

## ASSEMBLY INSTRUCTIONS SYSTEM SUPER 3 EZ WITH EXPANDED CORNER

Congratulations on your decision to use the world's most advanced and user-friendly cyclorama system. We have taken a great deal of care to create and ship your cyc, so please take a minute to visually inspect the crate before you sign the receipt to accept the shipment. Are there any signs of damage, including puncture holes in the crate, or shattered or stressed wood?

If there is visible damage, insist that the damage be noted on your bill of lading and that either the delivery person or a representative from the delivery company be present when you open the crate. All Pro Cyc crates are custom made for each order. Pro Cyc will not honor claims for damage if the bill of lading has been signed without noting and alerting the carrier of damage to the crate. The only exception is if the damage is internal. In that case, keep the crate so it can be inspected.

Review your Pro Cyc shipment to make sure all items listed on your quote match up to the items shipped. If there is a discrepancy, please call us right away to get the problem resolved.

### Let's Assemble Your Cyc:

#### 1. Tools

You will need the following tools & supplies for assembly of the cyc:

- Circular saw
- Stud finder
- Sockets and drivers; 7/16"
- Sockets & drivers; 1/2"
- Clamps or vise grips
- Chalk line
- 24" long level
- Carpenter's square

- Drift pin to align 9/32" holes
- 9/32" drill
- Drill motor
- Roto-hammer with 5/32" masonry drill bits (only if attaching cyc to concrete wall or floor)
- Canned air
- Dry mortar mix (One 80-pound bag for every 12 linear feet of cyc floor length)
- Framing hammer
- Screwdriver (Phillips & flat)
- Palm sander w/60-grit sandpaper
- Clean shop towels or cloths
- 4" minimum width horizontal furring strips or plywood – enough to match up to total length of floor cove cyc-to-wall contact area
- Vertical furring strips or plywood - same width as the distance on center between studs in your wall. The height of these strips needs to be 38 inches less than the overall height of your finished cyc. You should have two furring strips or pieces of plywood this size for every corner in your cyc. (L-shaped cycs have one corner; U-shaped cycs have two corners.)
- All furring strips or plywood should be the same thickness as the sheetrock in your wall
- Sheetrock knife
- Drywall tools
- Pro Cyc's Grey Bonding Primer
- Paint
- Paint supplies
- ABS plastic glue or cement (Available in plumbing supply stores.

This adhesive is only required if you need to trim your cyc to fit your studio.)

#### 2. Sanding the Modules

Sand the entire surface of each cyc module with 60-grit sandpaper. This will provide for better paint adhesion.

Sand the outside edges and the side flanges with 60-grit sand paper. This will provide for better joint compound adhesion and help create a non-slip surface when bolting the modules together.

Sanding before assembly will help make sure outside edges coming in contact with the joint compound are not missed.

After sanding, clean each module with a damp cloth. Dust from the sanding process can interfere with paint and joint compound adhesion. This is also a good time to clean the sanding dust from your studio.

#### 3. Construct the Corner Assembly

When installing a Super 3EZ with an expanded corner, you will need to build the corner assembly using Part #3A45L-EZ, Part #3A45R-EZ, Part #3B45EZ, Part #4B, Part #4C and steel leg assemblies. Review the schematic for System Super 3EZ with an Expanded Corner. This document can be found at our website [www.proccyc.com](http://www.proccyc.com).

#### 3A. Leg Support Assembly

Using 5/16"-18 x 3/4" bolts, nuts and washers, bolt together the leg support assemblies. Bolt the steel stud to the angle base (foot) so that the stud is standing on the inside bottom of the foot. Next, connect the flat bar diagonal brace. Use a level or carpenter's square to make sure

the foot is perpendicular to the stud. (See Figure 1.)

Next, bolt together the 69.5 inch steel studs using the 8 inch aluminum connector. Be sure to use a straight edge to make sure the steel studs are properly aligned before tightening the bolts.

Connect the 2 inch x 5 inch steel flange brackets to the stud columns. Make sure the brackets attach to the outside (smooth side) of the studs in the exact positions shown in Figure 2.

