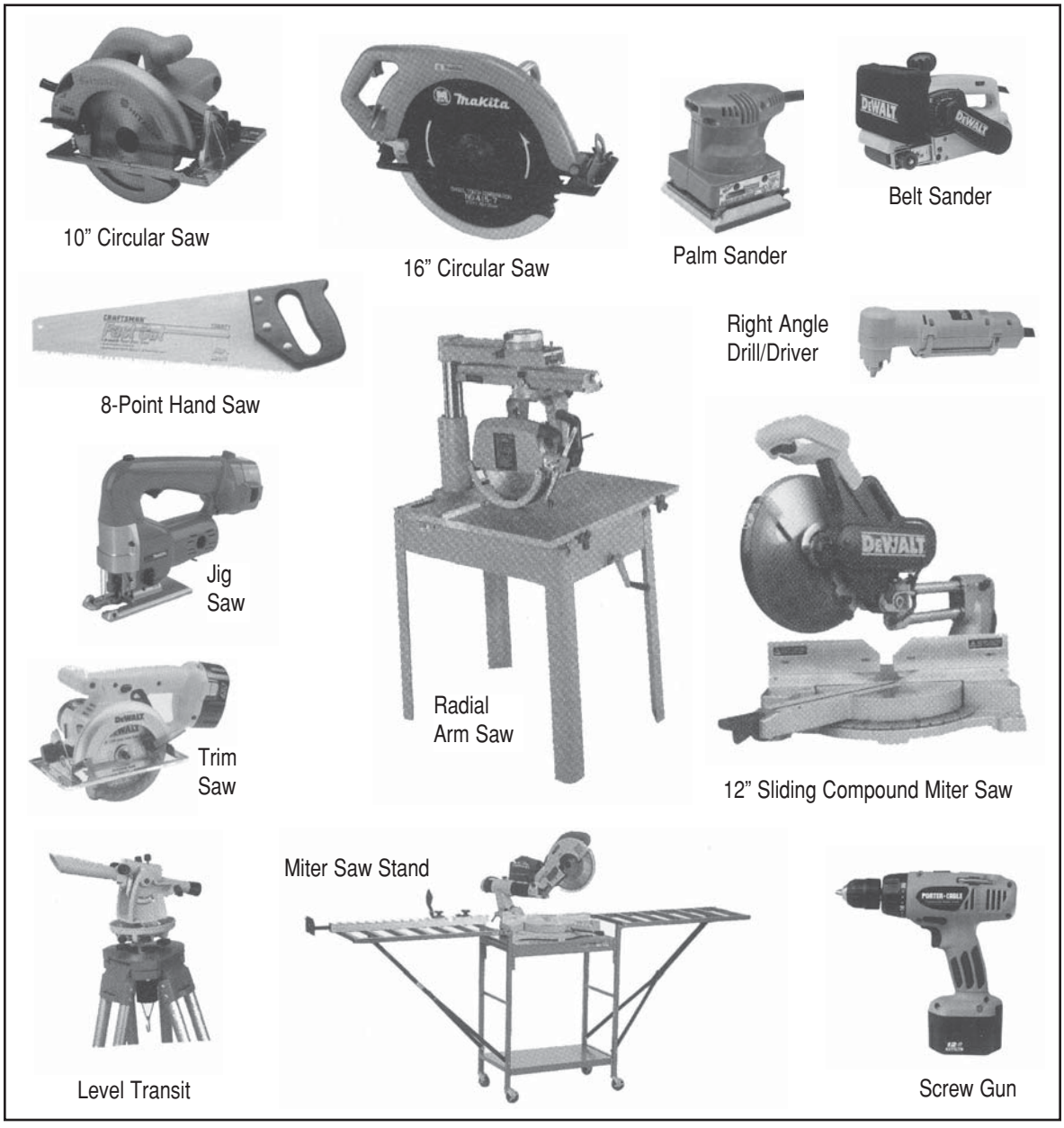


Typical spray gun placement for H&L's state-of-the-art automated log siding staining line is illustrated above.

Before Starting The Job

Tools

Tools for installing the siding are determined by the log profile and by cutting the siding in the field. Basic tools required for all sizes are: hammer, tape measure, utility knife, screw driver (to match the head on deck screws), wood chisels, long level, torpedo level, rasp, hand saw, chalk line, 12" speed square, framing square, saw horses, caulking gun and wood shims. The tools shown below are very helpful for the siding installation. A 10" circular saw will cut up to the 12" log size, and the 16" circular saw will cut the 14" and 16" siding profiles. The best site tool for cutting 12" and smaller profiles is the 12" sliding compound miter saw. If you do not own some of these tools, they are readily available at most rental centers.

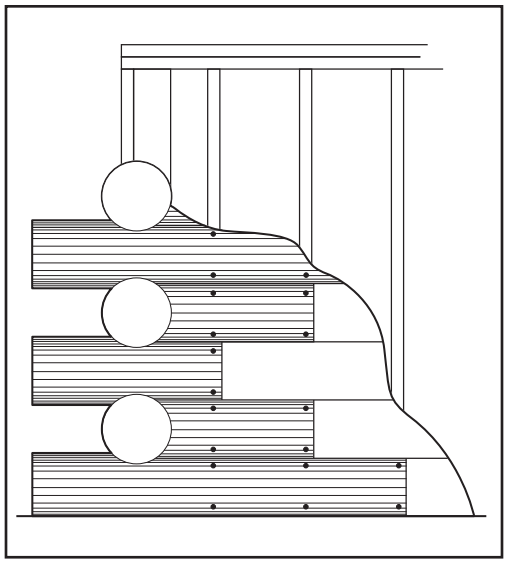


Tools for installing H&L log siding products are shown above.

Preparing Structural Wall Systems for Siding Installation

Stud walls usually do not require preparation for horizontal siding installation. Siding should be screwed or nailed into studs at maximum 24 inches on center when applied over wood-based solid sheathing, and 16 inches on center when applied without sheathing. In areas where an air space between siding and sheathing is desired, siding should be screwed or nailed to furring strips. When framing, extra studs are required for attaching a solid log tail corner system.

Masonry walls require furring strips thick enough to allow for prescriptive fastener (see Page 5) penetration into solid wood. Fastening 2" x 2" furring strips securely to masonry walls, 24 inches on center (as shown in Figure 11), prepares the wall for the Half-Log installation. Using cultured stone below the siding greatly enhances the overall look.



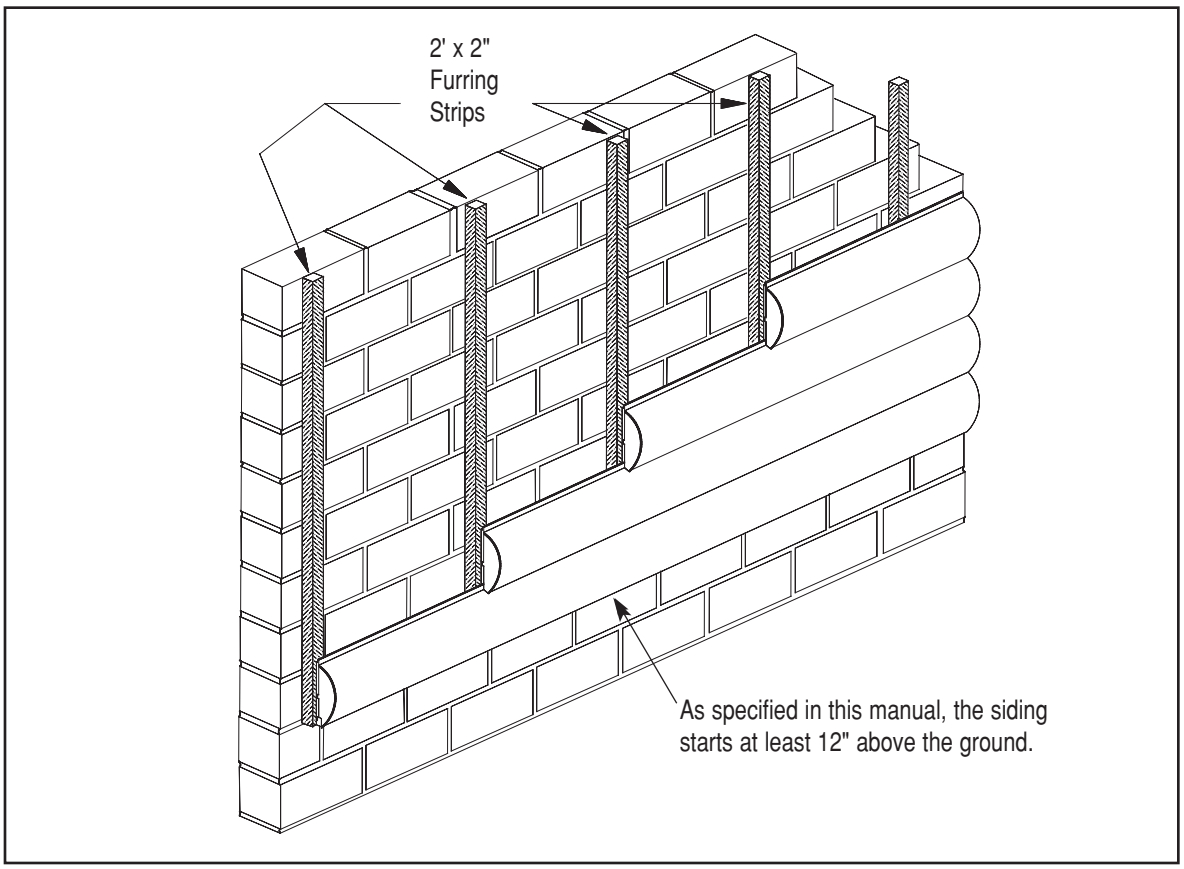
Above is a framing diagram for the butt & pass corner.

