

Please read these instructions prior to beginning the [French Cleat System Wall Panel](#) installation.

These instructions are intended to be a guide for technical information and installation techniques required to complete an efficient, neat and long-lasting installation.

[French Cleat System Wall Panels](#) must be installed in accordance with these instructions! [Failure to follow these instructions may void any product warranties and result in an unsuccessful installation.](#)

**IMPORTANT NOTES – DO NOT OVERLOOK THESE**

- Inspect materials for damage. Store materials flat on the floor and in a clean, dry area with a minimum temperature of 50°F (10°C) and a maximum temperature of 100°F (38°C).
- Due to the wood substrate construction of our panels which will be affected by humidity and temperature changes, some slight variations in plane will occur. When the panels’ French Cleats are properly engaged the slight variations will follow the plane of the wall.
- The building in which the panels are being installed must always be climate controlled between a minimum temperature of 65°F (18°C) and a maximum temperature of 75°F (24°C) and a relative humidity below 80%. Materials must reach a temperature between a minimum of 65°F (18°C) and a maximum of 75°F (24°C) max 24 hours prior to installation. This is essential to minimize expansion and contraction of material.
- Don’t expose wall panels to elevated temperature or direct sunlight after the installation. This causes the surface temperature to rise, which could cause bubbles and delamination.
- If fire blocking is required by local code requirements, it is supplied by others.
- French Cleat System wall panels require at least a 3/8” reveal at all ceiling conditions. Panels cannot be butted into the ceiling.
- A small bead of Silicone Adhesive can be used on the grooves of the cleats to make the panels more permanent.
- For any special conditions please see the following pages:  
 Installing Acrovyn sheet reveal strips – [page 3](#)  
 Installing panels with depths greater than 3/4” – [page 4](#)  
 Installing Acrovyn corner guard – [page 4](#)  
 Moving clips – [page 4](#)  
 Cutting out outlet box locations – [page 4](#)

Field modifying panel size – [page 5](#)  
 Applying aluminum trims – [page 6](#)  
 Shimming panels – [page 6](#)  
 Installing panels on block or other hard surfaces – [page 7](#)

**INSTALLATION TOOLS REQUIRED**

**Provided by Construction Specialties (CS)**

Drafting layout of wall panels (*If applicable*)  
 Wall panels with factory installed panel clips & Euro screw ([21F010000](#)) ([90H467002](#))  
 Continuous Wall Cleat ([21A007000](#))  
 Marking clip ([21F011000](#))  
 Drywall anchors ([90H040006](#))  
 Horseshoe Shims ([24F403000](#))  
 #6 x 1-5/8” Phillips bugle head tek screw ([90H079002](#))  
 Fill Sticks (*for miter fold corner guards*)  
 1/4” x 1-1/4” Wall Dog Oval Head ([90H919002](#)) (*only for panels on block / hard surface*)

**If Purchased**

M-1 Structural Adhesive (*for cutout trims*)      Panel reveal spacer  
 #6 x 3/8” round head wood screws ([90H454002](#)) Wall Panel Corner Guard  
 Primer (*Coverage: 350-400 ft<sup>2</sup>/gallon*)      1-1/2” Acrovyn sheet reveal strips  
 Aluminum edge trims

**Provided by Contractor**

Level and chalk line (*laser level is recommended*)  
 Drill with Phillips head driver & square head bit  
 1/4” drill bit (*if installing on 2 layers of drywall*)  
 3/16” Concrete Drill Bit (*if installing on block / hard surface*)  
 1/8” drill bit  
 Blocking (*for panels greater than 3/4” depth*)  
 Tape Measure  
 Jig saw / Sonic cutter (*For cutting outlets*)  
 Painter’s Tape  
 Chop Saw  
 Wood clamps (*for splicing wrapped edge panels*)  
 Table Saw  
 Tin Snips  
 Silicone Adhesive

**INSTALLATION INSTRUCTIONS**

1. Refer to drafting details, if applicable, for specific reveal width, type, and wall panel locations.

**NOTE:** If panels are to have reveals with a painted wall, wall should be painted desired reveal color before putting up panels. If panels are to have reveals with Acrovyn sheet reveals, please see page 3 for installing Acrovyn sheet reveals before putting up panels.

