



HOW TO INSTALL WESTERN RED CEDAR CLADDING



REPRODUCED FOR THE WRCEA WITH PERMISSION FROM THE WRCLA

Congratulations on your choice of Western Red Cedar cladding. Western Red Cedar is one of the world's premier quality timber noted for its appearance, durability, light weight, insulation value and dimensional stability. It will provide your home with character and a distinction that other claddings cannot match. Properly installed and finished, it will provide years of low maintenance performance.

Before beginning your cladding project read this brochure thoroughly – it contains useful information to ensure the cladding is installed correctly and will perform as intended. This brochure is organized into three sections.

Section I. Before You Start deals with numerous considerations which you should be aware of before you start installing Western Red Cedar cladding.

Section II. Outlines proper installation techniques.

Section III. Provides a list of industry best practices for Western Red Cedar cladding installation.

Note that these are general guidelines that are minimum standards to be followed with confidence in most areas. However, severe local climatic conditions such as extreme heat and dryness; high winds; seacoast exposure; and, areas with wide climatic swings may necessitate additional provisions for the installation of the cladding.

Your national and local building code requirements always supersede these instructions.

SECTION I BEFORE YOU START

1. SELECTING YOUR WESTERN RED CEDAR CLADDING

Grades

In the UK Western Red Cedar is commonly supplied with reference only to the commercial grades (No. 2 clear and better (2clr&btr); No. 4 clear (4clr)) and not to architectural or appearance grades. It is important to recognise how the natural characteristics permitted within the various grades can affect the overall appearance of cladding when installed and for the purpose of long-term performance which are acceptable and which are not. For cladding purposes grades quoted relate to the face of pieces, backs may be of a lower appearance quality. Knot holes are not permitted.

Some cladding products are available finger-jointed to length. This enables unacceptable defects to be removed the resulting shorter, clear, pieces jointed to produce a range of length specifications.

Appearance

To assist in selection of appearance quality, 'How to specify western red cedar' is available as a companion document to this one. It provides references to additional grade identifiers together with a description of the grades and a photographic representation depicting the frequency of knots within the grades: it is not possible to provide a true indication of colour, about which there is more below.

Colour variation

One of the prominent features of western red cedar is its colour variability which ranges from cream, through salmon pink to dark chocolate brown and all shades in between and which will be present to greater or lesser extent in all batches. (You can see the effect of this by "googling" the 'Welsh Assembly Building'). The colour also provides an indication of the natural durability and hence long-term performance. It is the heartwood of western red cedar that possesses both this colour variability and the high natural durability properties of the species. Conversely the sapwood, non-durable in western red cedar and all other wood species, is distinctly white.

Finger-jointed boards are not colour-matched end-to-end so this may accentuate the unique colour effect of installed cladding.

Grain feature

This is dependent on how western red cedar logs are sawn into lumber and where each piece of lumber was in the log. Variability in grain feature is not an indication of natural durability but it will to some extent affect how the timber 'moves' in service. Western red cedar is dimensionally very stable in service when compared with many other commercial softwood species and for classification purposes it meets the criteria for 'small movement'. Vertical grain material (quarter-sawn; growth rings through the thickness of the piece) exhibits least movement in service; any movement in flat grain material (through sawn; growth rings along the width of the piece) will be in the direction that will result in flatter growth rings (viewed on the ends of pieces).

Moisture content

Details for preferred moisture content are set out below.

Dimensions

To avoid excessive waste and associated extra cost always specify dimensions for cladding boards that can be produced from customary sawn sizes. This information can be obtained from UK stockists many of whom carry a range of standard dimensions and profiles. Associate Members can be found on the website www.wrcea.org.

Long-term performance

For maximum durability all pieces containing sapwood (white in colour) should not be used externally. Any knots present, as allowed within the grades, should be sound (no rot) and tight (partially inter-grown is acceptable as this will ensure the knot will stay in place). Grading will generally exclude most features that would not be acceptable for external cladding. Knot holes, very occasionally these slip through the grading process, should be excluded. Lengths of cladding can, of course, be cross-cut to remove knot holes and resulting shorter pieces used where practicable.

Implications of selection

The higher the grade (clear vertical grain heart is the highest of the Western Red Cedar grades) the more sorting is required to achieve this in every piece which accounts for the higher cost of the premium grades. Sorting for a colour match is seldom requested and would be an unnecessary excess when the material will be exposed to the elements as external cladding – it would also add considerably to the cost!

Supplied in the UK, Western Red Cedar cladding manufactured from #2clr&btr timbers has generally been further sorted for fitness for purpose (all unacceptable characteristics excluded) and will generally provide an appearance equivalent to 'A Clear', unless clear vertical grain heart is required, other than specification of dimensions, profiles and moisture content it is best to avoid any further stipulations in specifications. Inclusion of a reference to No. 2 clear and better (#2clr&btr) will make it quite clear which appearance quality is required.

2. INSPECTING YOUR WESTERN RED CEDAR CLADDING

Before commencing installation ensure the cladding delivered meets your specification or requirements. Ideally sort through all pieces; any pieces found to be damaged or visually unacceptable for any reason should not be installed; if you should encounter an excessive amount of such pieces stop and call your supplier immediately.

3. ACCLIMATIZE CLADDING BEFORE INSTALLING

One of the most stable softwoods, Western Red Cedar is nevertheless a natural material and it responds to the environment. Cedar cladding can swell or shrink as it gains or loses moisture to reach equilibrium with the moisture content of the surrounding air. Ensuring that the moisture content of cedar cladding is at equilibrium before it is installed will minimize movement later on. Recommended moisture content for claddings are given in the table below.