Rigid foam sheathing has an insulation value superior to that of traditional lumber and plywood sheathings. However, it has little or no nail holding power. Therefore, it is critical to use longer screws when fastening the H&L Half-Log to walls with foam sheathing. For example, if the wall has 1" thick foam sheathing fastened directly to studs, then use 2 1/2" galvanized deck screws to fasten the siding. This will satisfy the 1" penetration into solid wood rule for fastening with screws (see Page 5). In severe climates, an air space between the siding and the rigid foam sheathing can be created by fastening furring strips to the sheathing before installing the siding. Air spaces allow for the venting of accumulated moisture. In all cases, building wrap should be applied over the foam sheathing.

Structural Insulated Panels (SIPs) are composed of two structural boards (OSB for example) laminated over a continuous core of rigid foam insulation, such as Expanded Polystyrene (EPS), to form a single solid panel. With this type of construction, vertical framing members are virtually eliminated, resulting in a fastener holding problem for heavy large diameter solid wood log siding profiles. There are extra wood splines installed at every vertical seam between the panels, typically allowing for 4' centers for fastening (some panels are 8' wide). The H&L Half-Log was developed with SIPs in mind, to offer a massive large-log look without the weight associated with comparable solid wood log siding profiles. Because of the excellent strength-to-weight ratio of the H&L Half-Log, screwing into the thin panel skin and into the splines at the panel seams allows the siding to be installed on SIPs without any special preparation.

Controlling Moisture

Proper wall construction includes the use of gas permeable building wrap and vapor barriers to prevent moisture problems. H&L Half-Log siding should be installed over building wrap, regardless of the sheathing material. Building wrap is a water barrier, rather than a moisture vapor barrier. It prevents water from entering the wall cavity. An appropriate vapor barrier, on the warm side of the insulation, should be used to reduce moisture movement from inside. When sheathing material or building wrap surfaces become wet, they should be allowed to dry before the wood siding is nailed into position.



The figure above shows furring strips over masonry.

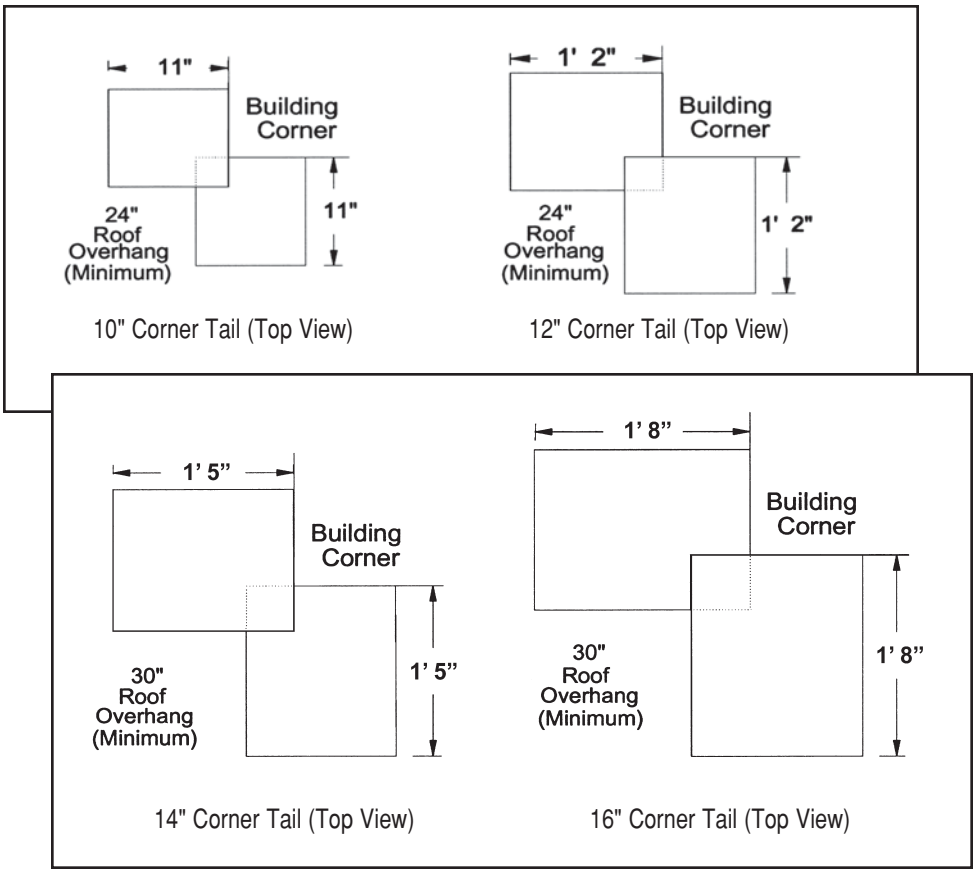
Roof Overhang

Roofs for log structures must protect the corners and walls from the elements. The best way to accomplish this is to incorporate wide roof overhangs into the design. The use of wide overhangs (see below) will shed rain water safely away from the logs and provide shade from the sun. Logs near the bottom, however, will be more exposed to the sun than the upper logs and may require maintenance more often. Other design elements - such as purlins, outlookers, beams and columns - should not extend out beyond the roof overhangs. If they do, the log ends will need to be protected with metal flashing to prevent water from wicking into the logs. Left unprotected, this wicking effect will cause excessive weathering and rotting of the solid log detailing elements mentioned above.

Using rain gutters with downspouts is another good way to move the water away from the structure. Gutters also protect the bottom logs from being splashed upon by rain water running off the roof every time it rains. It is important to pay attention to other areas where splashing on the logs can be a problem. For example, with gable and shed style dormers the water can run off one roof and splash down onto a lower roof. The more planning that is done on the front end to keep water away from the logs, the less long-term maintenance will be required. Using wide roof overhangs with the H&L Half-Log insulated building system will enhance the beauty of the structure and protect it from the elements, preserving your long-term investment.

The figure to the right explains how far the standard 10", 12", 14" and 16" corner tail pieces extend out from the corners of buildings.

These corner pieces must be protected from the elements by incorporating substantial roof overhang into the building design.



MINIMUM SUGGESTED OVERHANG FOR CORNER TAIL SYSTEMS

SIDING PROFILE	LOG WALL HEIGHT (FEET)						
	8	10	12	14	16	18	20
10"	24"	24"	30"	30"	36"	36"	42"
12"	24"	30"	30"	36"	36"	42"	42"
14"	30"	30"	36"	36"	42"	42"	48"
16"	30"	36"	36"	42"	42"	48"	48"

MINIMUM SUGGESTED OVERHANG FOR ROUND OR SQUARE CORNER SYSTEM

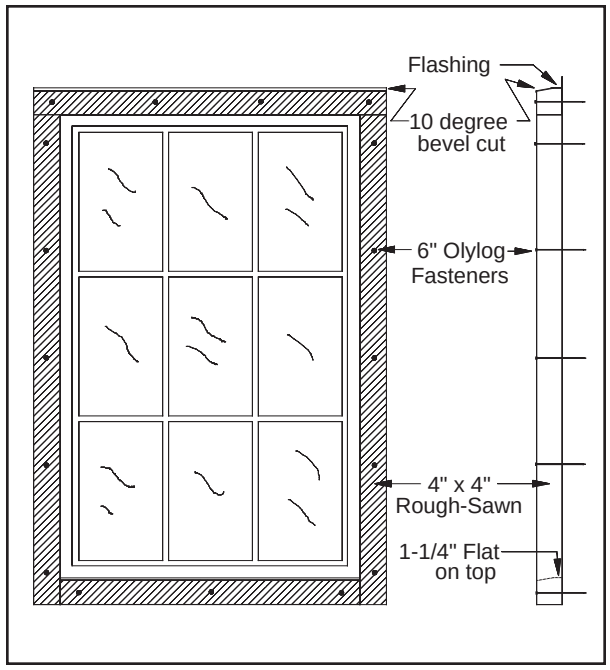
SIDING PROFILE	LOG WALL HEIGHT (FEET)						
	8	10	12	14	16	18	20
10"	24"	24"	24"	24"	30"	30"	36"
12"	24"	24"	24"	24"	30"	30"	36"
14"	24"	24"	24"	30"	30"	36"	36"
16"	24"	24"	24"	30"	30"	36"	36"

The chart above reviews minimum suggested overhang for the saddle-notch corner system, as well as for round or square corner systems.

