

# Storage, Handling, & Installation Guidelines



Cut. Fasten. Paint. Admire.



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The following information offers typical installation techniques when working with DURATION<sup>®</sup> 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 & HANDLING**

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

- DURATION<sup>®</sup> Trim & Siding should be stored on a flat, level surface in a clean, dry location.
- Keep product wrapped and protected from the elements until ready for installation.
- Installing product wet or saturated may result in gapping at joint locations.
   GAPPING DOES NOT CONSTITUTE A PRODUCT DEFECT.

## 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> items can be field glued using a polyurethane adhesive like PL<sup>®</sup> Premium or Titebond<sup>®</sup> 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". Alternatively, DURATION<sup>®</sup> does offer its proprietary epoxy system for specific installations requiring such an adhesive. 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> professional strength wood filler.

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

**Painting** - Painting DURATION<sup>®</sup> Trim & Siding is a requirement, and failure to do so will void the warranty. As in preparing for any painting project, be sure the surface of the product is completely dry and free of dirt, debris, 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.

# **FASTENING GUIDELINES**

**Fastening** - Standard nail guns and screws can be used to install DURATION<sup>®</sup> Trim & Siding as it takes a variety of fasteners with ease and does not mushroom at the fastener head.

- Ensure the product is completely dry and clean before fastening to the wall.
- Use fasteners designated for exterior trim and siding with ringed shanks.
- Pre-drilling is not required.
- When face nailing product that has the smooth, subtle TruExterior<sup>®</sup> 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 Trim and Moulding Applications

- 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 30° to 45° 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.

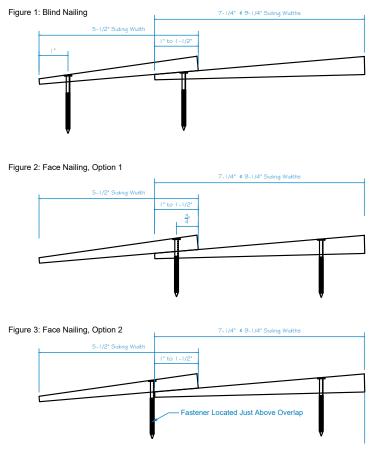
# Non-Beveled Siding (e.g. Shiplap, Channel, Nickel Gap, etc.)

- Install a highly drainable housewrap that allows water that gets around siding to drain out through the bottom of the system. Flashing behind vertical joints can be omitted with the use of an effective drainable housewrap.
- Before installation begins, factory ends are to be trimmed to a square 90°.
- 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.
- 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.
- Standard nail guns can be used to install DURATION<sup>®</sup> Siding. Nail guns should be adjusted to ensure nail head is flush or slightly below the surface.
- 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).

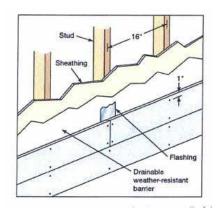
#### **BEVELED Siding**

- DURATION<sup>®</sup> beveled siding must be installed on frame-built walls with studs spaced 16" on center, or at most, 24" on center.
- The wall must be sheathed with O.S.B. or plywood panels per local code
- Install a highly drainable housewrap that allows water that gets around siding to drain out through the bottom of the system. Flashing behind vertical joints can be omitted with the use of an effective drainable housewrap.
- DURATION<sup>®</sup> siding must be fastened at the location of the studs and penetrate solid framing a minimum of 1-1/2".
- 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.
- The product will accept other types of fasteners including various types of exterior grade nails and screws. Care should be taken to ensure both fastener type and fastening pattern will meet local code requirements and performance needs.
- Standard nail guns can be used to install DURATION<sup>®</sup> Beveled Siding. Nail guns should be adjusted to
  ensure nail heads are flush with or just slightly below the exterior surface. Do not over drive fasteners more
  than two times the head thickness.
- 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



\*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.





## Preservation of TruExterior® Smooth (Subtle Woodgrain) Surface

Several DURATION<sup>®</sup> 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





#### Woven or Mitered Corners

DURATION<sup>®</sup> 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:

	Woven Corners			Mitered Corners	
	Woven Left	Woven Bevel	Woven Right	Table Setting	Bevel Setting
<u>Siding Size</u>	<u>Crosscut Setting</u> Starting with left flu	Miter Setting ish to corner	Crosscut Setting	<u>Crosscut Angle</u>	<u>Miter</u>
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°



