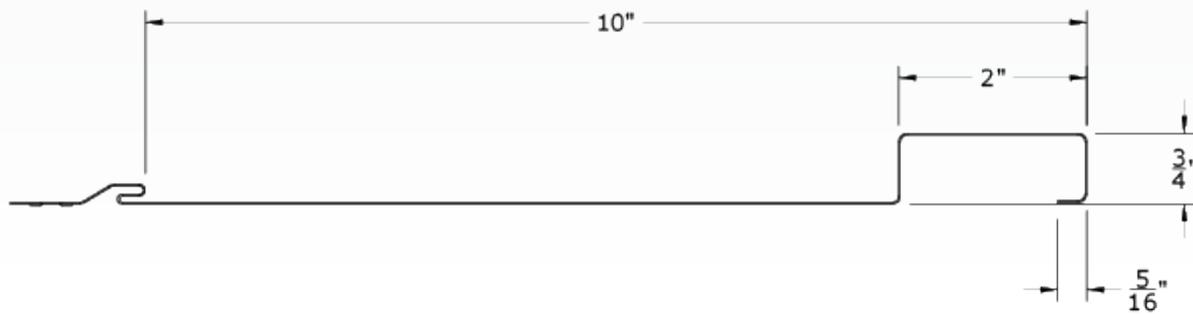
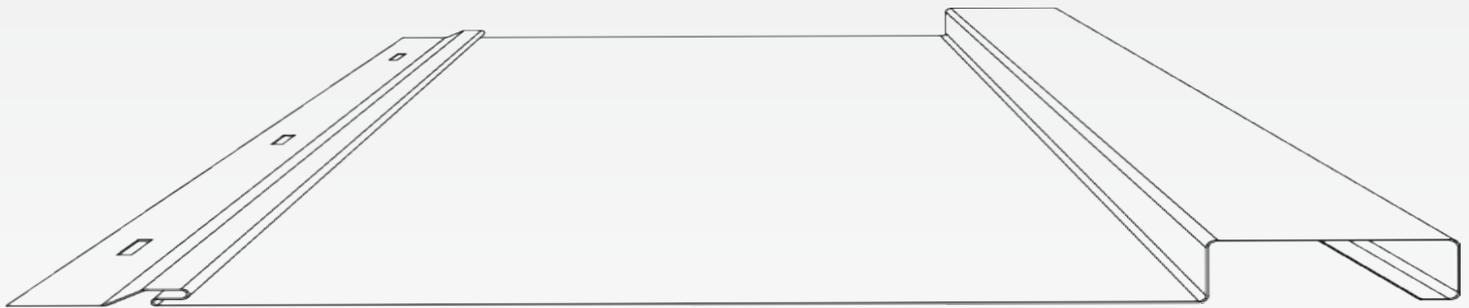


Board & Batten

Installation Details



INDEX

*Information in the catalog may vary by plant location.
Please call your salesperson to verify product availability.*

Important Information & Safety	3
Fastener Spacing.....	4
Tools & Equipment.....	4
Field Cutting	5
Wall Preparation Tips.....	5
Substructure Condition	6
Panel Installation Overview	7
Trim Installation Overview	7
Panel Installation.....	8
Gable Panel Installation	9
Board & Batten Trim Conditions	10-22
Corner Conditions	
Outside Corners.....	10-11
Inside Corners.....	12-13
Transition / Wainscot Conditions	
Band Boards.....	14-16
Double Angle.....	17
Base and Cap Conditions	
Rat Guard.....	18
Window Cap.....	19
Channel and Jamb Conditions	
J-Trim / Vertical Install.....	20
Soffit F&J.....	21
J-Trim / Horizontal Install.....	22

IMPORTANT INFORMATION

This manual contains suggestions and guidelines on how to install Board & Batten panels. The drawings in this guide are for illustration purposes only and may not apply to all building designs or product applications. The installation details shown are proven methods of construction, but are not intended to cover all instances, building requirements, designs, or codes. It is the responsibility of the designer/installer to ensure that the details meet particular building requirements. The designer/installer must be aware of, and allow for, expansion/contraction of wall panels. The details may require changes or revisions due to each project's conditions.

It is the buyer's responsibility to verify all applicable code requirements, check all measurements, and determine suitability of product for the job. The buyer is also responsible for determining lengths and quantities needed. Prior to ordering and installing materials, all dimensions should be verified with field measurements. **Implied warranties of merchantability and fitness for a particular purpose are disclaimed.** All Board & Batten instructions assume

that a qualified firm or individual has been contacted regarding application of this product. Failure to comply with stated recommendations relieves the manufacturer of responsibility for any damage or deterioration of the product incurred and voids any applicable warranty.

Central States Manufacturing reserves the right to modify, without notice, information in this guide. If you have questions regarding proper installation of Board & Batten or information not included in this guide, contact your salesperson.

SAFETY

Each job site presents different hazards; therefore it is the responsibility of the buyer/installer to determine the safest way to install the Board & Batten wall panel system based on the recommended instructions contained in this guide. Provide crew members working on the project with required safety equipment and training.

OSHA safety regulations should be complied with at all times.

Always wear heavy gloves when working with steel panels to avoid cuts from sharp edges. When power cutting or drilling steel panels, always wear safety glasses to prevent eye injury from flying metal fragments.



FASTENER SPACING

DECK THICKNESS	SPACING
7/16"	18" o.c.
5/8"	24" o.c.
3/4"	24" o.c.

*Slot on leg may not coincide with above chart.

TOOLS & EQUIPMENT

- Snips
- Tape Measure
- Electric Metal Shear*
- Caulking Gun
- Cordless Drill
- Blind Rivet Tool
- Chalk Line*
- Gloves

*We do not recommend the use of a power circular saw to cut panels. Use of a power saw could:

- Increase the instance of edge rust.
- Cause hot metal shavings on panel surface to damage panel finish.

We recommend that the installer have prior experience and knowledge of the listed tools and their uses in working with metal building materials.

*If using chalk, it is recommended that you use #1 Blue and not Red due to the possibility of permanent staining or deterioration of the finish from "electric cell" affect.

FIELD CUTTING

There are a number of ways to cut sheet metal quickly and accurately. Tin snips or a “nibbler” type electric tool are recommended for field cutting Board & Batten panels. Cutting over a trash barrel will help catch the tiny metal shavings that the machine produces.