Window and Door Trim

Applying window and door trim occurs before the actual siding installation can begin. Choosing the right trim can enhance curb appeal and resale value. From a more practical standpoint, the trim provides a termination point for the siding. When trimming, it's important not to leave any exposed log ends.

Four important factors should be considered when selecting a trim package: size, wood species, moisture content and pre-staining. The depth of the trim should always exceed the siding thickness by at least 1/2" in order to provide an adequate relief (distance the trim extends out past the thickest point of the log) and an appropriate caulking surface. As an example, to apply 12" diameter logs (from Figure 2), a 4" thick piece of trim (3 1/2" + 1/2") would be needed to provide the proper relief and caulking surface.



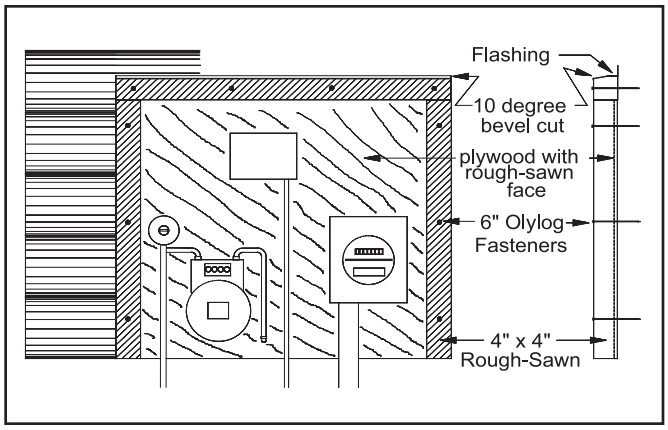
The preferred method of trimming around windows is shown above.

Another design element to consider is the width of the trim. Generally speaking, a wider trim piece will add a more rustic feel to the building. A species such as Western Red Cedar (WRC) is recommended for trim, because it's readily available in larger rough-sawn dimensions and it has excellent weathering characteristics if it is pre-stained.

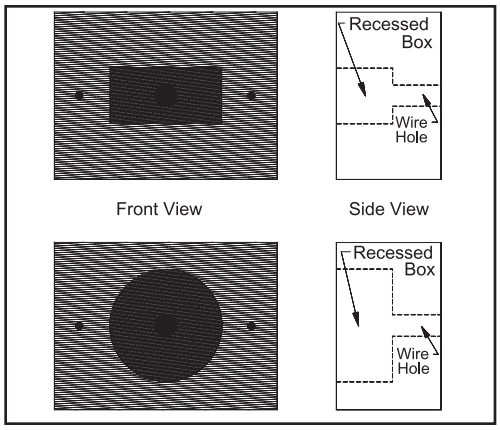
The trim should have a moisture content of 15% or lower, in order to achieve maximum stain adhesion. H & L Industries can supply and pre-finish the trim before the application with matching Van technologies™ stain. The preferred method of trim placement, shown in the diagram above, is designed to minimize the effects of moisture degradation.

Electrical Blocking and Utility Trim

In addition to door and window trim, other finishing details need to be addressed, including light fixtures, outdoor receptacles, gas mains, electrical entrances and phone lines. For maximum aesthetic impact, always try to use a variation of the trim material. For example, with 12" diameter H&L Half-Logs, a 4 x 6 rough-sawn piece of WRC would provide a nice mounting for light fixtures and outlets. Pre-drilled and pre-finished fixture blocks are available from H&L Industries. For congested, unsightly utility entrances, it's usually best to leave extra room for future utility upgrades. When pre-planning new service areas, partially recess the utilities. Then, cut out the backs of H&L Half-Logs and side right over the obstructions. Examples are shown on the following page.



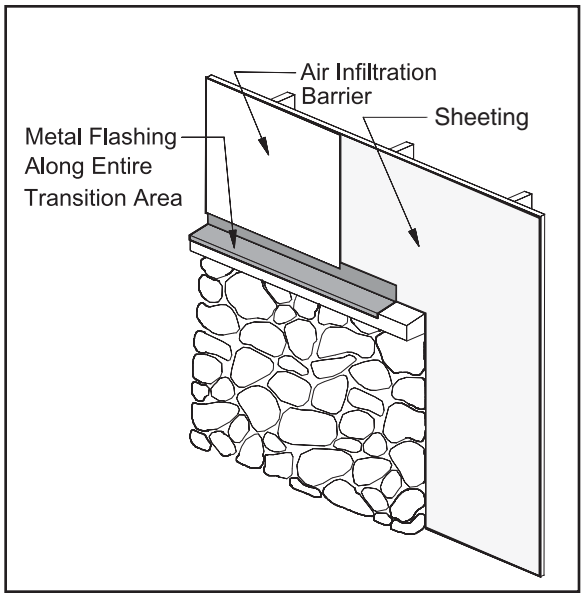
A utility entrance area with trim is ready for siding, above.



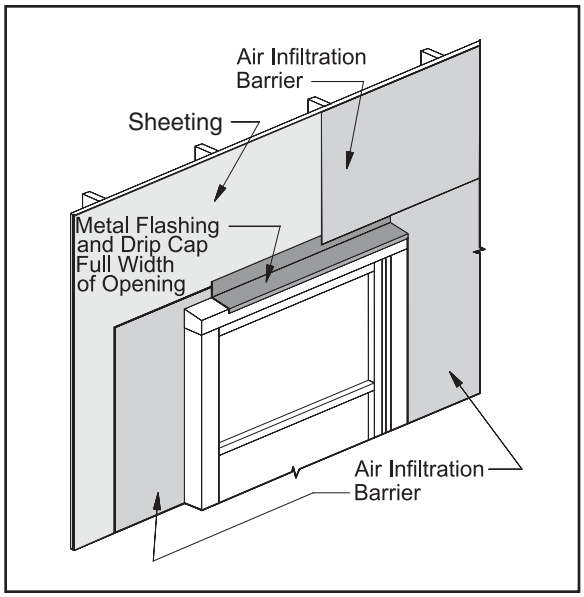
The figure above shows a 4 x 6 cedar outlet block (top) and a 4 x 6 cedar light block (bottom).

Flashing

Make sure that flashing is installed before installing the siding, to prevent moisture from entering wall and roof spaces. Flashing is a metal weather-proof stripping, which sheds water away from critical areas that are susceptable to moisture penetration. It should be made from a corrosion-resistant material, such as galvanized steel or aluminum. Flashing is installed where a horizontal break occurs in the siding to channel water away from the building. This prevents water from collecting in the wall cavity behind the siding. Typical areas of construction requiring flashing are at the horizontal transition of the Half-Log siding to other wall coverings such as stucco, stone and cedar shakes, at the junction of dormer walls and roof surfaces, and over windows and doors. Typical flashing details are shown in the figures below.



The drawing above depicts a transition from stone to siding, including beveled trim and flashing detail, before the siding is installed.

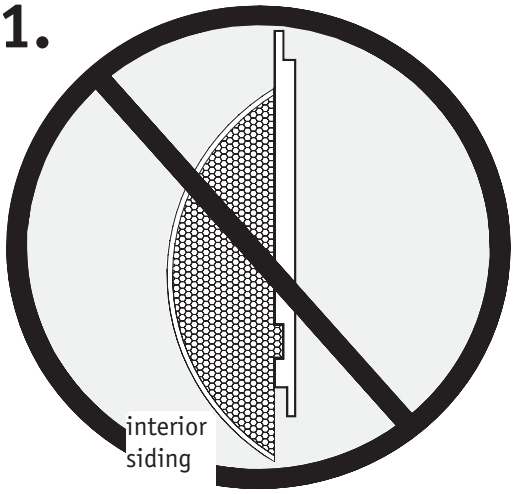


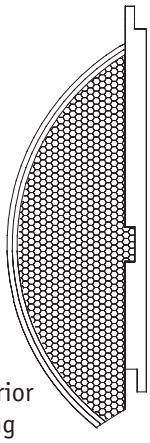
This drawing shows 4 x 4 trim installed around a window frame, with the required flashing and building wrap detail.

Installation

The following pages contain diagrams and text to guide you through the actual installation process.

1.

