# **Installation Manual**

## **ChamClad®**

CCMC 14323-R

**ICCES ESR 4560** 



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## Table of Contents

Before you Begin 2 First Steps for a Successful Installation 3-4 Best Practices Guide (General Installation Requirements/Recommended Fasteners) 5-8 Temperature Changes & Expansion/Contraction with Gap Guide 9-11 ChamClad<sup>®</sup> Exterior Architectural Products 12-20 Exterior Horizontal Wall Panel Installation 21-22 Exterior Vertical Wall Panel Installation 23-25 CHAMCLAD<sup>®</sup> Exterior Soffit/Fascia Products 26 **Exterior Soffit Installation 27-40** ChamClad® Interior Architectural Products 41-43 Interior Horizontal Installation 44 **Interior Vertical Installation 45 Interior Ceiling Installation 46** Column and Beam Wrap Installation 47-54 Creative Solutions Drawings for Column and Beams 55-58 3" Quick Click Column and Beam Coming Soon! 59 2PC Faux Beam Installation 60-61 Assembly Drawings 62-78 Care and Maintenance of ChamClad<sup>®</sup> Exterior Wall Panels 79 Installation Tips – At a Glance 80-83

QR CODE- For Install Videos on Both Soffit and Wall.



## **BEFORE YOU BEGIN**

**1.** Read the install instructions *completely*. These installation instructions illustrate the "Best Practices" to install ChamClad<sup>®</sup> cladding and trim.

ChamClad<sup>®</sup> does not accept any liability or responsibility under their written warranty for product failure caused by improper installation.

- 2. To ensure you are up to date with the most recent install instructions, please visit our website <a href="https://chamClad.com">https://chamClad.com</a> and view manual in conjunction with the technical bulletin advisory.
- **3.** Our research and development team are committed to improving product durability and performance. As a result, specifications may change from time to time. Please check our website for updated technical information and profile drawings.
- 4. While this Installation Manual provides typical methods, tools, and techniques based on standard industry practices, it may not address every question or condition that could arise during installation. We encourage designers and installers to review these guidelines thoroughly and identify any site-specific conditions not covered. In such cases, please contact ChamClad® customer service at insidesalesrep@chamclad.com, and our team will assist in developing a mutually satisfactory solution. It is the responsibility of the design authority and installer to ensure proper layout and compliance with relevant codes.
- **5.** Occasionally, you may come across minor irregularities that happen naturally during the manufacturing process. This occurrence will not affect the aesthetics and performance of the product.
- **6.** Occasionally, you may encounter aluminum accessories where the ends need trimming due to the film shrinking back during the curing process. This occurrence will not affect the performance of the product.



## **First Steps for a Successful Installation**

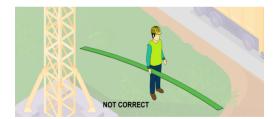
- Inspect all material for any breakage, defects, damage, and colour before installing. <u>Do not</u> <u>install</u> product that is questionable. Contact ChamClad<sup>®</sup> customer service or your dealer for assistance. Installing defective material may void your product Warranty.
- 2. Before installing ChamClad<sup>®</sup> cladding it is very important that installers read and understand the installation recommendations and topics covered in this manual.

#### ChamClad® Transportation, Proper Handling, and Storage

When transporting ChamClad<sup>®</sup> products, keep bags flat. The boards must be supported along the full length. Whenever possible avoid using metal banding. Metal banding will cut into the boards if pulled too tight. **Materials are required to be inspected for any damage within 7 days of receipt, recorded on the Bill of Lading, and forwarded to info@ChamClad.com.** ChamClad<sup>®</sup> warranty may be voided if damaged product is installed without prior inspection.

#### Proper Handling and Storage





Always carry ChamClad<sup>®</sup> cladding by holding it by the narrow edge and pick boards up in the center. ChamClad<sup>®</sup> pallets should not be stacked more than 2 pallets high and always stored on a flat surface.

#### Storage of ChamClad®

Products must be on a flat surface which supports the entire length of the boards and should be kept dry & out of direct sunlight (when possible). Do not store or place on asphalt or in areas prone to excessive heat buildup. Cover with a tarp leaving ends open to allow for airflow. Store away from areas where there may be falling objects or construction debris that could cause damage. If stacking product, please ensure it is stable.

ChamClad<sup>®</sup> packaging is vented to limit the greenhouse effect. Do NOT store uninstalled panels in areas of excessive heat prior to installation; doing so may lead to product distortion.

**Note**: It is important that product is not stored for long periods where temperatures could exceed 30 degrees Celsius (86 degrees Fahrenheit).

#### **Cutting and Tools**



- Always ensure you wear proper, appropriate and standard PPE when performing cutting and installation.
- If using a circular saw, cut cladding face down on a clean surface.
- If using a cut-off saw, cut face up
- Carbide-tipped blades with 84+ teeth are recommended. (Aluminum blades are optimal)
- Do not score or snap ChamClad<sup>®</sup> exterior cladding
- Do not cut ChamClad<sup>®</sup> with coarse saw blade to avoid chipping or damaging the panel

## **BEST PRACTICES GUIDE**

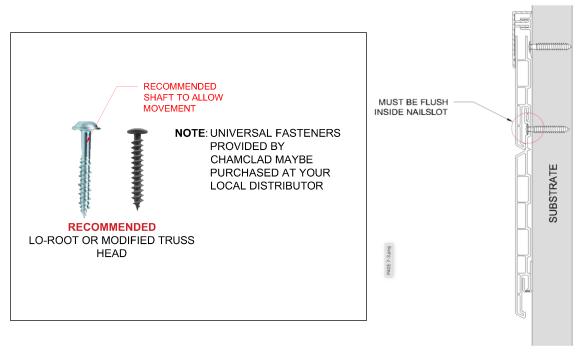
#### **INTRODUCTION**

These installation instructions illustrate the "Best Practices" to install ChamClad<sup>®</sup> cladding, and trim. ChamClad<sup>®</sup> does not accept any liability or responsibility under their written warranty for product failure caused by improper installation.

It is the responsibility of the installer to observe the requirements of the local Building Code as they relate to installation in any given area. Most Building Codes are derived from National Building Codes. In Canada, the primary model is the National Building Code (NBC), which is published by the National Research Council of Canada (www.nrc-cnrc.gc.ca). In the United States, the primary model is based on the International Building Code (IBC), which produces the International Residential Building Code (IRC).

It is the responsibility of the builder or contractor, to understand the local code and how it pertains to the location where ChamClad<sup>®</sup> is being installed.

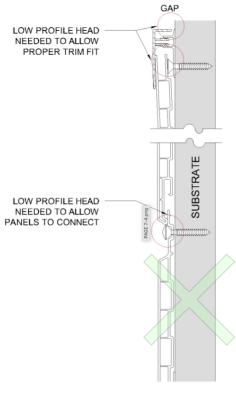
#### **GENERAL INSTALLATION REQUIREMENTS**



#### Fasteners

CORRECT INSTALL





INCORRECT INSTALL

# Fastener Size is critical to a successful ChamClad<sup>®</sup> installation; we recommend the following:

Screws: It is strongly recommended to use ChamClad<sup>®</sup> universal self-tapping screws which are available from your local distributor or directly from ChamClad<sup>®</sup>.

The fasteners must penetrate the wall to a minimum depth of 1 ¼" and allow for the expansion and contraction of the ChamClad<sup>®</sup> products. If using metal furring strips, use of self-drilling screw is recommended (Modified truss quadrex coarse thread self-drilling screw #8-18 X 1 ½"). You must pre-drill pilot holes when using ChamClad's universal self-tapping screws, when screwing into metal.

If ChamClad<sup>®</sup> fasteners unavailable, use low profile, corrosion resistant or stainless-steel screws long enough to fasten through the pre-punched flange. Do not use electroplated fasteners. It is important that the fastener head can fit inside the nailing slot. Fastener heads that protrude outside of the nailing slot will hinder ChamClad<sup>®</sup> tongue and groove locking mechanism.



#### ChamClad<sup>®</sup> Universal Screw #8 quad-drive 1 ½" Self-tapping screw with 1

Self-tapping screw with 1/8" threadless shaft

**Examples of alternate screws:** 



Exterior Wall 17 Self tapping Round Washer Lo-root #8 1 1⁄2"



Modified Truss Quadrex Coarse Thread Screw Self-Drilling  $\#8 - 18 \times 1 \frac{1}{2}$ "

**Note:** DO NOT USE a stapler, or nail gun for exterior cladding and soffit panel installation. GLUE IS NOT to be used to fasten strapping or ChamClad<sup>®</sup> exterior wall boards.

#### **Random ChamClad® Panel Pattern**

ChamClad<sup>®</sup> wall panels are laminated with a repeating pattern (48"). ChamClad<sup>®</sup> makes every effort to ensure the patterns are mixed in each bag to minimize repeat patterns. It is suggested to randomly check panels at the job site for repeat patterns and adjust as required. To avoid excessive repetition when cutting boards 4' or less, use 2 boards with different patterns.

#### Classic Panel (1 Panel, 2 Looks)

ChamClad<sup>®</sup> offers a simple tongue and groove system with the product stacking from the bottom up. For a U-Channel profile, insert to the first stop. For a V-Groove profile, take a non-marking rubber mallet and tap to the next stop. Does not apply for Shadow Line Panel.

#### Air Barrier/Rainscreen

ChamClad<sup>®</sup> exterior wall panels can be installed over many weathers resistant sheet membranes. It is recommended as per CCMC/ ICCES that 6" exterior claddings are installed on an air barrier/ rainscreen. ChamClad<sup>®</sup> panels may be installed over wood furring strips (min. 1/2"), galvanized steel z-girt (min. 20 ga.) or a continuous 3-dimensional membrane, as per local Building Code requirements. ChamClad<sup>®</sup> exterior claddings must be fastened every 16-24" O.C.

#### **Wall Flashings and Penetrations**

Windows, doors, and utility penetrations must be flashed and trimmed properly. It is the responsibility of the installer/designer/builder to ensure it is done to local codes and best industry practice. If sealants are required, ChamClad<sup>®</sup> recommends ASTM 920 Elastomeric Joint Sealants (e.g., Tremco Spectrum 2).

#### **2pc Trim - Vertical Installation**

When installing 2pc trims vertically (2pc Outside Corner, 2pc J Trim, 2pc H-Trim), in order to prevent downward migration, it is recommended to fasten the base trim at the highest point of the nail slot with all other fasteners located in the centre of the remaining slots (every 8-12").

Before applying the top cap, it is recommended to add a small dab of sealant (1") between the teeth at the top and bottom of the base trim. This is especially important around doors and windows where you are not completing a full perimeter wrap.

#### **Aluminum Trim - Film Shrink Back**

Occasionally, you may encounter aluminum accessories where the ends need trimming due to the film shrinking back during the curing process. This occurrence will not affect the performance of the product.

#### Compatibility

ChamClad<sup>®</sup> products are not compatible with asphalt or products containing asphalt. Do not store bags on asphalt (i.e., driveways or roads) as panels and asphalt should not be in contact with each other. Asphalt, if brought into contact with ChamClad<sup>®</sup> will leach into the panels and possibly weaken or discolour the product. If ChamClad<sup>®</sup> products come into contact with asphalt, clean the ChamClad<sup>®</sup> product immediately with a non-solvent cleaning product.

## **Temperature Changes & Expansion/Contraction**

It is important to remember that ChamClad<sup>®</sup> materials will expand and contract with regular temperature changes. ChamClad<sup>®</sup> trims allow for any variance in panel lengths due to expansion/contraction.

When placing fasteners in the center of the designated nail slots, always leave a 1/32" gap between the fastener head and nail flange to allow ChamClad<sup>®</sup> panels expand/contract as needed.

The below guide provides expansion/contraction examples based on different panel lengths and temperature fluctuations.

|  |   |     | Length of Panel (feet) |      |      |      |  |
|--|---|-----|------------------------|------|------|------|--|
| Temperature Change in                          |   |     |                        |      |      |      |  |
| °Celsius and Fahrenheit                        |   |     | 12'                    | 20'  | 30'  | 35'  |  |
| 10   |   | 50  | 0.10                   | 0.17 | 0.25 | 0.29 |  |
| 20   |   | 68  | 0.20                   | 0.34 | 0.50 | 0.59 |  |
| 30   |   | 86  | 0.30                   | 0.50 | 0.75 | 0.88 |  |
| 40   |   | 104 | 0.40                   | 0.67 | 1.01 | 1.17 |  |
| 50   |   | 122 | 0.50                   | 0.84 | 1.26 | 1.47 |  |
| 60   | (Optimal Gap)                                     | 140 | 0.60                   | 1.01 | 1.51 | 1.76 |  |
| 70   |   | 158 | 0.70                   | 1.17 | 1.76 | 2.05 |  |
| 80   |   | 176 | 0.80                   | 1.34 | 2.01 | 2.35 |  |
| ChamClad <sup>®</sup> 's Coefficient of Linear |   |     |                        |      |      |      |  |
| Expansion                                      | Total Expansion/Contraction Per Panel<br>(inches) |     |                        |      |      |      |  |

#### Expansion Guide (by temperature shift)

#### **Temperature Shift Example using ChamClad® products.**

The change in length of any material because of expansion and contraction is dependent on 3 factors:

1. The Coefficient of Linear Expansion (CLE) of the material.

For ChamClad<sup>®</sup> Panels, the CLE is 0.0000698 in/in/°C.

- 2. The original length of the material at time of cut
- 3. The net change in temperature

Change in length (inches) = (Original Length in inches) x (Temperature Change in °C) x (CLE in in/in/C units)

If there is a 12' (144") ChamClad<sup>®</sup> length that goes from 20°C (68°F) to 0°C (32°F), it will contract, theoretically, by this amount:

#### 144 x 20 x 0.0000698 = 0.20" or 7/32"

For example, if installed in 20°C (68°F), the final length of a 144" long ChamClad<sup>®</sup> panel at 0°C (32°F) would become 143.80."

When temperatures return to 20°C (68°F), it is expected that the PVC material will expand and return to 144" in length.

#### **General Rules**

**Based on a temperature change of 40°C (104°F),** for example: 0°C (32°F) in cooler months and reaching 40°C (104°F) in warmer months:

For panel lengths up to 16' leave a ½" gap per side; over 16', up to 20' leave a 5/8" gap per side; over 24' pin the panel and leave a ½" gap per side to equalize expansion and contraction. Use larger faced trims (3.5" 2pc Finish Trim, 3.5" 2pc Outside Corner, larger faced H-Trim).

It is imperative that ChamClad<sup>®</sup> panels are cut to fit the coverage of trim pieces.

The temperature the day of installation factors into the expansion and contraction gap you leave. If installing on a cooler day allow for more expansion and a larger gap, if installing on a warmer day allow for less expansion and a smaller gap. The below guide provides recommended spacing based on temperature and Panel Length.