Although Central States discourages it, if a power saw is used, the blade will generate slivers of metal chips. These slivers and metal chips must be immediately

removed from the Board & Batten panels because they will damage the finish and shorten the life of the product. One method of preventing this problem is to flip the panels over when cutting. This allows the slivers and metal chips to be brushed from the back side and avoids damaging the paint on the top side of the panels. Make sure that stacks of panels are away from the cutting area so shavings do not blow onto other panels.

All product surfaces should be free of debris at all times. Installed surfaces should be wiped clean at the end of each work period. Never cut panels over metal surfaces. When cutting metal panels, always wear heavy gloves to avoid cuts from sharp edges and safety glasses to prevent eye injury.

Shavings created by saw cutting or drilling may cause the panel to rust and will void warranties in affected areas.



WALL PREPARATION TIPS

- Board & Batten is designed to be installed over solid sheathing. We recommend a minimum 7/16" plywood sheathing
- Make sure any existing sheathing is smooth, level and in good condition. Replace any decking not meeting those requirements.
- Shimming out the low places in a wall is recommended.
- Make sure the wall is clear of any debris that might interfere with installation.
- A house wrap or moisture barrier should be installed referencing building codes in your area before installing Board & Batten over top.
- Use an alignment or #1 Blue chalk line where the first panel is installed. Other methods of confirming the squareness can also be used.

SUBSTRUCTURE CONDITION

- Metal installed with screw fasteners should be installed over solid decking.
- Avoid installing over damp or green lumber, porous insulation or other damaging materials.
- Strong chemicals may cause premature deterioration.
- The use of a moisture barrier or water shield is recommended.

PANEL INSTALLATION OVERVIEW

Familiarize yourself with all installation instructions before starting work. Before beginning installation, you should examine the substrate or framing to ensure that all supporting members are straight, level, and plumb to avoid any panel distortion. Substructures should be designed to meet all necessary code requirements.

Some field cutting and fitting of panels and trims is to be expected by the installer and minor field corrections are a part of normal installation work.

It is the responsibility of the installer to ensure a suitable substrate prior to the application of Board & Batten. Underlayment must be nailed or stapled down. Distortion in the panel caused by an uneven substrate, ripples, or laps in the vapor barrier, debris, protruding nails and staples, button cap nails, etc., are not defects in the materials and are not the responsibility of Central States Manufacturing.

All trims, closures, and accessories shown on the installation drawings are available from Central States Manufacturing unless noted otherwise.

Oil canning in the flat area of the panels is common to the industry and does not affect the integrity of the panel. Therefore, oil canning is not a reason for rejection.

The panels should be installed plumb, straight, and square. To keep the bottom edge of the wall perfectly straight and even, the panels must be installed square to the bottom edge. Begin by checking the wall for square; if it is square, you may pull the layout marks directly from the edge of the wall.

TRIM INSTALLATION OVERVIEW

On runs of more than 10' 2" that require more than one length of trim, overlap the pieces by 2". The material is thin enough that the overlaps are not noticeable. Trim is attached with rivets or wafer screws; take care to drive the screws enough to flatten the neoprene washer but not enough to deflect the wall or the trim.

Remove strippable film from panels and trims before installation.

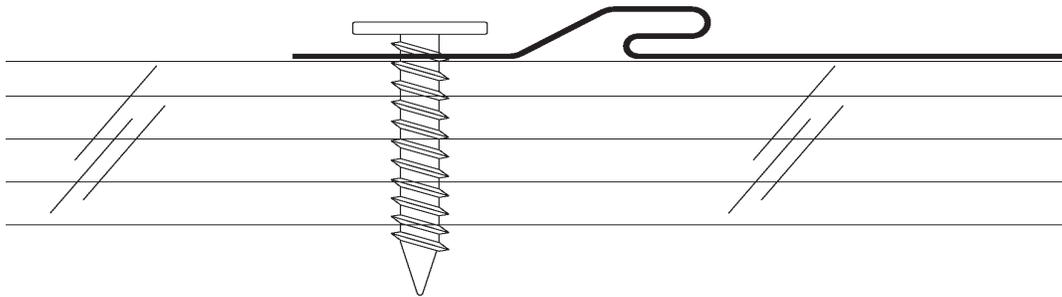
Strippable film on Textured panels and trim must be removed within 30 days of manufacture date. Strippable that is left on for more than 30 days may be hard to peel off and is not a reason for a refund or replacement from the manufacturer.



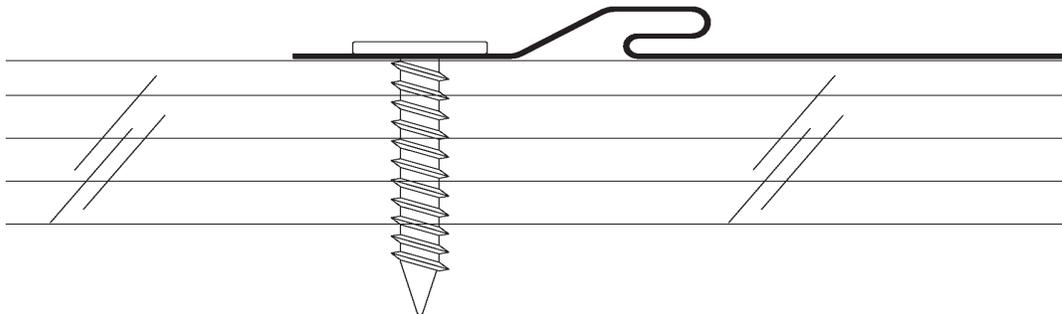
PANEL INSTALLATION

- When you're installing Board & Batten panels, it's absolutely essential to make sure there's enough space for vertical expansion.
- DO NOT over-tighten the fasteners. The panels MUST be fastened loosely, so they can hover against the substrate. To enable the panels to hover, center the fasteners within the nailing flanges and drive them straight. Do not drive them at an angle, as this could cause an "oil canning" effect that would be visible within the panels. You MUST ensure that there's an approximate 1/32" gap between the head of the fastener and the metal nailing flange (refer to the illustration).
- It's strongly recommended to install metal board and batten panels over a minimum 7/16" OSB substrate.

Correct



Incorrect



GABLE PANEL INSTALLATION

To properly install on a gable end, it's important to align the center panel with the center of the gable. The installation process should start from the center and then move outward to both the left and right sides. To achieve this, you can begin by cutting off the nailing flange from a full-length panel, as shown in the illustration Board & Batten cut here drawing below.