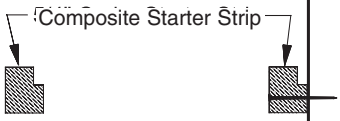




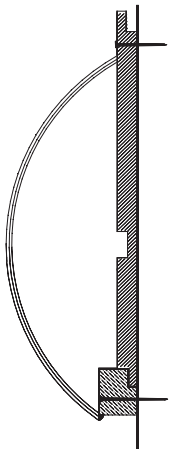
Do not use interior siding for exterior applications.

2.

First, shoot a level reference line around the entire building. Determine and mark the location for the starter strips. Remember, they must be a minimum of 12" above the ground.

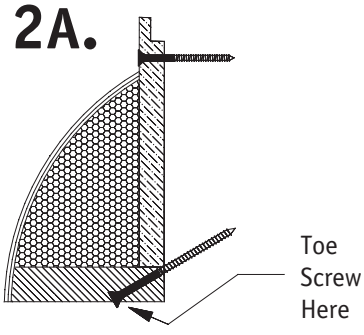


Second, fasten the starter strip with galvanized ring shank nails or screws. Be careful not to split the strip. Drilling a pilot hole first will prevent splitting.



Third, slide the starter Half-Log over the starter strip and lock it into place. Fasten the starter log through the top flange.

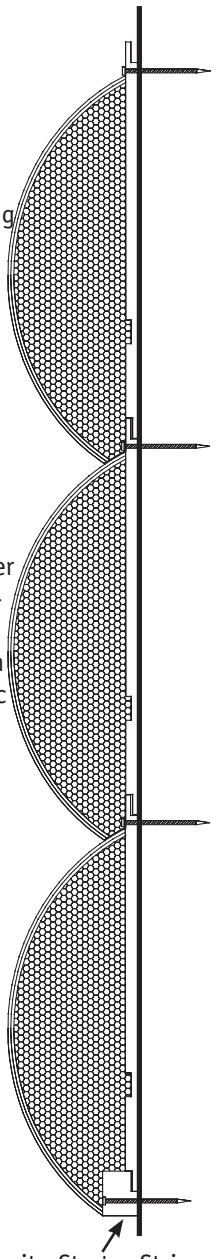
2A.



3.

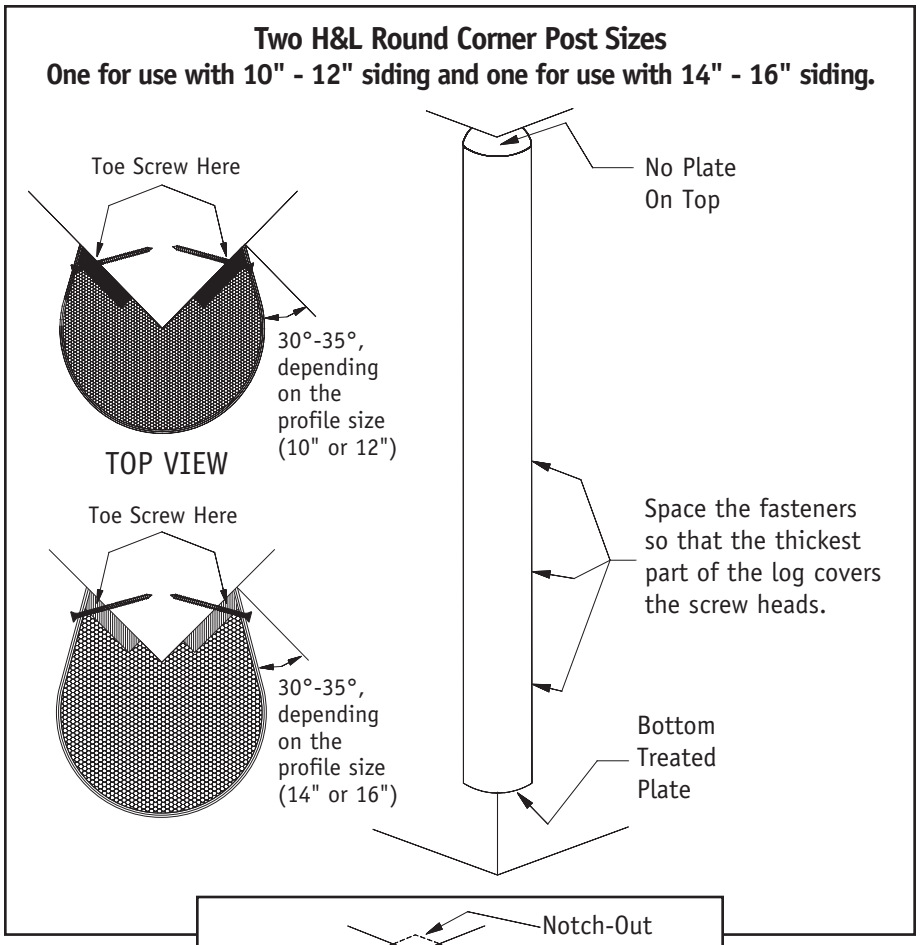
Continue up the building by locking the logs together and fastening them through the top flange.

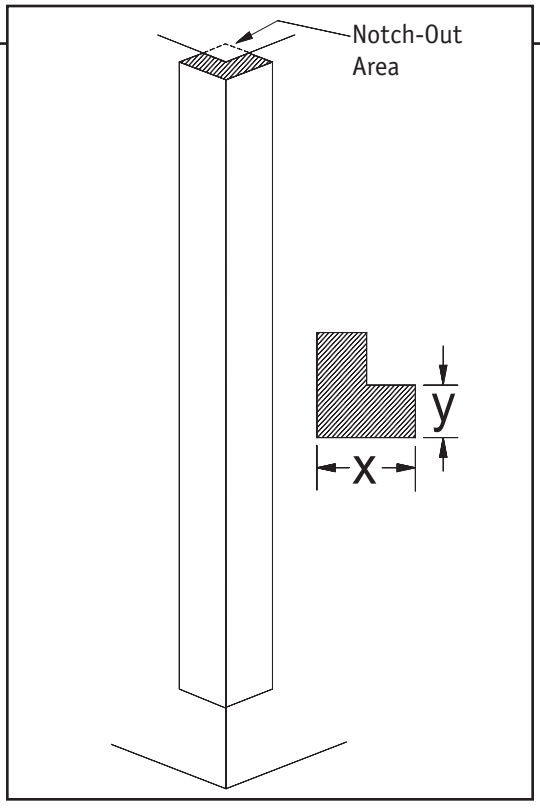
Be sure to stagger the butt-joints to create an authentic look.



The saddle-notch corner system requires an additional component. The half-height starter log, shown in 2A, is typically used on the shorter elevations. The standard full-height starter log, featured in step 2, is used on the elevations requiring a full starter course. The saddle-notch corner system is shown in detail on page 17.

CORNER OPTIONS





For a solid square timber corner post installation, the notch-out area (right) is critical. The relief (y) measurement should be at least 1/2" greater than the log siding thickness.

Solid Log Corner Tail Installation

H&L Industries provides two types of solid log corner tails to compliment our engineered log siding installations. One is a butt & pass style and the other a saddle notch. Both styles are shown here in the diagrams on the following page.

The diagrams show typical fastening locations for attaching the individual tail pieces to the building corners. Olylog screw type fasteners are typically used and can be supplied by H&L. Fasteners should be placed to align with solid framing components such as studs or rim joist. Fastener lengths should be chosen so that the fasteners penetrate the solid wood framing of the building 1 ½" – 2".

When starting the installation, it is important that the first tail be installed square and level. This first tail should also be aligned with the first, bottom course of siding and starter strip. The wood tails are manufactured to match the courses of siding, so it's critical to get a good start. Remember to note that saddle notch tails systems start with a half height tail and first row of siding on opposite sides of the building.

As you start up the corner, each tail should be checked for level, both vertically and horizontally. Install 3-4 corner tails ahead of the siding courses, checking each course for level and stack height as you go. Because the log tails are solid wood, there is a possibility for slight shrinkage of the tails which may affect their stack height relative to the H&L log siding. If needed, shims should be used to adjust tail stack heights. Once installation is complete, shims can be removed.