	Average	Individual Pieces
Most Areas	12%	9-14%
Dry Areas	9%	7-12%
Damp, Warm Coastal	> 12%	9-20%

1) To calculate average, test 10% or more of pieces.

2) Source: Wood Handbook 1987.

The following procedures are suggested for different cladding specifications:

Kiln Dried Clear Cladding

Kiln dried cladding products are the preferred choice for consistency, stability, paintability and overall performance. These cladding products have been dried at the mill to 12-15% moisture content. They are the most ready-to-use of all cladding products. If the cladding has not been wetted prior to arrival on the job site it may be applied upon arrival except in hot and dry conditions where 3 to 5 days of well ventilated storage away from direct sunlight is generally required. If the cladding has been wetted it must be separated and allowed to dry to the local equilibrium moisture content.

Dry Knotty Claddings

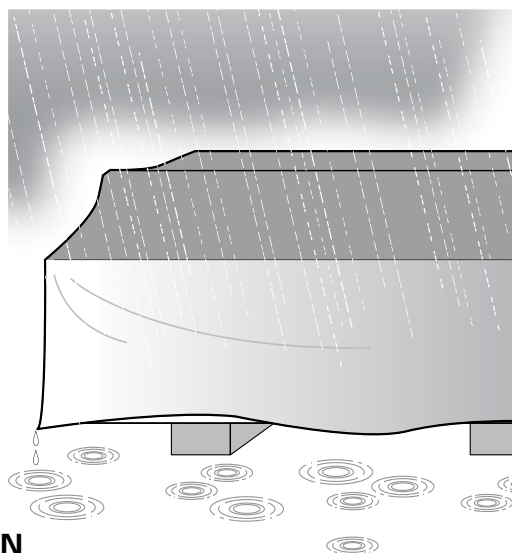
Some knotty claddings are air or kiln dried to less than 19% moisture content. These products should be acclimatized to ambient moisture conditions by stacking the cladding on evenly spaced, vertically aligned bearers in a dry storage area for 7-10 days. More time may be required in damp or humid conditions.

Green (Unseasoned) Claddings

Unseasoned or green claddings have not been dried prior to delivery and require a longer time to acclimatize than seasoned claddings. Separate the cladding with vertically aligned bearers, keeping two pieces stacked face to face between stickers and store in a well ventilated dry location for a minimum of 30 days, or longer in damp or humid conditions. If specifying unseasoned cladding, patterns such as channel, bevel and board-and-batten are recommended since these allow for shrinkage. Narrower widths are also recommended since they move less overall than wider widths. Note the WRCEA discourages the use of green claddings.

4. JOB SITE STORAGE

Until installed, Western Red Cedar cladding needs protection from direct sunlight, water saturation, snow, ice, dirt, and other elements. Store the cladding flat and off the ground on stickers and a vapour barrier so that moisture is not absorbed through the bottom boards of the stack. Protect with a waterproof covering elevated in the center so that water does not pool on the cover. Do not completely seal the bundle, as good air circulation is required. Ideally, the cladding should be stored in an enclosed building such as a garage prior to use.



5. FINISH CLADDING PRIOR TO INSTALLATION

If cladding is to be coated on site it is recommended that the finish is applied to all surfaces, including ends, before installation. For optimum performance of coatings factory applied finishes are the best option. This ensures the best performance of the finish. The type of coating will be determined by final finish and look selected. The finish protects the wood from moisture absorption and UV degradation, helps prevent staining caused by mildew and extractives and will increase the service life of top coats.

Recommended Priming Procedures for Western Red Cedar Cladding

Type of Finish Coat	Recommended Priming Coat
Natural and semitransparent stains	Apply the oil based stain to all surfaces.
100% acrylic solid color stains and paints	Apply an alkyd oil, stain-blocking primer (preferred) to all surfaces. High quality water based stain blocking primers may also be used.
Bleaching oils	Apply the bleaching oil to all surfaces.

More information about finishing is available on the WRCEA's website and in the "Guide to Finishing" publication.

6. FIELD CUTS

Regardless of the time of the year of the installation, all field cuts must be finished. The end grain of all wood products absorbs liquids up to 250 times more rapidly than other wood surfaces. 100% acrylic-latex primer is acceptable as long as it is able to properly cure according to the primer manufacturer's instructions. However, where temperatures drop below 10 degrees Celsius either during application or within the curing period, use an alkyd oil wood primer to coat end grain exposed by jobsite cuts. Cladding with end cuts coated with alkyd oil primer can be installed before drying without compromising the coating's effectiveness. Above 10 degrees Celsius, a high quality 100% acrylic-latex primer will suffice to coat exposed end grain if allowed to dry before installation. With either primer, follow manufacturer's recommendations.

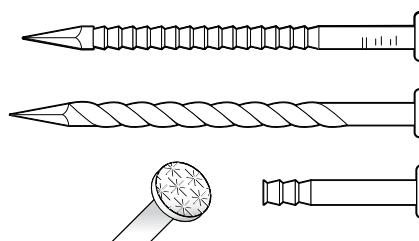
7. FASTENERS

Stainless steel nails are the best choice, especially if the cladding is to be finished with transparent or semitransparent stain. Use No. 304 stainless for general cladding applications and No. 316 for seacoast exposures.