**NOTE:** If installing panels with depths greater than 3/4” please see page 4 for installing blocking before you begin installing panels on the wall.

2. All outside corners should be installed first.
  - a. If using a standard Acrovyn corner guard, a spacer (by others) will be required behind the corner guard retainer to maintain the wall offset. Please see page 4 if installing Acrovyn corner guard with this wall panel system.



Figure 1

Hughesville, PA | 800.233.8493 | 570.546.5941  
 Mississauga, ON | 888.895.8955 | 905.274.3611

[www.c-sgroup.com](http://www.c-sgroup.com)  
[IWPTechSupport@c-sgroup.com](mailto:IWPTechSupport@c-sgroup.com)

- b. If using a miter folded corner guard, you will need to slide the marking clip over the factory installed panel clips on the back of the corner guard. (See figure 1 on page 1). It is recommended to use painter's tape to hold the marking clips onto the panel clips.

**NOTE:** Make sure corner guards are plumb on both sides. If you need to, shim corner guards to make sure corner guards are plumb.

- 3. Once the corner guard is in place, gently tap on the face of the panel (see figure 2.) in order for the marking clips to create impressions into the wall surface. After pressing the corner into the wall, you need to remove the marking clips from the panel clips on the back of the corner guard. See figure 3 below to see the proper indent.

**NOTE:** If going over wood, you may need to apply extra force.

**NOTE:** If one of the markers didn't mark the wall, use a level line and mark the wall using the mark that is on the wall as a reference point.

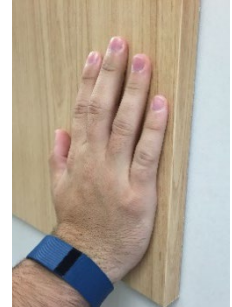


Figure 2.

- 4. At these locations (see figure 3.) you will install the continuous wall cleats. Wall cleats are supplied in stock lengths and must be cut down prior to installation. Wall cleats should be cut 1-1/2" shorter (3/4" gap on each side of the panel edge to wall cleat) than width of finished panel. Using the die line on the wall cleat, pre-drill the wall cleats using a 3/16" drill bit (see figure 4.). Screws should be spaced no more than 2" from each edge and max 16" on center. Place the pre-drilled wall cleat on the wall at the locations marked by the marking clips so that the bottom of the wall cleat aligns with the mark (see figure 5.). Mark the hole locations and install the plastic drywall anchors (see figure 6.). Once all necessary plastic anchors are installed, fasten the wall cleats to the wall using the #6 x 1-5/8" Phillips bugle head tek screws (see figure 7.)

**NOTE:** It is recommended to use either the #6 x 1-5/8" Phillips bugle head tek screw or a 1/8" drill bit to create a pilot hole to see if fastener will go into a stud or just drywall. If you hit a stud it is recommended that you utilize the supplied #6 x 1-5/8" Phillips bugle head tek screw drywall fasteners **ONLY** and not the supplied drywall anchors.

**NOTE:** If the wall has (2) layers of 5/8" thick drywall, the location for the drywall anchor will need to be pre-drilled with a 1/4" drill bit to allow the drywall anchor to engage properly in both layers of drywall.

**NOTE:** Be sure **NOT** to strip the fasteners in the wall substrate. The supplied fasteners when installed properly, and NOT stripped, will perform adequately in standard 5/8" and 1/2" drywall.

**NOTE:** We recommend using the lowest possible torque setting as over torquing can cause the fasteners to strip.

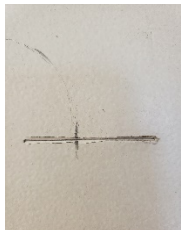


Figure 3.

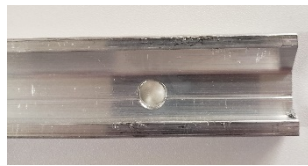


Figure 4.



Figure 5.



Figure 6.

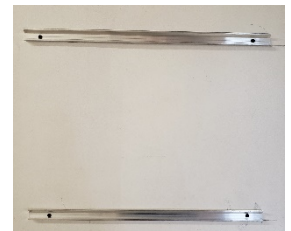


Figure 7.