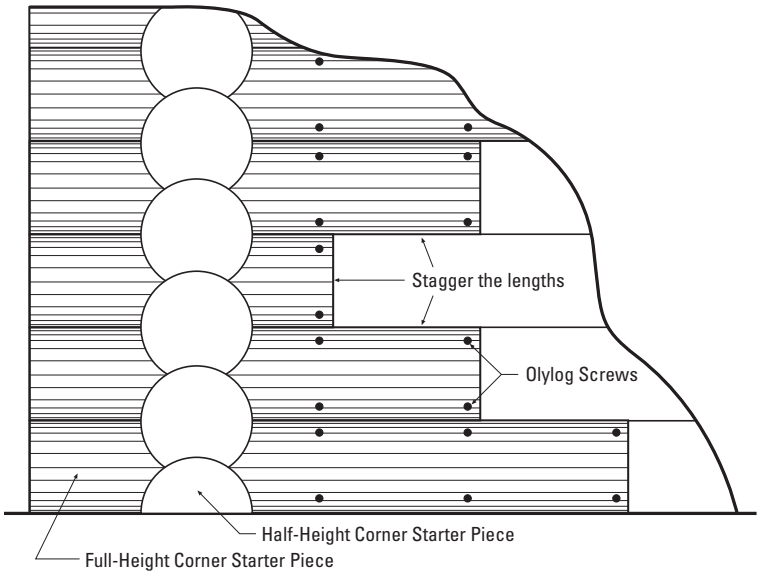
While shrinkage is not applicable to H&L's log siding, this slight shrinkage is typical of solid wood components as is checking of the wood. This is not a defect and will lend itself to a more authentic rustic, look of your log structure.

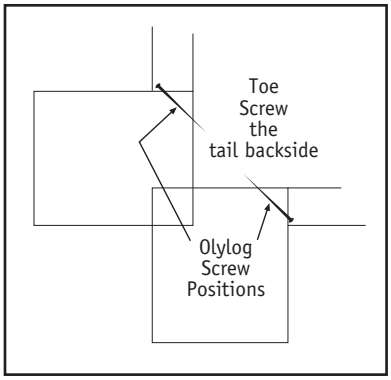
The log tails will be supplied by H&L with an approximately 4' siding extension for use in fastening to the building. Please notice in the diagrams how this extension length varies between courses. This gives a more realistic appearance and eliminates alignment of the caulked butt joints, course to course. This stagger should vary the same as the stud spacing (16" for example) and alternate every 3 courses. These stagger lengths are to be cut on site during installation to give the most flexibility to the installer.

Courses of H&L siding should be installed directly butting against the siding extensions of the tails using the foam spacers provided. In the case of the butt & pass corner tails, H&L will provide siding with an end cope cut for adjacent courses of siding to fit into the back side of the tail.

Please contact the factory with any questions or for and further information on solid log tail installation.

