EX-CEL®
EXTERIOR PVC TRIM MOULDING & SHEET

Installation Guidelines

NuCedar®
FINELY CRAFTED EXTERIORS

EX-Cel & NuCedar PVC Trim, Sheet & Moulding

INTRODUCTION

EX-Cel & NuCedar PVC Trim is well suited for many different applications. Especially;

* Any project where wood trim boards would traditionally be used.

* Applications with the potential for moisture exposure.

* Applications where ground contact is necessary.

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EX-Cel & NuCedar PVC Trim, Sheet & Moulding

HANDLING & STORAGE

∗ Care should be taken when handling boards. Do not drag material, it could cause damage.

∗ Material should be stored on a flat, level surface.

∗ Ideally the trim should be stored in a shaded area. Avoid storing on pavement or under a dark tarp, where ambient temperatures may exceed 120°F.

∗Keeping Material covered will help keep dirt and debris off of the product.

BEFORE INSTALLING

∗ Ensure that all openings have been properly flashed and taped in accordance with local building codes.

∗ EX-Cel & NuCedar PVC Trim should be installed over a weather resistant barrier system with a drainage plane that has been applied in accordance with the manufacturers' instructions.

∗ EX-Cel & NuCedar trim should be installed over a solid backing.

EXPANSION & CONTRACTION

EX-Cel & NuCedar PVC Trim will expand and contract with the changes of temperature. Below are some guidelines to follow to determine how to size up your gap to compensate for seasonal thermal expansion and contraction.

If the outside temperature is:

75° to 95°F, material is fully expanded, a small 1/32" gap between boards is recommended.

55° to 75°F, material will be partially expanded. A gap of 1/16" to 1/8" between boards is recommended.

25° to 55°F, material will be contracted. PVC material could expand up to an 1/8" per 18 foot length.

∗ Fill gaps with an acrylic or UV resistant caulk for sealing. (See BONDING & ADHESIVES section)

∗ Where appropriate, mill a scarf joint for a better-looking finish. (See SCARF JOINT section)

∗ NuCedar Pre-finished dark color trim could cause added expansion to your PVC Trim.

❄ When installing EX-Cel & NuCedar PVC Trim when the temperature is consistently below 40°F, Pre-drilling is suggested.

EX-Cel & NuCedar PVC Trim, Sheet & Moulding

CUTTING, DRILLING & ROUTING

There are no special tools that are required to work with EX-Cel & NuCedar PVC Trim, sheet or moulding.

* The same tools that are used for wood can be used.

* Traditional Carbide-tipped saw blades, carbide-tipped router bits, and woodworking drill bits will work best.

FASTENING

* Fasteners that are meant for wood trim and siding will work best. They will have a thin shank, blunt points, and full round heads.

    * 8d nails with annual thread shanks are recommended.

    * 15 gauge galvanized or stainless steel nails for mouldings.

* Stainless Steel Fasteners are preferred over galvanized nails.

* Exterior grade ring shank nails can be nailed or shot.

    * If using a power nail gun, it is recommended that the gun be capable of shooting a 15-gauge nail, using 80-100 psi.

    * A 1/16" - 1/8" nail set is optimal.

    * Be careful not to overdrive the fastener.

    * During Cooler Temperatures, annular threads are preferred.

* Trim Screws, #7, #8 and #10 work the best with PVC Trim.

    * Starborn PRO PLUG®, Starborn HEADCOATE®, and Cortex Screws work great with EX-Cel & NuCedar PVC Trim. They will even offer a color match plug or screw head.
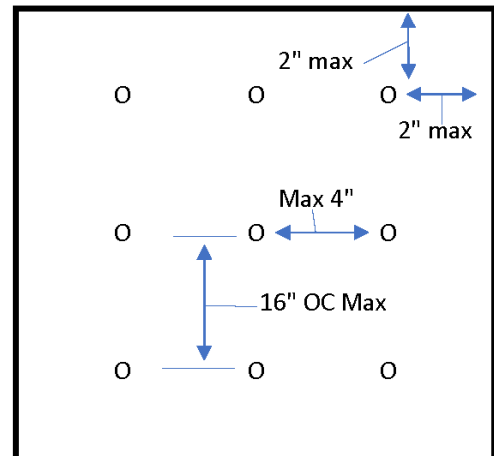
FASTENING (CONTINUED)

* Must be installed over a flat, solid surface.

