



Technical Bulletin

DESCRIPTION / GENERAL INFORMATION

The H&L Half-Log™ is an engineered wood composite exterior siding, which integrates sheathing, insulation and finishing. The first design option consists of an extremely strong outer skin made from composite wood fibers, with a cedar-embossed surface. This skin is laminated under heat and pressure to a molded core of expanded polystyrene (EPS) reinforced with an oriented strand board (OSB) back. The second design option features a thick, natural veneer outer skin laminated to a smooth hardboard veneer over the EPS core. Natural veneers available at this time include Knotty White Pine. The best available structural adhesive and aerospace laminating technology guarantees a highly-durable bond, which enables shipment of a quality product every time. The cedar-embossed hardboard veneers are tough garage door skins with improved water resistance, weatherability and strength. The natural veneers come with the Suncoat™ Stain System factory applied on the face edges to protect the wood until the final topcoat can be applied in the field. The hardboard veneers come with either the Suncoat™ Stain or Olympic Solid Color Stain System factory applied on the face edges. Following H & L's natural veneer topcoat maintenance schedule activates the 15-year warranty. EPS neither contains nor uses ozone-damaging blowing agents in its manufacturing process. This stable insulating material is also 100% recyclable for non-structural applications such as packaging.

QUALITY ASSURANCE / TEST INFORMATION

The H&L Half-Log has been subjected to rigorous testing at the University of Minnesota's Natural Resources Research Institute (NRRI). Glue bond performance and weathering characteristics were evaluated in the laboratory following International Conference of Building Officials (ICBO) guidelines for building code acceptance for exterior wall coverings. To test the H&L Half-Log's resistance to severe weather extremes, the NRRI subjected representative samples to ASTM D-1183 RESISTANCE OF ADHESIVES TO CYCLIC LABORATORY AGING CONDITIONS. Five cycles were completed, although only two are necessary to determine bond quality. The weathering characteristics were determined by placing 24 H&L Half-Log samples in a dual carbon-arc weatherometer for 2,000 hours, using the guidelines of ASTM Method G23-1981. An independent lab conducted R-Value tests using the methodology in ASTM: C236-89 STEADY STATE THERMAL PERFORMANCE OF BUILDING ASSEMBLIES BY MEANS OF A GUARDED HOT BOX. Test results dated November 13, 1992 rated bond performance and weathering performance as excellent. Wall system racking tests confirm that the H&L Half-Log can be used as structural sheathing with prescriptive corner bracing (let-in 1 x 4 bracing is recommended).

TECHNICAL DATA

The H&L Half-Log has a Class III (C) flame spread rating. The actual performance R-Value, based on guarded hot box testing at an independent laboratory, is R-7 for the 10" diameter Half Log, R-8 for the 12" diameter Half-Log, R-9 for the 14" diameter Half-Log and R-10 for the 16" diameter Half-Log (values at 75 degrees Fahrenheit). An 8-foot (94") length of the 10" size weighs only 14 pounds, the 12" diameter weighs 18 pounds, the 14" diameter weighs 23 pounds and the same length 16" Half-Log weighs 26 pounds. The H&L Round Insulated Corner Post comes in a standard length of 8 feet (94") and weighs 22.5 pounds.

AVAILABILITY

The natural veneer product is available in 8' (94") lengths only. The 10" Half-Log has a stack height of 8", the 12" Half-Log has a stack height of 10", the 14" Half-Log has a stack height of 12" and the 16" Half-Log has a stack height of 14". The Embossed Hardboard H&L Half-Logs are available in 8' (94") and 16' (190") lengths. All Half-Logs should be stored flat and off the ground. Opened bundles should be covered to enable protection from dirt and moisture. Bundles are individually protected with lumber wrap prior to shipping. In addition, four corner systems are available: an insulated round post, a square timber post, a solid Pine saddle-notch, and a Butt & Pass. Standard bundle sizes are:

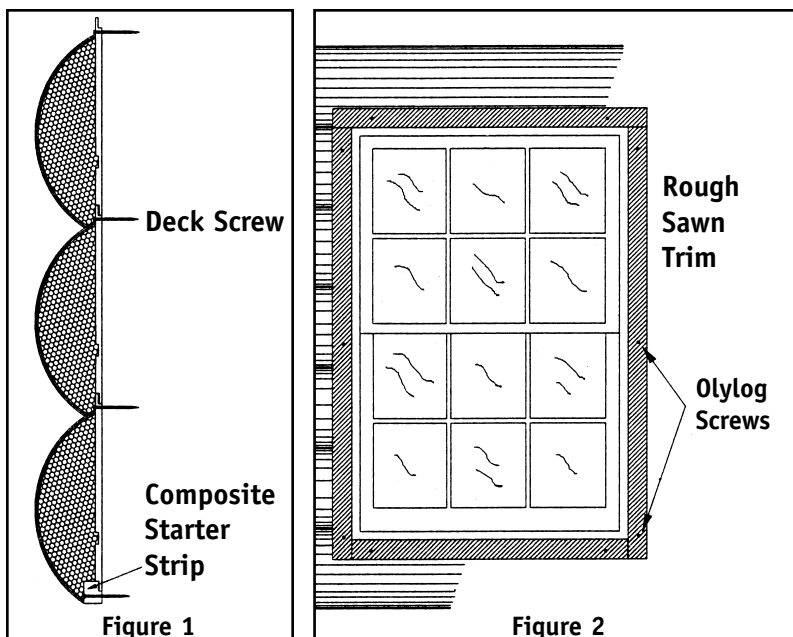
- 10" size - 70 pieces/bundle — 365 SF = 1 bundle*
- 12" size - 44 pieces/bundle — 287 SF = 1 bundle*
- 14" size - 27 pieces/bundle — 211 SF = 1 bundle*
- 16" size - 24 pieces/bundle — 219 SF = 1 bundle* (based on 94" lengths)

INSTALLATION

The H&L Half-Log can be utilized in new construction as well as in the retro-fit market. H&L Half-Logs are adaptable to many new construction techniques, including: wood-frame stick-built, steel frame, masonry (conventional and insulated forms) and structural insulated panels. When wrapping a new frame structure with an air infiltration barrier and wind bracing the corners, the H&L Half-Log can be fastened directly to the studs (check local requirements). We recommend all-weather deck screws from 1-5/8" to 2-1/2" in length for fastening the siding.

FASTENING GUIDE

When installing the siding, always fasten at the top, slide the next log over and lock it in place. The bottom course of siding has a special cut to fit over the Composite Starter Strip. When the logs lock together, the row of fasteners becomes hidden and protected from the elements. Drive the fastener straight in near the bottom of the flange (Figure 1), through the full width so the locking groove remains intact. Wrap windows and doors with H&L's Pre-stained Rough Sawn Trim and fasten with Olylog Screws. (Figure 2).



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