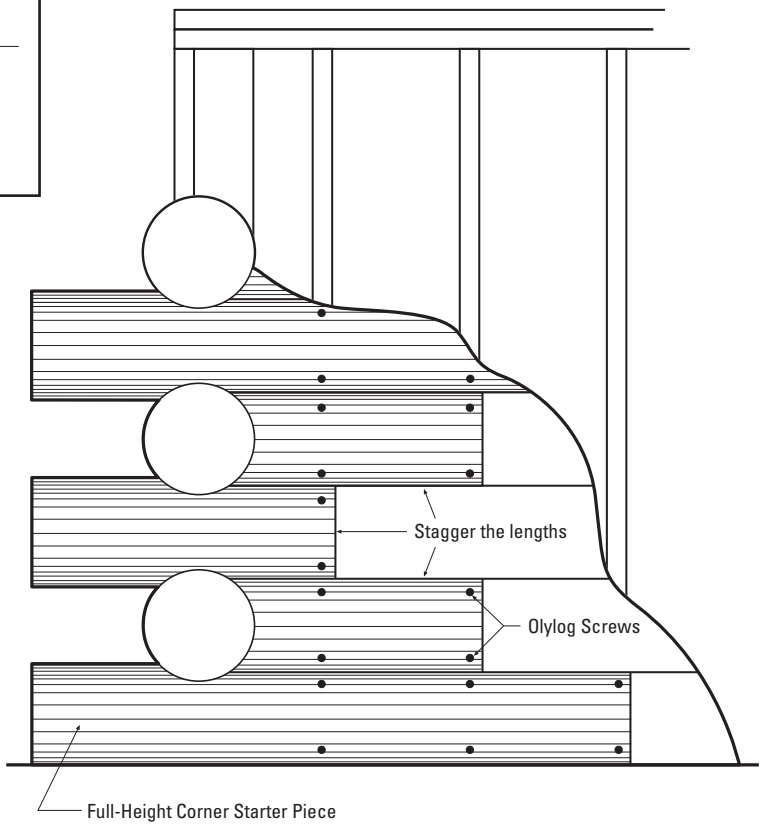
Saddle Notch Style Corner Tail





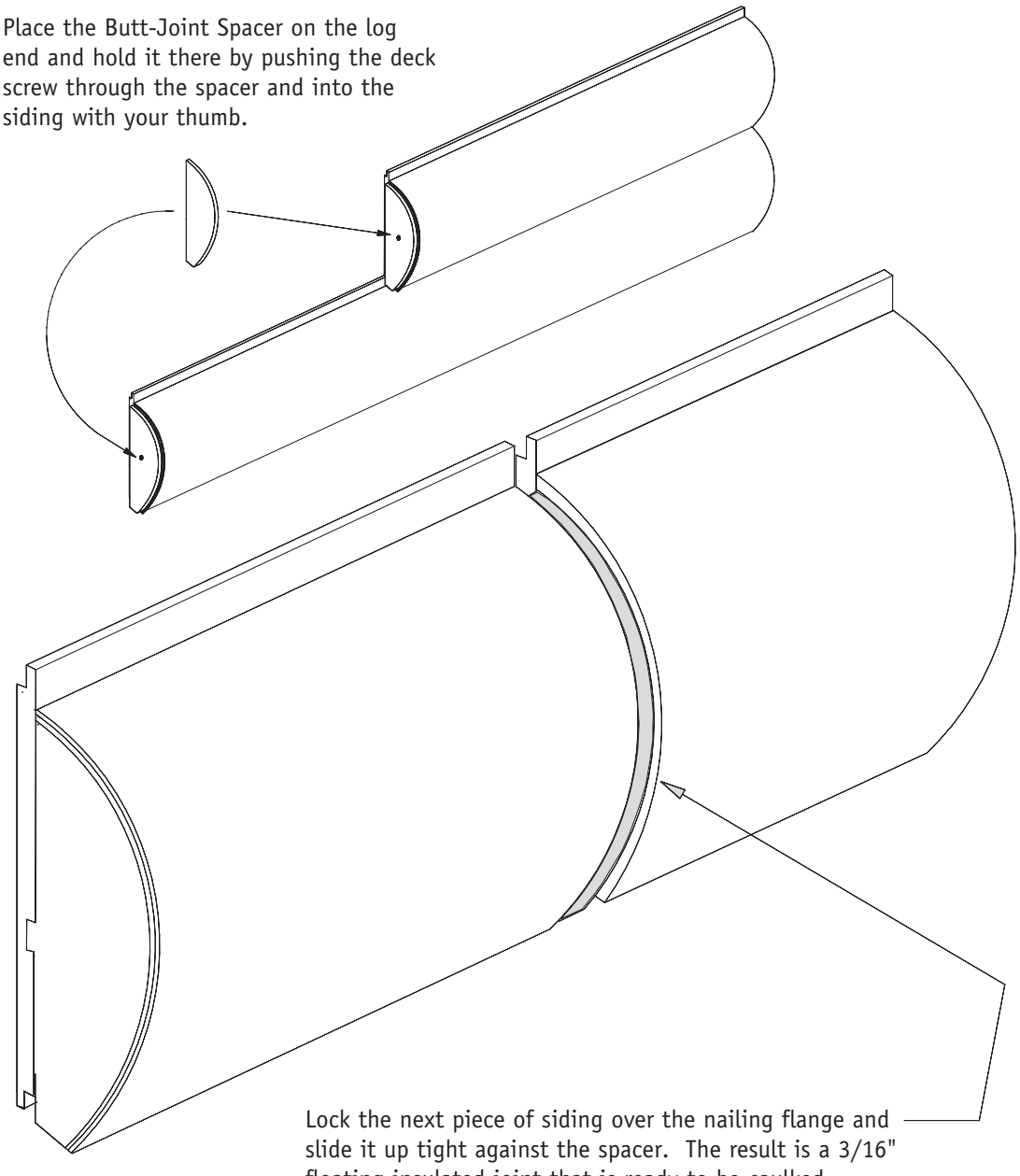
Top view of corner

Butt & Pass Style Corner Tail

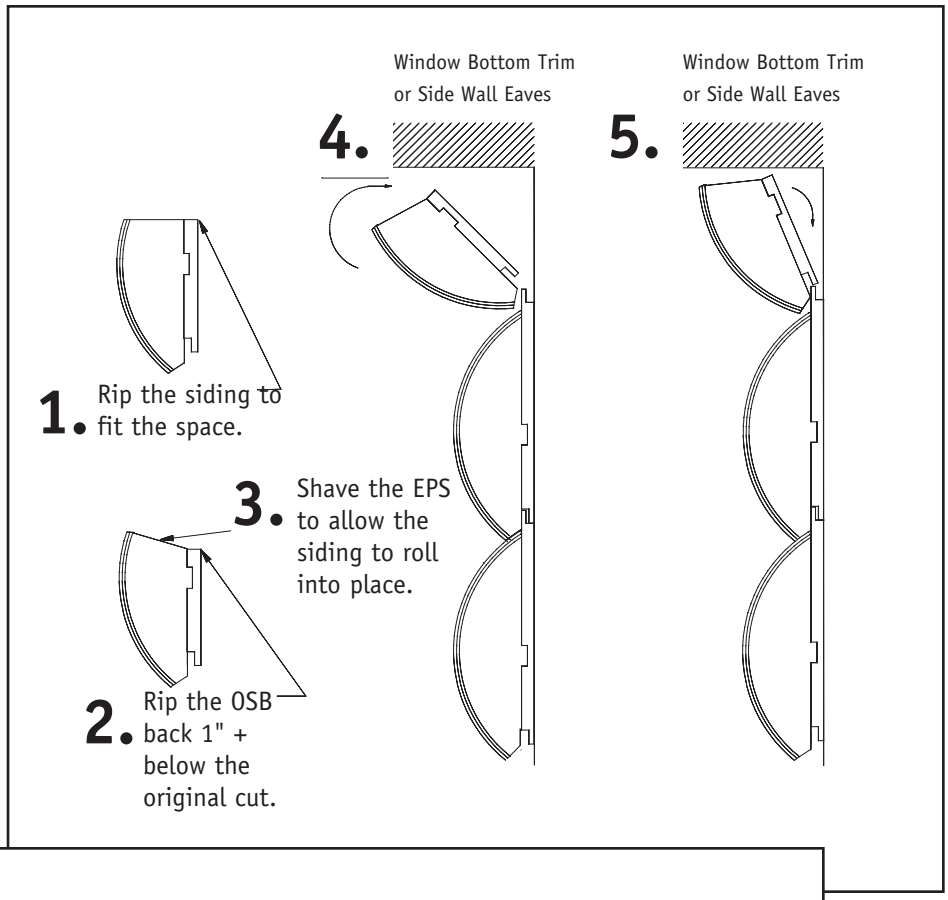


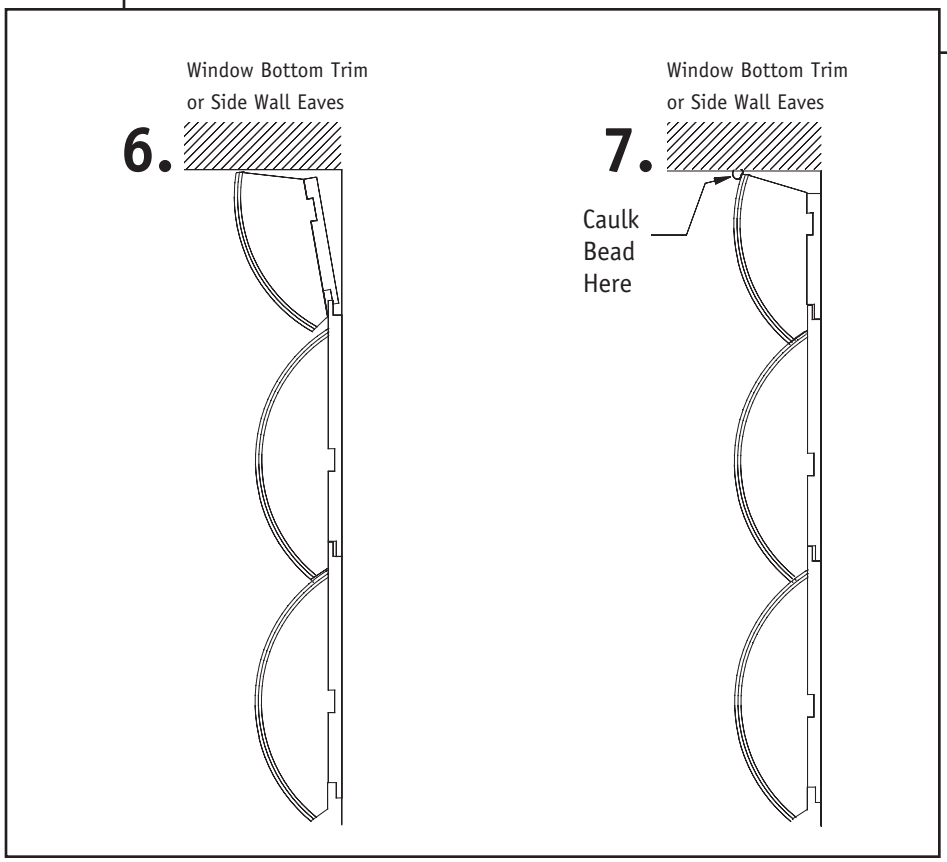
Caulking

Thorough caulking of all joints is required. This includes all butt-joints (see detail below) and areas where the siding meets the trim and corners. Notches in the siding and solid saddle-notch corner pieces must be caulked to prevent moisture wicking. Use only non-hardening caulks, such as waterborne acrylics or polyurethanes. H&L carries colored caulk to match the stain colors of the siding.

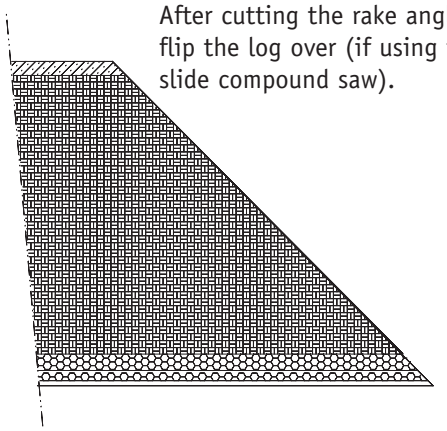


CUTTING SIDING TO FIT UNDER WINDOW TRIM OR SIDE WALL SOFFITS



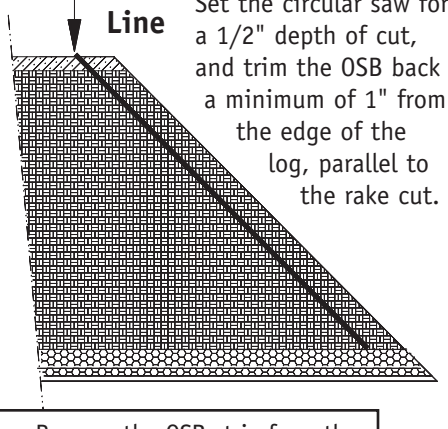


1. After cutting the rake angle, flip the log over (if using the slide compound saw).



2. Cut Line

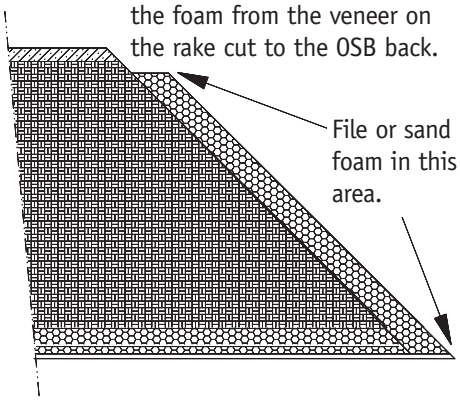
Set the circular saw for a 1/2" depth of cut, and trim the OSB back a minimum of 1" from the edge of the log, parallel to the rake cut.



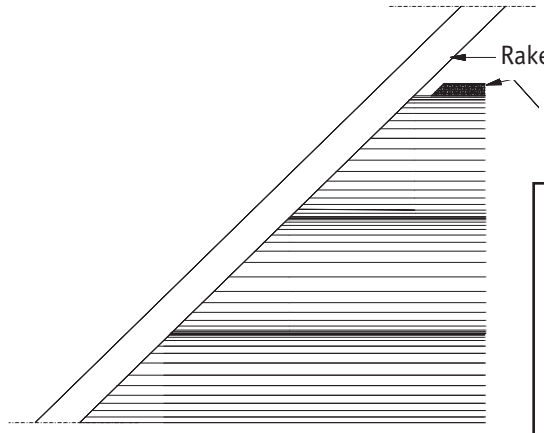
CUTTING SIDING TO FIT AGAINST A GABLE ROOF SOFFIT

3. Remove the OSB strip from the foam and file (rasp) or sand the foam from the veneer on the rake cut to the OSB back.

File or sand foam in this area.