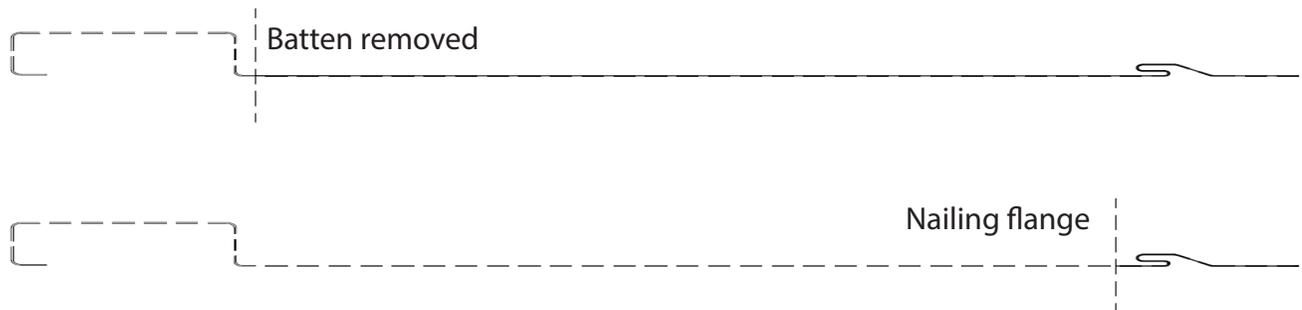
To ensure that the batten lines up with the center of the gable, you should fasten the nailing flange to the center of the gable end.

An extra panel may be needed depending on coverage needs and gable starter.

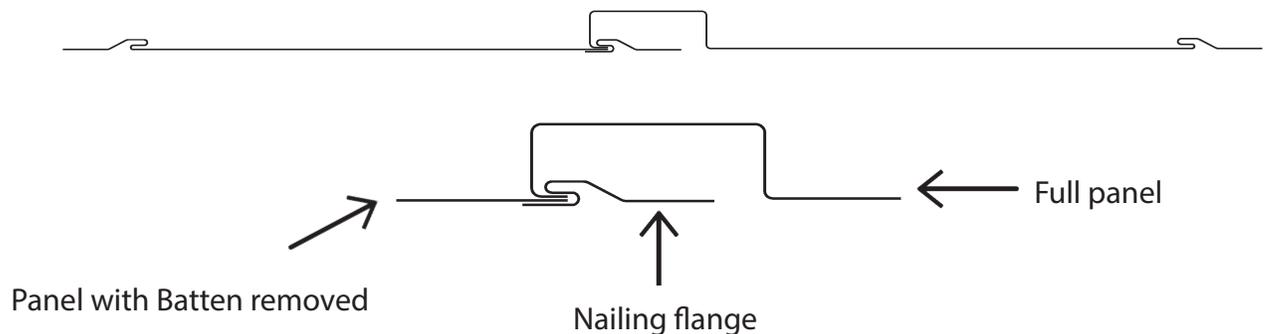
After securing the nailing flange to the substrate, you should cut the batten portion from a full-length panel. Then attach this cut piece to the substrate by tucking the cut edge into the open hem of the already-fastened nailing flange. This will create two nailing flanges with open hems facing each other. To complete the center starter gable panel, fasten a full-width panel to the substrate and clip the batten into the center nailing flange piece, just like how field panels are installed.

Now, you can proceed with your installation in both left and right directions as shown in the illustration.

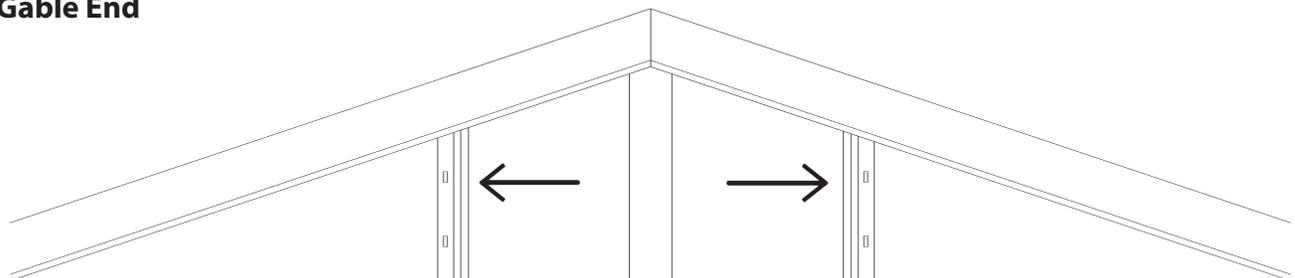
Panel cutting



Gable Starter



Gable End



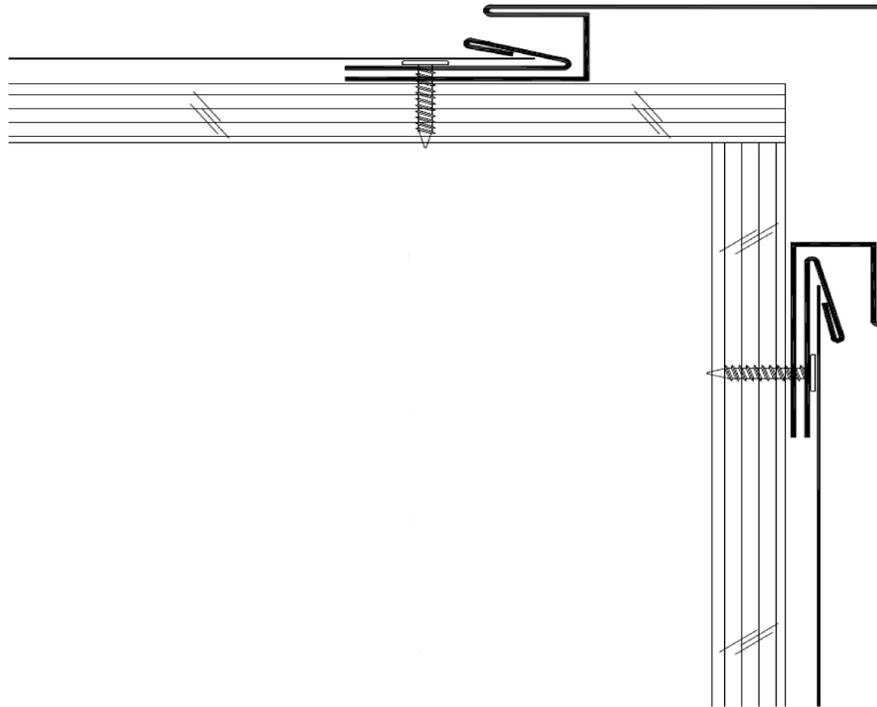
BOARD & BATTEN

OUTSIDE CORNER CONDITION

Board & Batten One Piece Outside Corner

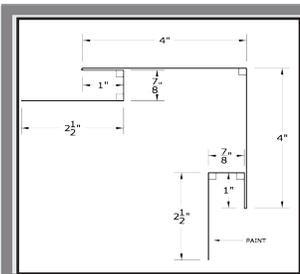
When two walls meet at an exterior corner condition, use Outside Corner Trim to flash for aesthetic appeal. The one-piece outside corner trim should be used in conjunction with a J-Clip to receive the panel, house the raw, cut edge and assist in preventing chatter.