- 5. You can now install the miter fold corner guard on the cleats mounted on the wall by placing the corner guard roughly 3/8" above the desired finished location and then slide it down to engage the panel clips onto the wall cleats. (see figure 8.)

**NOTE:** Shims will be required to properly engage clips due to variation in wall plane. Reference "Shimming Panels" on page 7.

- 6. At the cove base, find the center of the wall between the installed corner guard(s) and inside corner or end wall in which the wall panel installation is going to begin. Place a mark at the center of the room on the cove base.

**NOTE:** A piece of tape with the middle of the room marked will be a sufficient marker.

- 7. Once the center of the wall is found, refer to the drafting details and establish a level line at the top of where the first row of wall panels will be placed. Also establish a plumb line in the center of the wall.

**NOTE:** Level line should be established down from ceiling. The ceiling height should be determined using the highest point in the floor. This will alleviate an uneven floor from coming into play with the panel and reveal layout.

- 8. If the panels have reveals between them, you will need to cut a panel reveal spacer to the desired reveal width to be used as spacers between panels. You will need at least 2 and you need to make sure that the width of the spacer is consistent. Inconsistent spacer width will cause reveals between panels to be inconsistent.



Figure 8.

Hughesville, PA | 800.233.8493 | 570.546.5941  
 Mississauga, ON | 888.895.8955 | 905.274.3611

[www.c-sgroup.com](http://www.c-sgroup.com)  
[IWPTechSupport@c-sgroup.com](mailto:IWPTechSupport@c-sgroup.com)

**NOTE:** Panel reveal spacers of the specified reveal width can be purchased from Construction Specialties.

- Using the level line, or laser level, place the corresponding panel (refer to drafting details) at the spot of the mark for the center of the room. Place the marking clips onto the panel clips located at the left and right on the back of the panel (see figure 1.) for the panel that is called out in that specific location, per the drafting details.

**NOTE:** We recommend using a ledger board at the level line to help get the first row of panels on the wall level.

- Position the panel so that the center of panel lines up with the center of the wall. Once the panel is in place, gently tap on the face of the panel (see figure 2.) in order for the marking clips to create impressions into the wall surface. After impressing the panel in the wall (see figure 3.), you need to remove the marking clips from the panel clips on the back of the panel.

**NOTE:** If going over wood, you may need to apply extra force.

- Then at the locations marked out by the marking clips, you will install a supplied drywall anchor (see figure 6.) and continuous wall cleat (see figure 7.)

- Once all the wall cleats are fastened, place the panel on the wall so the panel is roughly 3/8" above the installed wall cleats and then slide the panel down to engage the panel clips with the wall cleats.

**NOTE:** When putting the panel on the wall cleats, use the panel reveal spacers to help locate the next panel. It is best if painter's tape is used to help hold the spacer in place while marking the wall cleat locations on the wall to ensure an accurate and consistent reveal throughout.

- Using the previously installed panel and the panel reveal spacer, place the remaining panels on the wall in the same manner as the above.

**NOTE:** Panel reveal spacers are temporarily placed between panels to ensure each reveal is consistent throughout the panel installation. (See figure 8.)

**NOTE:** Panels are to be installed similar to tile. (See figure 9.)

- If for any reason a panel must be removed, push up on the bottom of the panel to disengage the panel clips and wall cleats.

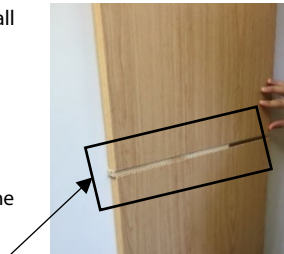


Figure 9.

**\*\*THE FOLLOWING INSTRUCTIONS ARE FOR SPECIAL CONDITIONS. NOT ALL OF THE FOLLOWING INSTRUCTIONS MAY BE REQUIRED.\*\***

**INSTALLING ACROVYN SHEET REVEAL STRIPS (IF REQUIRED)**

If the wall panels require Acrovyn sheet reveal strips, please follow these instructions **BEFORE** placing any panels on the wall.