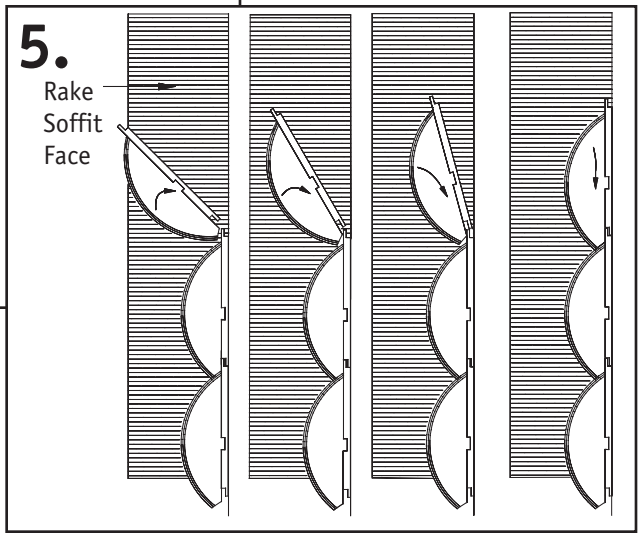
4.



FRONT VIEW

After completing the cut, roll the siding into position and lock it in place, as shown below.

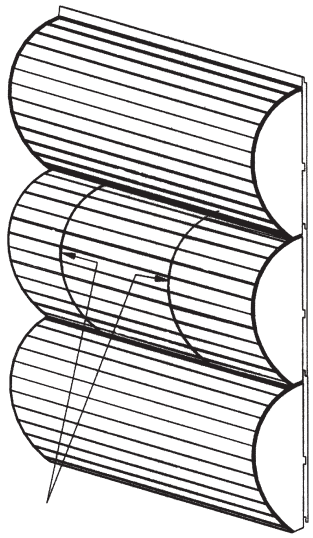
5.



Installation

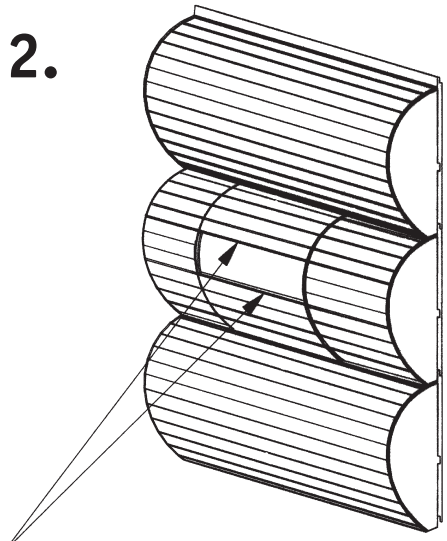
This page reviews Half-Log repair procedures.

1.



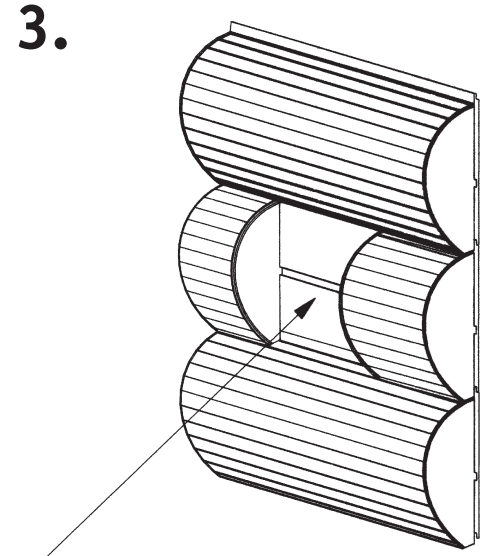
Make square cuts through the veneer, encompassing the damaged section.

2.



Cut the veneer horizontally in the damaged area in two places, approximately 3" apart, and remove the veneer section. This will allow access to the EPS core for cutting and removal.

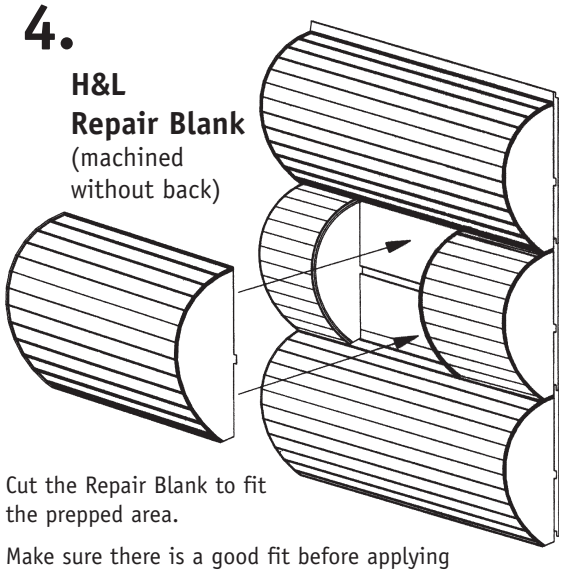
3.



Remove the damaged log section (veneer and EPS) down to the OSB back. Clean out the EPS with a scraper (putty knife) along the OSB surface to smooth out the Repair Blank laminating area.

4.

H&L Repair Blank (machined without back)



Cut the Repair Blank to fit the prepped area.

Make sure there is a good fit before applying the adhesive. Use a caulking gun to apply foam-friendly construction adhesive to the OSB back. Keep the alignment track free of adhesive.

Set the Repair Blank in place - top first - under the log above, and then pivot the bottom into position while locking into the alignment channel.

Temporarily shim the sides of the Repair Blank to hold it into position while the adhesive is curing.

Warranty

A copy of the H&L Industries Warranty is included on this page. Please read it carefully. You are responsible for knowing the content.

WARRANTY

* Please read carefully. You are responsible for knowing the content.

Limited WARRANTY on Materials and Workmanship

Project:

The 15-year limited product Warranty on materials and workmanship from H&L Industries, Inc. specifically covers the structural integrity of H&L Half-Logs™ (glue bond delaminating). The most important factor in preserving your investment and activating this Warranty will be how rigidly you enforce the prescribed installation method and maintenance schedule. You must follow the minimum re-application guidelines in the next paragraph (covering finishing) to keep the Warranty active. Failure of the glue bonds due to premature ultra-violet degradation is not covered by this Warranty.

We recommend that you restain your logs an average of four times during the first 15 years. Protected elevations might only require 3 additional applications in 15 years, while some sunny side walls might require 5 additional applications in 15 years. The goal is to maintain an adequate film build, so that the coating weathers instead of the wood fiber.

Critical elements of concern that will void this Warranty include, but are not necessarily limited to, the following items:

BUILDING PREPARATION ISSUES: improper on-site storage, using interior logs for the exterior, moisture in the wall cavity, improper HVAC exhausting, uncontrolled water runoff, inadequate flashing

CONSTRUCTION ISSUES: inadequate spacing and caulking around trim and corners, nailing or screwing the siding through the veneer face, siding in direct contact with masonry, exterior siding less than 12" above ground, exterior butt-joints without foam spacers and caulk, using mitered H&L Half-Logs as an exterior outside corner

FINISHING ISSUES: sprinklers spraying on the siding, failure of the stain system, insufficient stain coverage on the face and exposed edges, mold/mildew/algae on the siding surface, using a maintenance topcoat other than Van Technologies Stain.

WARRANTY ACTIVATION AND CERTIFICATION OF UNDERSTANDING:

Substantial Date of Completion: _____

H&L Industries, Inc. Authorized Representative: _____

Owner Signature: _____

To activate the H&L Industries Warranty, you are required to read the Installation Manual and return a signed copy of the Warranty to H & L Industries. By signing this Warranty you acknowledge that you have reviewed the materials presented in the Manual and the conditions of the Warranty, and that you fully understand the contents.

If an issue needs to be resolved, you will be required to submit a written explanation of the situation with accompanying graphics (photos, illustrations) to H&L Industries.

Failure to follow these procedures will void the Warranty.

Background Information

The H&L Half-Log™ is the world's first timber-saving and energy-efficient log siding. The patented H&L Half-Log - the original large-diameter, laminated log siding product - is engineered to provide four times greater R-values than solid log siding, while using 80% less timber.

H&L Industries is the patent-holder and manufacturer of the H&L Half-Log. Since the product was founded in 1991, more than 400 worldwide installations have been completed. H&L products have been used on a wide variety of commercial and residential structures - both new and existing - including: resorts, lodges, motels, restaurants, retail shops, small office buildings, condominiums, homes, cabins and ice fishing houses.