* Fasteners must penetrate solid wood by no less than 1-1/4".

Proper Spacing:

Following these Fastening guidelines will help reduce expansion and contraction of the product.

* Fasteners must be installed within 2" from the end of each board.

* 2 fasteners should be on each side of your joint.

* Along the length of the board, should be no more than 16" on center.

* Along the width of the board, should be no further apart than 4".

Fastening Schedule (every 16" on center):

To help reduce the movement of the PVC board.

Fasteners Per Width	
Width	No. Fasteners
4" & 6"	2
8" & 10"	3
12"	3-4
16"	4-5

EX-Cel & NuCedar PVC Trim, Sheet & Moulding

FASTENING (CONTINUED)

⚠️ 3/8" and 1/2" thick material Is not designed to be ripped and used for trim applications. If using these thicknesses, they must be glued and fastened to the solid substrate.

🚫 Wire Nails, Brads, and Staples should **NOT** be used to secure your PVC Trim.

❄️ Pre-drilling is not necessary , unless you are installing in temperatures that are consistently below 40°F

INSTALLING AT JOINTS

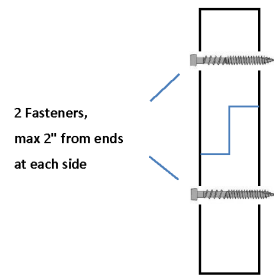Using a Butt Joint is acceptable for our EX-Cel or NuCedar trim.

* Butt the ends of the boards next to each other, taking into consideration the expansion and contraction guidelines.

* Use an Acrylic or UV Resistant Caulk for the joint.

For long runs of trim, a scarf, miter or shiplap joint will provide the best looking joint that allows for expansion and contraction.
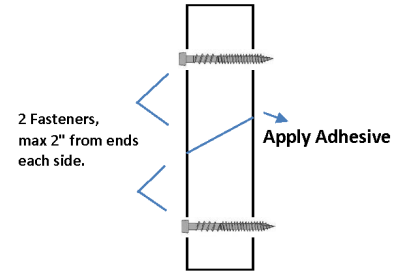
* For Scarf/Miter Joints, cut the ends of both boards at a 45° angle.

* Use our expansion and contraction guidelines listed in our install guide to determine the gap.

* Use an Acrylic or UV Resistant Caulk for the Scarf/Miter or Butted joint. (See Bonding and Adhesives section for suggestions.)

* Fasteners no more than 2" from the ends of the board should be in place on both sides of the joints.
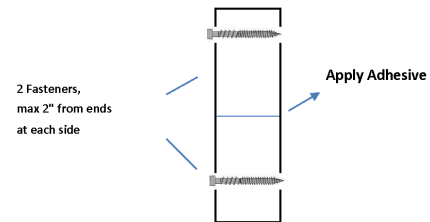
INSTALLING AT JOINTS (CONT...)

Shiplap Joint   **Scarf/Miter Joint**

2 Fasteners, max 2" from ends at each side

2 Fasteners, max 2" from ends each side.   **Apply Adhesive**

Butt Joint

2 Fasteners, max 2" from ends at each side   **Apply Adhesive**

🌡️ If installing joints when temperatures are below 50° F, leave an 1/8" gap to accommodate for the expansion in warmer weather.

BONDING & ADHESIVES

EX-Cel and NuCedar Trim can be bonded to a variety of substrates, as well as to itself. For best results:

* All surfaces to be glued must be smooth, clean, and in complete contact with each other.