### **3B. Corner Assembly**

Loosely fasten Part #3A45L-EZ together with Part #4B using 1/4"-20 x 1" bolts, 1/4"-20 nuts and 1/4" flat washers under the bolt head and the nut. Place bolts only in holes two through eight (counting from the top). Skip holes nine, ten and eleven then place bolts in the remaining five holes. Using a straight edge, make sure the top flanges are flush and even; then tighten the bolts.

Lift the pair of modules upright and position them on the steel leg assembly so the top of the modules are resting on top of the 2 inch x 5 inch steel flange bracket. The back edges of the flanges should be 1/2 to 5/8 of an inch from the front edge of the leg assembly stud. This spacing allows you to adjust other modules in or out to make sure the face of the cyc stays even. (See Figure 3.)

**\*\*\*Important Note: Make sure that the flange of the module does not rest on the foot of the cyc leg assembly. If it**

**does, there will be a bow in your cyc where the cove meets the floor. Place the flange on the clear or open side of the foot. Do not allow the flange bolt that is closest to the floor to rest on top of the foot. Insert this bolt so the nut and the stud portion of the bolt are pointed away from the steel foot. (See Figure 4).**

Clamp the module flanges to the diagonal braces of the leg assemblies. (See Figure 4.) Make sure the faces of the modules are FLUSH & EVEN, and that the back edge of the module flanges are 1/2 to 5/8 of an inch from the front edge of the leg assembly studs as shown in Figure 3.

Drill through the holes in the 2" x 5" flange brackets and through the module flanges using a 9/32" drill bit. Place a 1/4"-20 x 1" bolt through these holes and tighten with 1/4"-20 nuts. Make sure that you use a 1/4" flat washer on the module side of the nut and bolt. (See Figure 5.)

Loosely fasten Part #3A45R-EZ to the other side of Part #4B using 1/4"-20 x 1" bolts, 1/4"-20 nuts and 1/4" flat washers under the bolt head and the nut. Place bolts only in holes two through eight (counting from the top). Skip holes nine, ten and eleven then place bolts in the remaining five holes. Using a straight edge, make sure the top flanges and the faces of the modules are flush and even; then tighten the bolts.

Place a steel leg assembly so the top of the modules are resting on top of the 2 inch x 5 inch steel flange bracket. The back edges of the flanges should be 1/2 to 5/8 of

an inch from the front edge of the leg assembly stud. (See Figure 3.)

Using a straight edge, make sure the top flanges and the faces of the modules are flush and even; then tighten the bolts.

Clamp the module flanges to the diagonal braces of the leg assemblies. (See Figure 4.) Make sure the faces of the modules are FLUSH & EVEN, and that the back edge of the module flanges are 1/2 to 5/8 of an inch from the front edge of the leg assembly studs as shown in Figure 3.

Drill through the holes in the 2" x 5" flange brackets and through the module flanges using a 9/32" drill bit. Place a 1/4"-20 x 1" bolt through these holes and tighten with 1/4"-20 nuts. Make sure that you use a 1/4" flat washer on the module side of the nut and bolt. (See Figure 5.)

Now go back to the clamped diagonal braces on the steel leg assemblies. Use a 9/32" drill bit to drill through the holes in the diagonal braces and the flanges (see Figure 6). Insert and tighten a 1/4"-20 x 1" bolt, nut and two washers in the first hole before proceeding to the next hole. Occasionally, because your floor might not be flat or even, the diagonal braces cannot be drilled through into the flange. That's okay because Pro Cyc is strong enough so that it doesn't need to be supported by the diagonal braces.

After the bottom row is complete, it is now time to work up and out from the center. A pair of Part #4C can be bolted together while lying face down on the floor. This assures that the faces of the 4C's will be aligned flush with one another. Before tightening the bolts, make sure the flanges of the 4C's are also flush and even with one another.

Attach and then secure the pair of 4C modules stacked vertically above Part #4B – making sure to keep the fronts of the modules flush and even with one another.

