Wood Siding and Paneling Installation

These tips are meant to ensure a successful installation of your wood siding so that it will look great and be long-lasting.

SIDING SELECTION

Siding performance varies by grade, thickness, width, pattern and texture.

Premium grades (sometimes called "clear" or "select") generally have little to no knots, pitch streaks, etc. Products with these characteristics are generally categorized as knotty products (sometimes called STK or "common"). It is important to keep in mind that there are no uniform standards for marketing terms such as Select, STK, NPS, etc. and these products can vary in quality from one source to another.

"Select" generally refers to boards that have been picked as "better" than average. In the industry, this is an attempt to get a better product "out of grade" – getting a better board from those already graded somewhat lower.

"STK" – select tight knot refers to boards whose knots will remain solid and tight in the wood.

"NPS" – "No Previous Selection" means no boards have been pulled from the mill's production of lower or better quality.

Although all siding products are considered "non structural", all siding products have been milled from lumber that has been graded by one of the industry recognized grading agencies. It is after milling that siding products are generally categorized as either premium (clear) or knotty (STK). Such marketing terms aren't the official "grades" of the material but they do describe the basic characteristics one can expect from their siding.

Customers commonly use some less expensive lower grade of wood because they are going to be "just" painting the wood. Knots will show through (or telegraph through) some paints and indications of knots are apparent in most painted applications. This same effect will occur on pitch pockets and other defects found on lower priced and grade wood products.

Two good alternatives include using fingerjoint items or manmade trim pieces. The finger joint is a seamless wood connection made by cutting a set of matching rectangular cuts into the end of two pieces of wood, which are then glued. The finger joint is commonly used to form long pieces of lumber from shorter solid boards. Some customer resist going to these categories of products based on stories they've heard. We don't see these products and we believe the better end result more than offsets the occasional issue. Remember, a solid piece of wood can fail – it can warp, crack, cup or twist.

The finger joining process has evolved as have the polymers that go into glue formulas. In addition, the techniques used have improved over the years. This wood product is specifically designed to be primed and painted to look great and perform for years.

In the wood siding business you can't afford to quote options that will not work long term for customers. Our customers need to be as happy 20 years from now as when they purchase the wood. Consider your siding as an investment – one that will look good and last many years.

$4 or more a square foot is not what you want to hear - however the cost of doing things right is measured in perspective. It costs many times as much to fix something done incorrectly than to do it right in the first place. 100% of the people who have done it right feel it was worth it in the end.

THICKNESS–Thicker siding may be more expensive but it is also more stable against interior drying conditions, especially cupping and splitting. Also pattern relief (depth of pattern detail) is more apparent and perhaps more attractive.

WIDTH–Wood's natural reaction to changes in moisture is directly proportional to size. Although wider sizes install faster with fewer fasteners and are often preferred for appearance, they are more prone to drying; caused movement such as shrinkage and cupping.

TEXTURE–Planed or smooth surfaces have a more formal appearance and are most commonly used for interior paneling. Rougher, more textured surfaces are often used for a more rustic appearance.

PATTERN–Pattern selection is generally governed by cosmetic appearance factors and personal desires.

WOOD MOISTURE AND MOVEMENT

- All of our milled products are dried to a moisture content of 19% or less.

  ***Note**: Wood shrinks and swells with environmental changes, therefore some preconditioning of wood siding is necessary for best installation results.*

- When installed in a heated room without being preconditioned, siding should be expected to shrink.
- Knotty grades have higher moisture content than select grades.

  ***Note**: a 4% moisture change in a board will cause a width dimension change of .5% to 1%, which may seem minor. But a 1% change across a 60 foot wall is 6 inches–a huge difference.*

- Shrinkage can be minimized by conditioning the siding prior to installation. A) Stack all siding in the room in which it is to be installed with separation (using separator sticks) between each layer for a week to 10 days prior to

installation. *Plan your timeline accordingly!* B) Separators must be lined up one above the other with weight placed on the top layer of boards to minimize cupping.

FINISHING

Normally, one would regard finishing as the last step in installation. However, experience shows that prefinishing wood siding prevents drying-related gaps and creates a cleaner, more attractive installation, especially on exterior applications. This provides a good, uniform, 6-sided and cost-effective finish to the material. Prefinishing can minimize unsightly lines where joints separate due to shrinkage exposing the cut (unfinished ends).

There are three finishing families in dealing with cedar: natural weathering, opaque finish (i.e., paint), and natural finishes (stain). A solid color stain should be considered a paint of sorts. Staining allows the natural beauty, grain and color of the wood to shine through by penetrating the fiber. However, it provides less color, less protection and a shorter service life. A solid color paint provides better protection and more color. If painting, a good primer is a must.

The BEST way to finish your cedar product is pre-staining. Before any version of finishing, all woods should be left to acclimate on the jobsite under protected conditions. This allows excess moisture to leave the wood, the grain to open up for better absorption and allows extractives to get washed away.

Always use a good quality finish – protect your investment in both appearance and longevity. Always follow application instructions carefully.

For maximum protection, always fully prefinish each board, especially when used in for exterior applications OR kitchens, bathrooms, basements or other high moisture areas. For a successful installation, prefinish or prime the front back and edges of each panel (6-sides).

FASTENING

Fastening, or nailing, must secure the siding to the structure while not restraining any further drying-related size changes. A balance can be achieved by following these rules:

- DO NOT secure adjacent panels to each other.
- DO NOT place fasteners so far apart in wide areas as to cause splitting action.
- DO use an adequate number of fasteners.
- DO nail into framing whenever possible. Nail sizes recommended here apply only to nailing directly to framing lumber.
- Fasteners should penetrate 1-1/4” into solid wood – not sheathing (OSB or plywood). Always use stainless steel fasteners for best results, blunt point, thin shank.
- Nailing pattern must be met – visible nails aren’t pretty but the nailing pattern provides for solid installation and allows the wood to shrink/expand. Face nails on tongue & groove (T&G) also aren’t pretty, however, they will provide the most secure installation.
- DO NOT use any clear caulk or any caulk which is 100% silicone on cedar siding.
- Any cut must be painted/stained at the end grain. We suggest joints be cut at a 45 degree (scarf joint) so any shrinkage isn’t as noticeable. All joints must end at a stud and be fastened.
- Tyvek housewrap should be on top of ALL flashing, step flashings, window trim, trim, etc. This way the housewrap can shed water onto the flashing, not behind it.

Fastener Type

Fasteners are an important aspect of appearance. Always use fasteners with a length, thickness and head size in proportion with the application. Local usage experience and practice is often the best guide to success; the recommendations made here are intended as guidelines.

For appearance the most commonly used fastener is small-headed or finishing nail driven with a hammer. For siding in high humidity areas like bathrooms, non-corrosive nails should be used. We urge you to use some variety of spiral or ring shank nail on exterior applications.

Remember that virtually any fasteners will eventually stain the wood over time except for stainless steel.

Penetration

- Nails should be sized to penetrate solid wood about 1 1/2 times the thickness of the siding. Fasteners should penetrate 1-1/4” into solid wood.

Spacing

- While it is often desirable to “blind” nail siding, there are instances where wide widths require face nailing.
- Use at least one nail per framing crossing (i.e., every 16 or 24” on centers) for 4” and 6” nominal widths.
- Apply double nails so they are spaced about equally from each other and from nails on adjacent boards.
- Nails should be applied into framing at all ends and at intervals never exceeding 4’ along the board length.
- Nailing at 16” or 24” intervals is typical and may be required, depending on lumber width.
- Insufficient nailing permits excessive wood movement leading to unsightly distortion such as cupping and splitting.

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