* Always consult the adhesive manufacturer to determine suitability.

* Proper Ventilation and a clean environment are essential for adequate curing.

🌡️ Temperature will always play a role in the adhesive's workability. See adhesive manufacturer guidelines before using.

EX-Cel & NuCedar PVC Trim, Sheet & Moulding

BONDING & ADHESIVES (CONT…)

Bonding PVC to PVC

* PVC Cement, such as Oatey PVC Cement, or other solvent-based adhesives work very well.

* Use one with a moderate or slow set up time. Plumbers PVC Cement generally will have a fast set up time and may bond too quickly for any detailed work.

* When bonding EX-Cel or NuCedar PVC Material face to face, you may need a clamp or wood press to help hold the material together.

Below are examples of adhesives to use when bonding to different substrates.

* Adhering your EX-Cel or NuCedar PVC material to other substrates, besides itself, will require mechanical fasteners to be used as well as the adhesive or sealant.

* Always test the adhesive for compatibility before applying.

When Bonding PVC to:	PVC	Wood	Concrete/ Block	Metal
PVC Trimwelder	●			●
PVC Fill & Flex	●			
PVC White Hot	●			
Bond & Fill®	●			
IPS Weld on 705	●			
Liquid Nails Subfloor		●		
Liquid Nails Heavy Duty		●	●	
NPC Solar Seal 900		●	●	●

PAINTING & FINISHING

Nail Holes

The best solution for your trim is to use Starborn PRO PLUG® system. The plugs are made out of the same EX-Cel or NuCedar Trim product that you purchased. If you are using NuCedar Pre-finished Trim, then you can have your plugs pre-finished the same color to match your trim.

PAINTING & FINISHING

Nail Holes

Other options are:

* Starborn Stainless Steel Headcoate Screws. You can get a colored screw head to match the trim.

* To fill a nail hole, you can use Extreme Adhesives Fill & Flex or DAP® Crack Shot. Sanding and Painting may be required.

* Extreme Adhesives Nail Eraser. It is specifically formulated just for PVC Trim. PVC Nail Erasers let you fill in nail holes up to 1/8". Use only on PVC Trim that will not be painted.

Painting

Although, it is not necessary to paint your EX-Cel PVC Trim, it will accept and hold paint very well.

* Use a high-grade exterior 100% acrylic latex paint with urethane additive.

* The LRV (Light Reflective Value) needs to be 55 units or greater.

* Painting PVC dark colors (under LRV of 55 units) could result in poor results of your PVC material and will void your warranty. Although, darker colors have been proven to work, Jain will not be liable, and the warranty will now rest with the paint manufacturer.

* If your color is below the LRV of 55 units, use paints specifically for PVC products, that are vinyl safe and contain heat reflective pigments. Some examples may be Sherwin Williams VinylSafe™, PPG MANOR HALL or AquasurTech OEM. Consult with the paint manufacturers for further information.

Helpful Hints for Painting your EX-Cel PVC Material:

* Be sure that your surface is properly cleaned and lightly sanded

* Remove any mildew or mold with a mixture of water and bleach.

* Some paints can take upwards of 30 days to fully cure. This can depend on many variables; temperature and humidity being the major factors. Follow paint manufacturers' instructions to insure proper installation and preparation.

MANOR HALL is a registered trademark of PPG Architectural Finishes, Inc.

EX-Cel & NuCedar PVC Trim, Sheet & Moulding

PRE-FINISHED COLOR TRIM

NuCedar PVC offers Pre-finished Color PVC Trim, sheet, and mouldings. Our unique bonding process allows us to offer you our already exceptional trim with an exceptional finish. Our Water-Based, Solar-Reflective Finish is extremely durable and will not chip, peel, or crack. Starborn PRO PLUG® Systems can be color matched to your board.