Pairs of Part #3B45-EZ can be stood and their flanges and bolted together. Before tightening the bolts, make sure the flanges are flush and even with one another.

Attach and then secure the pairs of 3B45-EZ modules stacked vertically above Part #3A45R-EZ & Part #3A45L-EZ – making sure to keep the fronts of the modules flush and even with one another.

#### 4. Framing

Begin in the corner of the room where you will remove two strips of sheetrock and replace them with vertical furring strips or plywood so you have a solid surface to which you attach your Pro Cyc corner modules.

When an expanded-corner assembly is complete, slide it into the corner of the room and mark where the #3B45-EZ coves meet the wall with vertical lines. Make sure that both sides are equidistant from the corner. (The outer edges of Part #3B45-EZ should be approximately 7' 7" from the corner.)

Pull the corner assembly away from the walls, so you have room to work. Next, using a stud finder, locate the studs in your existing wall. From the lines marking the vertical edges of your corner section, locate the closest stud inside each line and outside each line. Remove the sheetrock between the two studs on the left and the two studs on the right. Begin this process by cutting the sheetrock with a knife or circular saw 38 inches above the floor and up to the planned height of the top vertical module. (BE CAREFUL

NOT TO CUT COMPLETELY THROUGH THE SHEETROCK WITH A CIRCULAR SAW. IF THE STUDS ARE METAL THE DAMAGE CAN BE STRUCTURAL. COMPLETE THE CUT WITH A SHEETROCK KNIFE.) Make the cuts through the sheetrock, along the center of each stud. Remove the sheetrock between the studs and replace it with plywood or furring strips that are the same thickness as the sheetrock you removed.

Now you need to remove horizontal strips of sheetrock along the top of the floor coves' length and width of your cyc and replace them with plywood or furring strips so you have a solid surface to which you attach the top of your floor-cove modules.

Begin in the corner and measure out at least as long and wide as your cyc. Terminate each strip into the stud that is equal to or longer/wider than your cove unit. Each strip should go underneath the furred out vertical strips you have in place. Measure up from the floor 34 inches and mark the wall at either end of your cyc. Next, mark the wall 4 inches above your first mark. Use a chalk line to mark the area to be removed. Using a sheetrock knife or a circular saw, remove the sheetrock between your two lines and replace it with plywood or furring strips that are the same thickness as the sheetrock wall. (AGAIN, BE CAREFUL NOT TO CUT COMPLETELY THROUGH THE SHEETROCK WITH A CIRCULAR SAW. IF THE STUDS ARE METAL THE DAMAGE CAN BE STRUCTURAL. COMPLETE THE CUT WITH A SHEETROCK KNIFE.)

**NOTE:** Adding an additional layer of sheetrock (on top of your existing sheetrock with furring strips) will help with soundproofing

and it will also render an improved fire rating. If you choose to install a second layer of sheetrock make sure to use wood screws that are long enough to reach the furring strips when you attach the Pro Cyc modules to the wall.

#### 5. Trimming Your Cyc to Fit Your Studio (See Figure L)

Snap a chalk line at the desired length and use a circular saw to cut the module to the size.

Next, cut the remaining part one inch from the flanged end so you can re-attach the flange. Clean off any burrs or debris from the plastic before using ABS adhesive or cement (available in plumbing supply stores) to fasten the flanged end behind (under) the cut-to-length module. Clamp the parts together until the glue is dry.

You will need to trim the floor and/or wall side of the flange back to the point where it will allow you to align the face of the trimmed module with the face of the adjoining module.

#### 6. Assembly

With your plywood or furring strips in place, begin to assemble your Pro Cyc modules. Before assembly, make sure that the flanges on the modules do not prevent the cyc from fitting flush to the floor or wall. If a flange holds a cove end off the floor or wall, simply grind down the flange in that area. Assemble your cyc away from the walls so you have adequate space to work.

Begin by standing a 3B-EZ module on its flanged side. Next, place a second 3B-EZ on top of the first one and align the holes with an alignment tool such as a drift pin, or even a bolt. LOOSELY bolt the two parts together using a 1/4"-20 x 1" bolt, washer, washer and nut. When all of the holes are loosely fitted, tighten the bolts one

by one, making certain that the face of the coves remain flush. Repeat this process with all cove pairs that form each wall of the cyc.