Hot-dipped galvanized (BS EN ISO 1461 "Hot dip galvanized coatings on iron and steel articles - specifications and test methods), aluminum and stainless steel fasteners are all corrosion-resistant and all can be used to fasten Western Red Cedar. Other types of fasteners (including electroplated and mechanically galvanized) are not recommended. They can rust and disintegrate and react adversely with the natural preservative present in cedar resulting in stains and streaks.

Type

For best result use "splitless" ring shank cladding nails. These have thin shanks and blunt points to reduce splitting. Textured heads should be used to reduce the glossy appearance of the nail head.



Hand Nailing is Preferred.

Nails should be driven with care into the framing members. To ensure nailing accuracy run chalk lines to mark framing locations. Heavy nailing distorts the wood and may cause splitting. At mitred corners, near edges and near ends, nail holes may need to be pre-drilled to avoid splitting. Avoid the use of pneumatic nailers if possible. If a pneumatic nailer must be used, reduce the air pressure and tap nails flush.

Overdriven nails must be remedied immediately. Fill overdriven nail holes with exterior grade wood putty specifically designed for filling exterior nail holes.

Placement

Cladding should be fastened to each stud or blocking with nails spaced at a maximum of 600mm on center. Nail placement depends on the cladding pattern and width. The key is to fasten the cladding securely without preventing it from moving in response to the moisture content in the air. In general, each piece of cladding must be nailed independently. Nailing overlapping pieces together restricts the natural movements of each piece and may cause splitting.

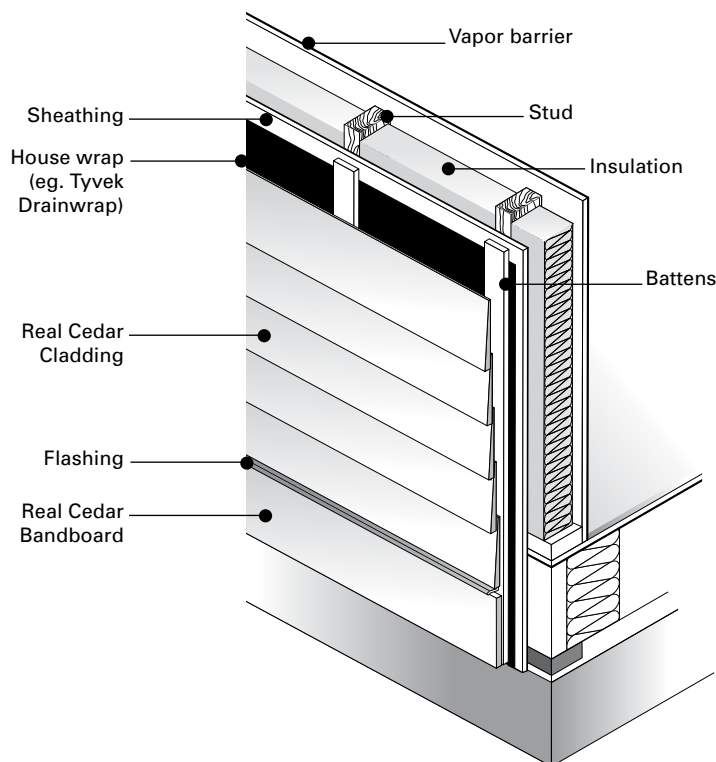
Size

The size of nails to use depends on the type and thickness of cladding. Use nails long enough so that they penetrate solid wood by a minimum of 32mm.

Cladding Type*	Nominal Thickness (mm)	Spiral/Ring shank Nail Length (mm)
Bevel	13	50 (6d)
	16	50 (6d)
	19	60 (7d)
	22 to 24	75 (10d)
	32	75 (10d)
Boards, T&G and Lap	16	50 (6d)
	19	60 (7d)
	22	75 (10d)
Battens for Board and Batten	19	75 (10d)

* Important: For application over foam sheathing, add the thickness of the foam to the tabulated nail length.

8. CONTROLLING MOISTURE: VAPOR BARRIERS AND BUILDING PAPER



High humidity output from washers, dryers, showers, kitchens and other sources, combined with today's energy-efficient construction, can result in a build-up of interior water vapour. This vapour migrates through the fabric of a building from the warm interior to the cold exterior, and when it condenses to water can cause structural damage and damage to claddings and finishes. Vapour barriers installed on the warm side of the wall largely prevent the migration of moisture vapour but they are not perfect. Residual vapour must be allowed to escape to the outside. Housewrap installed on the outside face of the sheathing helps prevent rain and snow from penetrating the walls but allows the escape of moisture vapour. The WRCEA recommends the use of rainscreen wall construction (see diagram and related section later in this publication) especially when installing over rigid foam.

Proper wall construction includes the use of housewrap or gas permeable building paper and interior vapour barriers. These are extremely effective in helping to prevent moisture problems.

9. WALL CONSTRUCTION

Stud Walls

Like all cladding materials, Western Red Cedar performs best when installed properly on a suitable frame. Cedar cladding should be securely nailed to battens, framing members, or to blocking between framing members. Standard stud walls generally require no special preparation for horizontal cladding installation. Cladding should be nailed into battens fixed at stud locations, maximum 600 mm centres when applied over wood-based. In instances where an air space between cladding and sheathing is desired (see rain screen wall construction) nail cladding to counter-battens. Maximum spacing for battens is 400mm on center. Spacing for counter-battens should match the spacing of the studs.

Vertical cladding applications require horizontal nailers, blocking or other wood framing members spaced no more than 600mm on center. Check your building code to verify requirements in your area.

