

INSTALLATION

-AND MAINTENANCE GUIDE-

The Vale Exterior Shingle Panel (7- $\frac{1}{8}$ " Exposure) by Visscher Lumber

Please check with local authorities for applicable building codes in your area. If the National or Local Building code requirements exceed these instructions, then that code will apply.

IMPORTANT - IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT THE VALE SHINGLE PANEL PRODUCT IS CORRECTLY INSTALLED. FAILURE TO STRICTLY ADHERE TO THESE INSTRUCTIONS AND ALL APPLICABLE BUILDING CODES WILL VOID THE WARRANTY AND AFFECT THE APPEARANCE AND PERFORMANCE OF THE PRODUCT.

IMPORTANT - ALWAYS FOLLOW INDUSTRY BEST PRACTICES:

In addition to following this Installation & Maintenance Guide, all installers should adhere to the following industry "BEST PRACTICES":



THE 'DO NOT' LIST!

- Do not assume that your installers know how to install this product
- Do not use for structural support purposes
- Do not install closer than 6" from grade or 2" from decks, patios, concrete and/or roofs
- Do not allow sprinklers to regularly wet Shingle Panels
- Do not install in a manner that allows water to pool against or behind Shingle Panels
- Do not substitute caulking or sealant for flashing
- Do not install or apply finish to Shingle Panels if moisture content is greater than 15%



THE 'DO' LIST!

- Read and adhere to this Installation and Maintenance Guide
- Print and distribute these installation instructions to your installation crew
- Adhere to applicable local, national and International building codes
- Strive for a "best practice" installation
- Coat all end grain with an exterior stain or primer to prevent tannin staining
- Follow coating manufacturers' written instructions when applying finish
- Install diverter flashings (kick-outs) on roofs to prevent water loading of walls

1. BEFORE STARTING

Double check that the correct product has been received for the application. Before installation, inspect the product for any defects. Should any product be found to be unsatisfactory DO NOT INSTALL IT. Contact a Visscher Lumber Representative immediately at: 604-858-3375, 778-828-0774 or email: charlene@visscherlumber.com to arrange for replacement material. **INSTALLATION OF THE PRODUCT CONSTITUTES ACCEPTANCE OF THE CONDITION OF THE PRODUCT.**

The Visscher Lumber goal is simple; to surpass consumer expectations for product quality and to quickly and effectively address any product concerns or questions.

Plan Ahead - have a layout and remember to take into account windows, doors and any other breaks. The goal is to establish a layout that allows an entire panel to be installed above windows and doors.

2. MANAGING EXTERIOR ENVELOPE WATER & MOISTURE

Every structure should be designed and constructed in a manner that controls and manages moisture. Please refer to local and National building codes for guidance.

WATER MANAGEMENT:

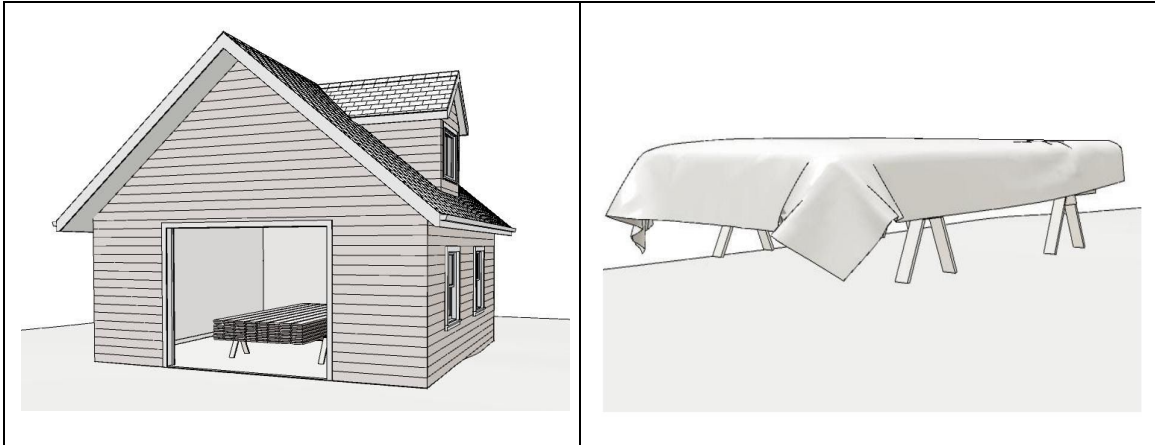
Moisture infiltration can be reduced and managed by incorporating design and installation practices that:

- Allow water that has penetrated the first layer of protection (the trim and Shingle Panel) to effectively drain out and away from the assembly by installing a properly detailed water resistive barrier (WRB). A rainscreen wall assembly is highly recommended (creating an air gap between the cladding and the WRB). Refer to Section 6: Exterior Wall Assembly Construction, for more details.
- Allow water to drain away freely between the Shingle Panel and WRB (this sheds water and prevents water pooling).
- Minimize water ingress into the exterior envelope by installing flashing at all openings, flat surfaces and wherever moisture drainage is required. Use appropriate membrane flashing at all openings/penetrations to ensure a continuous barrier. (Remember: sealant is not a substitute for proper flashing).
- Ensure to install gutters, deflective flashing and kick-out flashing on roofs.
- Adhere to the Section 8: Clearance requirements.