All installation instructions remain the same, however for any touch up work, we recommend the following:

∗ Apply touch-up paint on all cuts, planed edges and small damaged areas.

You may also purchase touch-up paint through Jain, just contact your local dealer. Otherwise, NuCedar can be touched up with a high-grade exterior latex paint. We recommend PPG MANOR HALL® Exterior 100% Acrylic Latex Paint. Take a sample of the product you are trying to match to your local PPG store and they will color match the touch up paint for you.

∗ In the future, if you would like to repaint the product, it is possible to do; however, you will void your warranty going forward. For re-painting, use a high-grade exterior latex paint, such as PPG Manor Hall (Exterior, Satin Finish). Make sure that your paint color has a Light Reflective Value (LRV) of 55 units or greater.

∗ Prior to touching up or repainting, make sure that the surface area is properly cleaned and prepared according to manufacturer's specifications.

🚫 Our coating is not fully cured for 30 to 90 days. Our Baked on Finish allows the product to be handled and installed, but not to be abused. **Please do not drag or scratch any thing along the material.**

CLEANING

To clean your EX-Cel or NuCedar PVC trim, use a mild solution of soap and water.

When using a power washer always use the lower pressure setting. However if you purchased NuCedar's Roughsawn (Brushed) texture Trim, we do not recommend a power washer, it could damage the brushed edges.

CLEANING (CONT...)

EX-Cel and NuCedar PVC will not support mold or mildew growth, but it is possible that it will be on the surface. To remove mold or mildew use a mild mold/mildew remover.

Other cleaning products such as OxiClean™, Clorox® with bleach, Mr. Clean® Magic Eraser, are acceptable with our products. Make sure to test any cleaners in a small hidden area first before using.

HEAT FORMING (HEAT BLANKET)

EX-Cel & NuCedar trimboards can be easily heat formed or bent into a variety of shapes without negatively affecting the surface finish.

Make sure that you are heating the product up slowly and uniformly to ensure best results. Heat Blankets or Heat Tape are recommended for this application.

PVC will start to deform at 160°F, but your desired temperature should be between 160°F and 300°F.

Always wear heat protected gloves, so not to burn your hands and it will help to keep the product clean.

Heat Blanket recommendations.

1. Have the mold you are forming the product to ready to go.

2. After you have heated the blanket up, place the trim in between the blankets and allow time for the product to heat and soften.

3. Continue to check the temperature of the product. Once at the desired temperature, take the material off of the blanket. (It will feel flimsy, almost like jello when removed.) Quickly place in the mold.

4. If necessary, clamp the ends of the trim to keep in place.

5. Work the product into the mold. While at the same time, with a small block or piece of trim, smooth and flatten the surface.

6. Once the material is cooled, you can remove from mold and install where needed.

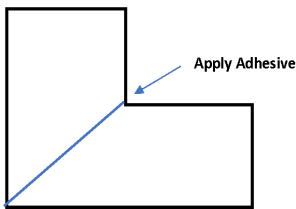# EX-Cel & NuCedar PVC Trim, Sheet & Moulding

FABRICATED CORNERS

EX-Cel and NuCedar Corners have pre-fabricated once piece corners available for purchase. Contact your local supplier to find out the size options.
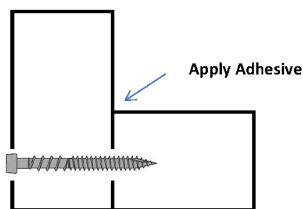
To Fabricate your own corners in field, you can either miter or butt two trimboards together and seal the joint with adhesive.

PVC adhesives have can usually have a short curing time, so when gluing the trim, do not apply the adhesive until you are ready to bring the two pieces together.