Lumber Size and Spacing for Blocking and Furring¹

	Nominal Size (mm)	Actual Size (mm)	Preferred Spacing (mm)	Maximum Spacing (mm)
Blocking	50 x 50	38 x 38	400	600
Battens over plywood/ OSB sheathing ²	25 x 50	19 x 38	400	600
Furring over masonry walls	50 x 50	38 x 38	400	600

1. Battens must be securely fastened to studs.

2. Can be used in moist and severe climates to form an air space between cladding and sheathing (ie. rainscreen).

Rainscreen Construction

The basic rainscreen wall configuration, incorporating two layers, or wythes, separated by an air space, has variations that provide different levels of rain protection effectiveness. A distinction should be made between the drained cavity wall, the simple or open rain screen, and the pressure-equalized rain screen wall. What is usually meant by a “rain screen wall” is generally the latter: an exterior cladding, a cavity behind the cladding, drained and vented to the outside; an inner wall plane incorporating an air barrier; and a set of compartment seals limiting the cavity size. The outer “screen” layer of cladding deflects the kinetic force of the rain, while the inner wythe remains protected. The vented cavity uses gravity and flashings to drain water that penetrates the outer wall, away from vulnerable surfaces and joints. The cavity is sufficiently wide that surface tension and capillary action are not able to move water across the cavity.

Step by step construction tips for basic rainscreen construction (check with local building codes for the appropriate techniques in your area):

1. Install housewrap (such as DuPont Tyvek’s Drainwrap) or gas permeable building paper.
2. Install vertical battens. Ensure they are lined up with the studs.
3. Install screen materials under the ends of the battens. Fold the screen material over the battens and staple to the front of the battens.
4. Install Western Red Cedar cladding over the battens.

More information about rainscreen construction techniques is available from Canada Mortgage and Housing Corporation (www.cmhc-schl.gc.ca).

Masonry Walls

Masonry walls require battens for horizontal and vertical cladding installation. Battens must be thick enough to allow for nail penetration of 32mm into solid wood.

Structural Insulated Panels (S.I.P.)

Structural Insulated Panels require battens for horizontal and vertical cladding installation. Battens must be thick enough to allow for nail penetration of 32 mm into solid wood. Typical Structural Insulated Panels have nominal 12mm sheathing. To ensure the appropriate nailing base, battens a minimum of 19mm thick should be installed on the outside of the sheathing at a maximum of 400mm on center.

Insulated Concrete Forms (I.C.F.)

These systems have no wood component and the foam has no nail holding capacity. As a result, Insulated Concrete Forms require framing of a minimum of 32mm thick spaced 400mm on center on the outside of the foam. Note these will need to be securely fastened to the concrete.

Rigid Foam Sheathing

Rigid foam sheathing has an insulation value superior to that of traditional lumber and plywood sheathings. However, it has no nail holding power and using rigid foam sheathing as a nailing base for cedar cladding is not recommended. Follow the nailing recommendations given in this publication as to nail type, positioning, penetration and spacing.

Foam sheathing panels vary in moisture permeability but are generally considered as good moisture barriers. They should be used with a continuous film vapour retarder on the inside wall under the interior finish. Rigid foam sheathing can cause moisture to accumulate on the back of cladding and cause staining, buckling and damage to finish coats. As a result, it is recommended that battens are used to create an air space between the sheathing and cladding (follow the rainscreen construction method).

Other recommendations that should be followed to minimize potential problems:

- Use kiln-dried cladding over rigid foam sheathing. This is the most stable cedar cladding.
- Proper prefinishing is essential.
- Use light color finish coats to maximize heat reflection and reduce dimensional movement.
- In all cases it is strongly recommended that house wrap be applied over the foam sheathing.

SECTION II INSTALLING WESTERN RED CEDAR CLADDING

1. FLASHING

Before installing cladding, make sure that flashings are installed to prevent moisture from entering wall and roof spaces. Flashing is an important line of defense in controlling moisture in wall assemblies. Flashing intercepts and directs the flow of water away from the building to designed drainage paths. Install horizontal flashing extending from the top of all wall penetrations (ie all windows and doors) and at any material or material directional change (ie. bandboards, water tables or the introduction of any alternative material). The flashing should tilt downward to allow water to drain away from the wall. Cladding or trim should be 7mm above the flashing ledge. Do not caulk where the flashing and trim or other materials meet. Note that caulking in lieu of flashing is not acceptable.

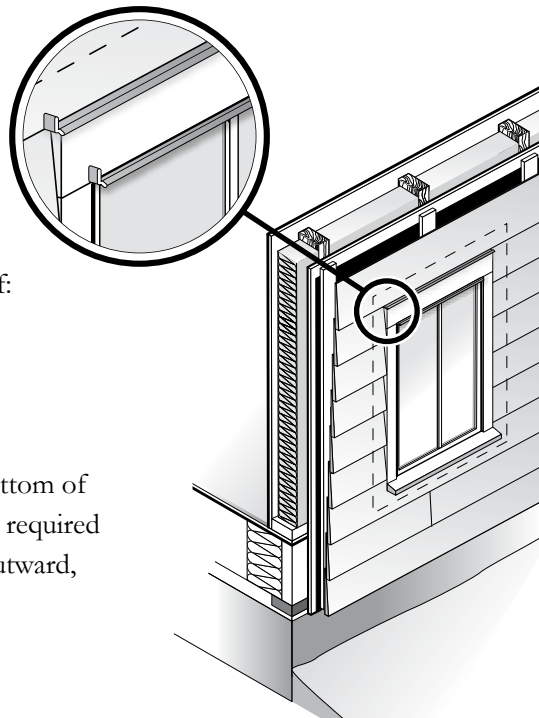
Door and Window Flashing

The purpose of flashing window and door headers is to intercept water behind the cladding and direct it to the outside, and to redirect water flowing down the face of the wall to flow away from the wall opening.