## Recommended Gap Allowance Temperature Guide

| OUTSIDE<br>TEMP. |     | GAP PER SIDE (inches) |      |      |      |     |  |  |
|------------------|-----|-----------------------|------|------|------|-----|--|--|
| °F               | °C  | ≤ 12'                 | 16'  | 20'  | 25'  | 30' |  |  |
| 14               | -10 | 3/8                   | 1/2  | 5/8  | 3/4  | 7/8 |  |  |
| 32               | 0   | 3/8                   | 7/16 | 1/2  | 5/8  | 3/4 |  |  |
| 50               | 10  | 5/16                  | 3/8  | 7/16 | 1/2  | 5/8 |  |  |
| 68               | 20  | 1/4                   | 5/16 | 3/8  | 7/16 | 1/2 |  |  |
| 86               | 30  | 3/16                  | 1/4  | 1/4  | 5/16 | 3/8 |  |  |
| 104              | 40  | 1/8                   | 3/16 | 3/16 | 3/16 | 1/4 |  |  |

#### Guidelines

- Take into consideration the temperature on date of installation and season you are installing in.
- Installation in weather colder than -10°C (14°F) is not recommended due to potential chipping or cracking of the panels. Should that occur warranty may be voided.
- Generally speaking, in summer and winter months;

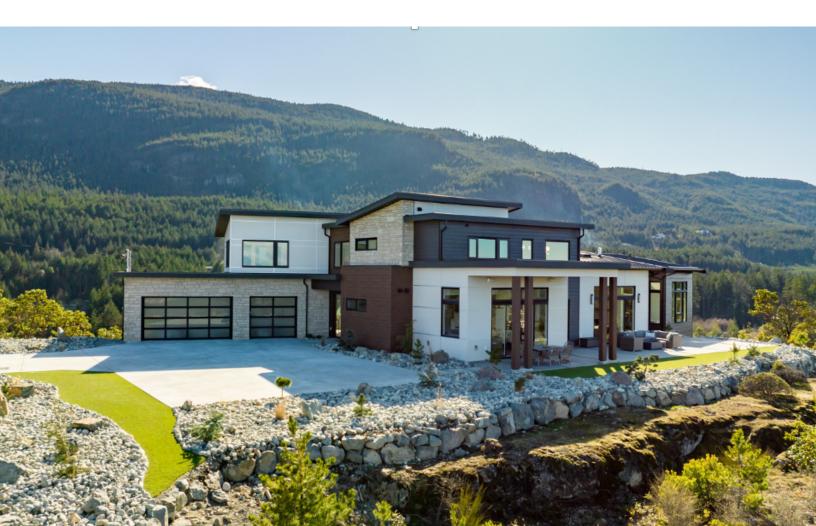
For panels up to 16' leave a gap on each side of 1/2",

For panels 20' leave a gap on each side of 5/8",

**Panels 25' and over** need to be pinned (fastened directly through nail rail, not in center of nail slot) to equalize expansion and contraction. Leave of a gap on each side of  $\frac{1}{2}$ " It is recommended to use the large faced trims to allow for appropriate expansion and contraction.

#### When using small face trims, refer to gap chart above (page 10).

#### It is important to acclimate panels and accessories for a <u>minimum of 24</u> <u>hours</u> prior to installation.

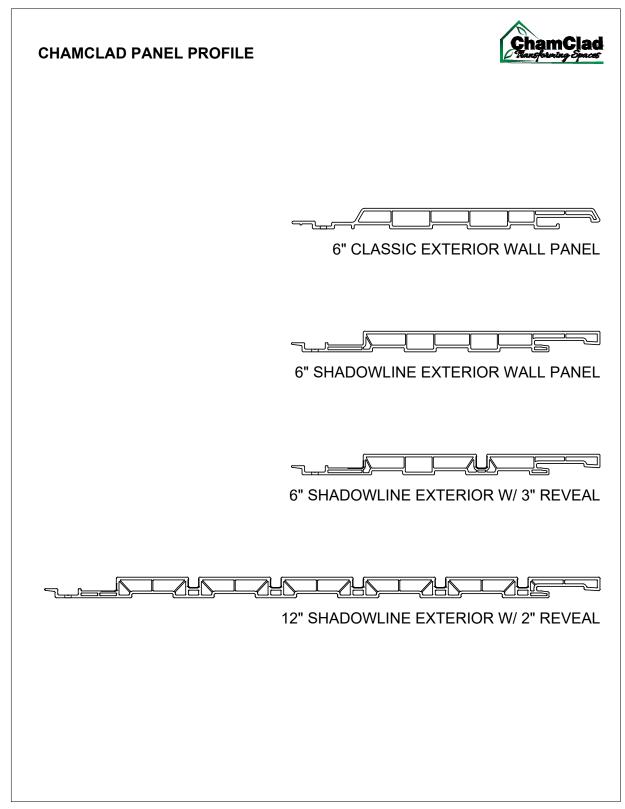


# CHAMCLAD® EXTERIOR

WALL, SOFFIT, HORIZONTAL, VERTICAL



## **CHAMCLAD® EXTERIOR ARCHITECTURAL WALL PANELS**



## 6" Classic Wall Panel and Shadowline Series

\*Panels may be used in exterior soffit (venting by others), interior wall and ceiling







6" CLASSIC EXTERIOR WALL PANEL



Classic Panel is one panel that offers two looks! U Channel & V Groove

J

12" SHADOWLINE EXTERIOR W/ 2" REVEAL



6" Shadowline Wall Panel ½"



6" Shadowline with 3" Reveal Wall Panel ½"



6" SHADOWLINE EXTERIOR WALL PANEL

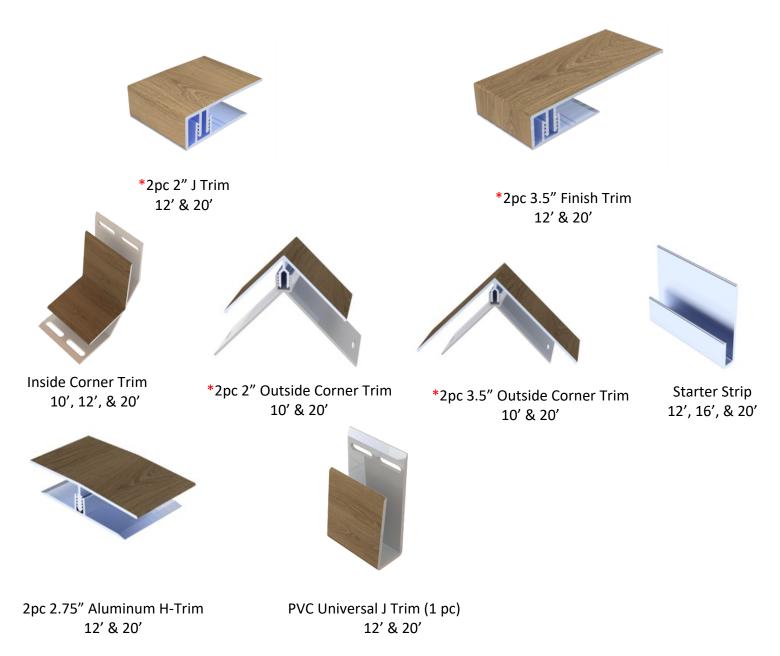


6" SHADOWLINE EXTERIOR W/ 3" REVEAL

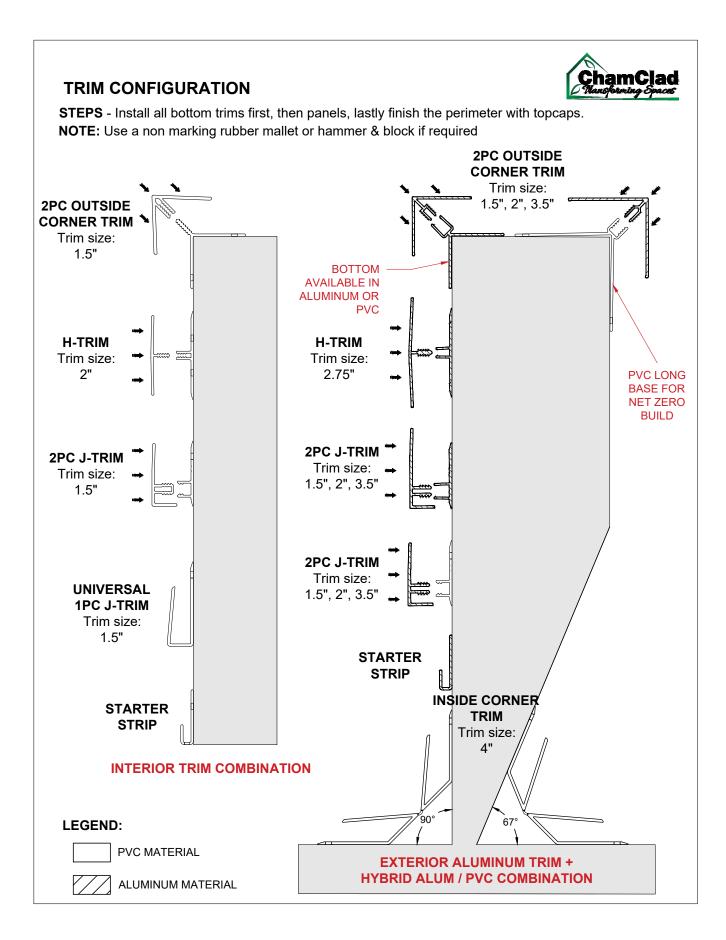


12" Shadowline with 2" Reveal Wall Panel ½"

### **CHAMCLAD® Exterior Wall Trims**



\*THESE TRIMS ARE AVAILABLE IN ALL ALUMINUM OR HYBRID COMBINATIONS





#### **COLUMN AND BEAM WRAPS**



7" 2pc Column Wrap



1" x 4" Architectural Trim



Quick Click Column Cap and Base Trim Available in 7", 8", 10", and 12"



2pc Beam 5.5"x 3.35"



Beam Bracket



Beam End Cap



4pc Quick Click Column and Beam Wrap Available in 8", 10", and 12"

#### ACCESSORIES



#### Spray Bombs

Colour matched Spray Paint. Recommended for use with the Column Wrap Trims or any larger surface areas.

#### **ChamClad® Universal Screw**

#8 quad-drive 1 ½" Self-tapping screw with 1/8" threadless shaft



#### **Touch Up Pens**

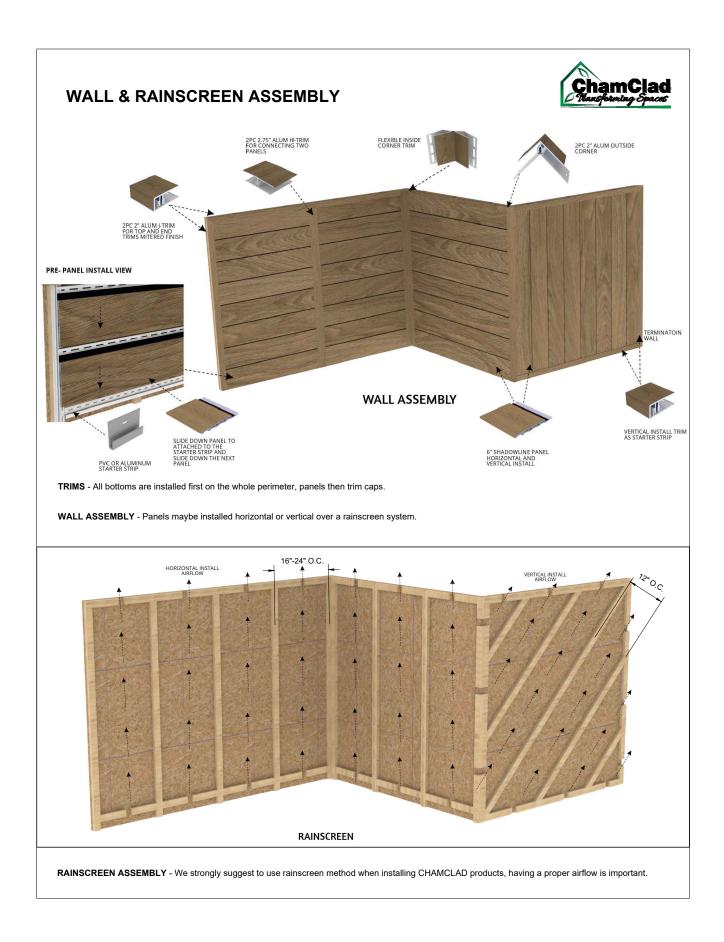


**PREPARATION:** The areas to be touched up must be dry and free from dust, dirt, and grease. Before each use, shake Pen for approximately 30 seconds. Rattle of mixing balls must clearly be heard.

**DE-AERATION:** Due to exterior influences (heat) an overpressure may develop. To prevent blotching, the pen must be de-aerated. Put pen with tip pointing downwards onto a solid, non-soaking surface and press down – hold for 2 seconds, release and repeat procedure until tip is filled with touch- up (7-10 times may be necessary).

**APPLICATION:** Touch down pen tip at a flat angle (about 45 degrees) using light pressure. The valve opens and touch-up flows continuously. With the new designed tip, you can work precisely on hard-to- reach areas. Different stroke widths can be easily applied. Touch up rapidly with one stroke using light pressure. **Important: Do not apply another coat of touch up until first coat has dried (approximately 3-5 minutes).** If opacity decreases, shake pen again and de-aerate as described above. If touch-up flow decreases, simply pump again. Put cap on immediately after use – cap has to snap with a "click". Over time, tip may become blocked with pigment sediments. If this occurs, replace tip with a new one, shake Pen well and repump.

\*Do not let pens freeze



## **EXTERIOR HORIZONTAL WALL PANEL INSTALLATION**

#### 6" Classic and Shadowline Series

#### (See assembly drawings listing on page 62)

- Acclimate panels and accessories for a minimum of 24 hours prior to installation. With each course of ChamClad<sup>®</sup> panels, proper gaps must be left between the end of the wall panel and the track of the base trims for expansion and contraction.
  - Refer to the gap allowance temperature guide chart on page 10 and guidelines before beginning.
- Use a level to produce a guideline around the entire building and mark with a chalk line. Snap line where the starter strip will be installed.
- When installing air barrier/ rainscreen, use either furring/strapping (16-24" O.C.) or steel furring/strapping every (16-24" O.C.) vertically across the wall or an approved continuous 3-dimensional membrane.
- Install a ChamClad<sup>®</sup> Starter Strip fastening every 12" (1/32" gap from fastener head to nail flange to allow for horizontal expansion and contraction). Install panel 2" above grade or ½" above concrete (set Starter Strip accordingly) following local building codes.
- Install flashing and trim bases around windows, doors, utility box fixtures, and all other penetrations through the wall cladding. We recommend all ChamClad<sup>®</sup> accessories be fastened every 8-12" (8" in high heat or wind exposure areas). It is common industry practice to align all vertical and horizontal trims on the same wall to ensure a visually clean look.
- Fasten all panels 16-24" O.C. starting within 4" from both ends of panel. Ensure that screws are placed in the middle of the nail slots to allow for proper expansion and contraction. For panels over 24' Pin Panel at centre of nailing fin and not in nailing slots to equalize expansion and contraction. See gap chart and guidelines on page 10-11.
- Begin installing your bottom courses of ChamClad<sup>®</sup> wall panels using ChamClad<sup>®</sup> Universal screws. When installing panel lengths 20' and over, it is recommended to use the large faced trims to allow for appropriate expansion and contraction. Check every three or four courses to ensure that ChamClad<sup>®</sup> wall panels are level and that adjacent panels are aligned horizontally.
- Except where designated in this manual, fasteners must be placed in and through the center of the nail slot. The fastener must be installed straight and not at any angles. The head of the screw or crown should allow for the thickness of a dime (roughly 1/32") behind the face of the mounting hem to allow for expansion and contraction of the ChamClad<sup>®</sup> panels.

- If you need to apply a fastener in a section that does not have a manufacturers predrilled hole, you MUST pre-drill a nail slot to allow the panel to expand and contract without restriction. (Nail slot punch may be used).
- Application of all 2pc trim top caps is the last step to completing a ChamClad<sup>®</sup> panel installation. Ensure not to overdrive the trim tops to the point where panels can no longer expand and contract due to tightness.
- ChamClad<sup>®</sup> exterior panels may be used in beam, post, or column wrap applications. When installing horizontally begin with installation of the bases of the 2pc Outside Corner on all corners. Continue with installing starter strip between corners at the base and 2pc J Trim between the corners at the top. Install all courses of ChamClad<sup>®</sup> panels and complete with the installation of the 2pc Corner Cap and the 2pc J trim cap along the top. Refer to assembly drawing listing on page 62.

