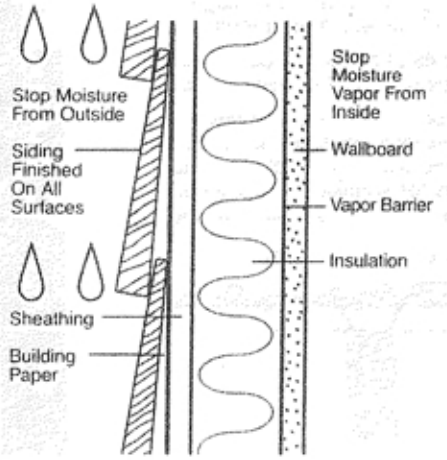
READ ME!

DIABLO TIMBER
"THE REDWOOD SPECIALISTS"

www.DiabloTimber.com

PREVENT MOISTURE PROBLEMS BEFORE YOU START



Most siding and trim "problems" and finish "problems" are caused by moisture. All woods shrink as they dry and swell when they absorb moisture. Problems such as checking, buckling, splitting and nail-popping are the result of this dimensional change. Redwood shrinks less than other woods, so it is less likely to have moisture-related problems; as with any wood, some dimensional changes can be expected.

After installation, Certified Kiln-Dried sidings will shrink less than air-dried or seasoned sidings.

The good news is that most moisture-related problems are preventable through proper construction techniques. By anticipating some shrinkage and swelling, builders can reduce splitting and buckling. By limiting moisture s access to siding, builders can minimize the amount of shrinking and swelling that will take place.

Proper wall construction includes a vapor barrier, with a rating of 1 perm, on the warm side of the wall to prevent interior moisture access to the wall cavity. Water-resistant building paper with a rating of at least 5 perms should be applied over sheathing to prevent exterior moisture from entering the wall. For sheathing, use plywood, waferboard or OSB.

Finish or primer should be applied to all faces, ends and edges of siding after it has reached a balance with the moisture in the air and before it is nailed in place. Factory priming or prefinishing is highly recommended.

STORE IT RIGHT

Until wood siding is nailed in place, it needs protection from sun, moisture, dirt and any other elements which might discolor or disfigure the wood. If wood is exposed to excessive moisture, it will swell. If it is exposed to excessive sun or heat, it may shrink unevenly, causing cupping, checking or splitting. For best results, let wood sidings reach an equilibrium with moisture in the atmosphere by storing them for at least fifteen days at the job site in a well-ventilated shelter. This will significantly improve product performance.

DO

Do store siding in a garage or shed with adequate air circulation for best protection from the elements.

Do keep siding dry. If it can t be kept under a roof, protect it with a waterproof cover. Make sure the cover is secure, but loose enough to permit air circulation.

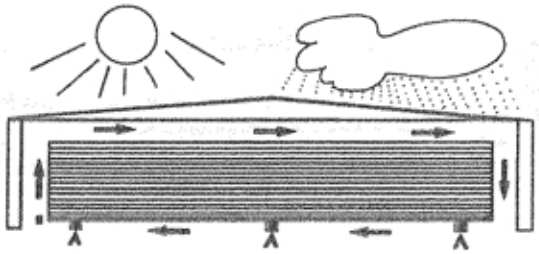
Do store siding off ground and protected from dirt, moisture, direct sunlight and extreme heat.

DO NOT

Do not keep siding wrapped tightly in plastic covers. Loosen wrappers at job site to permit air circulation.

Do not leave siding in the sun or covered with dark plastic. The dark cover will attract heat and cause excessive drying.

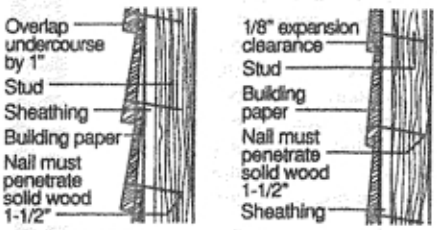
Do not let siding get wet or dirty. When storing lumber on the ground, place a plastic cover over soil to minimize moisture absorption from the earth.