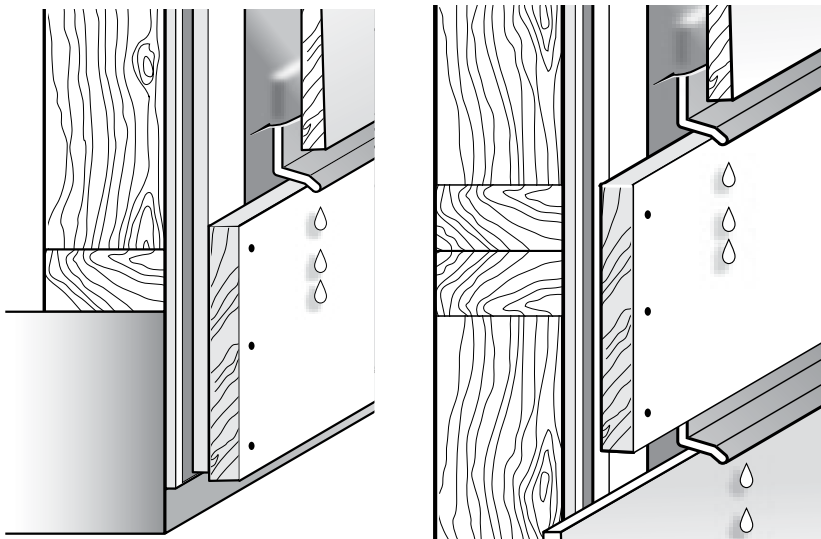
Moisture can accumulate behind the cladding as a result of:

- rain penetration through the cladding;
- water vapour diffusion;
- leakage of moist air from the interior or condensation.

Some moisture will drain through the weepholes at the bottom of each piece of cladding. An additional head trim flashing is required at the head of the window/door to direct water further outward, beyond the thickness of the window



Skirt and Bandboards



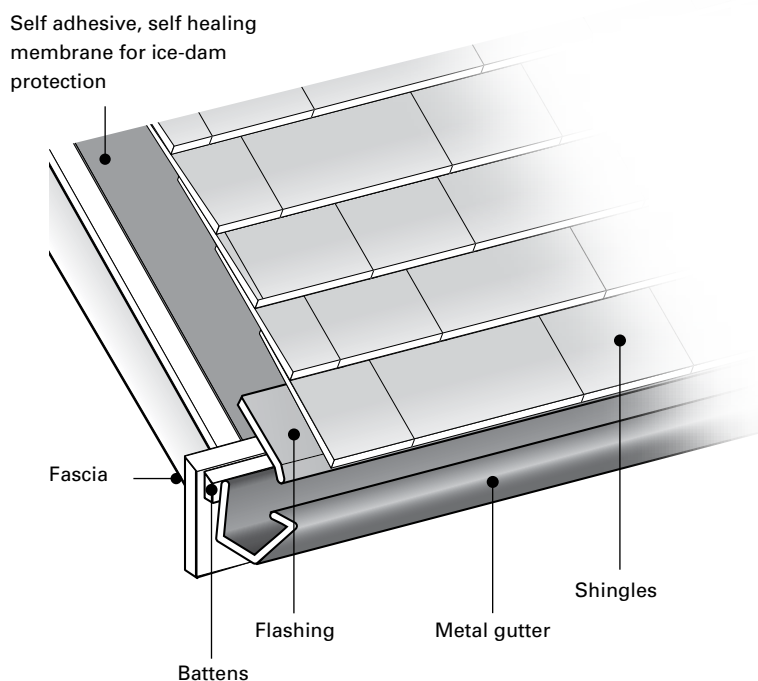
Ground Level Skirtboard

Second Story Bandboard

Fascia Flashing

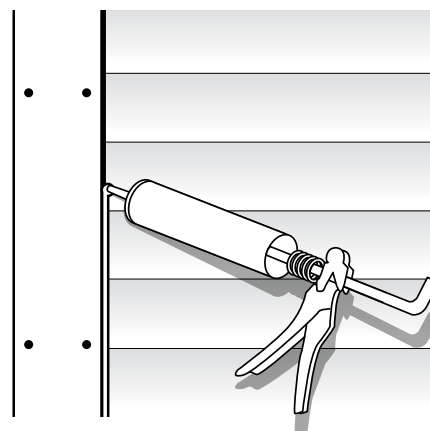
The purpose of fascia flashing is to support the shingle edge and to provide a drip edge to prevent water from running back underneath the roofing shingles and down along the fascia and soffit.

Preformed eaves flashing/drip edge should be installed under the starter course of the shingle roofing. The extension of flashing supports the edge of shingles. If eaves troughs (rain gutters) are used, the flashing edge also helps to direct the water into troughs. Fascia flashing protects both the soffit and the fascia board, and provides a drip edge at the bottom edge to direct water away from the building.