When the pairs have all been tightly bolted together, lay the parts composing a wall face down on the floor. Align the parts and loosely bolt them together. Tighten the bolts making certain that the cove faces remain flush with each other. Repeat this procedure for the other wall(s).

To attach any remaining vertical cove modules above the corner module(s), install the 1/4"-20 x 1" bolts, nuts and washers using two washers for each bolt. Before final tightening, use the straight edge to make sure the modules are flush on the face. Repeat this procedure for each corner module.

Slide the corner group back into the corner area. It should be approximately 4-1/2" from the wall. While one person remains behind the corner, as many people as necessary should take one wall of 3B-EZ modules, rotate it up and move it into position so that it can be bolted to the corner group. Proceed to bolt the wall to the corner group, making certain that the faces remain flush when tightening the bolts. Do the same with the second wall and any additional walls.

**(Note: The video on Pro Cyc's website shows the corner assembly attaching to the walls before the 3B-EZ modules are attached to the corner assembly. Either method is acceptable. If you choose to attach the corner assembly first, a small person should be available to crawl behind the cyclorama to bolt the 3B-EZ modules to the corner assembly.)**

#### **7. Attach the Cyc to the Wall**

After all of the cyc modules have been attached to one another – and you have checked to make sure the modules are all flush on the face – push the cyc unit into place in the corner and along the wall. When the entire unit is against the wall, continue to shift the cyc back and forth until all areas seem to be against the wall and floor.

Starting with the corner assembly, work your way up and out from the corner and attach the cyc to the wall with 1-1/4" Phillips drywall screws. Make sure the modules remain parallel to the furring strips or plywood and that the cyc does not "climb" or "sag" as you move away from the corner and proceed to the ends of the cove unit.

#### **8. Fastening the Bottom Edge to the Floor**

After the sides of the corner modules and the top of the floor coves have been attached, it is time to position and fasten the bottom of your cyc to the floor. Using both hands, grab the cyc from underneath, pull it forward, and then let it fall gently into place.

To secure the cyc to the floor, begin in the corner and work toward each end of the cyc.

Drill through the cove modules into the floor. If you are attaching to concrete, you should use a roto-hammer and 5/32" carbide masonry drill bits to install 3/16" x 1-1/4" flat-head Phillips concrete screws. Drill the holes a minimum of 1-1/2" deep. Before installing the screws blow out each hole with canned or compressed air.

If you are fastening into a wood floor, you should use 1-1/4" Phillips drywall screws.

#### **9. Finish the Joints and the Tapered Edge at the Floor**

The tapered edge at the floor may be done either simultaneously with the joint mudding or subsequent to the joints. The completed feathered edge at the cyc-to-studio-floor transition will typically extend 4" to 6" in front of the front edge of the cyc modules. This feathered edge completes the radius of the cove module.

The process for finishing the joints and the tapered edge at the floor is the same:

Make sure that the surfaces of all modules are properly sanded (see Step 2.) and wiped down in order to remove sanding dust. Use a self-adhesive fiberglass mesh tape on the joints. Be sure to press the tape into the crack with your finger as you apply the tape. Use a 90-minute drywall mud such as Durabond 90 Setting Type Joint Compound to mud the joints.

**DO NOT USE SELF-ADHESIVE FIBERGLASS MESH TAPE ON THE CUT-OUT AREAS AT THE TOP LEFT OF PART #3A45L-EZ OR THE TOP RIGHT OF PART #3A45R-EZ. THERE ARE NO RECESSES IN THE MODULES IN THESE AREAS TO ACCOMMODATE THE TAPE.**

**DO NOT USE EASY SAND JOINT COMPOUNDS, AS THEY HAVE POOR TACKING QUALITIES.**

**ALLOW PLENTY OF TIME FOR THE MUD TO COMPLETELY DRY BEFORE APPLYING SUBSEQUENT COATS.** This is because moisture can only escape through the face of the joint.