- Examine all new or existing walls that are to receive Acrovyn sheet reveal strips. They must be clean, smooth, dry and free of any oils or loose paint prior to applying primer.
- Prime the wall at least 24 hours before installing Acrovyn sheet reveal strips.
- Once wall is primed and you had left enough time for the primer to set, refer to the drafting details and begin measuring and laying out the Acrovyn sheet reveal strips as located on drafting details.

**NOTE:** It is recommended that the Acrovyn sheet reveal strips be cut with either tin snips or an 80-100 tooth carbide tipped saw blade or equivalent.

- To place Acrovyn sheet reveal strip on wall, just remove the paper off of the double stick tape on the back of the strip and place on the wall. Once the strip is on the wall, slide your hand down the strip to make sure the tape is adhered to the wall.

**NOTE:** It is recommended that the vertical Acrovyn sheet reveal strips be installed first, at full lengths. Then proceed with the horizontal strips.

- Once all the reveal strips are up, return to page 1 for instructions on installing wall panels.

### **INSTALLING PANELS WITH DEPTHS GREATER THAN ¾" (IF REQUIRED)**

If you are installing panels that are greater than ¾" in depth, please follow the following instructions before you begin installing panels to the wall. Blocking (provided by others) is required on the wall before installing panels.

1. Refer to drafting details and using a chalk line, layout where panels are to be placed on the wall.
2. Cut blocking to be placed behind the panel in between the return legs.

**NOTE:** Blocking thickness can be determined by subtracting ¾" from the depth of the panel. (Ex. 1" panel depth – ¾" = ¼" blocking thickness)

3. Once blocking is cut, fasten blocking to the wall. After all blocking is on the wall, return to page step 2 on page 1 for the rest of the panel installation.

### **INSTALLING ACROVYN CORNER GUARD (IF REQUIRED)**

Follow the following steps, along with the installation instructions for the specific corner guard you will be installing, to make sure the Acrovyn corner guard is installed correctly with these wall panels.

1. Measure the thickness of one of the wall panels that will be installed. This will be used to figure out how big of a spacer will be needed to make sure the Acrovyn corner guard is the same offset from the wall as the wall panels.
2. Look on the instructions for the dimension showing the thickness of the corner guard. Subtract that measurement from the thickness of the wall panel. Cut a spacer to make up the thickness to allow the Acrovyn corner guard to sit flush with the wall panels.
3. Attach the spacer on the wall and then proceed to install the Acrovyn corner guard as stated in the specific corner guard instructions. Once the corner guard(s) are installed, return to page 1 for instructions on installing wall panels

### **MOVING CLIPS (IF REQUIRED)**

If one of the fasteners on the back of the panel or in the wall strips, you can easily move the fasteners on the back of the panel.

1. Remove the clip and stripped fastener(s).
2. Drill (2) new 1/8" hole in the panel, at least 1" away from previous hole (see figure 10.). Try to keep the new holes on the same plane as the old holes so the same wall cleat can be used.

**NOTE:** Clip are to be no more than 24" on center and no more than 2" from the edge of the panel.

**NOTE:** Use a drill stop collar to make sure your drill bit does not go deeper than the recommended depth of 5/16" deep or you will damage the face of the panel.

**NOTE:** If using the Acrovyn sheet reveal strips, move the snaps at least 1" away from the Acrovyn sheet reveal strip.

3. Be sure not to strip the fasteners when installing in the back of the panel.

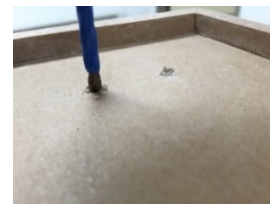


Figure 10.

### **CUTTING OUT OUTLET BOX LOCATIONS (IF REQUIRED)**

All outlet box locations must be cut in the field.

1. Measure to the center of the outlet box from the edge of adjacent panel or cove base.

**NOTE:** Be sure to measure the outlet itself as well to ensure you are cutting a hole big enough for the outlet

2. On the wall panel that is to be cut, measure out and use a pencil to mark the location of the cutout for the outlet.
3. Once the location of the outlet is outlined on the panel, we recommend using a Sonic cutter or a jig saw to cut the hole in the panel.

**NOTE:** We recommend cutting from the back side of the panel or that the panel surface at the cutout area be taped with painter's tape to minimize the risk of the toll scratching the finished surface.