THE EXTERIOR WALL ASSEMBLY OF A BUILDING IS A SERIES OF COMPONENTS THAT, TOGETHER, CREATE A SYSTEM. BEST PERFORMANCE OF THIS ASSEMBLY SYSTEM DEPENDS ON EACH COMPONENT BEING INSTALLED CORRECTLY WITH THE CONSIDERATION OF LOCAL ENVIRONMENTAL CONDITIONS, BUILDING CODES, PRODUCT AND MATERIAL LIMITATIONS. PERFORMANCE OF THIS SYSTEM IS THE RESPONSIBILITY OF THE ARCHITECT AND INSTALLER AND NOT THE DISTRIBUTOR OR MANUFACTURER OF THE MATERIALS. VISSCHER LUMBER ASSUMES NO RESPONSIBILITY FOR WATER INGRESS INTO OR BEYOND THE EXTERIOR WALL ASSEMBLY.

3. HANDLING AND STORAGE

- **Handle** the Shingle Panel with care to avoid damage/marring/scuffing.
- **Protect** the Shingle Panel from the weather: store it in a dry enclosed building or under a waterproof cover. If a waterproof cover is used, do not seal the bundle. This allows air circulation and permits acclimatization to the jobsite.
- **Store** the Shingle Panel on sawhorses or on dunnage stacks at least 6" away from the ground in a manner that does not allow the center of the stack to sag. Do not allow the Product to come into contact with the ground.



4. MOISTURE CONTENT AND ACCLIMATIZATION

Vale Shingle Panels are manufactured from natural Western Red Cedar and, like every wood product, will shrink or expand across the grain due to changes in moisture content. Moisture content will change in response to fluctuations in the relative humidity of the air. **It is important to allow the Product to acclimatize to the jobsite prior to installation.**

- **Exterior installation:** protect the Shingle Panel from liquid water and provide adequate air circulation to the stack until it has reached the equilibrium moisture content for the region.
- **Interior installation:** store the Shingle Panel in the environment in which it will be installed for seven (7) days. Prevent exposure to high humidity levels that come with some stages of construction, such as during painting or drywall mudding.

****DO NOT INSTALL SHINGLE PANELS IF MOISTURE CONTENT EXCEEDS 15%****

5. FINISHES FOR SHINGLE PANELS

Visscher Lumber recommends the application of an exterior rated finish to all Panel surfaces prior to installation. Please adhere to the coating manufacturer's application instructions.

****COATING THE END GRAIN OF THE SHINGLE PANELS WILL MITIGATE WATER ABSORPTION AND REDUCE TANNIN STAINING****

The lasting visual appeal and service life of any coating is directly dependent on the quality of the coating being applied and the caliber of the preparation and application. A professional factory finish application will generally provide the best results.

The Western Red Cedar Lumber Association has provided an excellent resource on finishing, available at <http://www.realcedar.com/siding/finishing/>

6. EXTERIOR WALL ASSEMBLY CONSTRUCTION

To properly install the Shingle Panel Product, the International Residential Building Code requires that exterior wall assembly construction adhere to the following:

- A water-resistive barrier (WRB) is required behind the exterior veneer.
- A means of draining water (that has entered the assembly) to the exterior, is required.
- Continuous flashing must be installed above all projecting wood trim.
- Windows and doors must be installed in accordance with the manufacturer's installation instructions.

(NOTE: this is not an exhaustive list but used to provide a guide and there ARE some exceptions).

***IMPORTANT: Information on Rainscreen Wall Assembly Construction:**

- Visscher Lumber recommends rainscreen wall construction be used to prevent water from collecting between cladding and the WRB and to promote drying of exterior wall assembly components (which will maximize the performance of exterior wall assembly materials and coatings).
- In order to create a rainscreen wall assembly, install vertical furring strips over the WRB, directly over the studs. Then fasten the siding over these vertical furring strips.

****ADDITIONAL FURRING MUST BE ADDED AT ALL FIELD JOINTS!****

A full row of vertical furring can be added at field joint locations because of the repetitive nature of the installation sequence

There are 3 dimensional "drainage mat" type products available in the market that also provide a means for water to drain behind exterior cladding

Ensure that all 3rd party materials are installed in accordance with manufacturer's instructions and building code requirements

****NOTE THAT RAINDRAIN WALL CONSTRUCTION IS REQUIRED BY CODE IN SOME JURISDICTIONS****

***IMPORTANT: Information on Rigid Foam Sheathing:**

- Rigid foam sheathing does not have adequate nail holding capacity. If used, adjustments to the design and construction of the exterior wall assembly will be required to achieve a suitable nailing base.
- Furring strips are imperative to create an airspace between the back of the siding and rigid foam sheathing.
- Shingle Panels installed directly on top of rigid foam sheathing can result in moisture accumulation between the two materials and may result in damage.