2. CAULKING

Use high-performance acrylic-latex, acrylic, acrylic-silicone, polyurethane, polysulfide or terpolymer rubber caulks or sealants to seal gaps around windows, doors, corners, and other exterior joints that are exposed to potential water intrusion. Pure silicone and clear caulks do not work well on Western Red Cedar and are not recommended. Caulking is not a permanent solution and as such requires regular maintenance. If not inspected and maintained, caulking may fail and trap water, creating severe moisture problems. Do not rely on it as the only barrier to moisture penetration. Do not caulk areas that will prevent moisture from escaping the wall cavity (e.g., under windows and around flashing).



3. ROOF AND GROUND CLEARANCE

Trim that extends down to a roof (dormers, second floors, etc.) and decks requires a minimum of a 50mm gap to avoid wicking. Trim, such as water table or skirt boards must be a minimum of 150mm above the grade.

4. INSTALLING BEVEL CLADDING

Spacing for the cladding should be laid out beforehand. The number of board spaces between the soffit and bottom of the lowest piece of cladding at the foundation should be such that the overlap is as per the table.

Start with the bottom course using a battens to support the lower edge. Each succeeding course overlaps the upper edge of the previous one by a minimum of 25mm. Rabbed patterns are self-spacing, but leave 3mm expansion clearance. Where possible, the bottom of the board that is placed across the top of the windows should coincide with the window cap.

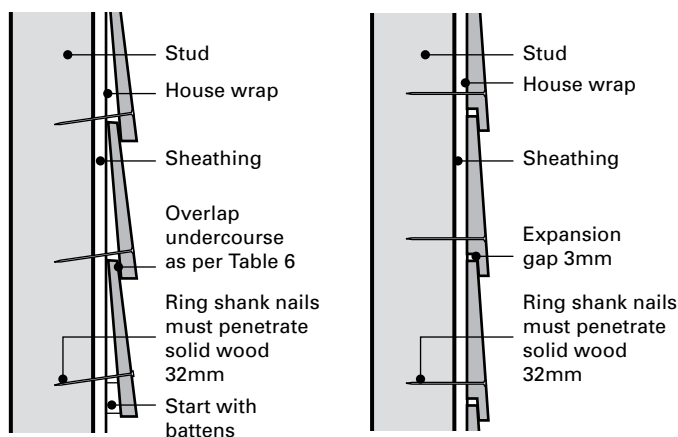
Bevel cladding should be face nailed to studs with 32mm penetration into solid wood using one nail per piece spaced at a maximum of 600mm on center. Place nail just above the overlap. Take care not to nail through the overlap of two pieces.

Do not reduce the cladding overlap recommendations given in the installation sections of this publication. Doing so could result in damage from wind-driven water. Use the larger overlaps for unseasoned claddings to allow for shrinkage and expansion. Take care not to overdrive fasteners when using larger overlaps. Butt joints between boards should be staggered and meet on studs. Fit cladding snugly to other pieces and to trim, allowing for expansion and an adequate caulking bead.

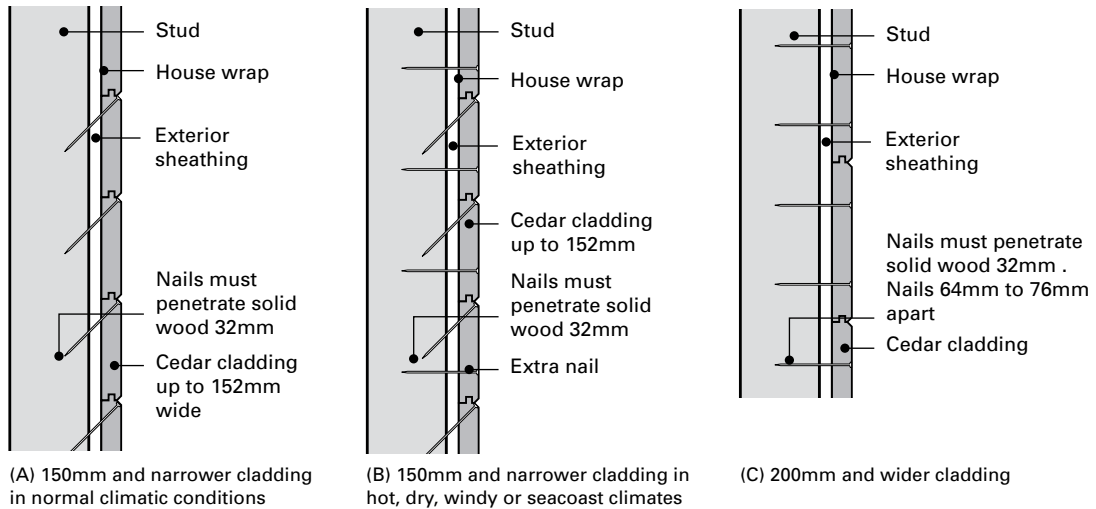
Recommended Overlap

Nominal Width (mm)	Overlap (mm)
100	25
150	25
200	25 to 28
250	25 to 28
300	25 to 28

* These overlap recommendations must be followed for proper installation.



