



Storage, Handling, & Installation Guidelines

READ THIS FIRST!

- **Keep product absolutely dry until and during installation – do not install if precipitating.**
- **Square off factory ends and butt adjacent siding boards tightly – no need to prime or seal the ends. Do NOT use adhesive or caulk at butt joints.**
- **To conceal fasteners that are placed into the face, use the “Painter’s Tape” technique of securing boards, filling nail holes, and concealing nail holes.**
- **Use Elmer’s ProBond filler to fill fastener holes and 60 grit sanding block (by hand) in the direction of the grain (staying on the painter’s tape) to conceal filler in products that have the standard, subtle, smooth, vertical grain texture.**

Please take the time to read the instructions fully and contact us at (888) 388-7852 or Info@DURATIONMillwork.com with any questions of concerns.

The following information offers typical installation techniques when working with DURATION® Trim & Siding. These products should never be used in structural or load bearing applications. These directions are guidelines only. As with installing any building material, care should be taken to adhere to local code requirements and construction best practices to ensure installation is sufficient for each specific application.

STORAGE

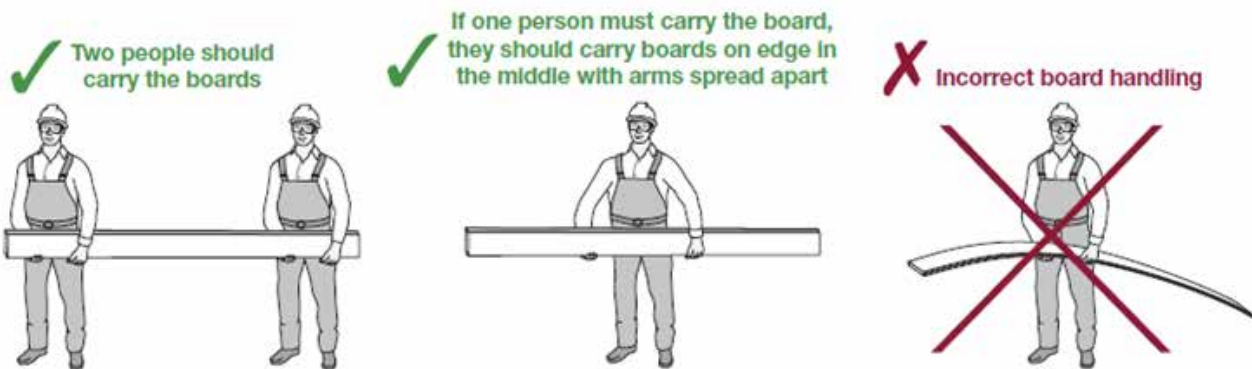
For expected performance results, ensure the product is COMPLETELY DRY and clean when fastened to the wall. For proper paint adhesion, the product should be dry and clean before painting.

- DURATION® Trim & Siding should be stored on a flat, level surface in a clean, dry location.
- Product should not be stored in direct contact with the ground.
- Keep product wrapped and protected from the elements until ready for installation; always replace covers after removing partial amounts of the material.
- If stored outside, protect the product with a DURATION® wrap free of holes or tears, else use an additional waterproof covering to protect the product from the environment.
- Installing product wet or saturated may result in gapping at joint locations.

GAPPING DOES NOT CONSTITUTE A PRODUCT DEFECT.

HANDLING

- Poly-ash siding and trim must be carried on edge.
- Whenever possible, poly-ash products should be transported by two people, one person on each end of the board and carrying the board on edge.
- If only one person must carry a board, they should position themselves in the middle of the board with their arms spread apart a safe distance while keeping the board steady. Improper carrying techniques can cause the board to break.



WORKING with DURATION® SIDING & TRIM

This product is an excellent replacement for wood trim and siding and can be installed using proven woodworking tools and methods. For ease of use, consider the following before working:

Safety - In working with any product that may cause airborne debris such as a nuisance dust, be sure to take proper measures to protect against inhalation and eye contact.

Cutting - DURATION® Trim & Siding can be cut using standard carbide-tipped blades, with those blades subsequently being "dedicated" to poly-ash, i.e. only used to cut poly-ash moving forward – a single cut made into wood after cutting poly-ash will render the blade ineffective. A carbide-tipped blade previously used for wood only *can* be used for poly-ash, but once used on poly-ash, the blade must be dedicated to poly-ash. Factory ends should always be trimmed to a square 90°. Field cuts do not need primer or sealer.