#### Notes:

- It is recommended as per CCMC/ ICCES that 6" exterior cladding be installed on an air barrier/ rainscreen (recommended size is ¾" thickness X 1 ½" width). Contact <u>insidesalesrep@chamclad.com</u> for additional rainscreen alternate solutions.
- DO NOT BUTT JOIN WALL BOARDS you **MUST** use an H-Trim. Leave a proper gap inside the H-Trim to allow for expansion and contraction (refer to gap allowance temperature chart on page 10). Do not install the H-Trim top cap until all wall panel courses are up.
- Installation in weather colder than -10°C (14°F) is not recommended due to potential chipping or cracking of the panels. Should that occur warranty may be voided.
- When installing final top horizontal panel, trimming the full length of the panel at a 45degree angle may ease installation of last panel. Oversized nail slots must be added manually.
- Steel stud framing, associated sub girts and fasteners to be installed as designated by the appropriate design professional OR must be a minimum of 20 gauge or lower and installed 16-24" O.C.
  - Note: DO NOT USE a stapler, or nail gun for exterior cladding and soffit panel installation
  - Note: GLUE IS NOT to be used to fasten strapping or ChamClad® exterior wall board

## **EXTERIOR VERTICAL WALL PANEL INSTALLATION**

#### 6" Classic and Shadowline Series

#### **Typical Vertical Install Method**

Properly installed vertical siding should have a balanced look. Working from left to right, plan the panel layout carefully. If you were to draw a vertical line down the center of the wall, there would be an equal number of panels on both sides. If trimming panels is necessary for a proper fit, the outermost panels should have the same width.

To achieve this balanced appearance, distribute the remaining space evenly at both ends of the wall. For instance, if a wall requires 25 full panels plus and additional 10", you would cut two 5" sections to create the end panels.

\*We recommend this method for the 6" Classic U-Channel and Shadowline Series to best achieve a balance appearance. See drawing CD.10-B on page 66

#### **Alternate Vertical Install Method**

Determine the center of the wall and install 2 starter strips back-to-back (spaced 1 7/8" apart) and 1" above the universal J Trim, fastening every 12". Ensure proper vertical backing is behind starter strips. (See drawing #CD.10-A on page 65)

Begin panel installation by positioning first panels into starter strips (working outward from wall center in both directions). It is good practice to fasten at the highest point of the nail slot at the top of each panel to limit downward migration. Balance of screws to be fastened in the center of nail slots and should allow for the thickness of a dime (1/32") between the screw head and the face of the nail slot.

\*We recommend this method for the 6" Classic V-Groove installation to best achieve a balance appearance. See assembly drawings on page 65.

#### **Steps for Vertical Installation**

To install vertical cladding, position strapping horizontally or diagonally (at a 45° angle) at 12" O.C. If horizontal, leave 2" gaps between straps every 3'-4' to allow any envelope moisture to escape. A continuous, 3-dimensional membrane with a vertical drainage cavity may also be used as a rainscreen (follow manufacturers recommended install procedures). Always check and follow local Building Codes.

- Snap a level chalk line around the base of the building and install universal J Trim/2 pc J Trim that will act as a starter strip, fastening every 8 - 12". When using a 1 pc Universal J trim, prior to install, drill 3/16" weep holes in bottom of universal J Trim 4" from ends and every 18"-24" to allow for drainage.
- Continue installing bases of all 2pc. Outside Corners, H-Trims and 2 pc J trims, fastening every 12". Please note all 2 pc trims require solid backing. We recommend all ChamClad<sup>®</sup> vertical panels and accessories be fastened every 12".
- To complete the install, apply the top caps of all 2pc. trims using a non-marking rubber mallet tapping gently until it locks in place. Do not over drive the trim top cap to the point where the panels can no longer expand and contract due to tightness. Note: All 2pc trims must have equal length base and top to support the trim top and ensure full length engagement.
- ChamClad<sup>®</sup> exterior panels may be used in a post or column wrap application. When installing in a vertical orientation, begin by installing all bases of 2pc Outside Corners on all corners. Continue with installing 1pc Universal J Trim or 2pc J trims between the Outside Corners at the base (punched with weep holes if required) and 2pc J Trim between the corners at the top. Measure column width and trim panels evenly to distribute across the column face with equal panel widths or use two starter strips installed back-to-back vertically in the center of the column and install panels outwards from the center. Fasten all panels at the highest point of the nail slot at the top of each panel to limit downward migration. To complete install, apply top cap of the 2pc outside corner and the 2pc J trim cap along the top. Avoid over hammering the 2pc trim caps so panels can freely move during expansion and contraction. (Refer to vertical column assembly drawings on page 69).
- In addition to using panels in a post, beam, or column wrap application, ChamClad<sup>®</sup> offers a 7" Column Wrap 2pc and our Quick Click Column and Beam in 8", 10", or 12". The innovative trim-less design results in clean lines, and an overall modern and precise appearance. It is environmentally friendly and easy to install over any wood or steel post; is extremely durable, UV protected, scratch and graffiti resistant. Refer to detailed installation instructions on pages 60 and 61.

#### NOTES:

- Attach vertical claddings and trims using ChamClad<sup>®</sup> Universal Screws. Screws must penetrate structural framing members.
- It is recommended as per CCMC/ ICCES that 6" exterior cladding be installed on an air barrier/ rainscreen (recommended size is ¾" thickness X 1 ½" width). Contact <u>insidesalesrep@chamclad.com</u> for additional rainscreen alternate solutions.

- Install vertical exterior cladding to structural framing members when using nonstructural sheathing, drywall, or foam. Install exterior cladding a minimum of 2" above finished grade or as per local building codes. Allow 1/2" above deck or concrete.
- At every floor level, it is recommended to break the installation through the use of a thru-wall flashing (supplied by others) or a ChamClad<sup>®</sup> H-Trim and restart following steps above. The first course of vertical cladding ends in the bottom of the H-Trim with the second course starting in the top of the H-Trim following the steps listed above. Always confirm local building code requirements.
- Except where designated in this manual, it is critical that fasteners are installed in the manufacturers pre-drilled holes. If you need to apply a fastener and it is in a section that does not have a manufacturers pre-drilled hole, you MUST pre-drill a nail slot (using a nail slot punch) to allow the panel to expand and contract without restriction.
- Installation in weather colder than -10 °C (14°F) is not recommended due to potential chipping or cracking of the panels. Should that occur warranty may be voided.
- Acclimate all panels and accessories for a minimum of 24 hours prior to installation.
  - Note: DO NOT USE a stapler, or nail gun for exterior cladding and soffit panel installation
  - Note: GLUE IS NOT to be used to fasten strapping or ChamClad® exterior wall board.

## **CHAMCLAD® EXTERIOR SOFFIT/FASCIA PRODUCTS**

4", 6"and 12" Soffit Panel Series \*







4" Solid Soffit Panel 3/8"

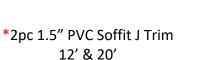
6" Solid Soffit Panel 3/8"

4" & 6" Vented Soffit Panel 3/8"

\*6" Classic and Shadowline may be used in soffit application (venting supplied by others)

## **CHAMCLAD® Exterior Soffit Trims**







2pc 2" PVC H-Trim Soffit 12' & 20'



\*2PC 1.5" Outside Corner 12' & 20'



1.5" PVC Universal J Trim 12' & 20'



2pc 2.75" Aluminum H-Trim 12' & 20'

\*THESE TRIMS ARE AVAILABLE IN ALL ALUMINUM, ALL PVC OR HYBRID COMBINATIONS

## **EXTERIOR SOFFIT INSTALLATION**

#### 4", 6" and 12" Seamless Soffit Panel Series (3/8")

#### (See assembly drawings listings on page 62)

- ChamClad<sup>®</sup> solid soffit panels are available in 4", 6" and 12". The 4" panels are available in 12' and 20' lengths, 6" panel in 12', 16', 20' and 30'. ChamClad<sup>®</sup> Vented Panel 4" is available in 12' & 20' lengths. The 6" Vented panel is available in 12', 16' and 20' lengths. VENTING: Both vented and solid panels MUST be used during installation of ALL exterior soffit applications. This includes the underside of decks (with or without living spaces above), porch ceilings and typical perimeter soffit for attic ventilation (as required by code).
- Verify that soffit substrate is even and level across all surfaces. Applicators may need to install shims to achieve a consistent surface to attach the soffit panels to.
- Attach ChamClad<sup>®</sup> soffit panels at 12 16" using ChamClad<sup>®</sup> universal screws. If the eave span is greater than 16", additional blocking must be installed at 12-16" O.C.
- On exterior soffit installations maintain the proper expansion/contraction distance from the end of the board and the required accessory (universal J Trim, 2pc H-Trim or 2pc J trims - refer to refer to gap allowance chart on page 10).
- During the installation process, it is important that the soffit material is installed to freely allow expansion and contraction with changes in temperature. It is recommended to use ChamClad<sup>®</sup> universal screws. Please allow for a 1/32" gap from the fastener head to the nail flange. Due to our PVC's recycled composition, ChamClad<sup>®</sup> soffit will not swell if exposed to moisture.
- When installing vented soffit panels, it is recommended to alternate between solid and vented panels. Always begin installation with a solid soffit panel. First panel, you must rip down nose to tuck inside the 2 pc J trims and allow for a gap (refer to gap chart page 10). Do not forcefully press panels together during installation to avoid cupping; panels must be installed loosely to allow for movement. Do not over torque screws when installing soffit. When installing long lengths, start from one end and work your way to the other. Always verify local building code requirements.
- Depending on the design of the soffit, ChamClad<sup>®</sup> soffit panels may be installed parallel or perpendicular to the exterior walls. It is important that each panel be fastened at every joist or rafter every 12"-16" O.C. using ChamClad<sup>®</sup> Universal Screws. Install additional courses and check alignment to either side of the line. Check that proper gaps according to the typical weather conditions are maintained to allow for proper expansion/contraction.



Soffit - Parallel to Building



Soffit – Perpendicular to Building



- When wrapping fascia through soffit, install Outside Corner horizontally along the bottom of the fascia. The top portion serves as a starter for the fascia with the underside portion being the starter for the soffit
- For both 6" and 4" x 12' vented soffit panels, the ventilation area is 13.25 in<sup>2</sup> per panel; for 20' vented soffit panels, the ventilation area is 22.08 in<sup>2</sup>. ALWAYS reference local building code when confirming ventilation requirements. Note: Adequate soffit ventilation is a necessity in all soffit applications, especially in the summer months. Excessive heat build-up can occur due to trapped air in the soffit cavity and results in higher soffit temperatures than outside air temperatures. All soffit applications must be vented.
- ChamClad<sup>®</sup> does not recommend installing products at -10°C (14°F)
- Allow the product to be acclimated for a minimum of 24 hours before install. Refer to gap allowance chart on page 10.
- Where more than one soffit length is needed, an H-Trim is required to cover the expansion/contraction gap. DO NOT BUTT JOIN PANELS.
   Please note 2pc trims require solid backing and be fastened every 8-12" O.C.
- When installing Trims and Soffit panels, it is important to use low profile ChamClad<sup>®</sup> universal screws and fasten solid soffit and vented panels every 12"- 16" and all trims fastened every 8"-12".
   In high wind or heat areas all soffit panels must be fastened 12" O.C. and trims 8" O.C.
- When installing final panel, trimming excess panel at a 45° angle at the full length of the panel may ease installation of last panel. Nail slots must be added manually.

# NOTE: 4", 6" and 12" X 3/8" soffit panels may NOT be used in exterior WALL application as improper use will VOID WARRANTY.

DO NOT install gas heaters into a soffit or ceiling application.

\*\*\*If planning to install infrared heaters, check with the Chamclad<sup>®</sup> engineering department to ensure compatibility with cladding.

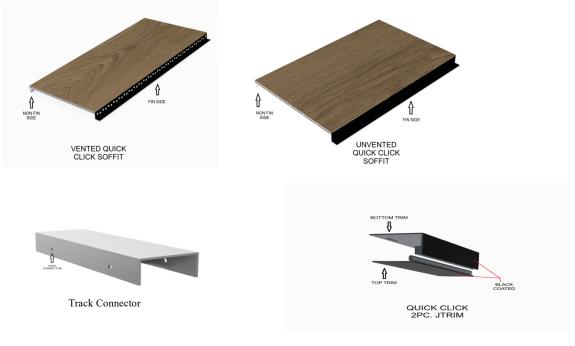
\*\*\*If planning to install electric heater, we recommend using the "Platinum Smart Heat Electric". Please contact <u>insidesalesrep@chamclad.com</u> for further assistance and details.

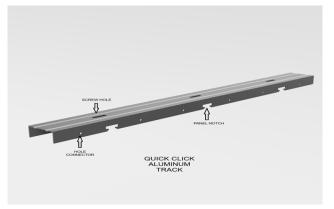


## **Quick Click Exterior Soffit Installation Instructions** 6" Quick Click Shadowline Soffit ½"

#### **Tools and Materials Required:**

- Laser leveling devices
- Hacksaw
- Power mitre saw with a fine-tooth blade
- Standard contractor's tools
- Pop Rivets (1/8" x 1/4") for Track Connector (Supplied by others)
- Fasteners ChamClad® Universal Fasteners (1 ½")
- 2 pc J-Trim Perimeter Trim- Standard Black
- Track Connectors (10 pc/bag)
- Quick Click Aluminum Track- 4pc/Bag
- Panels Hidden Vent or Unvented





#### Dimensions:

- ChamClad® Quickclick Shadowline soffit panels: 12', 16', and 20' lengths
  - Single panel: 6" exposed face, ½" thickness
  - Ventilation: 2.36 sq. in./sq. ft.

#### Note: This calculation is based on using two pieces of 6" panels.

- Track Connector: 4.7" L x 1.38" W x 0.6" H
- Track: 12' L x 1.5"
- **2 pc J-Trim**: Aluminum, Powder coated Standard Black, 1.5" face x 12', base 2" x 12'

#### Please Note:

- Review all drawings applicable to the installation and predetermine the layout of the Quick Click Track, trims and panels. To optimize yield and minimize waste, there may be various panel lengths incorporated into your project (please be sure to check panel location(s) on drawings and layout install plan accordingly)
- Review installation guidelines (below) completely and if you have any questions or require further clarification, please contact the ChamClad<sup>®</sup> Engineering Department at 1.780.454.4430 or email: <u>engineering@chamclad.com</u>
- It is critical that Perimeter Trims and Tracks be aligned and level to ensure correct engagement of panels into Track.
- Take note of Track and Panel direction before planning.
- Light cutouts should be made as the soffit and/or ceiling panels are installed. We recommend lights that are independently suspended. Use a hole saw cutter or mitre saw with a fine-tooth blade and trim kits provided with spotlights. Trim panels around lights to allow for expansion and contraction into the trim. Never hard fasten a light fixture.
- Should you need to remove a panel, use a putty knife to pop out and then reinstall.
- Whenever possible, complete project with full panels.

#### Installation Steps for Perpendicular Soffit

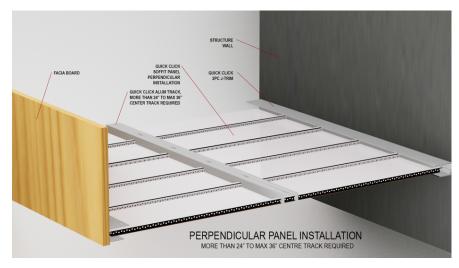
**Plan the Layout:** Plan the soffit layout carefully, as panels cannot be butt joined. Use two 2pc J trims back-to-back (functioning as an H trim) for extended runs and corners. J trims require backing. (See layout images on page 40)

#### 1. Install 2pc J trim:

- Install the base of J trim around the soffit perimeter, ensuring the base is level on all sides
- The 2pc J Trim on end walls must be installed level to the track so the soffit is aligned
- Fasten with ChamClad® universal screws every 8"-12"

#### 2. Install QC Track:

**Note**: If your overhang is **more than 24**" **up to 36**", install a single track down the centre and ensure the 2pc J trim is level so panels sit straight.



If your overhang is 24" or less, no centre track is required.

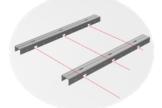


#### Installation Steps for Perpendicular Soffit Continued...

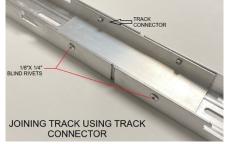
- Start by screwing a full piece of QC Track (16"-24" OC).
- Run QC tracks into the 2pc J Trim. It is wide enough to hold track and panels. This will provide additional support.



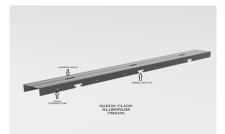
• Use a laser level to verify subsequent tracks align with the first track for proper panel engagement.