4. After the hole has been cut proceed in putting up the wall panel as instructed above. If trims are required to cover cut edges, see next section for applying aluminum trims.

**NOTE:** If trims are not used, the outlet may need to be moved out and will need to have an extension box (supplied by others) used to meet codes and allow the outlet to sit flush with the face of the wall panel. The outlet cover will hide the raw cut edges.

5. Once the outlet box locations are cut out of the panels, return to page 1 for instructions on installing wall panels.

Hughesville, PA | 800.233.8493 | 570.546.5941  
 Mississauga, ON | 888.895.8955 | 905.274.3611

[www.c-sgroup.com](http://www.c-sgroup.com)  
[IWPTechSupport@c-sgroup.com](mailto:IWPTechSupport@c-sgroup.com)

**FIELD MODIFIED PANEL SIZE (IF REQUIRED)**

**WRAPPED EDGE PANELS**

If using standard size wrapped edge panels and you reach a cut out, the panels can be spliced vertically.

1. Determine the required width of the panel to fit in the space left. Be sure to consider for the reveals on both sides.

**NOTE:** Put up panel reveal spacers on the edges of the existing panels and measure between panel reveal spacers for actual panel width.

**NOTE:** Be sure all clips and fasteners are removed prior to cutting, for safety

**NOTE:** It is recommended that the wall panels be cut with an 80-100 tooth carbide tipped saw blade or equivalent.

2. Using a standard table saw, cut excess portion out of the center of the panel.

**NOTE:** When cutting panel on the table saw, panel should be run face down on a clean, smooth table saw. (See figures 11. and 12.)

**NOTE:** We recommend taping where the cuts will be made so the blade cuts through the tape to minimize the risk of the panel chipping.

**NOTE:** If cutting Chameleon you may want to select a straight grain section of the pattern for splicing.

3. The cut panel must be placed on a flat surface and spliced together using the supplied aluminum splice plate. The plate will need cut using a chop saw to the exact inside wall panel dimension of the return legs on the panel. This helps to align the panels for splicing. The panels will be spliced with the supplied #6 x 3/8" round head wood screws.

**NOTE:** Use wood clamps to insure that the panel is pressed tight together at the cut seam. (See figure 13.) See figure 14 for picture of panel with splice plate attached.

**NOTE:** Not every hole on the splice plate needs used. You may stagger fasteners or skip every other hole on the splice plate when putting in screws.



Figure 11.



Figure 12.



Figure 13.

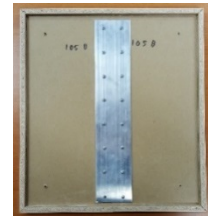


Figure 14.

**PANELS WITH TRIMS**

If using standard size panels with trimmed edges and you reach a cut out, the panels can be cut down and have the trims reapplied.

1. Determine the required width of the panel to fit in the space left. Be sure to take into account for the reveals on both sides.

**NOTE:** Put up panel reveal spacers on the edges of the existing panels and measure between panel reveal spacers for actual panel width.