Routing & Drilling - DURATION® Trim & Siding can be drilled and routed using standard woodworking tools, but carbide-tipped router and drill bits are recommended and should be dedicated.

Caulks & Sealants - While DURATION® Trim & Siding does not require priming or sealing of end-cuts, a variety of caulks and sealants may be used in conjunction with the product to help prevent water intrusion into the structure. DO NOT USE ADHESIVE CAULKS. All materials move and, although minimal, poly-ash products require the ability to do so as well.

Gluing - Although not necessary, DURATION® items can be field glued using a polyurethane adhesive like PL® Premium or Titebond® III. DO NOT glue siding edges together or to adjacent casings. Casing ends can be glued if desired, as long as a provision for slight expansion is provided at both ends of glued “assembly”. Be careful not to get polyurethane adhesive on surfaces that will eventually be painted as paint does not readily adhere to polyurethane adhesive. Please note that DURATION® does NOT recommend attempting lamination (i.e. making profiles thicker by adhering faces together) of the product in the field given the need for specific surface preparation and significant pressure clamping.

Expansion and Contraction - DURATION® Trim & Siding is very stable regardless of temperature changes or exposure to moisture; all ends can be placed tightly to adjoining end. No special precautions, such as gapping, are required. Minor shrinkage at board ends is not considered a defect. DO NOT GLUE or adhere sidings to casings, adjacent sidings, inside corners, or outside corners. Failure to allow for slight expansion (e.g. butting material to stone) may result in product cracking and is not a product defect. Wavy appearance of installed product is not a defect.

Nail Holes & Repair - Filling nail and screw holes or repairing any minor damage caused by handling may be done using high-grade exterior acrylic caulk or wood filler. We strongly recommend Elmer’s ProBond® professional strength wood filler.

Use at Grade - Since DURATION® Trim & Siding will not rot and is highly resistant to any type of insect infestation, it is approved for ground contact.

Painting - Painting DURATION® Trim & Siding is a requirement, and failure to do so will void the warranty. As for preparing for any painting project, be sure the surface of the product is completely dry and free of dirt, debris, oil, or other contaminants prior to paint application.

PRIMING OF POLY-ASH IS NOT A REQUIREMENT BEFORE PAINTING.

- Use any high-grade exterior, acrylic paint or solid color stain. Make sure to follow the paint manufacturer’s application recommendations.
- Apply any color regardless of darkness or light reflectance value.
- No need to prime or seal faces, end-cut or field-cut edges.
- Paint should be applied within 12 months of installation.

DRAIN-ABLE WEATHER-RESISTIVE BARRIERS

To achieve design performance and to comply with building codes, DURATION® siding must be installed over drain-able weather-resistive barrier (DWRB). Always follow your local building code requirements when selecting a DWRB for your project. Mesh house wraps/rain screens and plastic cap staples or button caps are not recommended as they can cause unevenness or waviness in the surface, which is not a siding defect. DURATION® recommends self-adhering, non-compressible drain-able weather-resistive barriers like HydroGap® SA by Benjamin Obdyke.



STANDARD FASTENING GUIDELINES

For Trim and Moulding Applications

- Use fasteners designated for exterior trim.
- Fasteners should be installed every 24" OC or less. For best results, place fasteners within 2" of the edge of each piece.
- Optimally, butt joints should be cut at 22.5 to 30 degree angles.

For 2x Applications

- Use a fastener that is long enough to penetrate a solid wood substrate a minimum of 1-1/2".
- Fasteners should penetrate a framing member. Sheathing alone may not provide adequate support or holding power.

For All Siding

- DURATION® beveled siding must be installed on frame-built walls with studs spaced 16" on center, or at most, 24" on center.
- Standard nail guns and screws can be used to install DURATION® siding as it takes a variety of fasteners with ease and does not mushroom at the fastener head. Nail guns should be adjusted to ensure nail heads are flush with or slightly below the exterior surface. Do not over drive fasteners more than two times the head thickness.
- Ensure the product is completely dry and clean before fastening to the wall.
- Always trim factory ends to a square 90°.
- Use fasteners designated for siding with ringed shanks; do not overdrive (2x nail head thickness maximum).
- Use a fastener that is long enough to penetrate a solid wood substrate a minimum of 1-1/2". Fasteners should penetrate a framing member. Sheathing alone may not provide adequate support or holding power.
- Pre-drilling is not required.
- **When face nailing product that has the smooth, subtle TruExterior® grain, we highly recommend use of the "Painter's Tape" system to minimize the fill and sanding area; this results in an inconspicuous fill area and preservation of the subtle, vertical grain of the material – See section at end of instructions.**

For NON-BEVELED Siding (e.g. Butt Joint, Channel, Nickel Gap, etc.)