• At junctions between tracks, use a track connector to join two QC tracks with rivets



• Temporarily insert a panel into the notches to check alignment. A smooth and even fit confirms correct track alignment.



#### Installation Steps for Perpendicular Soffit Continued...

#### 3. Install QC Panels:

- Leave an allowance on the ends for the panel to expand and contract. Generally speaking, <sup>1</sup>/<sub>2</sub>" in summer and 5/8" in winter for up to 20' lengths.
- Start installing the QC panel with the fin side inserted first into the track



- Using a non-marking rubber mallet, ensure the panel is fully engaged in the track before clicking in the next panel. Continue until all panels are installed.
- Whenever possible, complete the project using full panels. If ripping a panel is necessary, cut the panel using a power saw with a fine-tooth blade.
- For Corners use the 2pc J Trim back-to-back (functioning as an H Trim) on blocking.



#### 4. Final Touches:

• After installing all the QC Soffit panels, use a mitre cut to install the top J Trim. This method ensures a clean and professional finish for your soffit installation, especially around corners.



Mitred Corner Detail 2pc J trim, back-toback on blocking



#### Installation Steps for Parallel Soffit:

**Plan the Layout:** Plan the soffit layout carefully, as panels cannot be butt joined. Use two J trims back-to-back (functioning as an H trim) for extended runs (maximum panel length of 20ft) and corners. J trims require backing.



#### 1. Install Base 2pc J Trim:

- Install the 2pc J trim base around the soffit perimeter.
- Ensure the base is level on all sides.
- Fasten with **ChamClad**<sup>®</sup> universal screws.

#### 2. Install QC Track:

• Trim the track by 2 3/8" and leave a ¼" to attach to the J Trim. This will give full coverage when the top of the J Trim is installed. Start with a full panel at the fascia.





• Start by screwing a full piece of QC Track (16"-24" O.C).



#### Installation Steps for Parallel Soffit Continued...

• Run QC tracks into the 2pc J Trim. It is wide enough to hold track and panels. This will provide additional support.

**Note**: Install the first track inside J trim, then continue with spacing 16'' - 24'' O.C. If the last track spacing exceeds 18'' from the perimeter J trim you must install a track inside the J trim. This will provide required panel support.



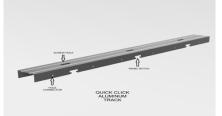
• Use a laser level to ensure subsequent tracks are aligned with the first track for proper panel engagement.



• At junctions between tracks, use a track connector to join two QC tracks with rivets



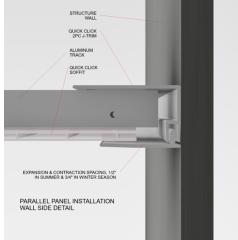
• Temporarily insert a panel into the notches to check alignment. A smooth and even fit confirms correct track alignment.



#### Installation Steps for Parallel Soffit Continued...

#### 3. Install QC Panels:

• Leave an allowance on the ends for the panel to expand and contract. Generally speaking, ½" in summer and 5/8" in winter for up to 20' lengths.



- Start installing with a full panel on the fascia side and work toward the wall side. If a ripped panel is necessary, it should be located along the wall side.
- Install the QC panel with the fin side inserted first into the track.



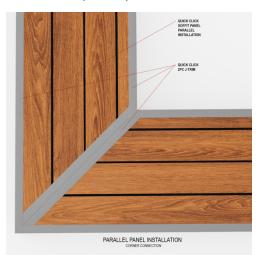
- Using a non-marking rubber mallet, ensure the panel is fully engaged in the track before clicking in the next panel. Continue until all panels are installed.
- Whenever possible, complete the project using full panels. If ripping a panel is necessary, cut the panel using a power saw with a fine-tooth blade.
- Panels cannot be butt joined. Use two J trims back-to-back (functioning as an H trim) for extended runs and corners. J trims require backing.



#### Installation Steps for Parallel Soffit Continued...

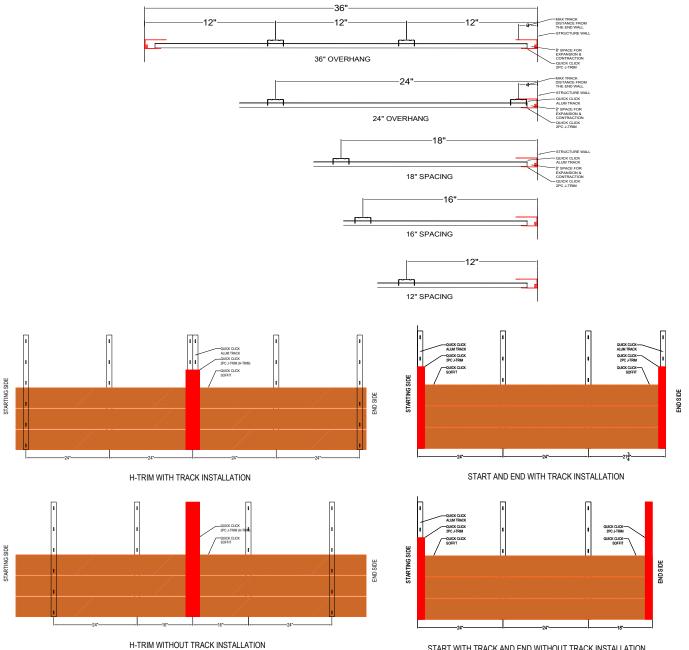
#### 4. Final Touches:

• After all panels are installed, use a mitre cut to install the top J-Trim, completing the corner. This method ensures a clean and professional finish for your soffit installation, especially around corners.





#### Layout Images for Quick Click Soffit



START WITH TRACK AND END WITHOUT TRACK INSTALLATION



# CHANCLAD INTERIOR WALL, CEILINGS, HORIZONTAL, VERTICAL



## **INTERIOR WALL AND CEILING CLADDING**

## 4" & 6" V GROOVE/U CHANNEL AND 12" SEAMLESS PANELS





4" Interior Wall & Ceiling Panels 3/8"

6" Interior Wall & Ceiling Panels 3/8"



12" Interior Wall & Ceiling Panels Seamless Panel 3/8"

NOTE: 4" & 6" panels available in V-Groove and U-Channel profiles

\*6" Classic and Shadowline may be used in interior wall and ceiling applications

## **Interior Wall and Ceiling PVC Trims**



1pc PVC Inside Corner Trim 10', 12', & 20'



1.5" PVC Universal J Trim 12' & 20'



2pc 1.5" PVC Outside Corner Trim 12' & 20'



2pc 1.5" PVC J Trim 12' & 20'



2pc 2" PVC H-Trim 12' & 20'

## **COLUMN AND BEAM WRAP**



7" 2pc Column Wrap



1" X 4" Architectural Trim



Quick Click Column Cap and Base Trim Available in 7", 8", 10", and 12"



2pc Beam 5.5"x 3.35"



Beam End Bracket



Beam End Cap



4pc Quick Click Column and Beam Wrap Available in 8", 10", and 12"

## HORIZONTAL INTERIOR INSTALLATION

## 4" & 6" VGroove/UChannel and 12" Seamless Panels (3/8")

(See assembly drawings listings on page 62)

- ChamClad<sup>®</sup> Interior Horizontal panels are installed similarly to Exterior Horizonal panels; please refer to Exterior Horizontal Wall Panel Guidelines on pages 21 – 22.
- Always allow ChamClad<sup>®</sup> panels and accessories to acclimatize to current temperature conditions before starting the installation. Temperature variations are less on an interior installation.
- Verify that the walls and ceiling substrates are even and level across all surfaces. Furring may be required to acquire a consistent surface to attach ChamClad<sup>®</sup> panels.
- Establish a level guideline using a chalk line on all wall areas to be covered with ChamClad<sup>®</sup> wall cladding, where the bottom of the lowest board is to be installed. Depending on the look or finish that is desired, the installer may use a starter strip or a universal J Trim. Since this is an interior wall, no drain holes need be drilled into the bottom of the universal J Trim.
- Install universal J Trim or 2pc J Trim in areas where ChamClad<sup>®</sup> wall panels meet other finishes. Also install Universal J Trim or 2pc J Trim at all windows, doors, and other penetrations. It is common practice to fasten interior wall panels at 16- 24" O.C. Every few courses of wall panels, the installer should check for horizontal alignment and level.
- Where the interior wall meets the ceiling, and depending on design requirements, use the ChamClad<sup>®</sup> 2pc J Trim. Install all trim bases first and once ChamClad<sup>®</sup> wall panels are installed to the top course, finish off by installing the top caps.
- When joining ChamClad<sup>®</sup> interior wall panels, use 2pc H-Trim to connect panels. It is recommended to align the ChamClad<sup>®</sup> 2pc H-Trim with other trim elements on the wall.
- On Interior applications, fasten trims (12-16" O.C.) and panels (16–24" O.C.) using ChamClad<sup>®</sup> universal screws. Panels must be attached to structural framing members.

DO NOT USE STAPLERS/PNEUMATIC STAPLERS FOR INTERIOR OR EXTERIOR APPLICATIONS. \*DO NOT USE 4" and 6" INTERIOR panels in exterior applications. The use of 4",6" and 12" Interior wall panels (3/8") on an exterior wall will void the warranty.

## **INTERIOR VERTICAL INSTALLATION**

## 4" & 6" VGroove/UChannel and 12" Seamless Panels

- ChamClad<sup>®</sup> Interior Vertical panels are installed similarly to Exterior Vertical panels; please refer to detailed Exterior Vertical Wall Panel Installation on pages 23-25.
- Always allow ChamClad<sup>®</sup> panels and accessories to acclimatize to current temperature conditions before starting the installation. Temperature variations are less on an interior installation, but the same requirement applies.
- Verify that the walls and ceiling substrates are even and level across all surfaces. Furring may be required to acquire a consistent surface to attach ChamClad<sup>®</sup> panels.
- Establish a level guideline using a chalk line on all wall areas to be covered with ChamClad<sup>®</sup> wall cladding, where the bottom of the lowest board is to be installed. As in the Exterior Vertical Installation, use a universal J Trim to start application. As this is an interior wall, no drain holes are required to be drilled into the bottom of the universal J Trim.
- Commence application with installation of all trims at 12-16" O.C.
- When covering entire wall area, install starter at mid-point of wall and align VGroove or UChannel to the centre of the wall and work outwards from either side. Install balance of trim bases as per exterior vertical installation and finish wall application with installation of 2pc trim caps. It is good practice to fasten at the highest point of nail slot at the top of each panel to limit downward migration.
- If applying interior vertical panels as a feature on a portion of a wall area, use full panels (cut to height) in order to maximize overall appearance. Begin with installation of component pieces and base trims; followed by installation of all wall panels (working left to right) and complete with application of component top caps. Attach panels to structural framing members.

#### DO NOT USE Electric Staplers/Pneumatic Staplers for INTERIOR APPLICATIONS. We recommend using Chamclad<sup>®</sup> Universal Screws but if unavailable use a non-corrosive Low Profile #8 Modified Truss Head Screw 1 ¼".

DO NOT USE 4", 6" and 12" INTERIOR panels (3/8") in exterior wall applications. The use of 4",6" and 12" Interior wall panels (3/8") on an exterior wall will void the warranty.

## **INTERIOR CEILING INSTALLATION**

## 4" & 6" VGroove/UChannel, 12" Seamless Panels (3/8")

(See assembly drawings listings on page 62)

- ChamClad<sup>®</sup> interior wall panels may also be used as a ceiling finish; installed similar to ChamClad<sup>®</sup> Exterior Soffit panels - refer to pages 27-40.
- Always allow ChamClad<sup>®</sup> panels and accessories to acclimatize to current temperature conditions before starting the installation. Temperature variations are less on an interior installation, but the same requirement applies.
- Verify that ceiling substrates are even and level across all surfaces. Furring may be required to achieve a consistent surface to attach ChamClad<sup>®</sup> panels. Install furring strips at 12-16" O.C. perpendicular to the joist.
- We recommend all ChamClad<sup>®</sup> accessories be fastened every 12-16"
- Fasten at each furring strip, which should be 12-16" O.C. Once you have installed a few courses of ChamClad<sup>®</sup> ceiling panels, check for alignment of the perpendicular or parallel adjacent vertical wall. Where you are placing panels end to end, use H-Trim to finish the joint.
- Install the remaining ChamClad<sup>®</sup> panels and check for alignment. When using the 2pc J Trim install the top cap onto the base to complete the installation.

#### Note:

- ChamClad<sup>®</sup> versatile 4",6" & 12" interior architectural panels are designed for all types and sizes of decorative (non-load bearing) post, beam and column wrap applications. In addition, we offer a 2pc Faux beam wrap which is lightweight and easy to install. Please refer to detailed installation instructions on pages 59-60.
  - 4", 6", and 12" interior 3/8" panels must be used for soffit applications, interior covered deck areas, barrel ceilings, sun porches, interior walls, and ceilings. The use of these panels on an exterior WALL will void the warranty.





## CHAMCLAD COLUMN & BEAM EXTERIOR & INTERIOR

2pc faux beam Sunbleached Oak

7" 2pc column wrap Sunbleached Oak

## **COLUMN AND BEAM WRAP INSTALLATION**



(See assembly drawings listings on page 62)

#### INSTALLATION INSTRUCTIONS FOR CHAMCLAD 2PC 7" CLASSIC COLUMN WRAP

#### 1. LOADING

a. 7" 2pc column wrap is non-structural.

#### 2. <u>DIMENSIONS</u>

- a. Exterior dimensions of the column are 7" x 7".
- b. Internal cleared dimensions of the column are 6" x 6 1/2".
- c. Architectural trim dimensions are ¾" x 3 5/8".
- d. Column lengths available in pairs at 8, 10, and 12ft lengths.

#### 3. INSTALLATION

- a. The internal structural support should be straight, square, and within the dimensions specified above.
- b. Cut 2pc columns caps 1/4" shorter than column height requirements to allow for expansion and contraction at the top of the column.
- c. Wrap the 2pc columns around the vertical internal structural support by engaging the arrowhead in one panel into the groove of the second panel. Do this on both ends of the "L" shaped column, using a non-marking rubber mallet to assemble. Ensure a tight wrap around the internal structure to avoid movement and full engagement of the two pieces for a seamless finish.
- Connect the column wrap using ChamClad universal screws on two sides at the base, countersinking the screw to be flush with the column face. This will allow for the trim to sit flat and allows movement for expansion and contraction.
   Note:

If column is loose or has movement around the internal structural support:

- Create three collars measuring 6 ½" x 5 ½" around the base, center, and top of the support structure. Install the 2pc column, which will form a tight fit around the collars. This will prevent movement of the 2pc column.
- 4. If you do not want to trim out columns, use Bradnail instead of ChamClad Universal screw at the base of the column to secure





#### **Finishing Options**

#### 1. 1" x 4" Architectural Trim

- a. Chamclad<sup>®</sup> offers use of architectural trims to finish the ends of the columns.
- b. Measure and cut architectural trims at 45-degrees. Ensure the trim is pressed firmly against the column when determining the edge of the 45-degree cut.
- c. Touch up exposed cut edges with touch-up paint. Paint cans or touch up pens available through ChamClad<sup>®</sup>.
- d. Apply PL Premium on the back of each cut trim and position along column base or cap.
- e. Wrap a fastening strap around trims and allow to cure for 24 hrs
- f. To ensure the trim remains securely in place, finish by inserting a small Bradnail into each piece.



- g. Chamclad<sup>®</sup> offers Column Cap & Base trim for 7" to finish the base and/or top of the columns.
- h. Place the column brackets around each corner of the column base and snap bracket together. Ensure they are level, and anchor the bracket to the deck or substrate through the predrilled holes in the corners.
  - Touch up exposed cut edges with touch-up paint if required
    - Screw the bracket into the column, do not screw in tightly as it can create a gap. Snap on the 4pc trims provided until they click.



## INSTALLATION INSTRUCTIONS FOR CHAMCLAD® 4-PIECE QUICK CLICK COLUMN WRAP



- 1. LOADING
  - a. 4pc Quick Click Column wraps are non-structural
  - b. Always climatize product 24hrs before installation.