**NOTE:** Be sure all clips and fasteners are removed prior to cutting, for safety

**NOTE:** It is recommended that the wall panels be cut with an 80-100 tooth carbide tipped saw blade or equivalent.

2. Remove the trims from the panel and use a standard table saw to cut the excess portion off of one edge of the panel.

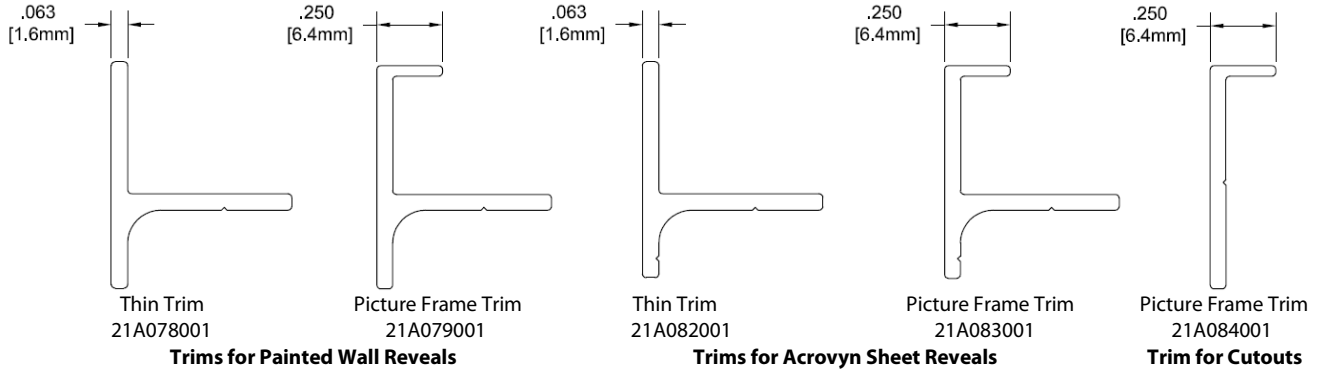
**NOTE:** When cutting panel on the table saw, panel should be run face down on a clean, smooth table saw. (See figures 11. and 12.)

**NOTE:** We recommend taping where the cuts will be made so the blade cuts through the tape to minimize the risk of the panel chipping.

3. Once the panel is cut to the correct size, reapply the trims to the panels. The trims will need to be cut down to fit the newly sized panel.

**APPLYING ALUMINUM EDGE TRIMS (IF REQUIRED)**

At floor, ceiling, outlets, fire cabinets, and other obstructions, an aluminum edge trim is supplied to cover any cut locations on the panels. See below for available aluminum edge trims.



1. Measure the length of the edge of the panel that is going to require the aluminum edge trim.
2. Cut the trims to length.

**NOTE:** If installing trims on adjacent sided of panel, trims are to be mitered at 45° in the corners.

3. Once the trims are cut, dry fit them on the panel.

**NOTE:** After trims are cut, ease the cut edges to remove any sharp edges.

**For painted wall reveal and Acrovyn sheet reveal trims**

4. Once the fit of the trims is acceptable, pre-drill 1/8" clearance holes on the die line of the back of the trim.

**NOTE:** Panel does NOT need to be pre-drilled. Just the trims get pre-drilled.

5. Attach the trims to the panels with the supplied #6 x 3/8" round head wood screws.

**NOTE:** Fasteners in trims are to be no more than 12" on center.

**For trim used at the cutouts**

4. Apply a 1/8" bead of M1 Structural Adhesive to the inside top corner of the trim.
5. Push the trims tightly to the sides of the panel to spread the adhesive out for a better adhesion. Wipe away any adhesive that might squeeze out along the face of the panel.

**SHIMMING PANELS (IF REQUIRED)**

To properly engage the cleats due to variations in wall plane, the cleats will need to be shimmed to help them engage.

1. Determine fastener locations where cleats are not engaging.
2. Remove panel and loosen wall cleat on wall at locations where cleats are not engaged.
3. Place purchased, or customer supplied horse shoe shim (see figure 15.) behind loosened fastener and then retighten.
4. Place panel back on the wall. If cleats still do not engage, repeat steps 1-3.



Figure 15.

**INSTALLING PANELS ON BLOCK OR OTHER HARD SURFACE (IF REQUIRED)**

If the wall panels are being installed onto a hard surface, like block or concrete, please follow these steps for a successful installation.

**NOTE:** Before panels can be placed on wall, make sure wall is flat, even, clean and clear of any loose particles.

1. Find the center of the wall and refer to the drafting details to begin laying out panels.
2. Utilize the drafting details and a laser level to layout the locations for all the wall cleats.

**NOTE:** You will not be able to use the marking clips on block or other hard surfaces, so the panels will need to be laid out using the drafting details and a laser level.

**NOTE:** The bottom of the wall cleat should be 1-9/32" from the die line located on the panel cleat.

3. Refer to step 4 on page 2 to start cutting the wall cleats and mounting them to the wall using the drafting details and laser line as references to the bottom of the cleats. The cleats should be pre-drilled with a 1/4" diameter drill bit to allow the wall dog to fit through the pre-drilled hole.
4. Once the first wall cleat is cut, pre-drilled and attached to wall, continue to step 5 on page 2 and follow the rest of the instructions to continue the installation of the panels.