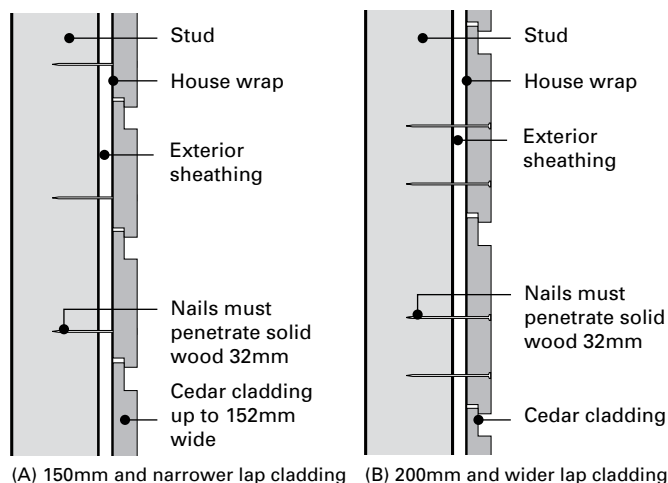
5. INSTALLING TONGUE AND GROOVE



Tongue and groove cladding can be installed horizontally or vertically. In horizontal application, start at the bottom and work up with the groove edges facing downwards. Cladding up to 150mm wide can be blind nailed with one cladding nail per bearing toe-nailed through the base of each tongue. Wider cladding should be face nailed using two nails per piece. Nails must penetrate 7mm into solid wood.

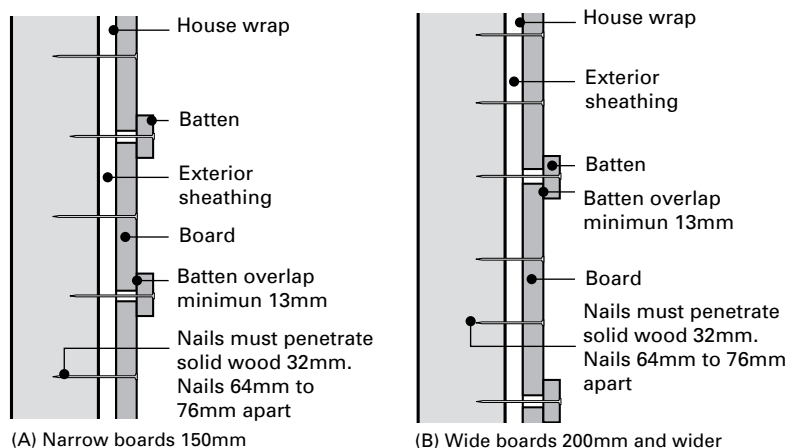
In vertical application, start at one corner with grooved edge toward the adjacent wall. Use a level or plumb line to ensure that the first board is installed plumb. The grooved edge of the first board may have to be trimmed to ensure a flush fit. Cladding is nailed to horizontal blocking lines installed between studs or to battens. As with horizontal installation, pieces up to 150mm can be blind nailed and wider pieces should be face nailed.

6. INSTALLING LAP CLADDINGS



Lap claddings can be installed horizontally or vertically. For horizontal applications, start with the bottom course and work up with the channels pointing upwards. Allow a 3mm expansion gap between pieces if the cladding is air or kiln-dried. Do not nail through overlaps. For cladding up to 150mm wide, use one nail 25mm up from the lap. Face nail with two nails per piece for 200mm patterns and wider, keeping nails 65mm to 75mm apart to allow for dimensional movement without splitting. For vertical applications, cladding should be nailed to horizontal blocking or battens.

7. INSTALLING BOARD-AND-BATTEN CLADDING



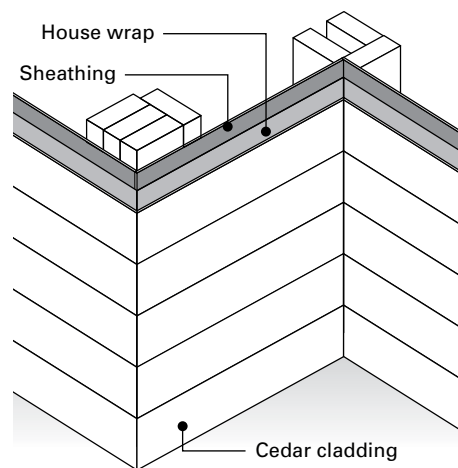
Board-and-Batten is a vertical pattern created using cedar boards and battens of various widths for a wide range of appearances. For nominal 150mm boards spaced 13mm apart, battens should overlap by a least 13mm. With wider boards, increase batten overlap proportionately. While there are no set widths for board and batten cladding, an attractive combination is 25mmx75mm battens with 25mmx250mm boards.

Cladding should be nailed to horizontal blocking lines or to battens. Boards up to 150mm wide should be fixed with one nail per bearing driven through the center of the board. The overlying batten covering the gap between boards should be attached with one nail per bearing, the shank passing between the edges of the under boards. Use two nails per bearing on boards 200mm and wider placing the nails 65mm to 75mm apart.

8. OUTSIDE AND INSIDE CORNERS

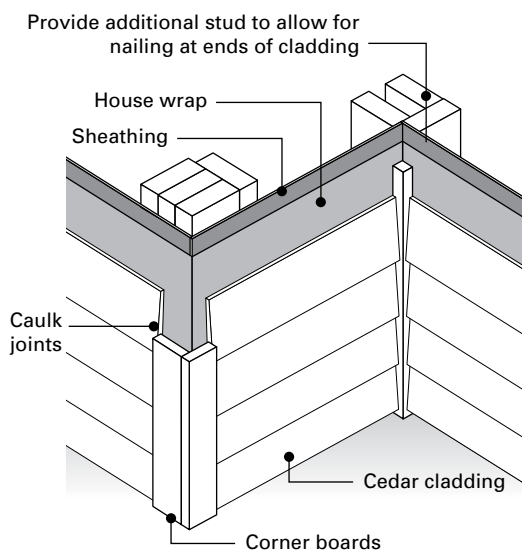
There are two main methods used for outside corners. The choice depends primarily on the desired appearance but also the experience and skill of the installer.