#### 2. DIMENSIONS

- a. Exterior dimensions of the column available are 8" x 8", 10" x 10", 12" x 12" (Mix and match dimensions are also available. e.g. 8" x 10", 10" x 12" etc.) (figure 1 on page 54)
- b. Check Detailed drawings (figure 2 on page 54) for the internal clearance dimensions before ordering.
- c. Columns available in sets of singles or 2pc (4pc to complete 1 Column or Beam) in 10ft and 20ft lengths.

#### 3. INSTALLATION FOR COLUMNS

Note: Available in 8", 10", and 12" face sizes, in 10' or 20' stocked lengths you can mix and match to create custom columns.

- a. The internal structural support should be straight, square, and within the dimensions specified in the detailed drawing.
- b. Pack with dimensional lumber or block top, middle and bottom. This is to keep the column straight.
- c. Start by measuring your column height and cut ChamClad Column wrap to desired length less ¼" in exterior application to allow for expansion and contraction.
- d. Apply 1" of QuadMax silicone at the top and bottom of each corner.
- e. On the ground, snap together 2 of the 4pc into a 'L' shape using a rubber mallet and place around the column. Repeat with the remaining 2pc for the other side. Always fix the column at the top.
- f. Connect the column wrap using ChamClad universal screws on all four sides at the base, countersinking the screw to be flush with the column face. This will allow for the trim to sit flat and allows movement for expansion and contraction.

Note: To ensure the column remains straight, always start snapping the pieces together from one side and work towards the other. Avoid starting from the middle.

#### **Creative Solutions!**

Our 8", 10", and 12" Quick Click column and beam series system, were designed to offer even more design possibilities for your next project. Whether you're envisioning a simple column, extended privacy walls, or striking beams, our quick installation system makes it all achievable. With sustainability and durability at its core, the only limit is your imagination. Check out the drawings below for design inspiration from the ChamClad team.





#### **Finishing Options**

1.Column 1" X 4" Architectural Trim

- a. Chamclad<sup>®</sup> offers use of architectural trims to finish the ends of the columns.
- b. Measure and cut architectural trims at 45-degrees. Ensure the trim is pressed firmly against the column when determining the edge of the 45-degree cut.
- c. Touch up exposed cut edges with touch-up paint. Paint cans or touch up pens available through ChamClad<sup>®</sup>.
- d. Apply PL Premium on the back of each cut trim and position along column base or cap. **Do not** apply PL Premium at miter.
- e. Wrap a fastening strap around trims and allow to cure for 24 hrs.
- f. To ensure the trim remains securely in place, finish by inserting a small Bradnail into each piece

Note: If you do not want to trim out columns, use Bradnail at the base of the column to secure.

2.Column Cap & Base Trim Option

- a. Chamclad<sup>®</sup> offers a Column Cap & Base trim to finish the base and/or top of the columns. Currently available for 8" column.
- b. Place the column brackets around each corner of the column base ensuring they are level, and anchor the bracket to the deck or substrate through the predrilled holes in the corners.
- c. Touch up exposed cut edges with touch-up paint if required
- d. Screw the bracket into the column, do not screw in tightly as it can create a gap. Snap on the 4pc trims provided until they click.

## INSTALLATION INSTRUCTIONS FOR CHAMCLAD® QUICK CLICK 4PC BEAM SYSTEM

ChamClad<sup>®</sup> 4pc Beam System is not load bearing and should not be used as the primary source of weight.

Note: Available in 8", 10", and 12" face sizes, in 10' or 20' stocked lengths you can mix and match to create stunning faux beams.

- a. Start by measuring your beam length and cut the ChamClad Beam to the desired length
   Note: In exterior application, cut to desired length less ¼" to allow for expansion and contraction.
- b. Snap together 2 of the 4pc into a 'L' shape using a rubber mallet.



- c. Fasten preassembled 2pc beam wrap using universal screws every 16-24" along the screw track (figure 3 on page 54)
- d. Ensure ChamClad Universal Screws are fastened into a joist or a stud. If no solid backing is available, it must be added before installation.
- e. Snap together the final 2 of the 4pcs in place using a rubber mallet

#### **FINISHING**

#### Beam 1" X 4" Architectural Trim

- a. Measure & Cut architectural trims at 45-degrees. Ensure the trim is pressed firmly against the beam when determining the edge of the 45-degree cut.
- b. Touch up exposed cut edges with touch-up paint. Paint cans or touch up pens available through ChamClad<sup>®</sup>.
- c. Apply PL Premium on the back of each cut trim and position along the beam end where required.
- d. Clamp to hold trim in place and allow to cure for 24 hrs
- e. To ensure the trim remains securely in place, finish by inserting a small Bradnail into each piece

## INSTALLATION INSTRUCTIONS FOR CHAMCLAD® QUICK CLICK 3PC BEAM SYSTEM

Follow the below instructions when a 3pc wrapped look is required:

a. Start by measuring the length of your beam. Cut the ChamClad<sup>®</sup> beam to the desired length.

Note: In desired length expansion and

 b. Rip down the 3and attach it to countersinking Ensure the 3-Use the chart correct length
 based on the required width.



exterior application, cut to less ¼" to allow for contraction.

inch Quick Click (QC) beam the ceiling by screws on both sides. inch QC beams are straight. below to measure the to leave between them

- c. Make sure the ChamClad universal screws are fastened into a joist or stud. If there is no solid backing, it must be added before installation.
- d. Insert one side of the beam

e. Snap together the two shape using a rubber mallet.



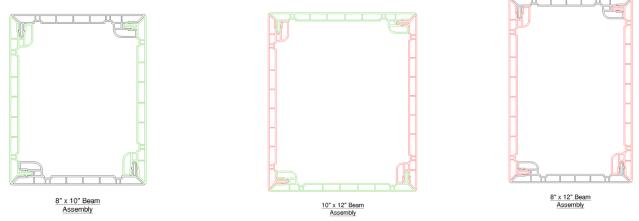
as shown below.

remaining pieces to form an L

f. Attach the L-shaped assembly to the remaining beam along its entire length with a rubber mallet to ensure the beam is properly engaged.



Figure 1. 4pc Column and Beam Mix and Match Options





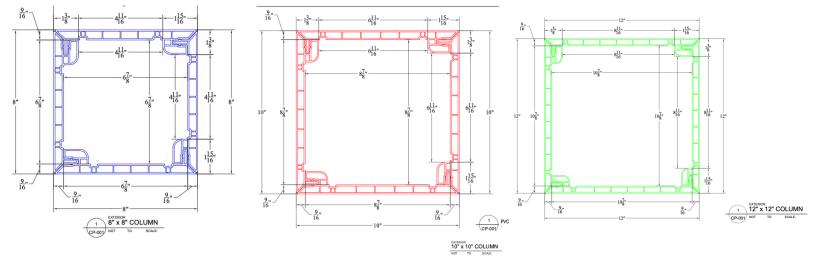
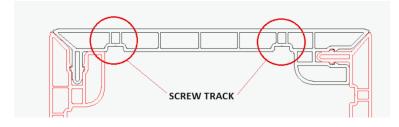
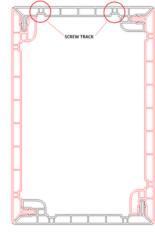


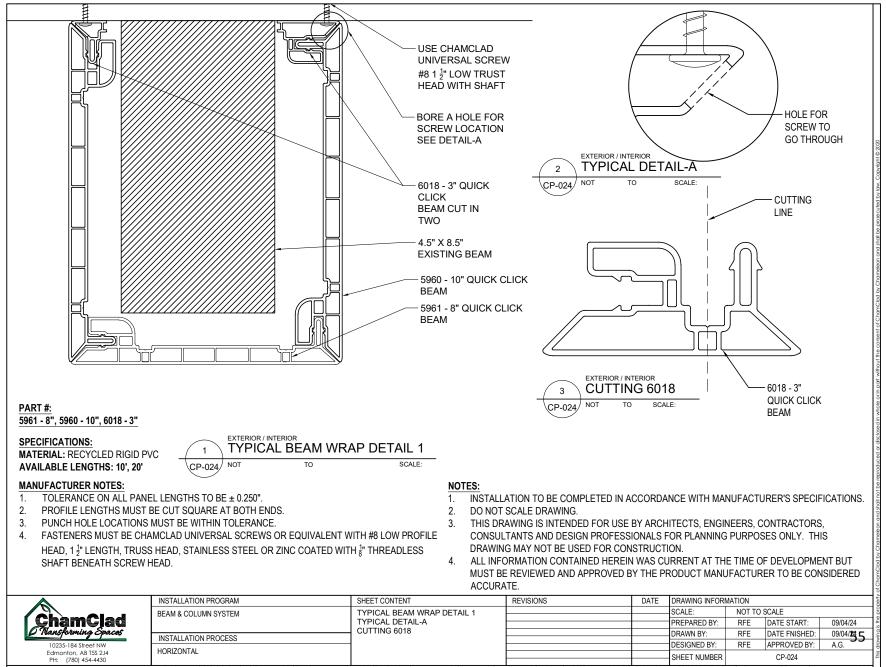
Figure 3. Beam Screw Track



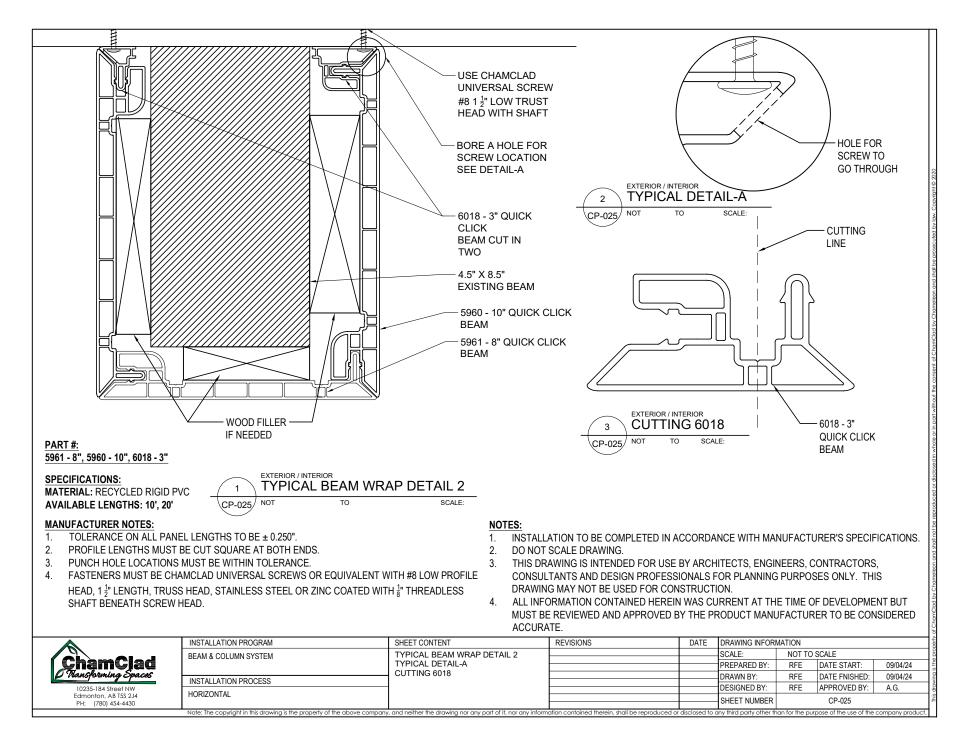


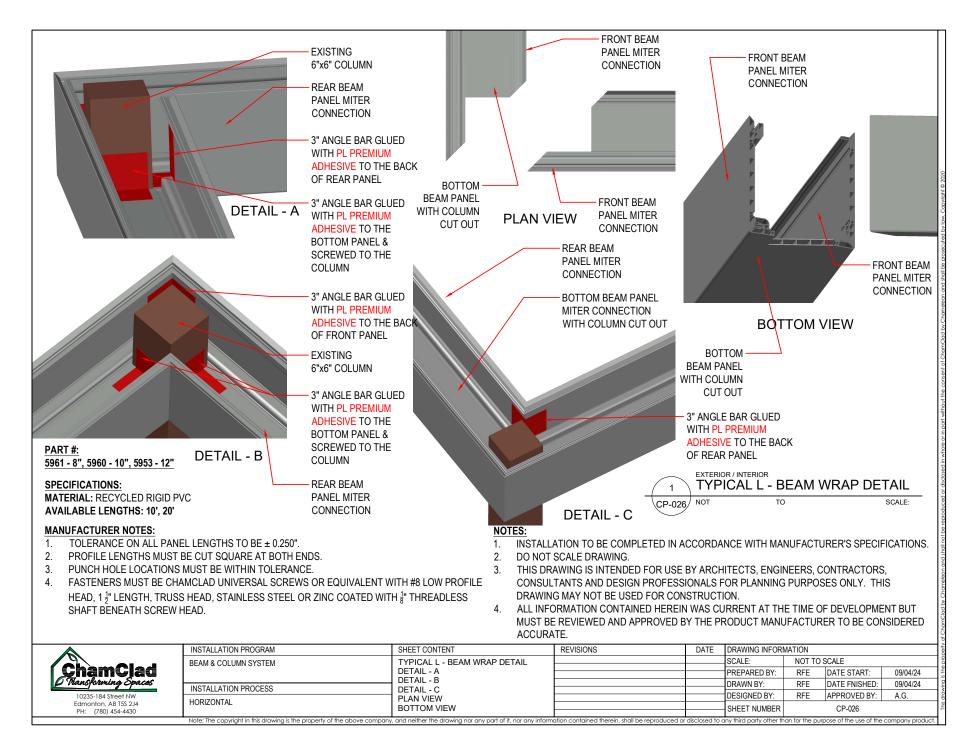
8" x 12" Beam Assembly

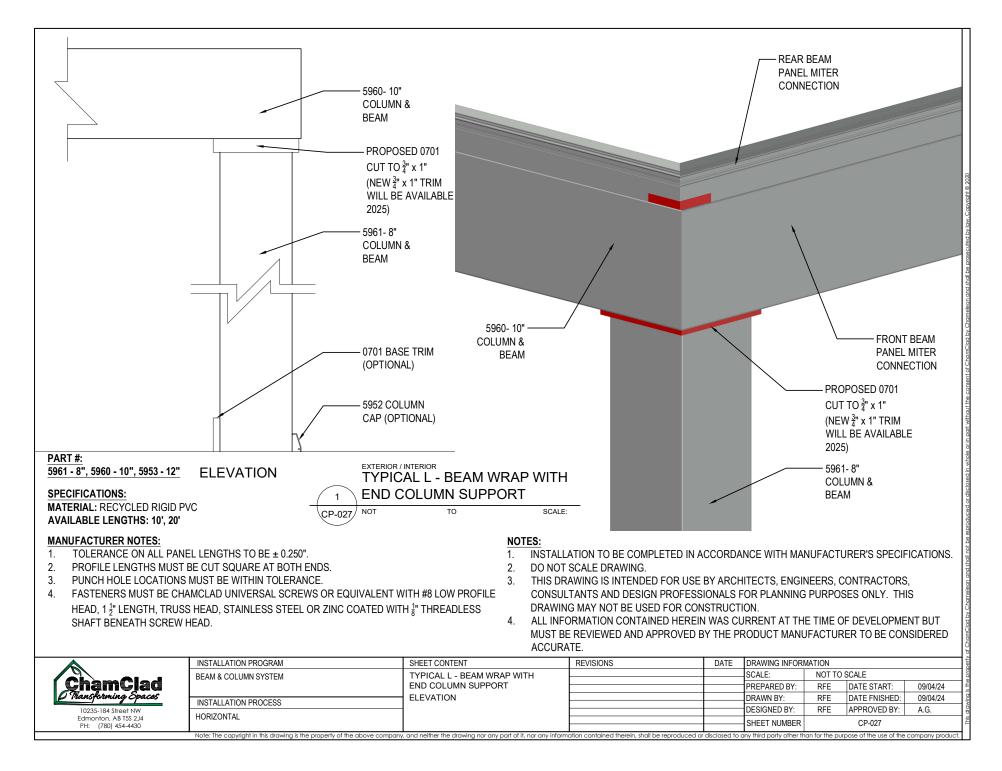
## **Creative Solutions Drawings for Columns and Beams**