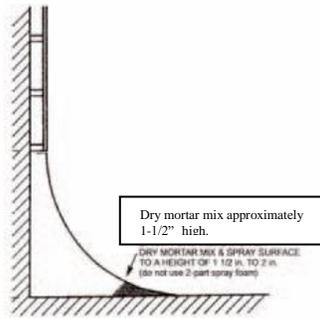
Wet sand or dry sand the joints and re-coat with the 90-minute mud. Wet or dry sand again. For the third and final coat, use a regular box or bucket mud, such as Beadex All Purpose Joint

compound, to float out the seams. Sand and wipe down the cyc one last time before painting.

**Do not cap off the ends or the top of the corner on your cyc. It is important to allow the free flow of air behind the cyc. Temperature differences between the front and the back of the cyc can create uneven expansion and contraction. This can cause drywall mud to crack.**

### 10. Reinforce the Tapered Edge at the Floor

It provides additional support to the cyc to put dry mortar mix underneath the area where the cyc meets the floor. Do this to a height of approximately 1-1/2" as depicted in the drawing below. Use a spray bottle to spray water on the back side of the mortar mix and allow mortar to set.



### 11. Prime & Paint the Cyclorama

Wipe the entire cyc with a clean damp cloth – including the sheetrock wall. It is now ready to be primed. Apply one generous coat of Pro Cyc's Grey Bonding Primer using a 9" roller with a 3/8" nap. Use a 3" or 4" roller in the corner area.

Paint your cyc with either a roller or an airless spray gun. See Pro Cyc's Helpful Construction Hints

(available for download on our website) for useful tips on painting your cyc with a roller.

Repaint as often as necessary over the life of the cyc. Clean between each coat. Wearing surgical booties and/or putting plastic on the floor covers during rehearsal or studio prep will prolong the time between new coats of paint.

### 12. Questions?

Please give us a call at: (503) 723-7448. You can also email us at:

[info@procyc.com](mailto:info@procyc.com)

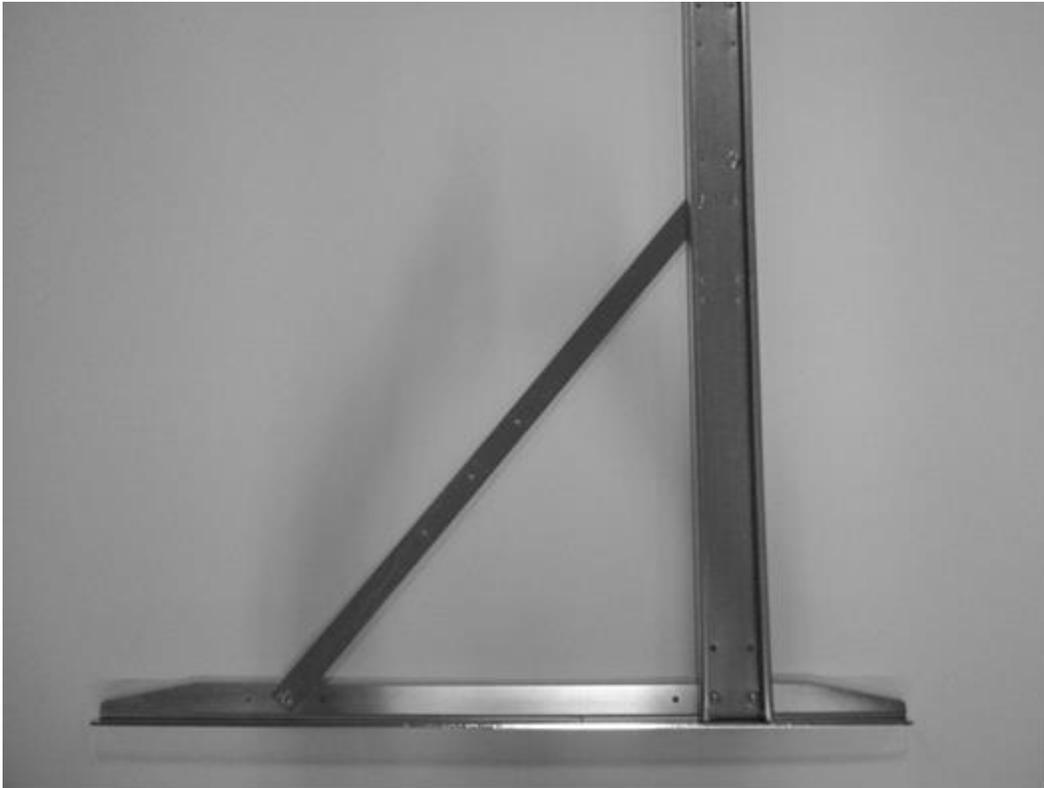
Instructions, videos, schematics, helpful construction hints and other recommendations can be found on our website:

[www.procyc.com](http://www.procyc.com)

### Scan this QR Code for a link to an installation video for System Super 3EZ with an Expanded Corner.

Please note – if you find any differences between the video and the written installation instructions always follow the written instructions.





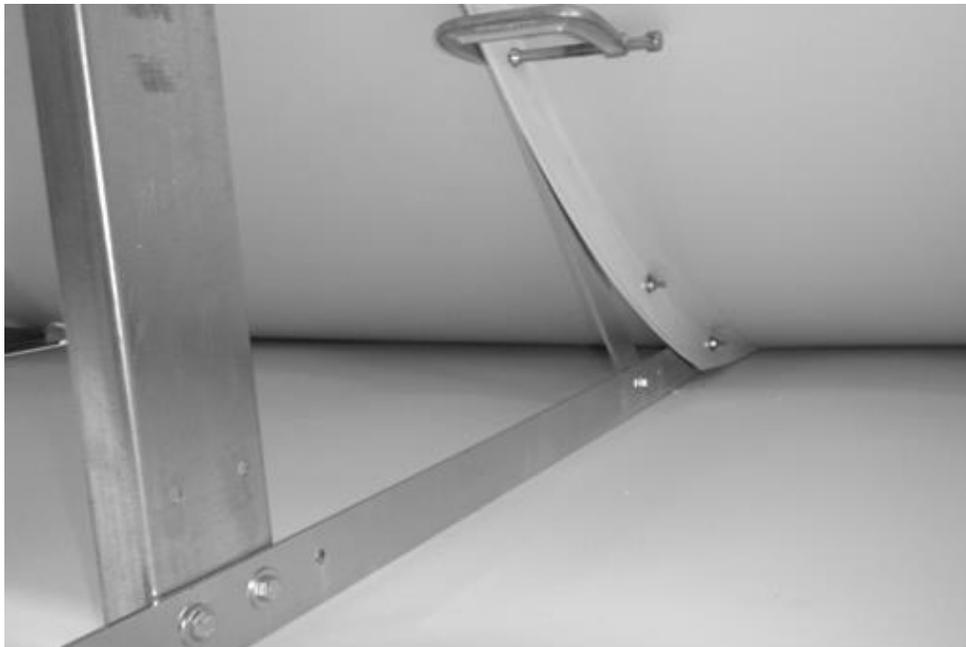
**Figure 1. – Attach diagonal bar to center of three holes.  
Attach steel stud to back two of three holes.**



