

This information is critical for both home builders and home owners.

## Oxidation Care & Maintenance

### What should I do to take care of my hinges and keep them looking good?

Any steel-based hardware, such as finished, plated hinges, will oxidize and rust over time, especially if the hinges are exposed to elements, including air and moisture. This will also happen if they don't get regular, proper maintenance. So what can you do to prevent rust on your hinges?

- If you can, choose stainless steel finishes for exterior hinge application.
- Prevent scratching them; water can collect and pool in the scratches, leading to rust.
- Keep your hinges clean and dry. In addition to water, harsh chemicals, acids and salt can also speed up the corrosion process.

### Why is addressing rust on hardware so important?

Proper maintenance makes all the difference. First, when you have Penrod's standard steel-based finished, plated hinges and hardware, you have products that meet or exceed the industry minimum standard. Penrod takes pride in meeting a higher-than-minimum standard to provide the highest quality finished product.

Second, oxidation (rust) is eventually going to occur over time on all steel-based plated products. The process will be accelerated if hinges are exposed to the following conditions:

- Excessively humid or wet environments
- Building designs that do not wick and/or capture moisture
- Cleaners or chemicals applied directly to, wiped on, or sprayed on the hardware that delaminate the finish, removing the top, more protective layer
- Paint drippings, splatter, or overspray
- General misuse

Again, stainless steel is not completely immune from rust, so it's important to keep detergents, abrasives and acids away from stainless steel-based hardware, and cleaning only with a warm-water and mild-soap solution.

[HardwareByPenrod.com](http://HardwareByPenrod.com)

272 Bendix Road, Suite 550  
Virginia Beach, VA 23452

**PH** (757) 498-0186

**FX** (757) 498-1075

### Why is proper handling of the hardware so important?

Proper, careful handling of your hardware is always important so it maintains a beautiful, protective finish. It's important for higher-end products, and it's especially important for commodity products. Proper handling and care (from the builders to the installers to the homeowners) is always important to keep your hinges and hardware products free of defects.

### How should I approach painting doors and trim onsite?

If you'll be painting doors and trim after hardware has been installed, we recommend you remove all your door hardware for the best outcome. Any hardware not removed should be well covered and/or taped using a recommended low-adherence painter's tape such as Scotch™ Blue or a lighter grade tape.

It's important to keep paint from getting on your hinges; the chemicals in paint can damage the finishes on your hinges.

### What is the best way to tape a hinge before painting a door?

If taping a hinge, it is important to follow these steps to prevent damage and ensure longevity:

Select a low-adhering tape such as Scotch™ Blue or a lighter-grade tape. Heavier-grade tapes (such as general masking tape) are not recommended and will damage finish plating.

- Tape thoroughly, covering all areas. Paint ingredients will cause damage when wiped or sprayed on the surface.
- Remove tape immediately after painting.
- Do not clean the hinge with solvents or foreign substances including, but not limited to, thinner, lacquer remover or alcohol.
- To properly clean the hinge, use a mild-soap and warm-water solution, then immediately dry it with a clean rag.

### I want to paint the door hinges onsite. Is that possible?

Some door hinges can be painted, although it is not recommended. Why? Hinges are moving parts and paint will simply not adhere to these areas, so their appearance over time will likely not be very attractive. Painting can also change the functionality of a hinge, which can lead to improper opening and closing of the door.

In cases where painting is still desired, take note that US2D Zinc Dichromate and LUS15 Dull Nickel are the two hinge finishes recommended for the best paint adhesion. Also, a high-quality latex paint such as Sherwin Williams Pro Max 200 or higher is recommended. To paint we recommend the following steps:

- Wipe the surface using only water or a mild-soap solution and dry immediately.
- Do not scuff, sand or prep the surface with any agents such as thinner, lacquer remover, or alcohol.
- Use paint at 100% strength; do not thin it.
- Two coats are recommended, allowing two hours between coats.
- Allow the paint to cure for twenty-four hours before hanging or operating the hinge.

### What is the stainless steel grading on Penrod products?

All of Penrod's stainless steel products are a 304 grade. This is to provide the highest quality and most resistance to oxidation and moisture (rust). 304 grade hinges are not recommended in marine environments, which is regular exposure or direct physical contact with salt water. For marine environments, we recommend a 316 grade hinge.

## Your Limited Warranty

### What is your warranty on hinges and hardware?

The Penrod Company warrants its products against manufacturing defects under normal use for a period of one year after delivery. This warranty does not cover defects or damage due to improper use or handling of material, ordinary wear and tear, or any misuse. The liability shall be limited to replacement or repair of any product supplied by Penrod. Penrod will accept no claims unless given proper written notice and an opportunity to examine the claimed material and installation.

Warranty will automatically be considered void for hinges and hardware subjected to any foreign substances or cleaning agents other than a mild-soap and warm-water solution. This solution must be wiped off the hinges with a clean, dry rag immediately following use.

If you have more questions regarding Penrod's Limited Warranty or questions regarding further care of hinges and hardware, please contact your local Penrod Sales Representative.

[HardwareByPenrod.com](http://HardwareByPenrod.com)

272 Bendix Road, Suite 550  
Virginia Beach, VA 23452

**PH** (757) 498-0186

**FX** (757) 498-1075