Depending on the application, the nail fin will need to be cut away from the panel in order to keep the appeal of the concealed fastener application. If the batten falls within the housing of corner trims, it may be necessary to secure it by placing a furring strip behind it.

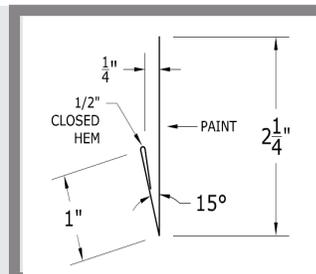


REQUIRED TRIMS:

BBOC



BBJCLIP



BOARD & BATTEN

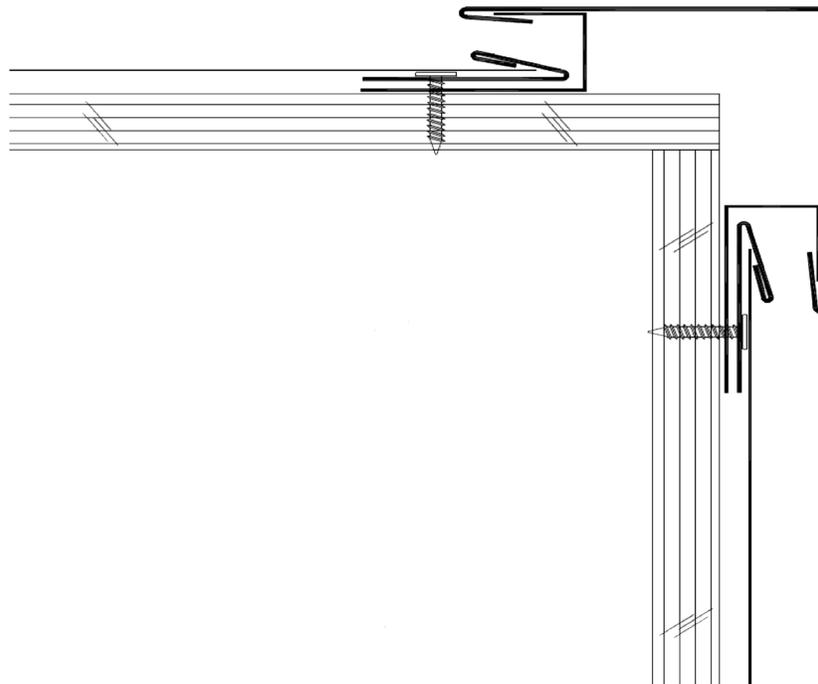
OUTSIDE CORNER CONDITION

Board & Batten Outside Angle

In this corner condition, an open hem outside angle is used in conjunction with a C-Closure and J-Clip when a one-piece corner isn't a preferred install option.

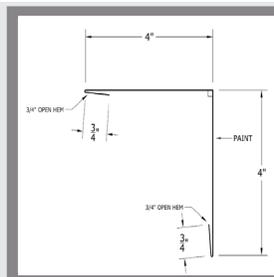
First, measure the desired placement of the C-Channel and J-Clip. Fasten so that the open hem angle will snap securely in place around the C-Closure.

Like the one-piece corner, and any other condition requiring the use of a J-Clip, it may be necessary to "rip" a panel to the required width to accurately house itself within the J-Clip.

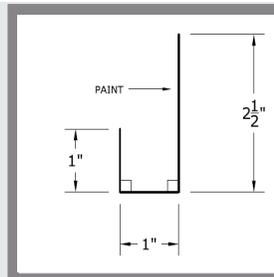


REQUIRED TRIMS:

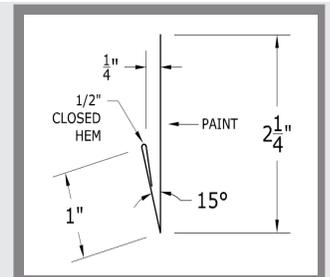
BBOA



BBCC



BBJCLIP

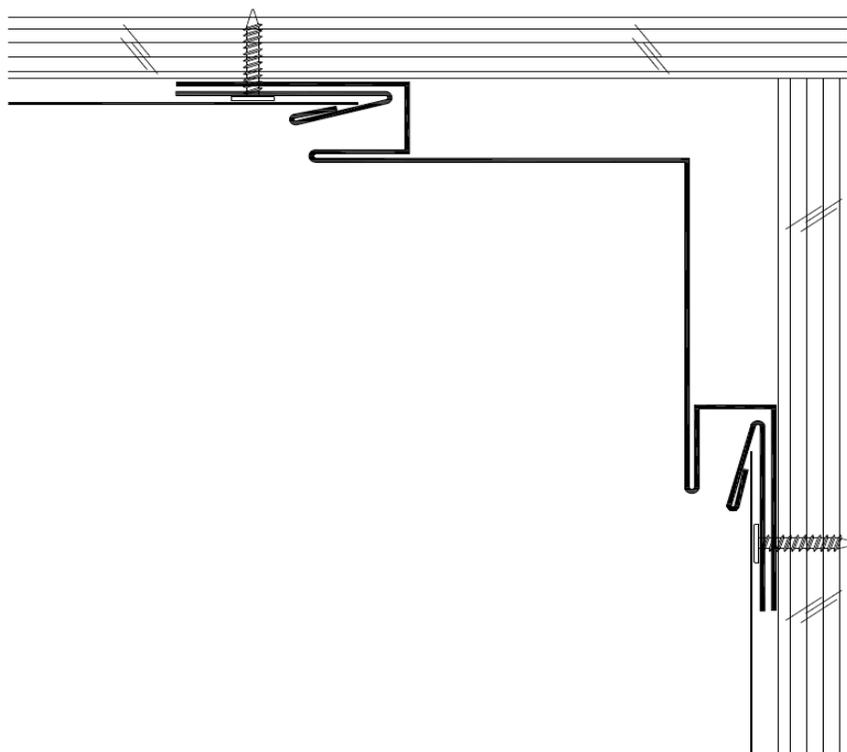


INSIDE CORNER CONDITION

Board & Batten One-Piece Inside Corner

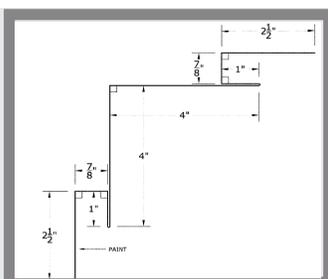
To securely flash an inside corner condition, this one-piece inside corner trim should be used in conjunction with a J-Clip to receive the panel, house the raw, cut edge, and assist in preventing chatter. Simply fasten the corner and J-Clip with wafer head fastener, ensuring ample penetration into the framing, and slide the panel into the J-Clip for security and aesthetic, concealed fastener appeal.