Note: The copyright in this drawing is the property of the above company, and neither the drawing nor any part of it, nor any information contained therein, shall be reproduced or disclosed to any third party other than for the purpose of the use of the company produced or disclosed to any third party other than for the purpose of the use of the company produced or disclosed to any third party other than for the purpose of the use of the company produced or disclosed to any third party other than for the purpose of the use of the company produced or disclosed to any third party other than for the purpose of the use of the company produced or disclosed to any third party other than for the purpose of the use of the company produced or disclosed to any third party other than for the purpose of the use of the company produced or disclosed to any third party other than for the purpose of the use of the company produced or disclosed to any third party other than for the purpose of the use of the company produced or disclosed to any third party other than for the purpose of the use of the company produced or disclosed to any the produced or disclosed to any third party other than for the purpose of the use of the company produced or disclosed to any the produced or disclosed to any the purpose of the use of the company produced or disclosed to any the produced or disclosed to any the purpose of the use of the company produced to any the produced to







## 3" Quick Click Column and Beam Coming Soon!

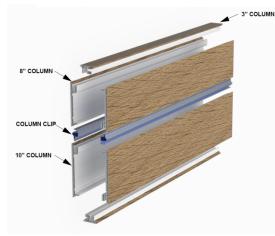




## Privacy Wall Coming Soon!



Privacy Wall Vertical Installation



Privacy Wall Horizontal Installation



Privacy Wall Vertical Finished View



## **2PC FAUX BEAM INSTALLATION**

(See assembly drawings listings on page 62)

- 1. LOADING
  - ChamClad<sup>®</sup> 2pc Beam System is not load bearing and should not be used as primary source of weight support.
  - Internal Weight Capacity of Beam = 24.11 kg/m (16.17 lbs/ft) (equally distributed weight). o Weight of Beam and Adapter = 1.84 kg/m (1.23 lbs/ft)
- 2. DIMENSIONS
  - Exterior dimensions of the beam are 5-1/2" x 3-3/8"
  - Internal cleared dimensions of the column are 4 3/4" x 3".
  - Beam cap and Adapter lengths available in pairs at 10ft, 16ft, and 20ft lengths.
- 3. PACKAGING
  - Beam cap and Adapter will be packaged together in vented white bags, one set per bag.
- 4. INSTALLATION OF 2PC FAUX BEAM
  - $\circ~$  ChamClad  $^{\mbox{\scriptsize @}}$  2pc beam is compatible for interior applications.
  - Allow 2pc beam system to climatize to installation temperatures prior to cutting. Measure and mark beam length using a square edge.
  - If fitting against an angled wall or ceiling, a T-bevel may be helpful to determine the cut angle.
  - Use a fine-toothed circular saw to cut beam cap and adapter. Ensure equal lengths of both adapter and beam are cut.
  - Mark ceiling with a chalk line to ensure a straight installation of the beam adapter.
  - Fasten beam adapter using ChamClad<sup>®</sup> universal screws every 16-24". Ensure fasteners are fastened into a joist or a stud.
  - Add ChamClad<sup>®</sup> beam bracket along wall to close any spacing between wall and beam good for renovation (2 per pack plus screws, #8 1 ½" flat quadrex course thread plated black zinc) 8 per bag.





**BEAM END BRACKET** 

#### 5. FINISHING

#### Beam End Cap Option

- a. Trim the supplied 3/8'' panel to  $5 \frac{1}{2}'' \times 3 \frac{1}{4}''$  (You may also use a matching 3/8'' panel from the job).
- b. Slide the panel into the Beam Cap ensuring the panel is to the bottom of the cap and no panel is exposed above the trim.
- c. Add a small dab of silicone into the cavity of the beam on 2 sides.
- d. Fit the cap onto the beam.







BEAM END CAP

## **ASSEMBLY DRAWINGS**

## HORIZONTAL EXTERIOR

see drawings CD.3 & CD.5 (pages 63 & 64)

## VERTICAL EXTERIOR

o see drawings CD.10-A & CD.10-B (pages 65 & 66)

## SOFFIT DETAILS

see drawing CD.15 (page 67)

## INTERIOR HORIZONTAL

see drawings CD.5 (page 64)

## INTERIOR CEILING

• see drawing CD.13 (page 78)

## COLUMNS & BEAMS USING CHAMCLAD CLASSIC OR SHADOWLINE PANELS

o see drawings CD.19, CD20, & CD.16 (pages 68-70)

## 7" 2PC COLUMN WRAP SYSTEM

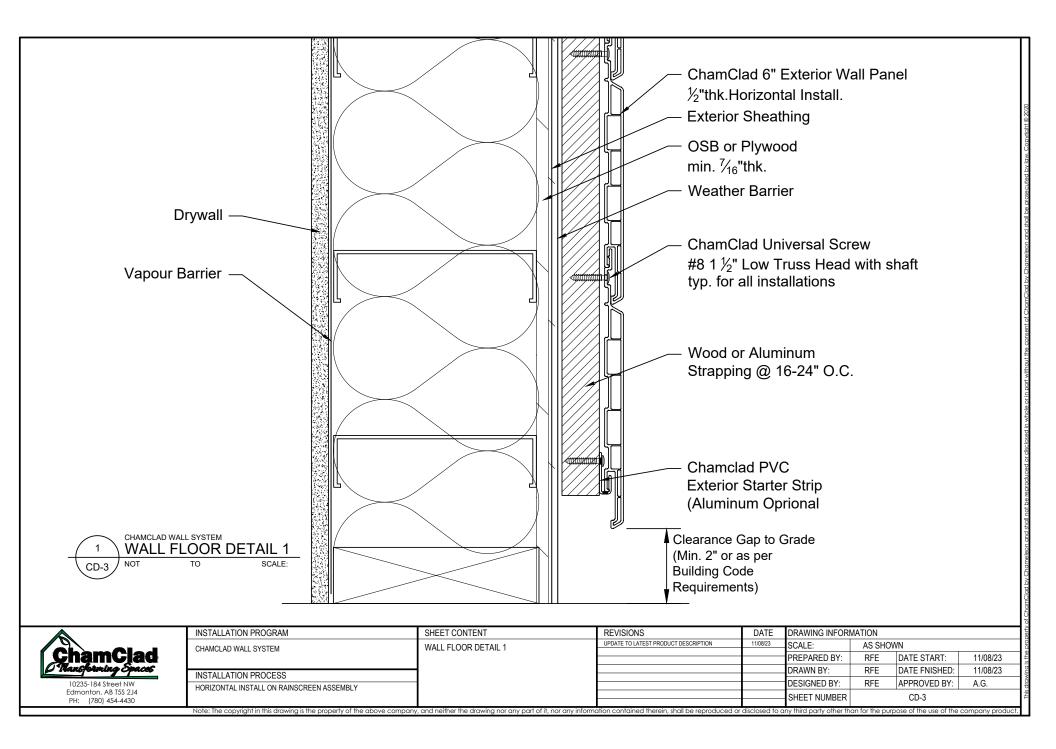
• see drawing CD.27 & CD.28 (pages 71 & 76)

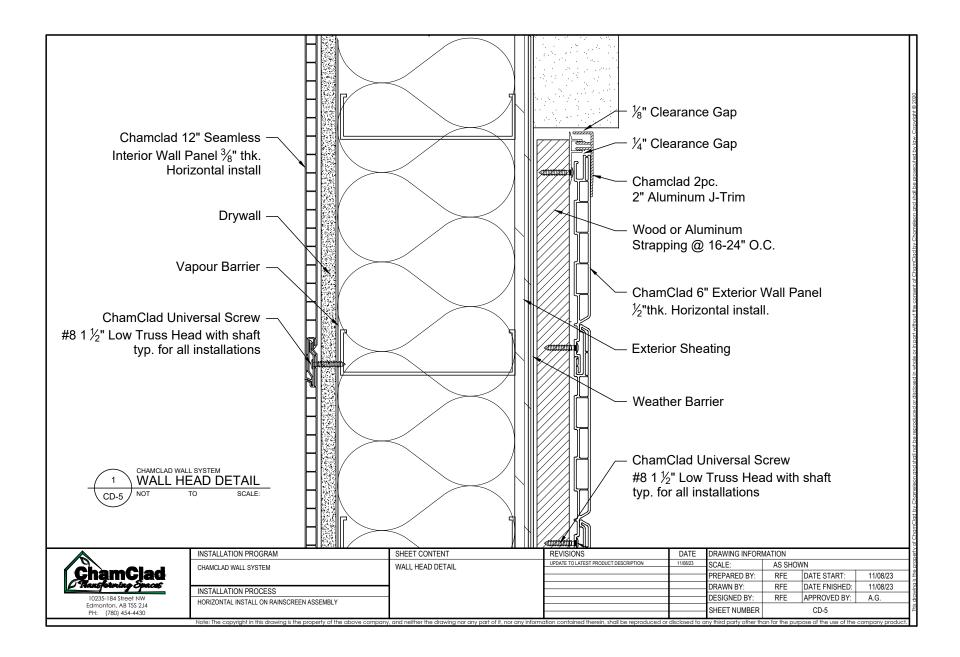
### 4PC QUICK CLICK COLUMN AND BEAM SERIES

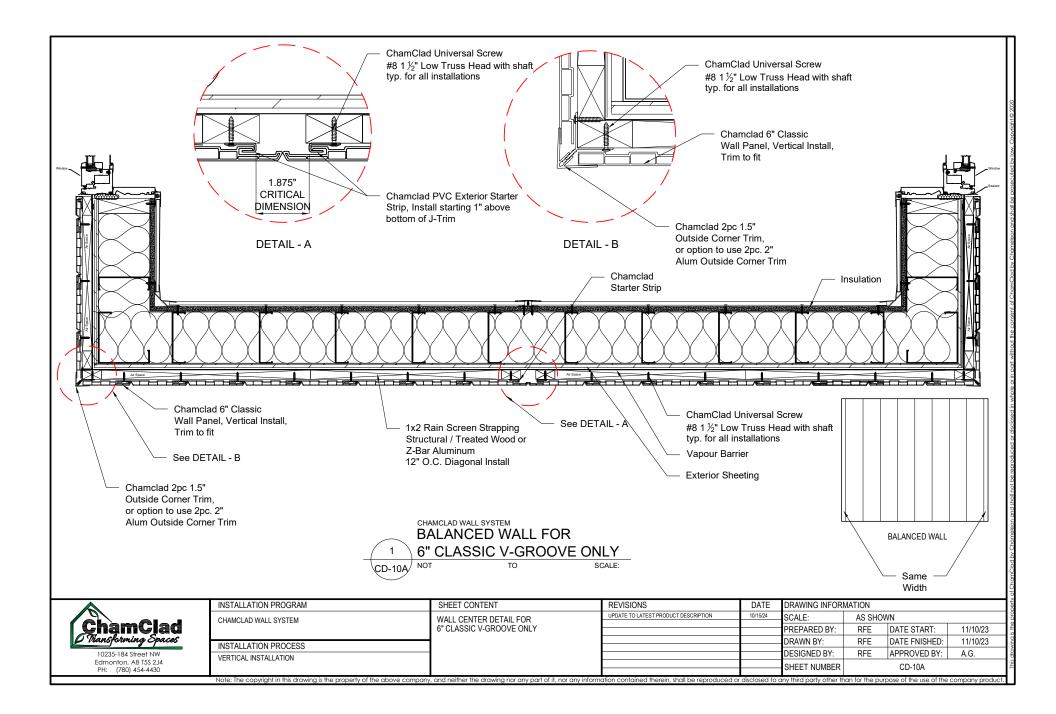
• see drawings CD.29, CD.30, CD.31 & CD.32 (pages 72-75)

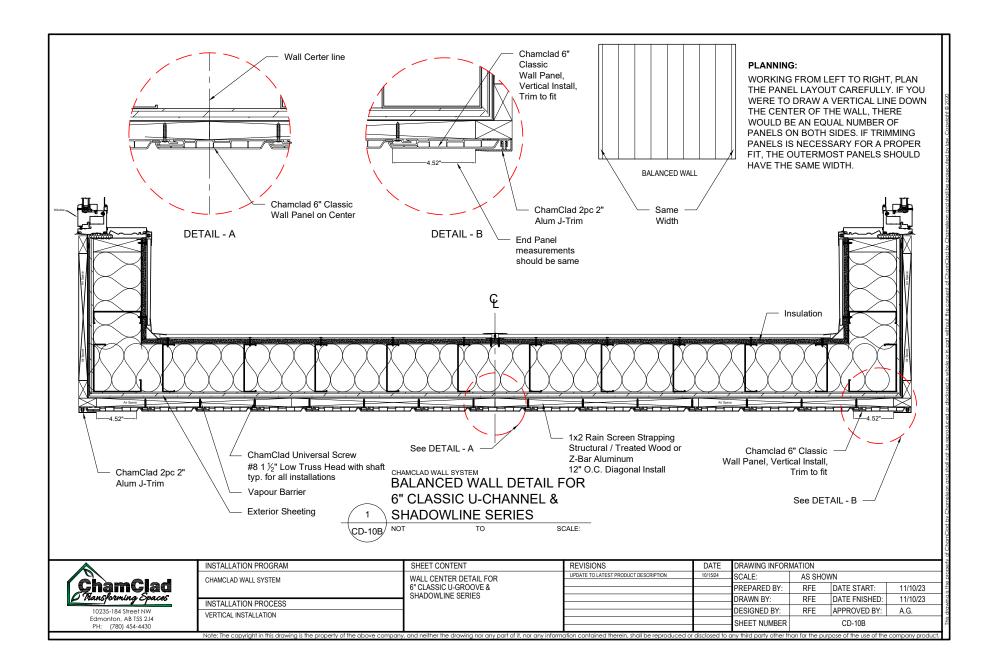
### **2PC FAUX BEAM SYSTEM**

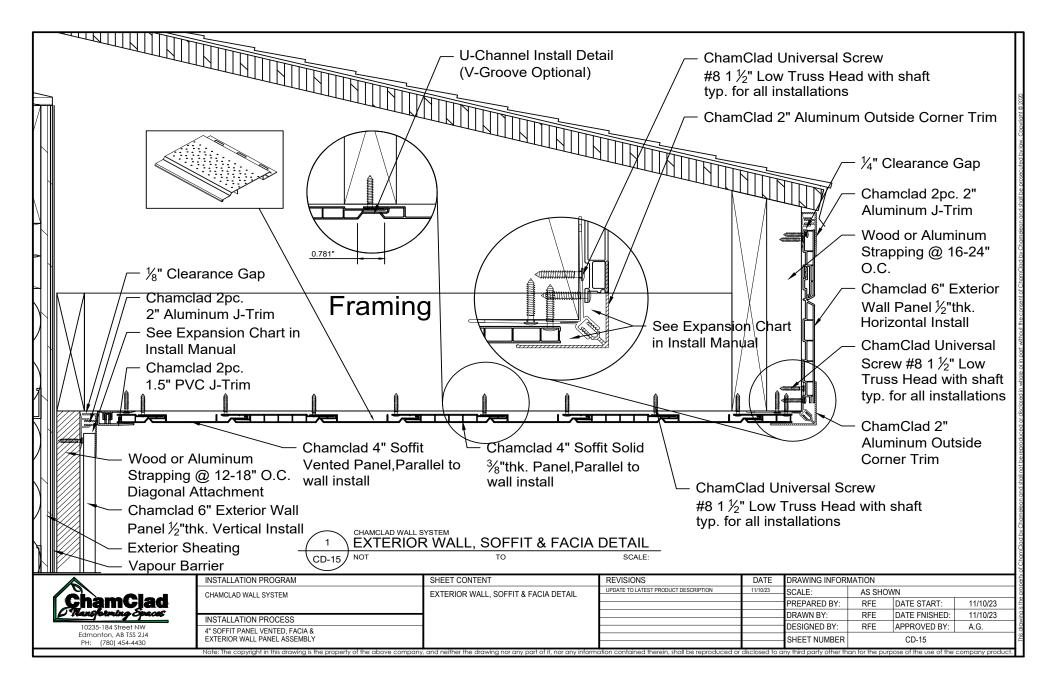
• see drawing CD.18 (page 77)