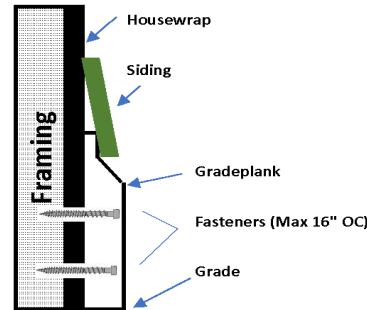**Mitered Corners**   **Butted Corners**

Mitered Corners

1. Assemble your pieces before you start installing

2. Cut your miter angles

3. Apply adhesive to the length of the Mitered pieces, and adhere the two trim pieces together

4. Allow to cure and then install with mechanical fasteners as you would for normal trim. (See Fastening Section for instructions)

Butted Corners

1. Assemble the two trim pieces you want together before installing

2. Apply adhesive to the length of your trimboards that will be adhered together

3. Use a mechanical fastener through the butt along the whole length of the boards, every 16" on center

4. Allow to cure and then install with mechanical fasteners as you would for normal trim (See Fastening Section for instructions)

GRADE PLANK

Grade Planks, also referred to as Water Tables or Skirtboards, are to allow water to run down and away from the house, preventing the sidind from absorbing any moisture. Since PVC does not absorb moisture, it can be installed at zero clearance.

To begin, be sure all walls are true and covered with housewrap. If there is no house wrap, then flashing is required. Flash around the base of the wall 10-1/2" up from the sill plate using roofing felt, rubber, or trim coil (aluminum/vinyl).

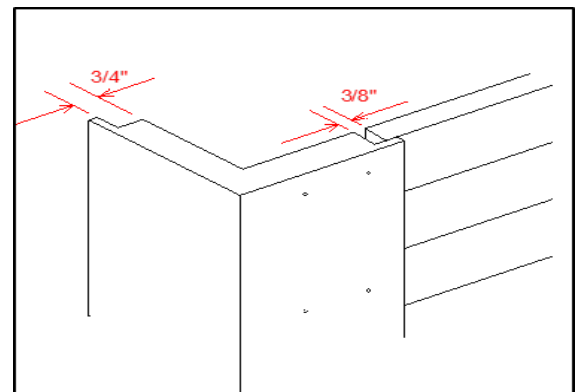Use the same guidelines as EX-Cel or NuCedar trim stated in our instructions.

Install Siding per manufacturer's guidelines

CHANNELED TRIM & CORNERS

When installing a Channeled EX-Cel or NuCedar trim or Corner, such as J-Pocket or Universal trim, DO NOT nail through the channel edge.

* Install your siding in accordance to the manufactures guidelines.

* If installing the siding first, you may want to chalk a line to determine where your trim will go after.

* Follow the same trim guidelines as you would Standard trim.

EX-Cel & NuCedar PVC Trim, Sheet & Moulding

SOFFIT INSTALLATION

For spans of 16" to 24", use 3/4" inch actual (1" nominal) thick products. You should never span EX-Cel or NuCedar PVC material more than 24".

If you are using the Beadboard material for soffit, install beadboard perpendicular to the structure and fasten every 12" on-center or less.

CEILING INSTALLATION

Before installing PVC Beardboard as a ceiling application, be sure that the ceiling joists are true and level. The space above the ceiling should be properly ventilated to prevent any heat buildup.

We recommend placing a 1/2" sheet of OSB or plywood to the underside of the ceiling joists. In addition to the mechanical fasteners, you use a construction grade adhesive.

Your Beadboard should be installed perpendicular to the joists. Fasten every 12" on center or less

Beaded Sheets should be fastened 12" on center and should be fastened 16" on center along the width.

For spans of 16" to 24", use 3/4" inch actual (1" nominal) thick products. You should never span EX-Cel or NuCedar PVC material more than 24". You will want to create the shortest run of material if possible.

Recommended Fastening:

* You are able to use a pneumatic gun
* #7 Trim Screw, 16 gauge T-nails, minimum of 1-1/2" in length
* For 1/2" beadboard, use 15 gauge round head, minimum of 1-1/2" in length
* Nails should be 1/2" to 3/4" from edges of material.

