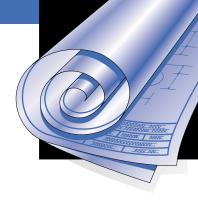
E C H N I C A L N O T E

# FINISHING EXPOSURE 1 OSB SHEATHING



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#### Introduction

Oriented Strand Board (OSB) sheathing may be used in interior applications for decorative purposes. It is often desirable to finish these panels to enhance their appearance and protect them from normal wear and tear.

OSB sheathing panels rated as Exposure 1 are designed for applications where long construction delays may occur or where high moisture conditions may be encountered during their service life. Although they are not intended for permanent direct exposure to weather, they may be used for certain applications such as open soffits where they are only exposed on the underside. OSB sheathing used in this type of application should be finished to enhance its appearance and to provide protection from surface degradation due to moisture.

Exposure 1 OSB sheathing may also be used as a substrate for stucco coatings when the panels are applied in accordance with APA recommendations and the coating in accordance with the specifications of the coating manufacturer. However, high performance elastomeric coatings should only be applied to Exterior panels.

### Finishing – Interior Applications

The choice of interior finishes for OSB sheathing panels in dry use areas is generally dependent on the desired aesthetic effect and whether wax is present on the panel's surfaces. Some manufacturers incorporate wax into the panel's surfaces to improve resistance to moisture penetration. The quantity of wax varies from one manufacturer to another. If the panel surface is waxy, it can affect finish performance. Some of the more popular interior finishes, along with considerations relative to surface wax, are described below.

Clear Finishes. Clear finishes can be used on OSB sheathing for indoor applications to show off the natural wood color and highlight textures. Two coats of a clear penetrating sealer provide the most natural appearance. These types of finishes help protect the wood from soiling and improve moisture resistance. If a clear film-forming finish such as lacquer or varnish is used, many finish manufacturers recommend that a sealer be applied prior to topcoating. Be sure to try the finish on a representative sample of the panel before proceeding with the entire job.

Semitransparent Stains. Semitransparent stains impart color to the wood surface while allowing the wood grain and panel texture to show through. Oil-based stains are generally the most effective in achiev-

ing this look. However, absorption of oil-based semitransparent stains can be inhibited by wax, resulting in a washed-out appearance. If wax is present on the surface, a water-thinned semitransparent stain may be preferable. If in doubt, consult your distributor or try the finish on a representative sample to determine what the final appearance will be.

Solid-Color Stains and Paints. These finishes are opaque and provide a uniform color to the panel, but still allow the surface texture to show. Water-thinned solid-color stains are preferred over oil-based formulations, since solvents in oil-based solid-color stains can dissolve wax and result in bleed-through and a mottled discoloration. Best results will be achieved by application of a stain-blocking primer compatible with the topcoat.

Paints are available in a full range of gloss levels, including flat, semi-gloss and gloss. The gloss paints are generally the easiest to clean but should not be used in areas of high humidity.

# **Expected Results and Performance**

OSB sheathing panels can be expected to maintain their integrity and appearance when finished according to the above procedures and used in interior applications where they are not exposed to drastic changes in moisture or to physical abuse. As with any product, the service

requirements and expected appearance should be considered when selecting the appropriate finish. Always consult the finish manufacturer's recommendations. Try the finish on a representative sample before proceeding with the entire job.

High humidity areas such as kitchens or bathrooms can affect finish performance in a manner similar to outdoor exposure. OSB sheathing panels used in these types of areas should be edge protected with a sealer compatible with the finish applied to the panel surface. Only acrylic latex paint systems should be used in high humidity areas. Because this type of finish tends to block (stick to itself), finished OSB sheathing should not be used in cabinetry or shelving if high humidity is expected.

# Finishing – Soffit Applications

Exposure 1 OSB panels used for open soffits should be finished only with a top-quality acrylic latex house paint system composed of an acrylic latex stain-blocking primer and a compatible all-acrylic latex topcoat. All panel edges should be protected with at least one coat of the primer to be used on the panel surface. This is usually accomplished most easily while the panels

are in a stack. Any panel edges which are subsequently cut should also be so protected.

## **Expected Results and Performance**

Swelling of panel edges and uneven swelling of individual wood particles or chips may be expected on OSB sheathing panels exposed to high moisture conditions. This can cause a rough, uneven surface that may detract from the appearance of smooth panels. Some cracking of the finish and lifting of wood chips may also occur.

#### **Summary**

OSB sheathing panels may be used for most interior applications. Selection of finish is primarily dependent upon the desired appearance. Surface wax on some panels can interfere with application and appearance of some finishes. Try the finish on a representative sample prior to proceeding with the entire job. OSB sheathing rated as Exposure 1 can be used in outdoor applications where exposure is on the underside, such as open soffits. In this type of application, panels should only be finished with a top-quality acrylic latex house paint system consisting of an acrylic latex stainblocking primer and at least one allacrylic latex topcoat.

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