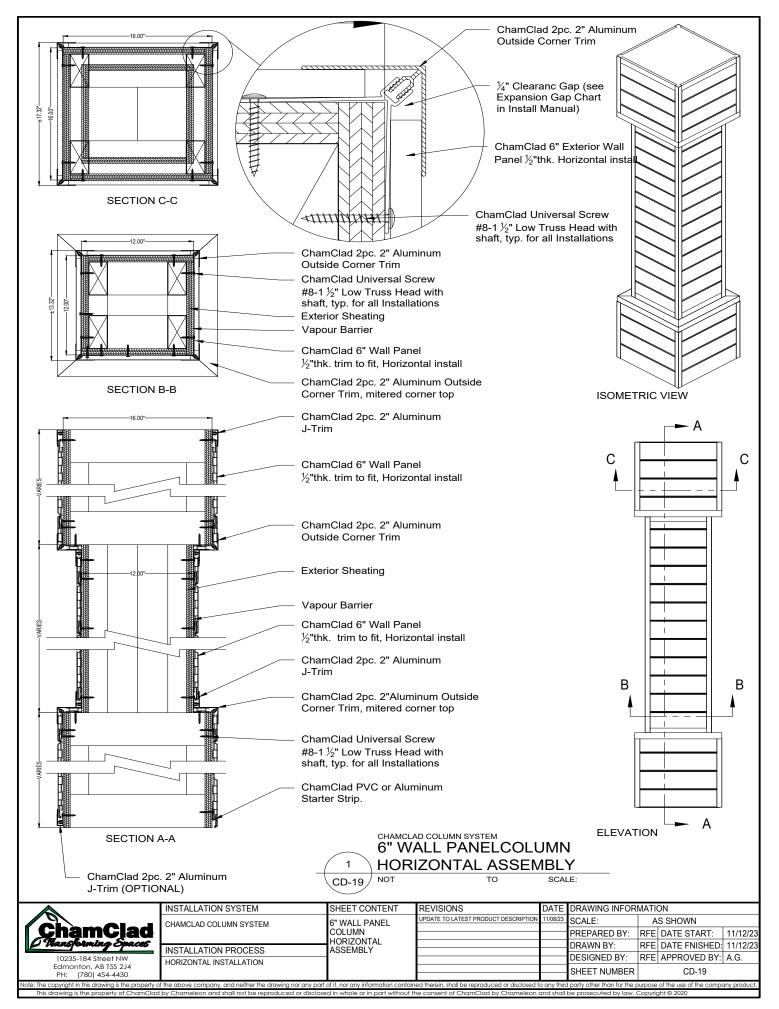


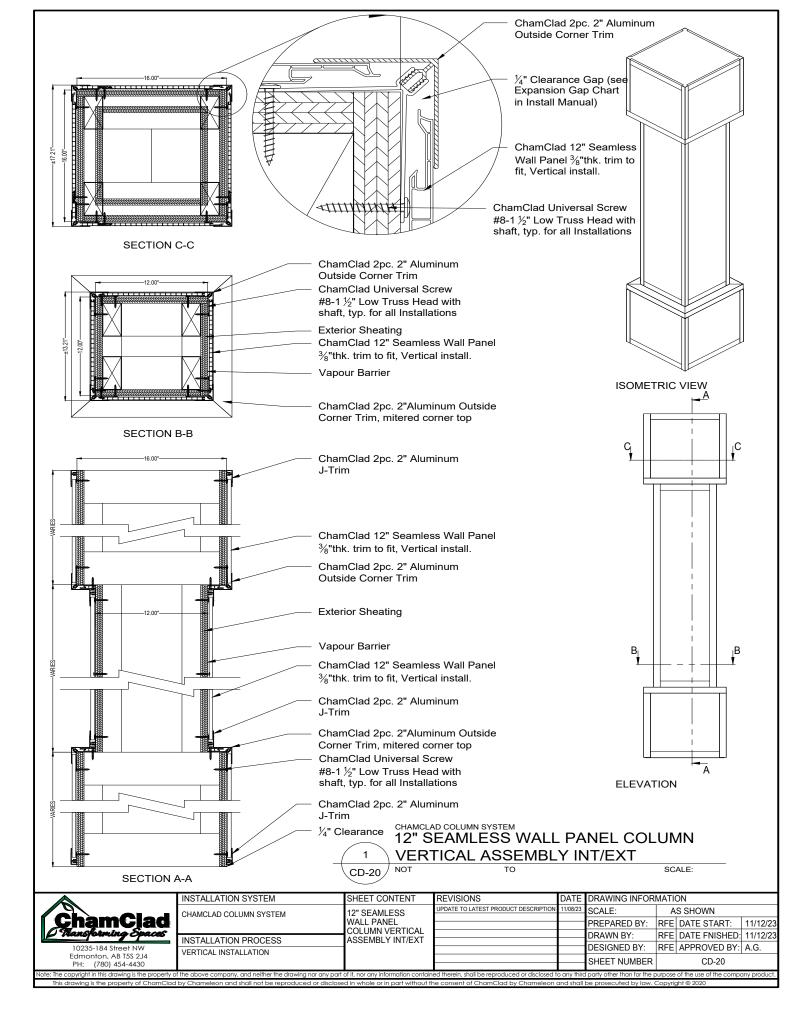


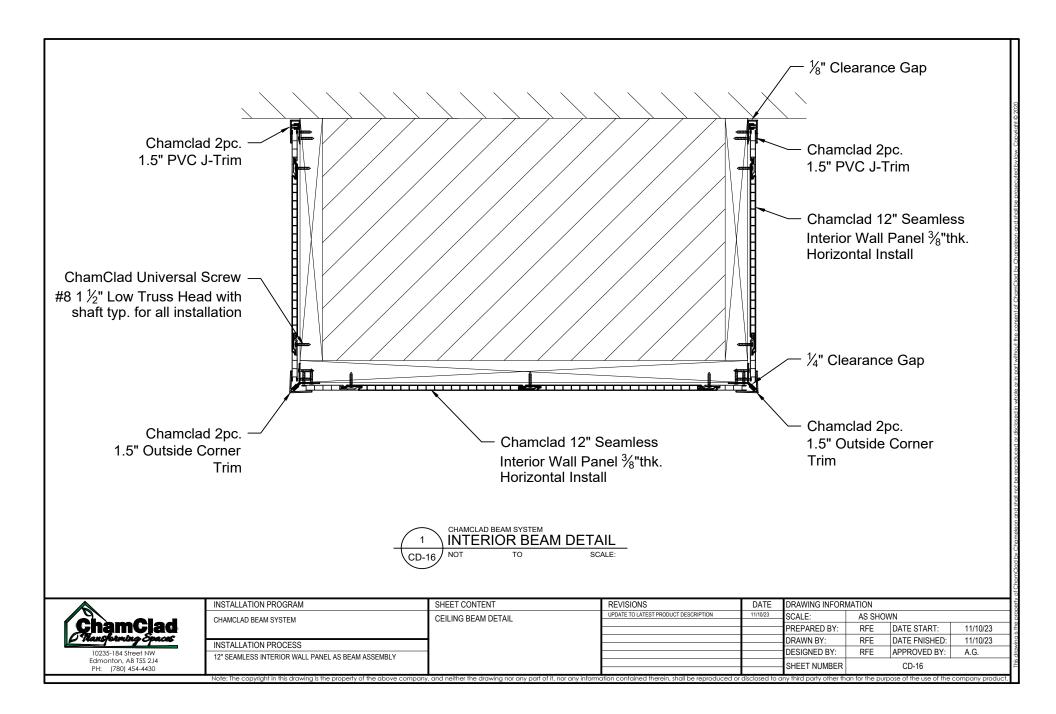


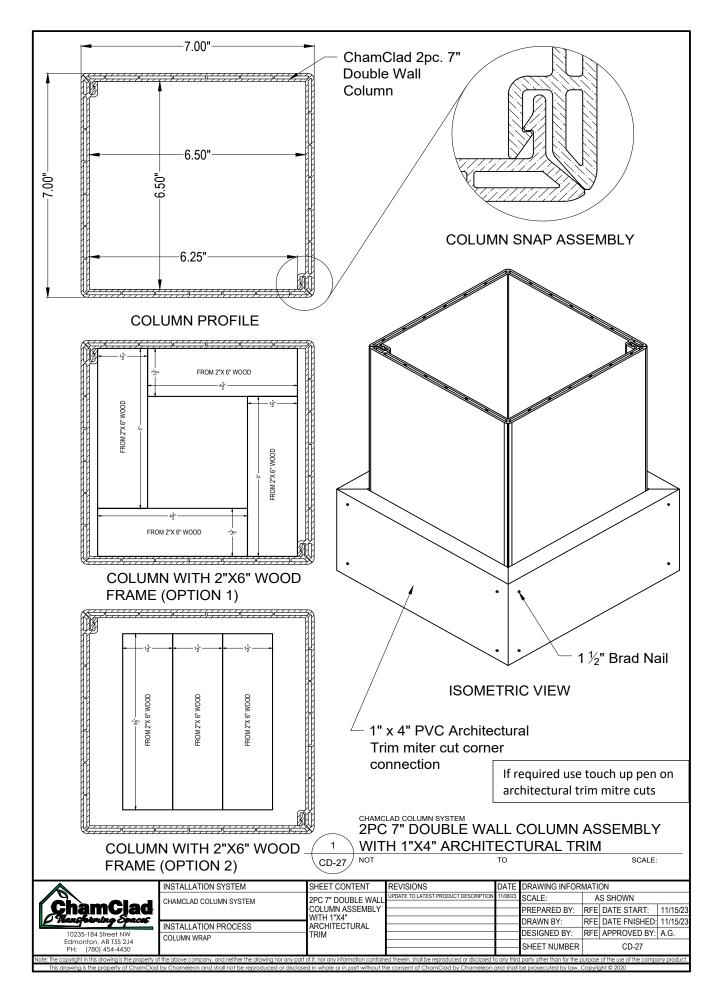


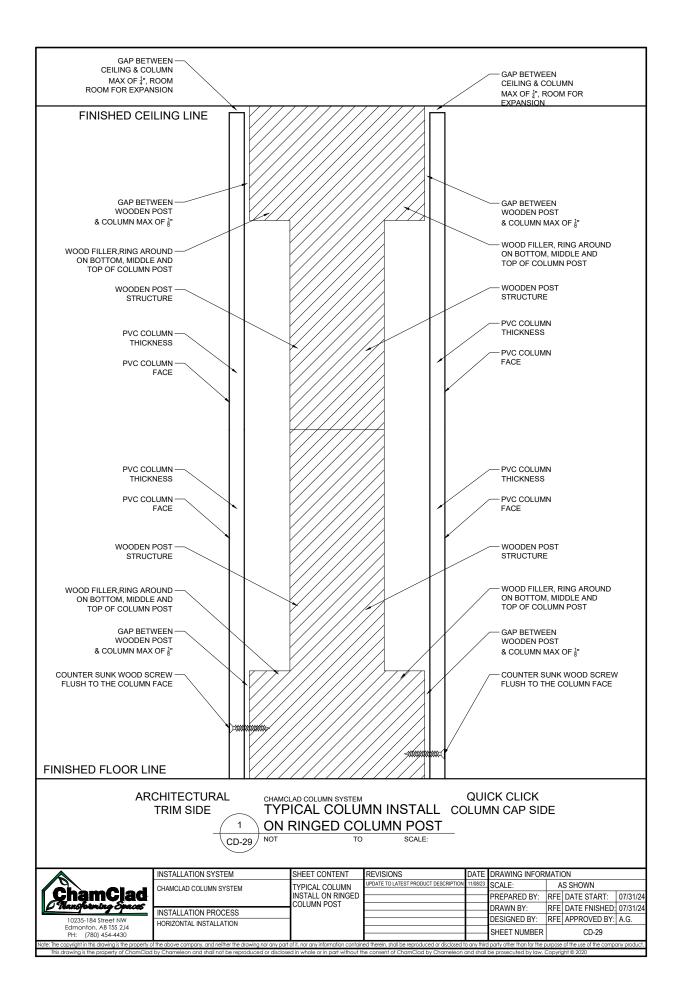


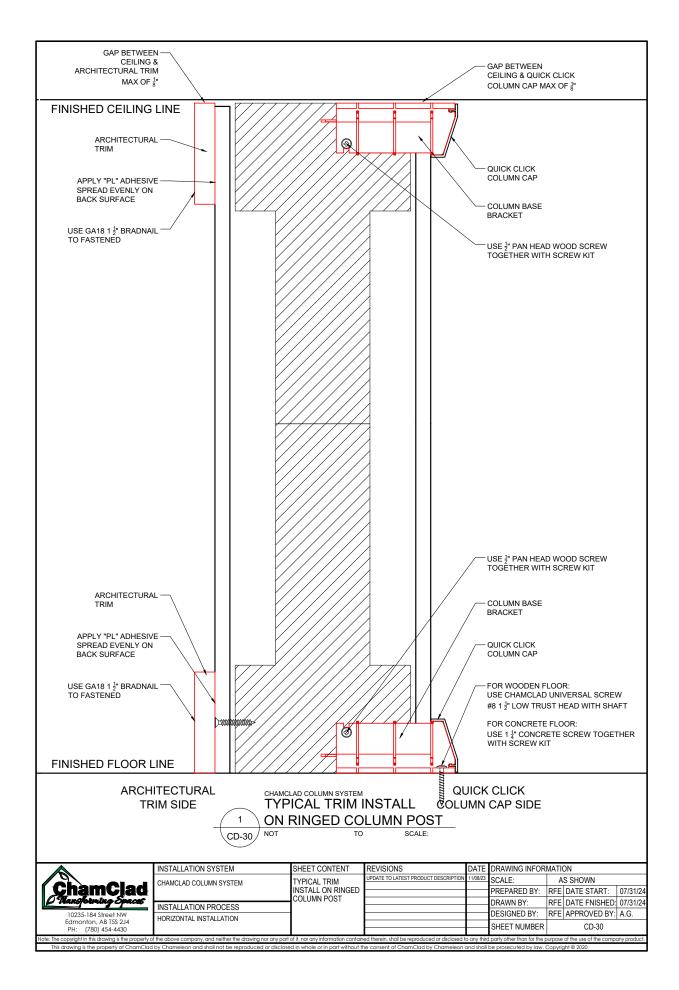


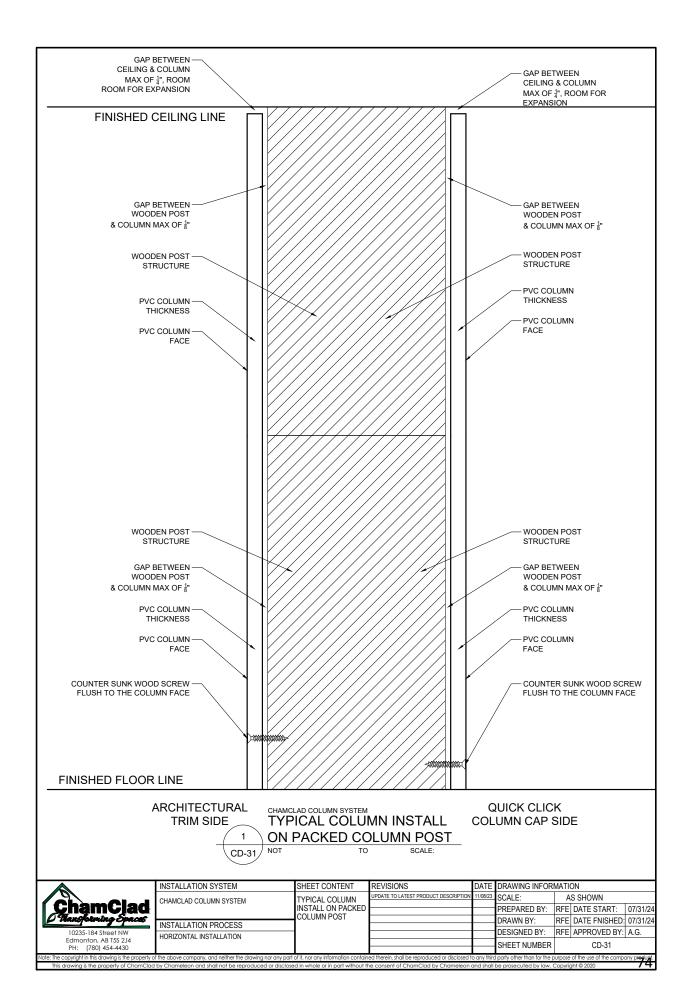


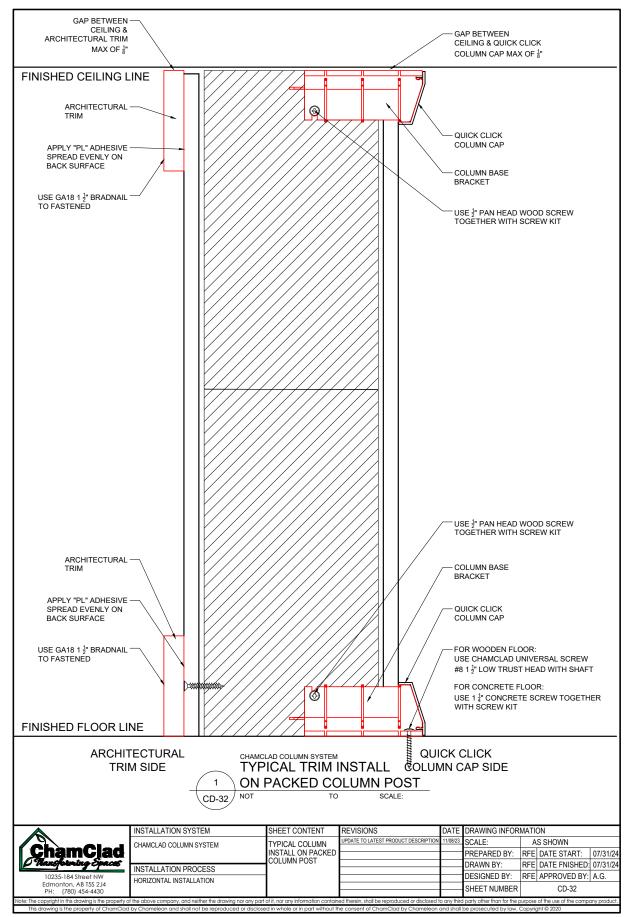


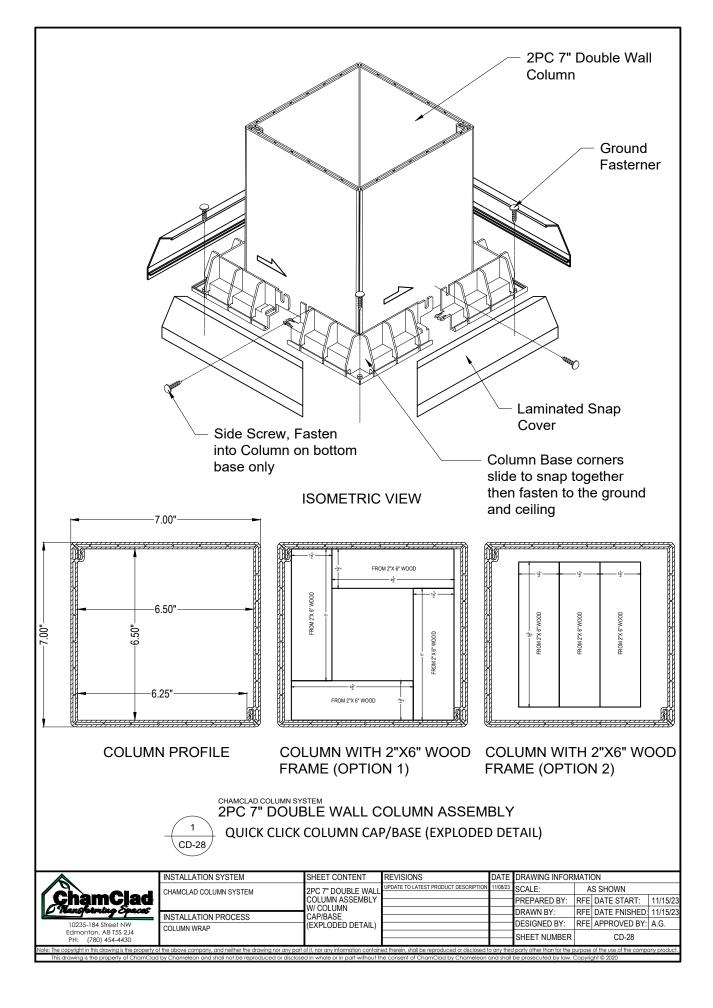


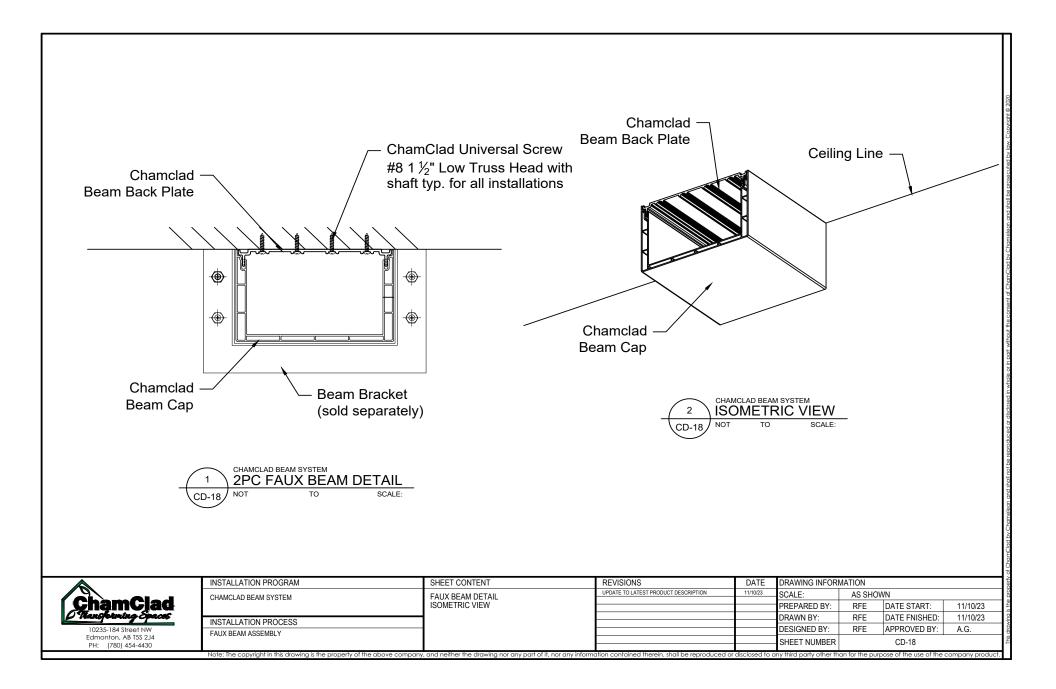


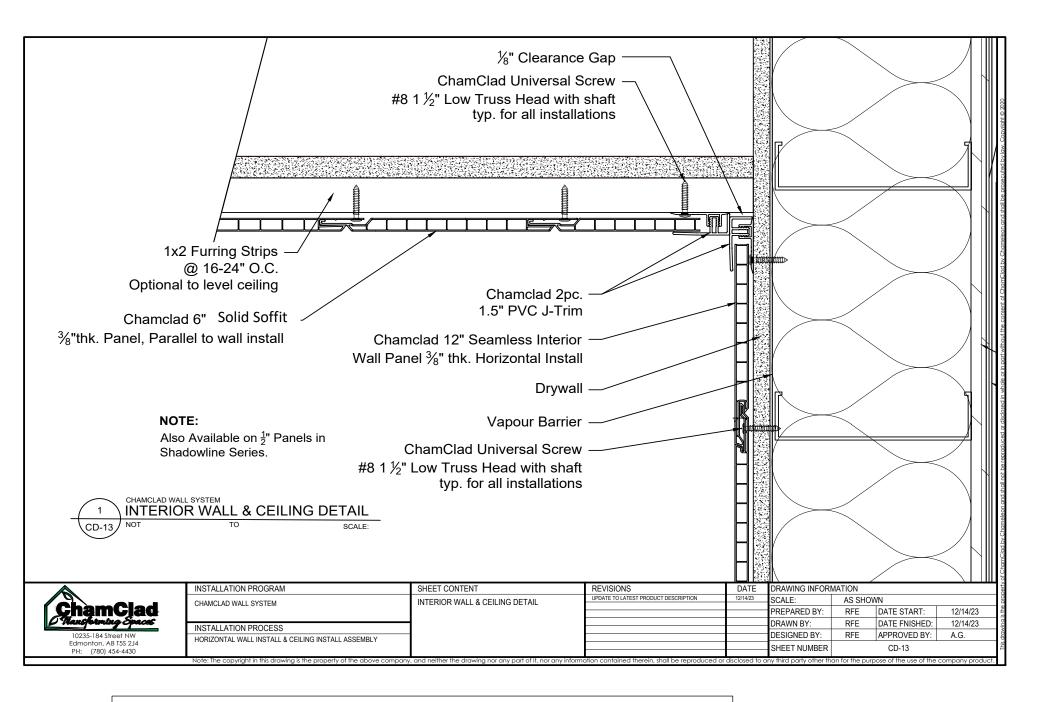












## **Care and Maintenance of ChamClad® Exterior Wall Panels**

ChamClad<sup>®</sup> products are designed to be low maintenance and our Laminate Films have exceptional properties that ensure ease of cleaning and surface longevity. They are highly ultra-violet, scratch, and salt air resistant. The film's low surface tension makes it inherently dirt-repellent and therefore easy to clean. ChamClad<sup>®</sup> finishes include anti-graffiti properties and, in most cases can be easily removed using a garden hose and mild kitchen detergent and warm water.

If cleaning required, follow these simple instructions below:

- Using a soft bristled nylon brush attached to a garden hose, clean the surface with a mild PH neutral soap or non-abrasive kitchen detergent in warm water.
   DO NOT USE abrasive, erosive, or caustic solvents to clean ChamClad<sup>®</sup> panels as they can damage the panel finish and will void the warranty.
- To avoid streaking start at the top of the wall working your way to the bottom.
- Follow with a thorough rinsing of fresh water to ensure that substances such as airborne salts, dirt and pollutants are removed.
- Always remove unintentional paint splashes, stucco spills, etc. immediately to prevent the possibility of permanent staining.
- You may pressure wash ChamClad<sup>®</sup> panels with a low PSI pressure washer. DO NOT exceed 1500 PSI.

Should you experience removal difficulties, please contact us via email at info@ChamClad.com.

## Installation Tips - At a Glance.

|  |   | Do   |   | Don't  |
|--|---|--|---|--|
| 1. Before You Start                      | 0 | Review the installation<br>manual and all local<br>building codes before<br>starting the install.          | 0 | Don't install damaged or<br>questionable materials.<br>Check all products and<br>call ChamClad <sup>®</sup><br>customer service. |
| 2. Storage and Handling                  | 0 | If storing cladding<br>outside, when possible,<br>keep out of direct<br>sunlight.<br>Store on a flat level | 0 | Don't allow panels to<br>come in contact with<br>asphalt or in areas<br>prone to excessive heat<br>buildup.                      |
|  | 0 | surface, cover with a<br>tarp leaving the ends<br>open for air circulation.                                | 0 | Don't use abrasive<br>cleaners or solvents to<br>clean ChamClad®<br>cladding.  |
|  | 0 | Carry ChamClad® panels<br>by holding it by the<br>narrow edge and pick<br>panels up in the center.         |   |  |
| 3. Flashing                              | 0 | Use non-corrosive<br>flashing.   | 0 | Don't use uncoated aluminum or other   |
| + 1/4" GAP BETWEEN<br>+ FLASHING AND SID |   | Always leave a minimum<br>of ¼" gap between the<br>bottom of the cladding<br>and metal flashings           |   | metal materials.   |