CEILING INSTALLATION (CONT...)

Make sure to include a space for material to expand and contract (approx. 1/4" gap on each end of the board).

To ensure the look of the board is even,

1. Measure and calculate how many boards you will need.
2. You may need to trim the width of the first & last board (lengthwise).
3. When trimming down the width of the 1st board, do not trim the tongue side. Your cut side will be against the wall.
4. When trimming down the width of the last board, you will want to trim down the tongue side.
5. To finish your look, install mouldings around the perimeter to cover the gaps, for example Crown Moulding.
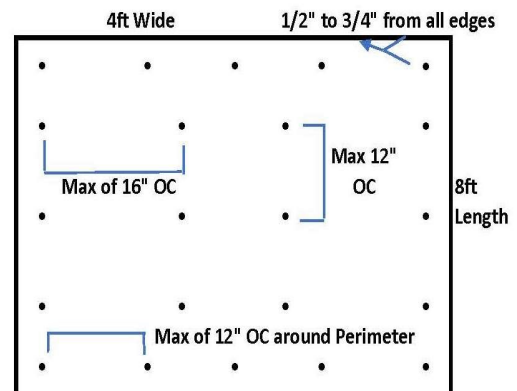
You are able to fasten in the tongue of the board. Angle your gun away and to one side of the tongue and position at the back edge of the tongue.

You should then be able to slide the grove side of the next board in and continue installing.

For runs longer than 16ft, additional face fastening and/or application of construction adhesive at the substrate or along framing members will help restrict movement.

For Runs longer than 18ft, and expansion joint is recommended, or you may apply a scarf joint. (See Scarf Joint and Expansion & Contraction sections)

Example of Fastening Pattern for Beaded Sheets

EX-Cel & NuCedar PVC Trim, Sheet & Moulding

WAINSCOTING APPLICATION

Using EX-Cel or NuCedar Beadboard or Beaded Sheet for wainscoting applications are great for high moisture areas (for example, outdoor showers or bathrooms) and it is easy to install.

1. Make sure that the ends of the boards have a 90 degree square cut.
2. Cut the material to your desired length.
3. Apply Adhesive to the back of the material and install on a solid surface.
4. You should start in the corner of the room. If using Beadboard verus Beaded Sheet, make sure the tongue section is facing away from the corner. Press into the wall and nail through the nailing fin.
5. You may need to cut the Grove side of the beadboard for the 1st board, to have a straight edge start.
6. If you are installing in a controlled environment, then staples are acceptable.
7. Once you reach the next corner, you may need to trim the tongue side in order for it to fit on the wall.
8. For corners, you can use quarter round or scotia or a moulding of your choice for inside corners or corner trim for outside corners.
9. Scarf Joints are another option for corners
10. Lastly, finish off with Chair Rail type mouldings and wall base mouldings to add that extra curb appeal (an example could be shingle moulding)

COLUMNS

EX-Cel & NuCedar offer Column Posts in 5" & 7" Column Wraps that are made for 4" & 6" Posts. They are pre-made in a 2 pieced set, and matching Bases & Caps will be included.

The columns are easily installed and will be a great completion to add to your curb appeal.

1. Make sure that the structural post is straight, true and structural sound.
2. Start by putting your 3 sided Colum Wrap onto your post.
3. You may have some extra room between your post and wrap, you can brad nail, nail or screw one side of the column to keep it in place.

COLUMNS (CONT...)

4. You will want to have an adhesive that will allow for enough working time to allow you to work. An example would be Oatey PVC Cement or Weld-On 705.
5. Apply the adhesive on the Milled Edges of the 1 piece that is separate from the 3 sided Wrap.
6. Now snap that 1 piece into place with the 3 sided Wrap piece.
7. Now you can apply the 5" Cap & 7" Base onto your Column Wrap. Apply the same as you did the Column.

WINDOW TRIM

Jain offers some Window Trims to make your trim package complete.

