

# NAKAMOTO FORESTRY

Please read this before using our products

## Finish Information and Surface Maintenance

Traditionally in Japan Suyaki- and Gendai-type yakisugi have generally been installed unfinished and left that way for the lifetime of the structure. Cryptomeria ("sugi" or Japanese cypress) is a highly rot-resistant wood species, and color change from weathering are expected and accepted. Generally only higher-grade residences or public properties applied finishes and were maintained. Today most yakisugi (the statistic is 80%) is prefinished due to availability and acceptance of finishes and desire to maintain color consistency for as long as possible. We generally recommend finishing and regular re-finishing of all of our products when installed outdoors to slow down the weathering process, and when installed indoors for cleanliness. Note the typical weathering due to lack of finish or finish maintenance in photos on the historical gallery on our website's "What is Yakisugi" page. This is due to the lack of a repainting culture in Japan. Organic weathering is beautiful, but most North American owners prioritize color longevity.

Weathering depends on finish spec, pigment content, and method of finish application, the nature of each individual plank, local exposure to weather, and maintenance. Sun-exposed surfaces will gradually turn burnt orange as the soot erodes over decades, and moisture-exposed surfaces will gradually turn silver. However, finishing with a UV-resistant penetrating finish and regular refinishing per manufacturer instructions will slow down the aging process and allow the siding to retain the specified color. This will also allow the maximum lifetime possible by preventing dimensional movement, checking, and UV damage. Basically yakisugi is similar to any other wood siding in terms of finishes and maintenance. The differences are that thermally treated wood will silver out more quickly and will rot much less quickly than untreated wood.

After initial installation and within several years depending on conditions, minute hairline cracks will open on the surface of exterior planks. Refinishing as soon as color begins to change will fill in these cracks and make a longer-wearing surface. Each maintenance coat of finish will generally last longer than previous coats did due to oil build up.

Please consult with us for specific project requirements and our recommendation to match.

### On Finishes...

- For maximum longevity on exteriors, finish end cuts, drilled holes, or notches during installation. Some people think that back-oiling wood will increase longevity too, but there are mixed opinions on this.
- There is no reason to back-finish wood for interior applications except to prevent soot getting on the installers and their tools. All outer face prefinishes will bond the soot to the surface and prevent it from coming off after install, so there is really no reason for the extra expense of back-finishing. Touching up cuts, holes, and notches is a good idea on interiors also since it will bond any soot released from the cut cross section.
- Use a penetrating UV-resistant plant-derived finish for exterior.
- Natural unmodified plant-derived penetrating oils will show the deepest grain but will need more regular maintenance than hybrids.
- For maximum longevity on exteriors we recommend alkyd-based hybrids with an unmodified oil component. Alkyds are plant-derived oils (safflower, linseed, soy, etc) that have been chemically modified into a polymer. They offer maximum protection and erode over time instead of spalling off like petroleum-derived polymers.
- Petroleum-derived polymers (such as polyurethanes) will help retain specified color longer without recoating than a straight oil finish after install and will harden the Suyaki surface to high traffic. But when subjected to UV exposure on exterior applications they WILL separate from the wood, turn milky, and spall off in time. It doesn't matter what the finish manufacturer's warranty is, it will fail before the wood does. Nakamoto Forestry North America will not specify a petroleum polymer for exterior application. Yakisugi should not be sanded to remove and recoat, therefore plant-derived oils must be used to match the longevity of the wood. Beware of recommendations for polymer finishes on exterior

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surfaces no matter how good the product is claimed to be. It will turn a 100-year product into a 15-year product. For interior applications polyurethanes are great and make a beautiful, long-wearing surface.

- Use an exterior grade product for exterior applications. Hemi-cellulose and oils in the thermally treated wood have been neutralized, and introduced natural oils should contain fungicides and mildewcides for protection from microorganism growth in the introduced oil component.
- On exteriors, using tinted finishes that have a high pigment content will result in the specified color lasting longer due to more UV protection. Wiping the wood down after oiling with a dry rag will expose grain patterns for more contrast, but will lower UV protection. We generally recommend wiping down with a dry rag for interiors and a wet rag or brush for exteriors.
- It is important to follow finish manufacturer's instructions and to test.

## Maintenance Guidelines

- Cypress has premium longevity over other species due to a high tannin content. Tannin may leach from the cypress within the first year or so and stain lighter colored surfaces below. These stains will generally wash away with rain exposure within the second year after installation. This is normal. See the photos on our FAQ page. If any tannin stains appear on the wood or lower surfaces, they can be washed off with a mild oxalic acid product.
- Apply a maintenance coat of finish when the wood begins to change color. Generally the first maintenance coat will be within 1~10 years for straight natural oils, then additional maintenance coats will be needed further and further apart due to oil build-up. Hybrids normally last longer before maintenance is needed, and a general rule of thumb is 10~15 years.
- Before application of a maintenance coat, clean and prepare the surface as specified by the finish manufacturer. Wash with a soft brush or cloth, never with a stiff brush or power washer.
- A very weak TSP or soap solution, commercial no-wash neutral pH cleaner, or simply clean water, can be applied with a cloth and residue removed to clean off soil, dirt, dust, etc.
- Use the same finish product for maintenance coats, or a maintenance product recommended by the same manufacturer of the original finish.
- Always clean and refinish a hidden test area before attempting the entire wall surface
- Touch up of damage, such as scratches or dings, or local uneven weathering, can be done easily with the specified finish maintenance product. Suyaki or Gendai damage can be touched up with a black or dark brown stain, or the original prefinish. A small nick can be carefully dabbed with stain, bleaching can be lightly blended with stain and a rag, or for interior even a magic marker can be used for quick cosmetic touch-up.
- Scratches to our Suyaki with an interior urethane finish can be touched up with a polyurethane solution, but make sure you match water-based or oil-based according to your project spec.

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