- Use of 8d x 2-1/2" (assuming exterior insulation is not part of the wall system) stainless steel, ringed shank nails are recommended to meet the wind load and performance results stated in the ES report PER-13069.
- Use 2 fasteners per every framing member.
- At least one fastener should be run through the face of the profile; simply fastening the product through a tongue or shiplap is not sufficient.
- Fasteners should be installed every 16" - 24" OC or less to meet the performance results stated in the ES report PER-13069. For best results, place fasteners within 2" of the edge of each board.
- Profiles can be installed both horizontally and vertically. Make sure to adhere to local building codes to ensure that wind load or other fastening requirements are met. For vertical applications, make sure sufficient horizontal blocking is properly installed (generally a minimum of 24" on center).

For BEVELED Siding

- The wall must be sheathed with O.S.B. or plywood panels per local code.
- Two fasteners are required within 2" of a joint on each side of a butt joint - one fastener at the top of each board and one fastener in the face of each board.
- Use of minimum 6d to 8d (assuming exterior insulation is not part of the wall system) stainless steel, ring shank nails are recommended to meet the wind load and performance results stated in the ES report PER-13069.
- Minimum overlap of boards per course is 1", with 1-1/4" being common. Boards may be overlapped at any dimension 1" or greater without affecting performance.
- When blind nailing, nails should be placed approximately 3/4" to 1" down from top of the board.

Acceptable Wall Preparation & Fastening Patterns for Beveled Siding

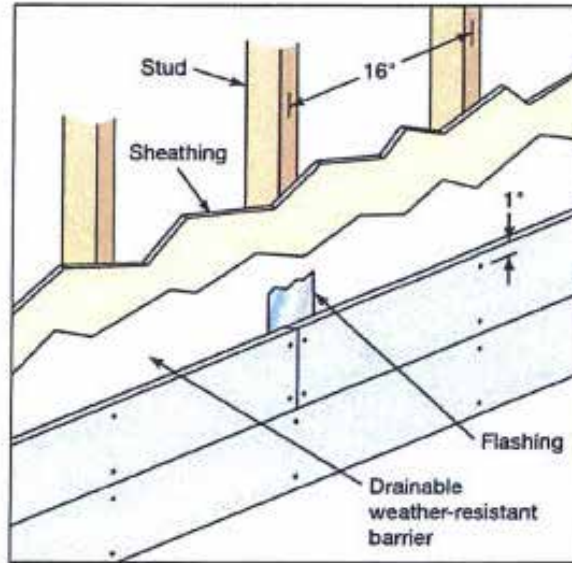
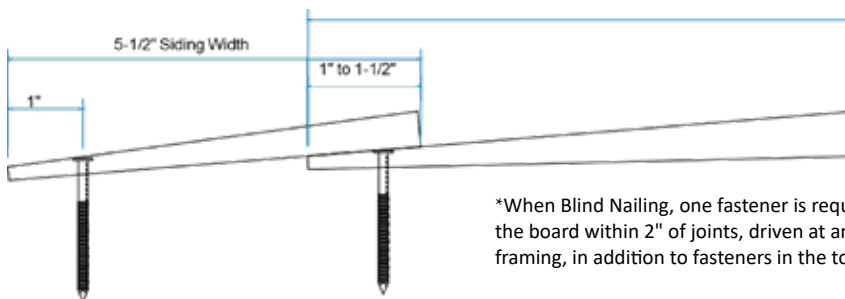
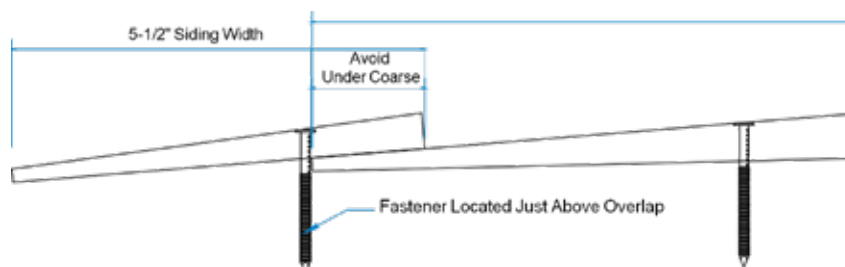


Figure 1: Blind Nailing



*When Blind Nailing, one fastener is required in the face of the board within 2" of joints, driven at an angle to contact the framing, in addition to fasteners in the top of the board.