7. FASTENERS AND REQUIREMENTS

When possible, fasten Shingle Panels to a combination of furring strips (if used), sheathing and studs. In other words, drive fasteners directly over framing locations and ensure 1" penetration into studs on 16" centers.

Install fasteners just above the scribe line on the Shingle Panel and take care to ensure the fasteners are hidden by the subsequent Panel. Position nails at the studs. Drive nails 1/2" from the Panel ends to prevent splitting. If the Panel end misses a stud, place 3 nails approximately 1" away from the end of the Panel. Nail each course of Panels from one end to the other.

Stainless steel fasteners are recommended to prevent rust, iron stains, streaks, or deterioration especially when Panels are finished with a transparent or semi-transparent coating. At a minimum, fasteners must be hot-dipped galvanized.

Stainless steel, ring or spiral shank siding nails are recommended. These have a blunt point to prevent splitting and provide excellent holding power. Use No. 304 stainless for general installations and No. 316 stainless for coastal installations.

Drive nails flush with the surface of the material. Use a flush nailing device or pneumatic nail gun to prevent overdriven nails.

****FASTENERS MUST PROVIDE A MINIMUM 1" PENETRATION INTO STUDS****

8. CLEARANCE REQUIREMENTS

- Maintain a minimum ¼" gap between the bottom of the Shingle Panels and flashing over windows and trim to act as a capillary break.
- Install Shingle Panels a minimum of 6" from unfinished grade and a minimum of 2" above decks, patios, concrete and roof surfaces.
- Clearances prevent the Shingle Panel's exposure to pooled water and/or locations where large volumes of water occur.

9. FLASHING REQUIREMENTS

- **Before Shingle Panel installation:** horizontal metal flashing MUST be installed above all wall penetrations (or as per window and door manufacturers' instructions) and above all projecting wood trim.
- **Flashing:** critical to preventing water from entering past the exterior cladding and also allowing infiltrated water to drain. Ensure all flashing has a positive pitch to prevent water from pooling and to shed water away from the wall.

****SHINGLE PANELS MUST BE INSTALLED AT LEAST ¼" ABOVE ALL FLASHING**
AND**

****THE APPLICATION OF CAULKING OR SEALANT DOES NOT REPLACE FLASHING****

10. CAULKING

Use the best exterior grade caulk available that meets all local building code requirements. Always follow the sealant manufacturer's installation instructions:

- Seal where Shingle Panels meet vertical trim or the intersection between Shingle Panels and the vertical portion of window frames.
- Back caulking or blind caulking is recommended between Shingle Panels and corners.
- Caulking and sealants are not a permanent solution and require maintenance to prevent failed caulking from permitting water ingress into the wall assembly.
- Never seal areas that will prevent moisture from draining away from the exterior envelope such as under windows and around metal flashing.
- If choosing to paint or stain the Shingle Panels, ensure the exterior grade caulk is paintable or stainable according to the sealant manufacturer's instructions.

****SILICONE CAULKS ARE NOT RECOMMENDED FOR USE WITH WESTERN RED CEDAR****

IMPORTANT

Installing Around Windows, Doors & Gables: cut Shingle Panels to fit around windows and other fenestrations. It is recommended that Panels be rip-cut at the top of a wall and angle-cut at gable ends. To ensure Panels stay intact, add fasteners (stainless steel staples or stainless steel brad nails) under the cut line on each shingle (prior to rip or angle cutting). A piece of lathe can be temporarily fastened as a cut guide. When installing cut Shingle Panels, ensure joints are caulked and sealed by blind-caulking or face caulking as per the sealant manufacturer's instructions.

*** DOUBLE NAILING OR TOENAILING WITH APPROPRIATE FASTENERS MAY BE REQUIRED TO KEEP SMALLER PIECES OF SHINGLE PANELS INTACT THROUGHOUT THE PRODUCT'S SERVICE LIFE.***

11. SHINGLE PANEL MAINTENANCE

To maximize the visual appeal and performance of your Shingle Panels, regularly:

- inspect caulking and sealants and re-install as necessary to prevent water ingress
- keep roof surfaces and gutters free of debris
- ensure downspouts are flowing freely
- keep the surface of your Shingle Panels free of mold, mildew, algae and other biological growth
- make sure that soil and debris is kept 6" below siding (See: Section 8 - Clearance Requirements)
- do not let trees and shrubs grow up against Shingle Panels
- ensure that sprinklers are not spraying water onto Shingle Panels
- inspect and maintain all coatings on your Shingle Panels and home, regularly

PROACTIVE HOME MAINTENANCE IS LESS EXPENSIVE THAN REACTIVE HOME MAINTENANCE!