Mitered corners offer a professional looking finish. They are most commonly used with horizontally applied cladding applications such as bevel. Mitered corners require good carpentry skills. They must fit tightly for the full depth of the miter.

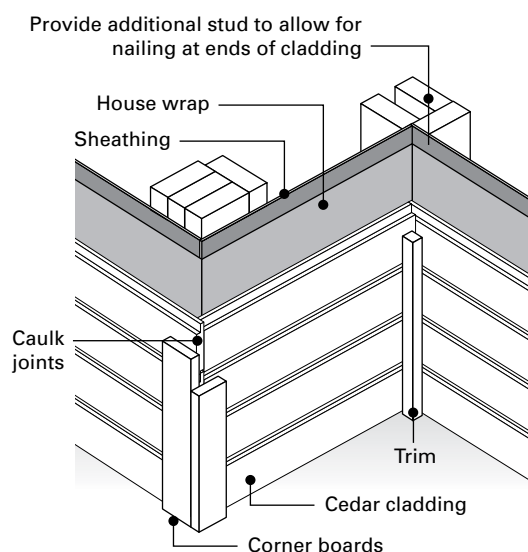


(A) Mitered Corners

Corner boards are a popular and easier alternative to mitered corners. Thickness of the corner board will depend on the thickness of the cladding. The most common are 19mm or 32mm thick. Width is a matter of taste and proper proportion. Corner boards are applied to the sheathing with cladding fitting tightly against the narrow edge of the boards, allowing for expansion and an adequate caulking bead. The corner boards and the ends of the cladding are nailed to the corner studs which anchors the wood for a maintenance-free joint. Designing roofs with an eaves overhang to protect corners from weathering also helps ensure trouble-free joints. Always apply primer or stain end cuts. With corner boards, there is the choice of applying them next to the cladding or over top of the cladding as shown here.



(B) Corners boards



(C) Trim boards

As in the above illustration, at inside corners, cladding is frequently butted against a 50mm trim strip. It can also be butted against adjoining walls with a trim strip used to cover the joint.

9. FIELD JOINTS

When butt jointing cladding, cut ends at 45 degree angles to form an overlapping joint. This is particularly important for vertical installation. Ensure joints meet on studs, blocking or battens with the nail penetrating solid wood at least 32mm.

SECTION III CLADDING INSTALLATION QUICK TIPS

All installers should learn and follow “best practices” in order to deliver a better job for their customer and reduce call backs.

DO:

- Follow local and national building codes.
- Follow WRCEA installation instructions.
- Purchase from WRCEA members, distributors and retailers.
- Use construction techniques to create easy drainage planes to shed water accumulations.
- Finish Western Red Cedar ASAP! Factory finish or apply coatings prior to installation if possible. Always touch up field cuts.
- ‘Acclimatize’ Western Red Cedar cladding before you install it.
- Use the correct fasteners: 304 or 316 grade stainless steel, aluminum, or hot-dipped galvanized (BS EN ISO 1461 “Hot dip galvanized coatings on iron and steel articles - specifications and test methods).
- Nail all Western Red Cedar cladding into 32mm of solid wood!
- Ensure butt joints are made over solid wood to provide secure nailing. Join two pieces of cladding with a mitered butt joint.
- Visit: www.WRCEA.org or call our UK office +44 (0) 1252 527102 for more information.

DO NOT:

- Allow Western Red Cedar to ‘Weather’ before applying a finish coating to the Cedar.
- Use Electroplated or mechanical galvanized fasteners that do not conform to BS EN ISO 1461 “Hot dip galvanized coatings on iron and steel articles - specifications and test methods.”
- Install Western Red Cedar cladding without acclimatizing.
- Fasten Western Red Cedar cladding only to the sheathing material.
- Nail through two layers of cladding.
- Fail to finish the end cuts during installation.
- Attempt to ‘blind nail’ bevel cladding/clapboards.
- Install or paint over wet cladding.
- Use caulking sealant as a substitute for flashing.
- Place cladding direct contact with concrete, masonry, top soil, mulch, patios, porches, and/or roofs.

WESTERN RED CEDAR EXPORT ASSOCIATION

The Western Red Cedar Export Association (www.WRCEA.org) represents a membership consisting of primary, secondary and tertiary cedar manufacturers. This broad coalition of companies based in British Columbia, Canada is committed to raising the awareness of and growing the demand for Western Red Cedar in offshore (non-North American) markets. The association operates as a sub group of the Western Red Cedar Lumber Association (WRCLA), known as the "Voice of the Cedar Industry". The WRCLA has been championing the benefits of Western Red Cedar products since 1954.

The companies that comprise the association membership collectively ship over 70 million board feet to offshore markets annually which represents over 70% of the total offshore shipments of Western Red Cedar. In addition to the core membership, the WRCEA has established an Associate Member program that is open to in-market companies who share the commitment of growing the demand for Canadian Western Red Cedar in their markets.

The WRCEA's projects provide technical and promotional resources specific to key markets in Europe, Asia and Oceania. The association works closely with customers and in-market associations in developing literature, advertising programs, web based resources and tradeshow initiatives. Materials and activities are designed to inform and educate architects, builders and consumers about the environmental benefits, unique physical properties and varied applications of this unique species.

For more information about Western Red Cedar or a list of companies in your market supplying WRCEA member product, please visit the Purchasing Cedar section of the WRCEA's website WWW.WRCEA.ORG or contact our office:

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This brochure has been produced with the generous support from the following organizations:



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07-500 (OCT/07)