Figure 2: Face Nailing



Woven or Mitered Corners

DURATION® Beveled siding can be used to form an outside corner by weaving (one piece overlapping an adjacent piece in alternating fashion) or mitering (each piece meeting at a point on the corner). In either application, a small amount of adhesive and a mechanical fastener can be used at the joint.

Fabrication of these corners is simplified by referring to the saw setting chart provided below.



Compound Miter Saw Settings:

Siding Size	Woven Corners			Mitered Corners	
	Woven Left <u>Crosscut Setting</u>	Woven Bevel <u>Miter Setting</u>	Woven Right <u>Crosscut Setting</u>	Table Setting <u>Crosscut Angle</u>	Bevel Setting <u>Miter</u>
	Starting with left flush to corner				
126DBS	3°	90°	6°	3°	45°
128DBS	2°	90°	4°	2°	45°
588DBS	2°	90°	5°	2°	45°
589DBS	2°	90°	5°	2°	45°
5810DBS	1.5°	90°	4.5°	1.5°	45°
5812DBS	1.5°	90°	4.5°	1.5°	45°

Wide (Over Nominal 12") Tongue & Groove Siding

In order to "Wrap" horizontally applied wide siding boards at outside corners, consider the following:

- Make sure that product is completely dry when installing.
- Vacuum tongues and grooves before combining them in order to eliminate any foreign matter that will not allow the joint to come together tightly.
- Use the painter's tape method to conceal face applied fasteners.
- Apply a minimum of one fastener for every 5" of nominal siding height e.g. for 20" tall siding, apply four fasteners at each stud location.
- While outside corners can be mitered, many installers prefer "weaving" boards or overlapping perpendicular boards back and forth going up the wall. Routing an overlapping board with a flush bit (aka a tracing bit) works well and is generally faster than mitering.
- Gentle hand sanding of the routed edge with a 60 grit sanding block in the direction of the adjacent grain will result in a well-concealed outside corner joint.

Butt Joint Tongue & Groove Siding

In order to conceal butt joint lines optimally, consider the following:

- Make sure that product is completely dry when installing.
- Cut factory ends so that they're square.
- Vacuum tongues and grooves before combining them in order to eliminate any foreign matter that will not allow the joint to come together tightly.
- Use the painter's tape method to conceal face applied fasteners.
- If required, tool a very small amount of Elmer's ProBond wood filler at the joint using a narrow putty knife and allow to dry.
- Sand the joint in a very cursory fashion in the direction of the grain using a sanding block with 50-60 grit sandpaper for standard "Smooth" texture products or 80-100 grit for custom "Super-Smooth" texture products. SAND LIGHTLY – DO NOT OVER SAND.
- Apply paint with a 3/8" nap roller in the direction of the grain.

Preservation of TruExterior® Smooth (Subtle Woodgrain) Surface

Several DURATION® siding products with a “smooth” face have a subtle, vertical (direction of board length) “grain” that nicely simulates real wood. This “grain” can easily be sanded off, either intentionally or accidentally by sanding in a circular motion, against the grain, and/or using finer grit sandpaper. The “grain” can be preserved by lightly sanding in the direction of the grain and using a 50-60 grit sandpaper with a sanding block.

To preserve the grain when using fasteners and fillers simply apply a piece of painter’s tape to the face of the board in the direction of the board length, install the fastener through the tape and into the framework, fill the fastener hole with a wood filler, let the filler dry, sand the filler with a 50-60 grit sanding block back and forth in the direction of the painter’s tape, remove the tape and apply two coats of finish paint. Please see images below.

Untouched Board



Tape Applied



1. Apply painter's tape to the face of the board, in the direction of the board length.

Fastener Through Tape



2. Install the fastener through the tape and into the framework.

Filler Applied



3. Fill the fastener hole with exterior wood filler, let the filler dry.

Filler Sanded



4. Sand filler with a 50-60 grit sandpaper with a sanding block. Sand back and forth in the direction of the painter's tape.

Tape Removed



5. Remove tape.

Finish Applied



6. Apply two coats of finish paint.

Inconspicuous Fill