To start, be sure the window area is properly prepared to accept it. The window should be installed square, true and plumb. It should be weather proofed as per manufacturers specifications. Flash window opening in accordance with manufacturer.

Install per our Standard fastening instructions listed above. You will use the same fasteners and tools as Standard & Channeled Trim. (Do not nail into any channel)
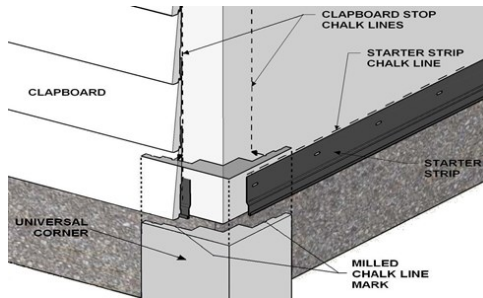
EX-Cel & NuCedar PVC Trim, Sheet & Moulding

UNIVERSAL TRIM/CORNERS - FOR NUCEDAR CLAPBOARD INSTALLATION—WITH/WITHOUT PUSH LOCK INSERTS
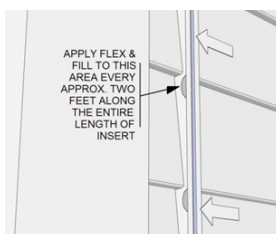
Our Universal Trim & Corners are perfect for the NuCedar Clapboard installation.

The NuCedar Universal Trim & Corners have a Pocket that is 2" in width. There is a notch for your chalk line, and for your Push Lock Insert if you choose to use the insert.
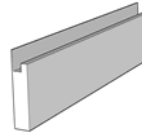
Install your Universal Trim & Corners the same as you would your Channeled Trim & Standard Trim. See Fastening Section above. (Do not nail through the Channel)

If you are using the Push Lock Insert, after the Universal Trim & Corners have been installed, align the insert with the Clapboard and cut to the proper length (if necessary). Apply a small dollop of Fill & Flex every two feet to only the side of the insert facing the Trim, all along the length of the insert. Now snap into place. Do not put adhesive on the clapboard.
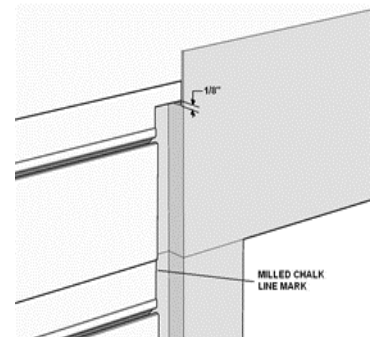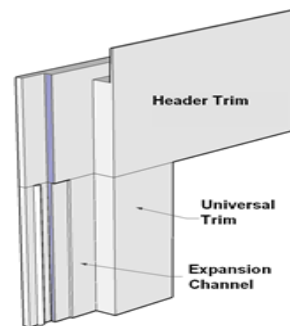
HEADER TRIM - FOR NUCEDAR CLAPBOARD INSTALLATION

NuCedar Header Trim is a component that you will need in conjunction with your NuCedar Clapboard Siding. It is to be used above Windows & Doors and will work as a drainage plain.

∗ Properly flash all windows and doors in accordance with local building codes and window/door manufacturer's flashing recommendations.

∗ You can cut the sides into an expansion channel to match the Vertical trim along the side of the windows and doors.

∗ Make sure that your chalk lines from the start of your installation are there (see NuCedar Clapboard installation guides).

∗ If your clapboard must be notched above the window/door, cut the clapboard to line up with the milled chalk line mark. Leave 1/8" clearance above the channel in the Header trim.

∗ Install your header trim with the same fasteners & tools as listed in our Fastening section above.

Backside of the Header Trim (above Window/Door)

⚠️ **Please see NuCedar Clapboard Installation Guides & Videos for more practices on installing. You can find more information at *www.jainbuildingproducts.com***