To prevent any water seepage, seal the joint between the outside corner trim and the siding with high-grade, exterior acrylic caulk.

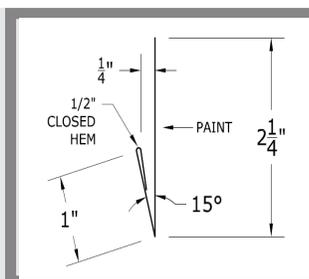


REQUIRED TRIMS:

BBIC



BBJCLIP



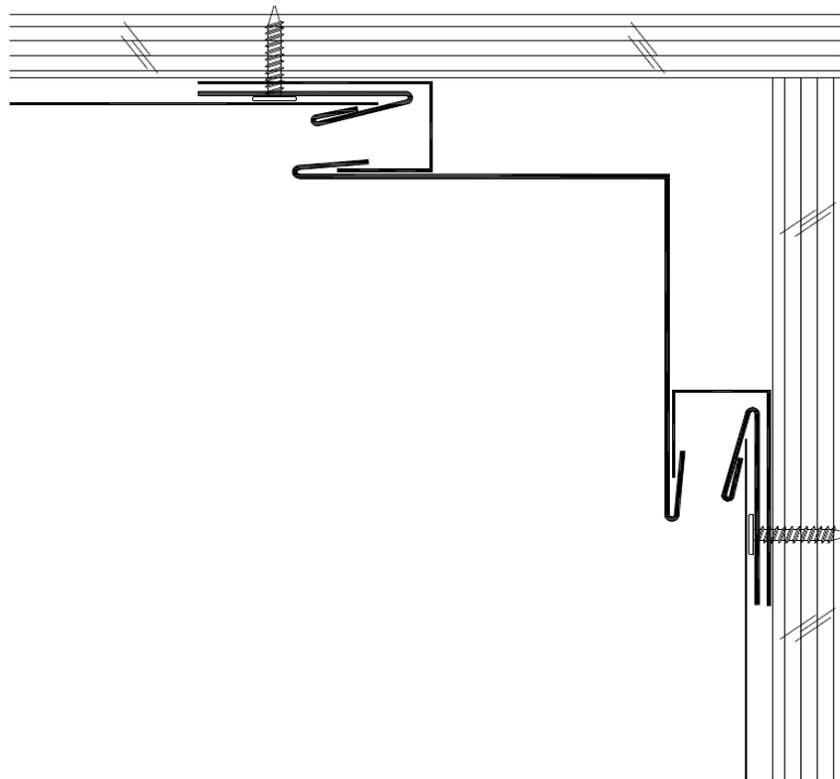
INSIDE CORNER CONDITION

Board & Batten Inside Angle

In this corner condition, an inside angle is installed much like the open hem outside angle. It is also used in conjunction with a C-Closure and J-Clip when a one-piece corner isn't preferred.

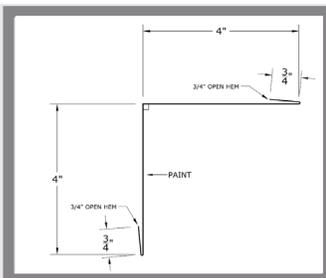
First, measure desired placement of the C-Channel and J-Clip and fasten so that the open hem angle will snap securely in place around the C-Closure.

As this condition requires the use of a J-Clip, it may again be necessary to "rip" a panel to the required width to accurately house itself within the J-Clip.

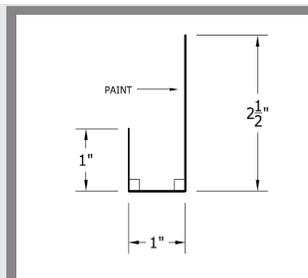


REQUIRED TRIMS:

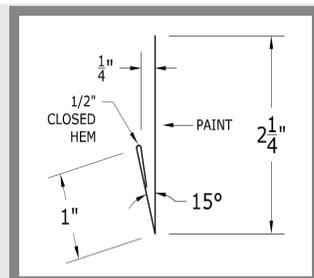
BBIA



BBCC



BBJCLIP

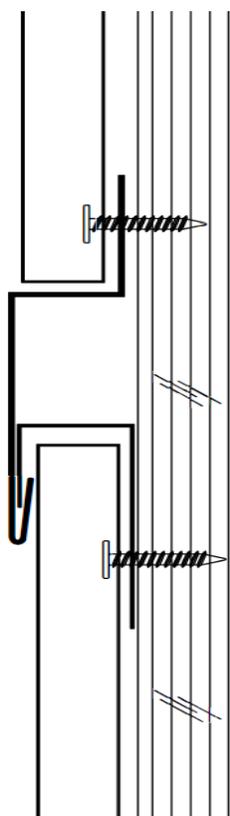




BAND BOARD TRIM CONDITION

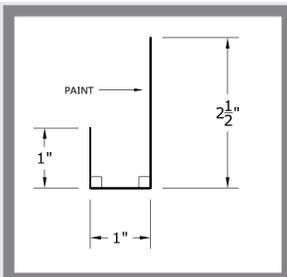
3" BAND BOARD TRIM WITH C- Closure

To join the vertical sections of Board & Batten panel, it's recommended to use Band Board trim. For the lower side, the C-Closure should be used to safeguard the cut edge of the panel. The Band Board trim will then lock into the C-Closure and fasten directly to the wall substrate. Once this is done, the higher Board & Batten panel can be installed directly over the high side of the Band Board trim.