| W  | raps and Sheathing | 0  | Install horizontal and<br>vertical exterior cladding<br>to structural framing<br>when using non-<br>structural sheathing,<br>drywall, or foam.<br>Cladding must be<br>installed onto structural<br>framing/sheathing and<br>over a water-resistant<br>barrier in accordance<br>with local building<br>codes. | - | <ul> <li>Don't fasten ChamClad<sup>®</sup><br/>cladding over non-<br/>structural framing or<br/>sheathing (e.g., foam)<br/>without re-establishing<br/>a structural surface like<br/>a rain screen or furring<br/>strips.</li> </ul> |
|----|--------------------|--|--|---|--|
| 5. |                    | least 2<br>code<br>finish<br>above<br>Refer<br>allowa<br>guide<br>order<br>expar | l exterior cladding at<br>2" or as per building<br>requirements above<br>ed grade. Allow ½"<br>e deck or concrete.<br>to the ChamClad® Gap<br>ance temperature<br>lines on page 10 in<br>to allow for proper<br>asion/contraction<br>een panels and trims.   |   |  |
| 6. |                    | 84+ te<br>recon<br>blade<br>If usir<br>claddi<br>clean                           | de-tipped blades with<br>eeth are<br>mmended. (Aluminum<br>s are optimal)<br>ng a circular saw, cut<br>ing face down on a<br>surface.<br>ng a cut-off saw, cut<br>up.  | 0 | Don't score or snap ChamClad<br>exterior cladding.<br>Don't cut ChamClad® with a<br>coarse saw blade to avoid<br>chipping or damaging the<br>panel.  |

| 7. Butt Ends o | If attaching ChamClad <sup>®</sup><br>cladding end to end, use H-<br>trim and cut panels to the<br>appropriate length to allow<br>for expansion and<br>contraction.  | 0           | DO NOT butt join.<br>Don't place panels into H-Trim<br>without proper gap for<br>expansion and contraction<br>(refer to chart on page 10).<br>Do not leave gaps between two<br>butt ends without utilizing an<br>H-trim. Do not glue butt ends.   |
|----------------|--|-------------|---|
| 0              | Screws must penetrate the<br>structural framing<br>members.<br>Fastener must be installed<br>into the center of the<br>nailing slot.<br>Fasteners must penetrate a<br>minimum of 1 ¼" into<br>structural framing.<br>Structural sheathing is a<br>minimum of 7/16" OSB or<br>plywood (as per local<br>building codes).<br>Use Chamclad® Universal<br>screws; stainless fasteners<br>or corrosion resistant are<br>recommended (e.g., 17 Self<br>taping, round washer, lo<br>root #8)<br>Always leave a 1/32" gap<br>(width of a dime) between<br>the fastener head and<br>nailing slot | 0<br>0<br>0 | Don't counter sink or angle the<br>fastener. PVC cladding must be<br>hung and be allowed to expand<br>and contract freely.<br>Don't use galvanized screws.<br>Don't use soffit staples, D-head<br>nails, finishing nails or glue to<br>install exterior.<br>Don't fasten panel into the<br>bottom of trims.<br>Don't exceed recommended<br>spacing between fasteners. |

## Additional Tips: O Use ChamClad® touch-up pens to cover any exposed PVC substrate resulting from cutting or a surface scratch.

- Use backing for all trims.
- Fasten panels 16-24" OC.
- Fasten trims 8-12" OC.
- Fasten Soffit at 12-16" OC.
- Use centre of nail slots.
- Cut panels shorter to allow for expansion/contraction clearance. See Gap Chart on page 10.
- Use a non-marking Rubber mallet or hand pressure to install V-groove system and top caps of all 2pc trims.
- Break vertical installation at every floor level using ChamClad<sup>®</sup> H-Trim or flashing detail (supplied by others).

- DO NOT install gas heaters into a soffit or ceiling application!
- If planning to install infrared heaters, check with the Chamclad<sup>®</sup> engineering department to ensure compatibility with cladding.



Sustainable wood solutions for today's world.

Revised: December 2<sup>nd</sup>, 2024

Supersedes: July 30th, 2024