

Proper storage and handling of redwood dimensional lumber and timbers at home improvement retailers, lumber yards, and job sites is important to maintain the appearance, quality, and sale ability of the wood. Important considerations include:

- Managing changes in wood moisture content to minimize degradation through shrinkage or expansion
- Mitigating warping and cupping
- Minimizing material loss from splitting, checking, and decay
- Avoiding weather-related issues such as discoloration and staining

Redwood timbers (6-inch and larger dimensions) are remarkably durable and dimensionally stable, but may be subject to some of the above problems if not handled or stored properly.

By following the guidelines presented here, those handling and storing redwood timbers will ensure the wood remains in good condition.

Shipment & Storage

Redwood timbers are almost always shipped green (unseasoned). To protect them during shipment from the mill to the distribution center and on to the retailer, they are typically covered with lumber wrap or tarp. At the retailer, redwood timbers are typically unwrapped, unbanded, and placed in lumber racks, which may or may not be protected from the elements.

Redwood timbers should ideally be stored in a covered rack or inside a climate-controlled warehouse. If they are expected to be in inventory for a number of weeks or months, separate them with stickers arranged vertically over the support blocks. This allows for air circulation and continues the natural seasoning process.

In addition, an end seal product, such as Anchorseal, can be used to prevent or minimize end checks and splits which may develop during the seasoning process. Checking, which can be particularly problematic in redwood timbers with heart centers, can result in significant material loss.

Jobsite Delivery & Protection

In a retail setting, redwood timbers should be handled with care. Forklift damage should be avoided. Retail and jobsite personnel should be aware that these are high-value, appearance products requiring special care. At the jobsite, care should be taken to not roll redwood timbers off the back of delivery trucks "dumping" them on the ground. This may cause damage.

At the jobsite, redwood timbers should be stored in a protected, undercover area if possible. If they cannot be protected undercover, they should be covered by a loosely fitting lumber wrap or tarp. Redwood timbers



should be stored on a level surface and supported with blocking well off the ground to provide uniform and adequate support. They should not be placed directly on the ground, especially if there is the possibility of coming into direct contact with mud or water. If a paved surface is not available, the ground should be covered with polyethylene film.

Discoloration & Restoration

During extended and exposed storage, redwood timbers may darken or blacken. Although often treated at the mill with an anti-stain product, this treatment may only last for a few months. If darkening occurs, redwood can be restored using an oxalic acid based wood brightener. Redwood timbers may also be sanded, resurfaced, or resawn to restore a fresh, bright appearance.

Redwood timbers contain water-soluble extractives (tannins) which can stain concrete and other masonry. In the event or possibility of rain, it is advised to cover masonry with a tarp or polyethylene film before laying down the timbers. If stains do occur on the masonry, they can be removed using a specialty cleaning product manufactured by PROSOCO.

Black iron stains may occur where metal objects come into contact with wet redwood timbers. To avoid this, only corrosion resistant fasteners such as hot-dipped galvanized or stainless steel should be used. Lower quality hardware and fasteners should not be used. Black iron stains can be removed with an oxalic acid based wood brightener (as previously mentioned), however staining will continue to occur unless the source of the iron is removed.



Finishing

Redwood timbers can be finished with a wide variety of products from clear water repellents to a variety of stains and paints. Since redwood timbers are typically unseasoned, applying breathable natural finishes such as transparent and semitransparent stains is advisable. These can be applied to a clean, dry surface within weeks.

If an opaque coating is desired, it may be necessary to wait several months for the redwood timbers to thoroughly season. Moisture content should be 15% or lower before application. Use a stain-blocking acrylic primer prior to applying the top coat.

Refer to the **Humboldt Sawmill Finishing Guide** for further information on how to protect and maintain exterior redwood structures.