STORE IT RIGHT

RECOMMENDED NAILING METHODS

HORIZONTAL SIDING (side view)



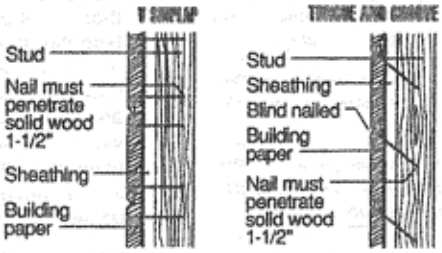
Face nail with one nail per bearing. Drive nail so shank clears the top of the preceding course.

Face nail with one nail per bearing. Drive nail about one inch above lower edge of course.

BE[illegible] DRIVING NAIL HOME [illegible] TOO HEAVY A FINAL BLOW. WOOD MAY SPLIT OR CUP DUE TO NON-SUPPORT IN CAVITY.

ALLOW ⅛-INCH EXPANSION GAP AT RABBET.

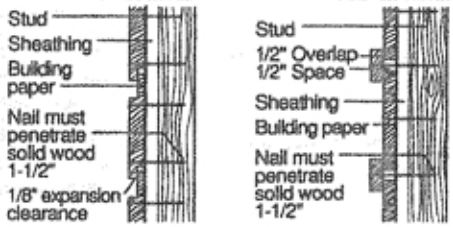
HORIZONTAL OR VERTICAL SIDING (side view)



Face nail with two siding nails per bearing for patterns wider than 6 inches. Position nails one-quarter the width of the material in from each edge. For narrower courses, one nail per bearing is enough—with the nailing point one inch from the overlapping edge.

Blind-nail 4- and 6-inch widths through the tongue. Use one nail per bearing. For wider patterns, face nail with two nails per bearing, as in V Shiplap, at left.

VERTICAL SIDING (overhead view)



Use one nail, an inch from the lap, for 6-inch channel shiplap. Face nail with two nails per bearing for patterns 8 inches and wider. Space nails 1½ inches from the edge of the overlap and 2 inches from the edge of the underlap. Nail other widths proportionately. Position material to allow expansion clearance of ⅛ inch. Boards should be nailed to horizontal blocking installed between studs at no more than 24 inches on center.

Space underboards about ½ inch apart and nail with one nail per bearing driven through the center of material. Boards wider than 8 inches use two face nails evenly spaced. Nail batten strips with one nail per bearing, driven through the center. Boards should be nailed to horizontal blocking installed between studs at no more than 24 inches on center.

DO

Do use noncorrosive nails to avoid nail stains...aluminum alloy, stainless steel or top quality, hot-dipped galvanized.

Do use ringed-shank wood siding nails.

Do use properly sized nails. Shank should penetrate 1½ inches into framing members or a combination of framing members and solid wood sheathing. If sheathing is not solid wood, use longer nails for 1½ inch penetration into solid wood framing.

Do pre-drill nail holes to prevent splitting when nailing mitered corners or near board ends.

Do use water-resistant building paper with a rating of at least 5 perms.

Do use a wood-based sheathing.

Do remember that saw-textured surfaces perform better and hold finishes longer.

DO NOT

Do not use common steel, electroplated or poor quality galvanized nails. These will cause stains.

Do not use casing, finishing or other small-head nails, except for blind nailing tongue and groove, because they will not hold lumber in place.

Do not staple redwood lumber. Most staples stain and do not have enough holding power.

Do not nail through tip of undercourse on lapped siding. This causes splitting.

Do not nail to sheathing only. This will not hold lumber in place.