**Figure 2.**



**Figure 3.**



**Figure 4.**

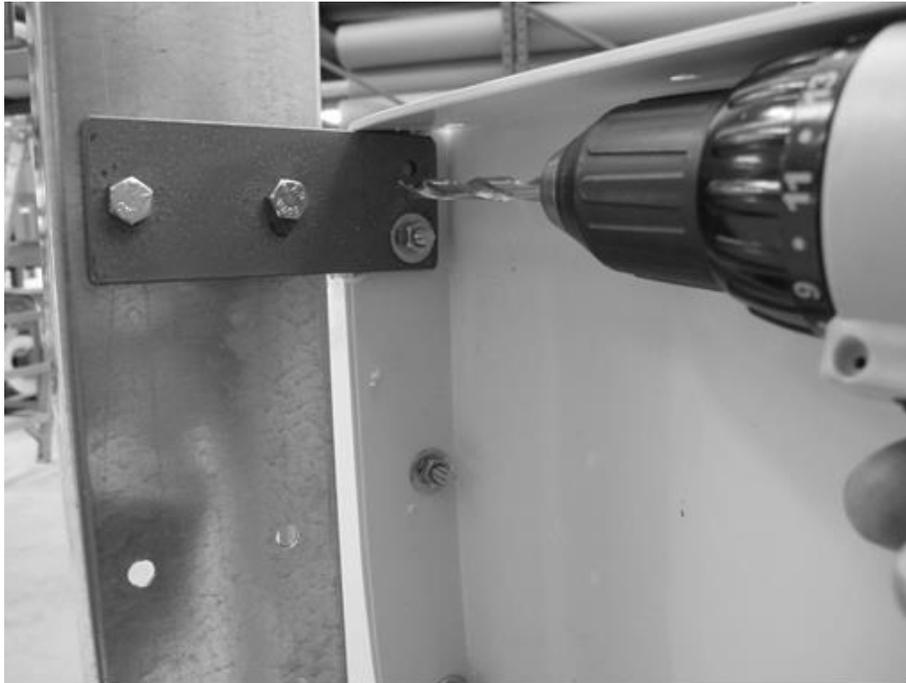


Figure 5.



Figure 6.

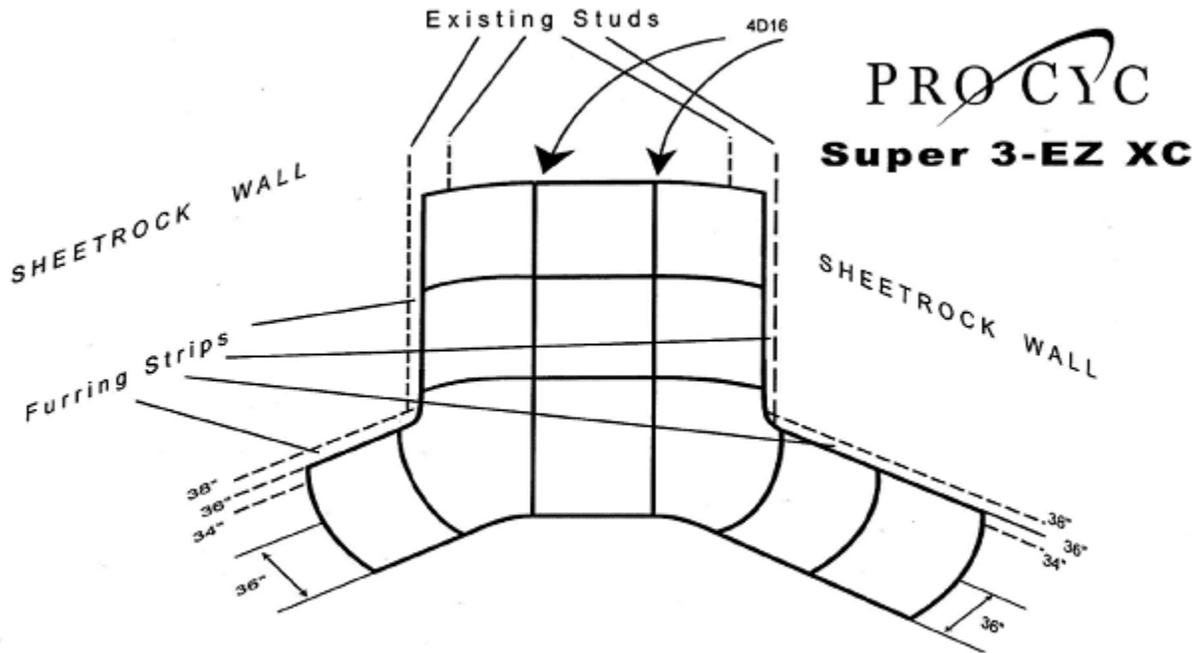


Figure L