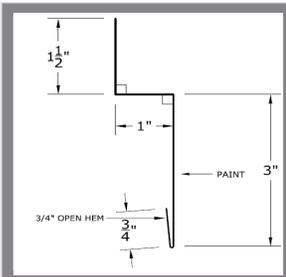


REQUIRED TRIMS:

BBCC



BBBB

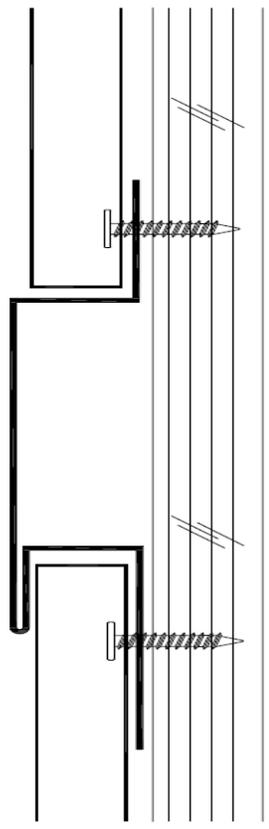


BOARD & BATTEN

BAND BOARD TRIM CONDITION

4" BAND BOARD ONE PIECE TRIM

This one-piece band board option with a 4" outward face can also be used as a panel transition. It simply houses the lower panels within its built-in C-Closure while the upper panels rests on the upper ledge.



REQUIRED TRIM:

BBB4

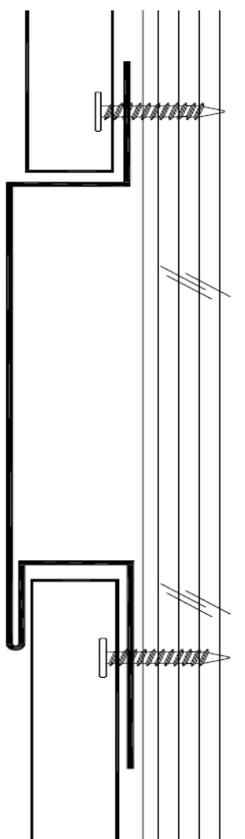
1 1/2"
1"
2 1/2"
7/8"
1"
4"
PAINT



BAND BOARD TRIM CONDITION

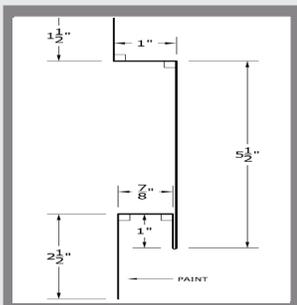
5.5" BAND BOARD ONE PIECE TRIM

Band board trims are used to safeguard exposed raw panel edges, ensure water drainage away from the upper panels and to protect the underlying wall from water damage behind the lower panels. This 5.5" outward faced band board has a more dominant profile and is installed like its 4" counterpart.



REQUIRED TRIMS:

BBB5

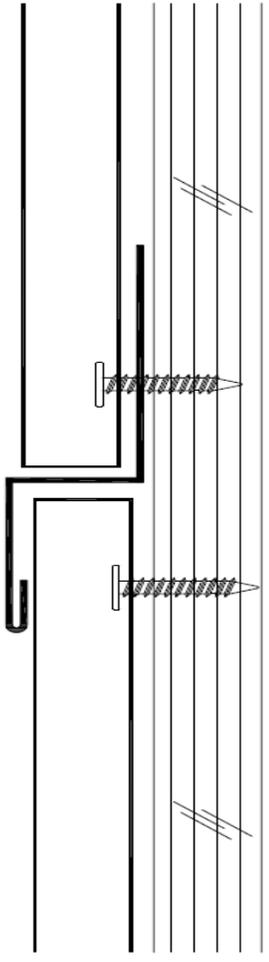


BOARD & BATTEN

DOUBLE ANGLE PANEL TRANSITION

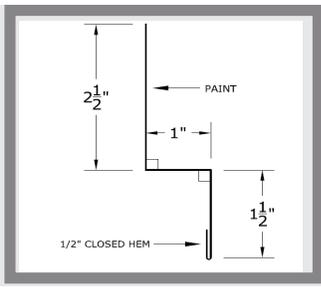
DOUBLE ANGLE PANEL TRANSITION

If you prefer a smaller margin between vertical panels, you can use Double Angle trim instead of Band Board trim. The installation process involves first installing the lower Board & Batten panel and then fastening the Double Angle trim over it directly to the wall substrate using a wafer screw.



REQUIRED TRIMS:

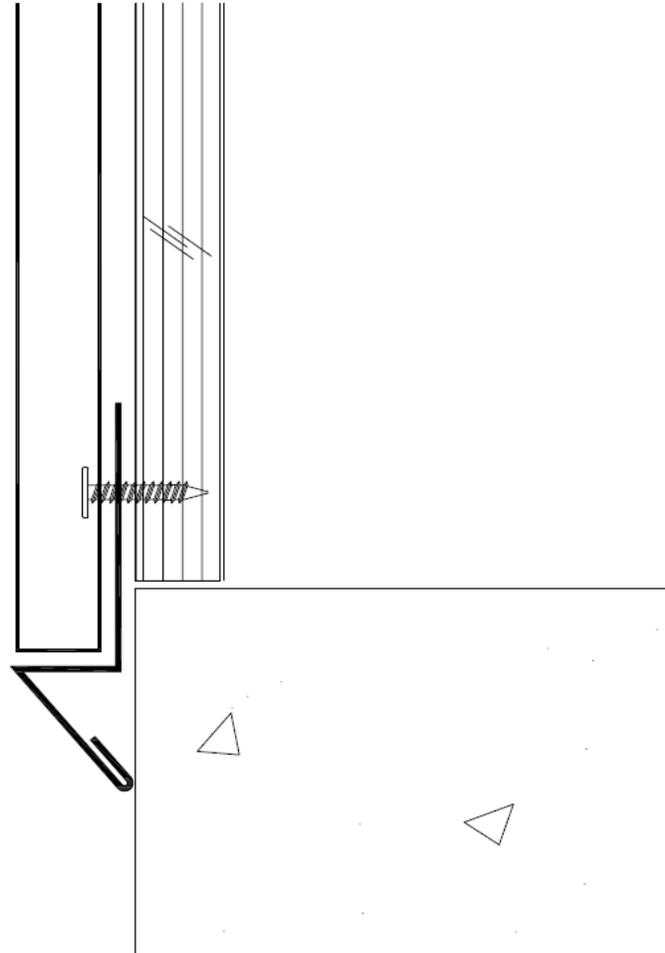
BBDA112



BOARD & BATTEN

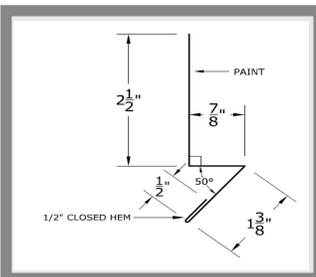
RAT GUARD TRIM CONDITION

Rat Guard serves as the base trim at the bottom of the wall. To fasten it, use a wafer head screw directly on the wall substrate. After that, install the Board & Batten panel over the Rat Guard, resting on the trim's "ledge".