The standard H&L product line is comprised of four H&L Half-Log sizes, a 10" & larger H&L Round Post, and three H&L Ceiling Beams. Veneer choices are Smooth or Peeled Knotty Pine and Cedar Embossed Hardboard. Other standard H&L products and accessories include:

* Saddle-notch and Butt & Pass corner systems
* Half-height starter logs (for saddle-notch corners)
* Van Technologies™ high-polymer acrylic stain
* Caulk, screws and chinking
* Rough-sawn window trim

H&L product options and variations include:

* Chinked-style H&L Half-Logs
* Custom Ceiling Beam backs (recessed OSB, single/double flange)
* Large-diameter solid log detailing (posts, headers, purlins, rafters)
* Large-diameter solid log trusses
* Custom pre-finishing services

To learn more about H&L Industries products, or to locate the nearest dealer, here's how to contact us:

web:
www.hlhalf-log.com

mail:
11290 South Mertzig Parkway
P.O. Box 222
Solon Springs, WI 54873

e-mail:
sales@hlhalf-log.com

telephone:
(715) 378-2640

fax:
(715) 378-2697

H & L
HALF-LOG™

H & L
INDUSTRIES

Delivering Traditional Log Warmth
Through Advanced Engineering

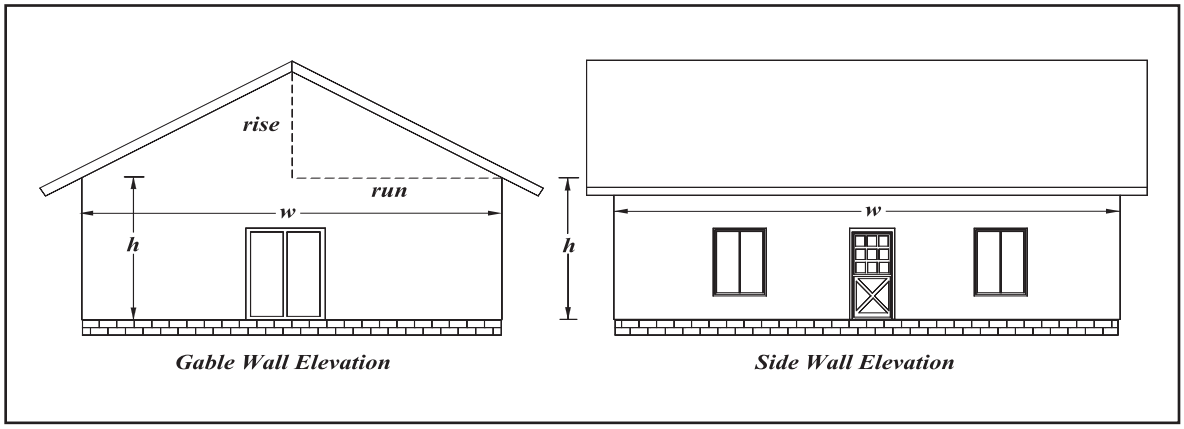
Estimating Log Siding Material

In general, estimating the amount of H&L log siding material needed for a project involves a few fairly simple steps:

1. Calculate the square footage of wall area to be covered with siding.
2. Convert the square footage area to pieces of H&L siding based on siding size.
3. Calculate the base perimeter for starter strips and starter logs.
4. Calculate the lineal footage of trim for window and doors.
5. Calculate the materials needed for corner systems.

Square Footage

Basic square footage calculation can be illustrated in the diagram below. Let's assume the sample building is 24' wide (w), 40' long (l) with a 10' sidewall (h). First add up the perimeter distance of the building or 40' + 24' + 40' + 24' = 128'. Multiply that distance by the sidewall height and you have the square footage (ft²) of the sidewall area, 10' x 128' = 1,280 ft².



Above shows basic information needed when calculating how much siding will be required.

Next, determine the square footage of window and door openings that will not need siding coverage. Assume the windows as shown measure 3' wide x 4' tall, the patio door 6' wide x 7' tall, and the single door 3' wide x 7' tall. Using these measurements you'll have 12 square feet for each window, 42 ft² for the patio door and 21 ft² for the walk door. This totals 87 ft². Take 90% of this total and subtract it from the overall sidewall square footage. In this example, 1280 ft² - 78 ft² = 1202 ft².

Next, calculate the gable area square footage. For this example, let's assume the roof line has a 6/12 pitch or, 6" of "rise" for every 12" of "run". Using this pitch, half way across the gable end, 12', the roof will rise 6'. 12' x 6" = 72" and 72" ÷ 12" = 6' Now, if you take the height of the gable, 6', and multiply it by the overall width of the gable, 24', that will give you the square footage area of two gables, one on either side of the building. 6' x 24' = 144' ft² Add this gable square footage to the sidewall square footage, 144 ft² + 1202 ft² = 1346 ft². Add 5% to this amount for an approximate

waste factor, 1346 ft² x 1.05 = 1414 ft² (rounded up), and this gives you the square footage of siding needed to cover the building.

Convert Square Footage

Next, convert the square footage area to the number of pieces of H&L siding that will be needed based on the size of siding that will be used. This can be done using one of the conversion factors as shown in the following chart:

Sq. Foot Siding/Piece

SIDING SIZE	8' LENGTH (94" actual)
10"	5.222
12"	6.528
14"	7.833
16"	9.139

Taking the square footage of the building and dividing by the appropriate siding size factor will give you the number of siding pieces needed to cover the building. In this example, let's assume we are using 12" siding. Then we would use 1414 ft² ÷ 6.528 = 217 pieces of siding (always round any fraction up to the next whole piece of siding).

Base Perimeter

The base perimeter is used to determine the amount of starter strip and H&L siding material notched specifically to match the starter strip. Again, using the same example above, if you add up the sides of the building, 40' + 24' + 40' + 24' = 128'. From this total, subtract the width of doors, (3' + 6' = 9'). Starter strips come in 12' lengths, so 119' ÷ 12' = 10 starter strips needed.

H&L siding is supplied in factory trimmed, 94" lengths. To determine the number of starter siding pieces needed, take the 119' perimeter, multiply by 12 (inches) and divide by 94" to determine the number of starter siding pieces to order. (119' x 12") ÷94" = 16 pieces of siding (rounded up). This number of siding pieces should be subtracted from the overall number of siding pieces determined by the square foot conversion (217 – 16 = 201). This result gives you 201 regular pieces and 16 starter pieces of H&L siding that would be needed for this building.

Estimating Log Siding Material

Trim Lineal Footage

H&L can supply a pre-stained trim package for use around windows and doors, inside corners, and any areas that need to be trimmed out in the siding application such as electrical, plumbing and vent entrances. Trim can be supplied in rough sawn cedar or pine. The trim is supplied in sizes appropriate to the size of the siding being used. In the example we've been using, a 12" siding has a maximum thickness of 3 ½". We would typically supply a 3" x 4" trim with the 3" face exposed and the siding terminating against the 4" side.

To calculate the lineal feet of trim needed, add the outside perimeter dimensions of each window and door opening in the building, plus one foot. For instance, in our example, the windows are 3' x 4' in size. This would require 15' of trim, (3' + 4' + 3' + 4' + 1'). If we add up all the openings as shown, we have 69', 30' (two 3x4 windows) + 18' (one 3x7 walk door) + 21' (one 6x7 patio door). It's a good idea to factor in some waste. If we use 5%, our total lineal feet is 73' (69' x 1.05 = 73').

Corner Systems

H&L supplies four different corner systems, vertical round, vertical square, saddle notch tails, and butt & pass tails. The easiest corner systems to estimate are the vertical round or square corners. You simply need to figure the lineal feet of material needed to cover the buildings corners. In the example we've been using, the sidewalls are 10' tall and there are four corners. Therefore, 4 x 10' would give you 40' of corner material needed. The square corners are produced from a solid piece of cedar or pine, sized appropriate for the siding being used and notched to fit the corners. These can be ordered in lengths appropriate for corner heights up to 16'. In this case, 4 – 10' pieces would be needed. The round corners come in two sizes, one for 10" and 12" sidings and one for 14" and 16" sidings, and are limited in length to 8'. In this case you would need 5 vertical round corners, one for each corner at 8' and then one extra from which 2' sections would be cut to finish the 10' corner height.

Saddle notch and Butt & Pass corners are generally solid log components, manufactured to match the specific H&L log siding being used. The siding, and consequently the corners, stack height is 2" less than the overall size of the siding itself. So, 10" siding stacks 8", 12" stacks 10", 14" stacks 12", and 16" stacks 14". Corner tails are ordered individually so the number of tails will be determined by the stack height of the appropriate size tail and the lineal feet needed to cover the corners. Because this calculation can vary between saddle notch and butt & pass systems along with specific details needed with each such as half height starters, matching coped logs, etc..., it is best to contact the factory for assistance in calculating either of these types of corner systems.

Estimating Log Siding Material

These estimating instructions are intended to be applied as a general guideline. Complexity of specific projects and buildings may require additional calculations. Please feel free to contact our factory directly to go over any questions or specific project details in estimating H&L log siding products.

We can be contacted at 715-378-2640 or, toll free at 888-525-2981 or, via email at sales@hlhalf-log.com.

H & L

HALF-LOG™

11290 South Mertzig Parkway
P.O. Box 222
Solon Springs, Wisconsin 54873

www.hlhalf-log.com