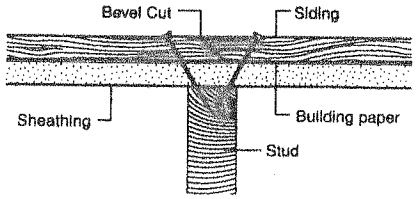
Caution! There have been reports of moisture-related problems with the use of rigid foam sheathing. Check with CRA or manufacturer regarding the application of CKD siding over rigid foam sheathing.

AVOID GAPS

Redwood exhibits very little end shrinkage. Unseasoned redwood from green to an over-dry state has a longitudinal shrinkage of about 0.1 to 0.2 percent. A twenty-foot board exhibiting 0.2 percent shrinkage would shrink a little less than ½ inch.

Using bevel cuts at butt joints can minimize the appearance of gaps if shrinkage occurs.

Another method is to cut the last piece in each course 1/16 inch overlong, requiring it to be snapped into place for a tight fit. This practice allows for shrinkage but will not accommodate moisture-induced swelling.



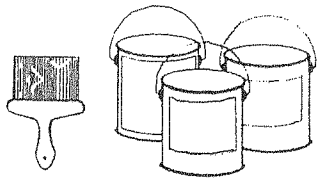
EXTERIOR FINISHES

Clear Water Repellents with mildewcide protect the wood from absorbing moisture which can cause excessive shrinking and swelling. Water repellents will slow the color change in wood, but they will not completely stop color change due to ultraviolet rays of the sun. Water repellents usually need to be reapplied every year or two.

Semitransparent Stains permit the wood grain to show through. Use oil-based stains containing water repellents and mildewcides—some stains do not provide this protection. Even lightly pigmented stains provide protection from the sun which increases finish longevity. Semitransparent stains usually last three to five years.

DO	BECAUSE
Do use only top quality finishes and follow manufacturer s instructions.	Because low quality finishes will result in poor performance.
Do use oil-based exterior stains with Certified Kiln-Dried sidings.	Because oil-based stain finishes have shown the best performance and maintenance records on redwood sidings.
Do use a brush to apply finishes.	Because other methods of application may not provide adequate coverage.
Do use finishes that contain a water repellent.	Because water repellents help prevent excessive shrinking and swelling.
Do backprime.	Because it helps minimize bleeding and cupping.
Do use finishes that contain mildewcides.	Because mildewcides inhibit the growth of unsightly mildew.
Do use bleaching or weathering stains for an immediate weathered look.	Because these finishes offer protection while providing a weathered appearance.
Do use clear water repellent finishes for a more natural appearance.	But keep in mind that clear water repellents permit color changes caused by sun, weather and aging and seldom last more than two years.

DO NOT	BECAUSE
Do not apply exterior finishes by spraying.	Because spraying may not provide adequate coverage or work the finish into the wood fibers as well as brushing.
Do not use "shake and shingle" type paints or stains.	Because "shake and shingle" finishes have a very limited lifespan on redwood lumber siding.
Do not use varnishes or lacquers on exterior surfaces.	Because clear film-forming finishes will discolor, crack and peel with exposure to ultraviolet rays of the sun.



Bleaching and Weathering Stains are used for a naturally-weathered appearance while providing protection for the siding. The pigment in bleaches will stain the wood gray while the bleach works with the sun and moisture to achieve a pleasing weathered appearance. The protective performance of these finishes usually lasts three to five years.

EXTERIOR FINISHES

Solid-color Stains contain more pigment than semitransparent stains and therefore hide the grain and texture of the wood more than semitransparent stains. Use oil-based stains containing water repellents and mildewcide—some stains do not provide this protection. If acrylic stains are used, they should be applied over a compatible stain-blocking primer. Solid-color stains usually last between three and five years.

Paints provide the greatest degree of protection to Certified Kiln-Dried siding. The paint system should consist of one prime coat of a quality oil- or alkyd-based stain-blocking primer and two top coats of an acrylic latex. For additional protection, apply a paintable water repellent prior to priming. Back priming is strongly recommended. Paints usually last between five and seven years.