REQUIRED TRIMS:

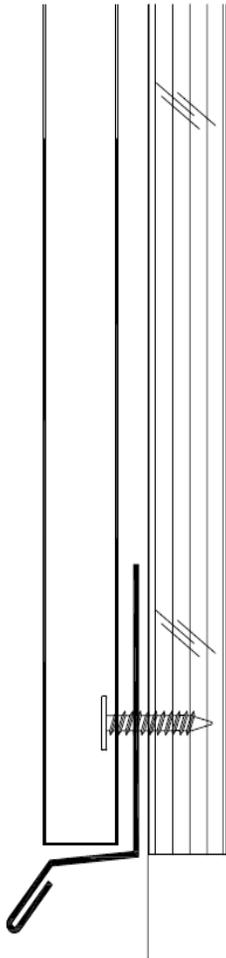
BBRG



BOARD & BATTEN

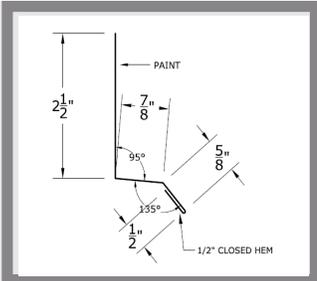
WINDOW CAP TRIM CONDITION

The Window Cap is used over framed openings like doors and windows to allow water to run off without pooling or siphoning. To install the Window Cap, it should be fastened directly to the wall substrate using wafer head screws. After that, the Board & Batten trim can be installed over the high side of the Window Cap, resting on the trim's ledge.



REQUIRED TRIM:

BBWC

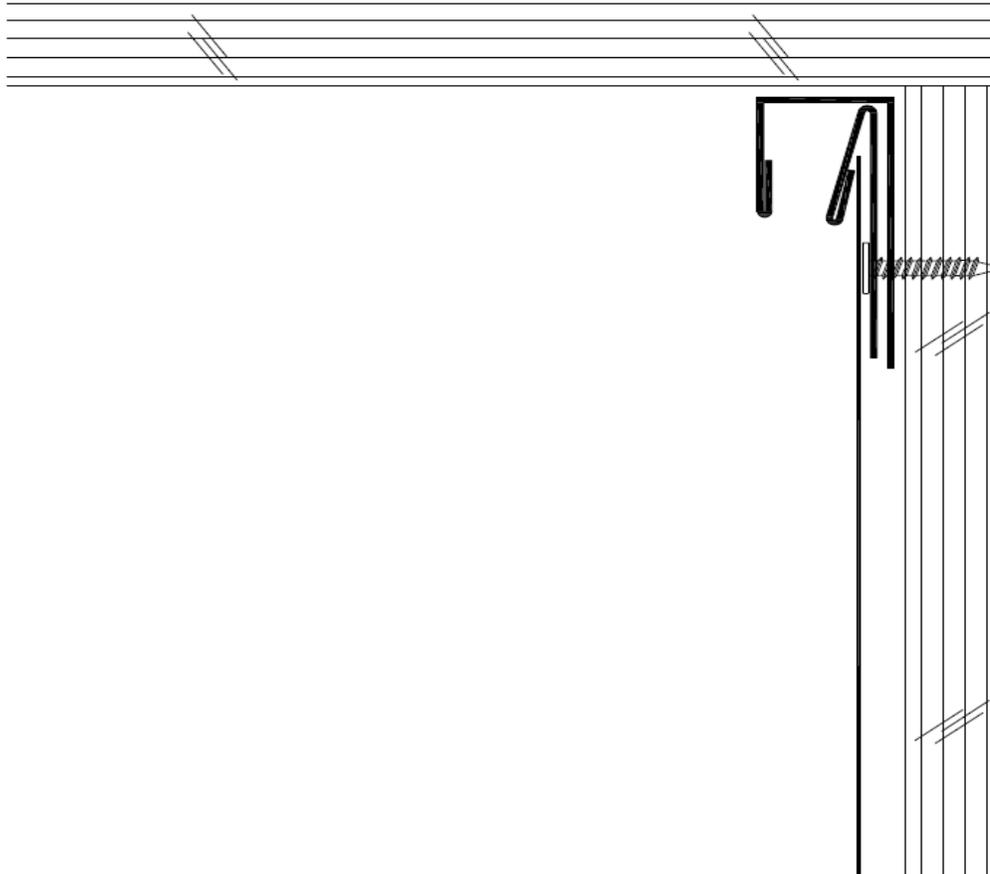


BOARD & BATTEN

JAMB CONDITION

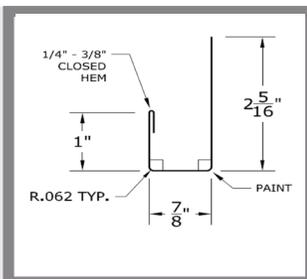
J-Trim / Vertical Install

When receiving the panel vertically around framed openings like doors and windows, a J-Trim is used in conjunction with a J-Clip to help ensure panel is secured from chatter due to environmentally caused vibrations.

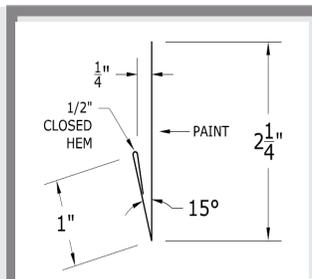


REQUIRED TRIMS:

BBJT



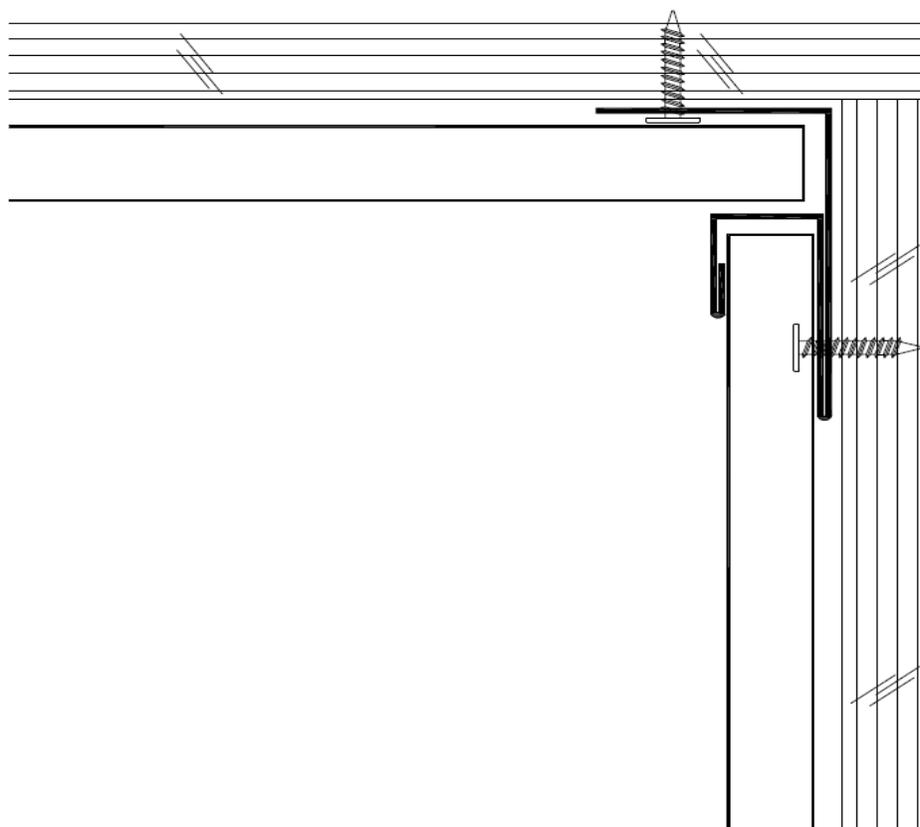
BBJCLIP



BOARD & BATTEN

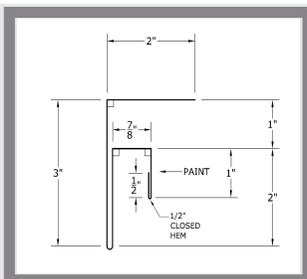
F & J CHANNEL CONDITION

Before installing Board & Batten panels or soffit material, make sure to install the F&J Channel at the top of the wall. This channel is designed to receive the panel on the low side and the soffit material on the high side. To install the F&J Channel, use a wafer head wood screw to fasten it directly to the wall substrate, as shown in the illustration.



REQUIRED TRIMS:

BBFJ

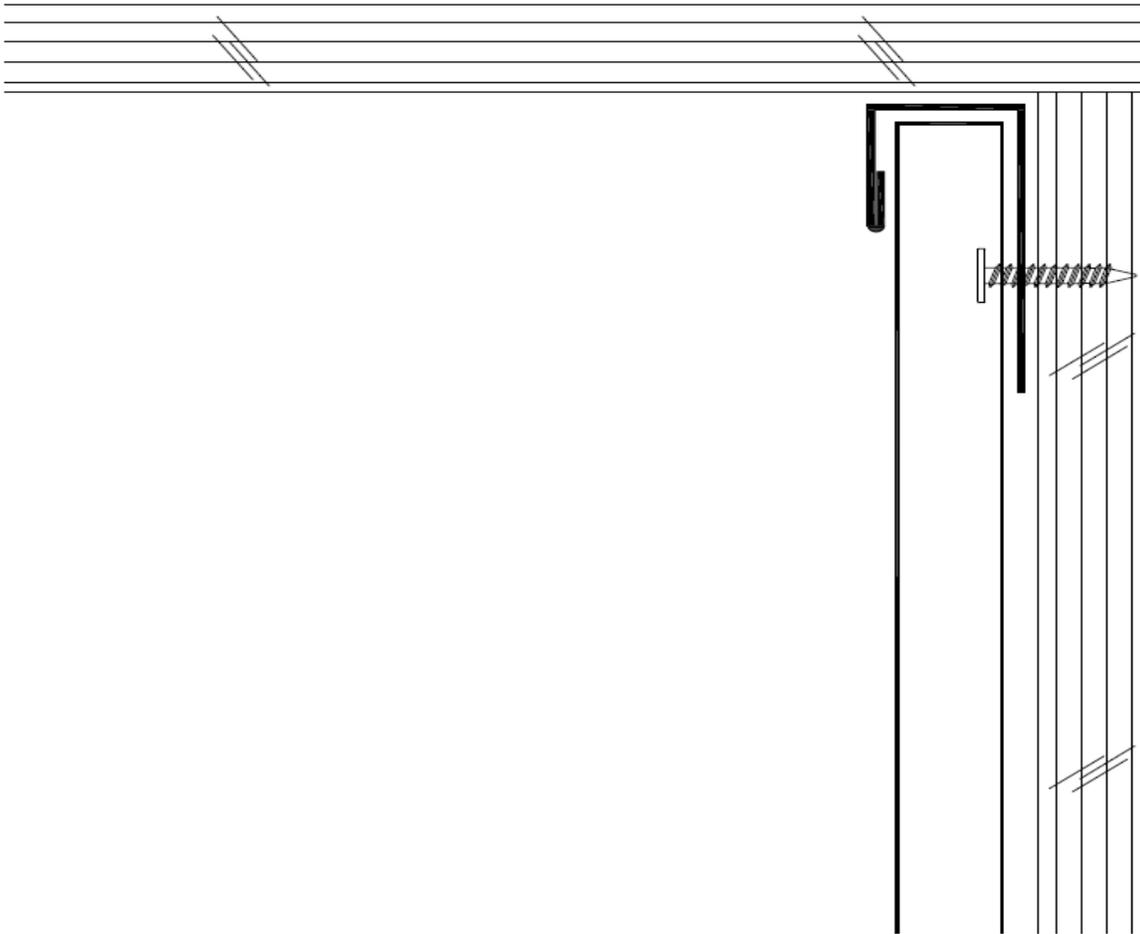


BOARD & BATTEN

J-TRIM CONDITION

J-Trim / Horizontal Install

When receiving the panel horizontally around the top of a wall or the bottom of a framed window opening, J-Trim is used alone to encase the top edge of panels. Fasten the J-Trim directly to the wall substrate using wafer head screws.



REQUIRED TRIM:

BBJT

1/4" - 3/8" CLOSED HEM

1"

R.062 TYP.

7/8"

2 5/16"

PAINT

A detailed cross-section diagram of the required trim. The diagram shows a vertical profile with a closed hem at the top. Dimensions are provided: a 1/4" to 3/8" closed hem at the top, a 1" vertical dimension for the hem, a 7/8" horizontal dimension for the base, and a 2 5/16" vertical dimension for the main body of the trim. A note 'R.062 TYP.' is shown at the bottom left, and 'PAINT' is indicated at the bottom right.



Right.
On Time.
Every Time.®

centralstatesco.com