

## Assembly Instructions System 4QS

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:

- 1/2 inch sockets and drivers
- 7/16 inch sockets and drivers
- Clamps or vise grips

- 24 inch long level
- Carpenter's square
- 9/32 inch drill bit
- Drill motor
- Drift pin for hole alignment
- Framing hammer
- Palm sander with 60-grit sandpaper
- Drywall tools
- Handheld grinder (optional)
- Clean shop towels or cloths
- Pro Cyc's Grey Bonding Primer
- Paint (Speak with your Pro Cyc representative about paint recommendations.)
- Paint supplies
- **The following items are used only if cyc modules need to be trimmed to length:**
- Chalk line
- Circular saw
- **Part #4C-QS:**
- 1/8 inch drill bit
- Counter sink
- Phillips screw driver
- 1 inch x 2 inch wood (to be used as a brace along cut edges)
- **Part #4B-QS:**
- ABS plastic glue or cement (available in plumbing supply stores)

#### 2. Sanding

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 sandpaper. This area must be rough in order to 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. 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.)

**Note:** Your shipment includes left wheel assemblies and right wheel assemblies. When assembling your cyc, you must reserve one left-footed leg assembly and one right-footed leg assembly for the outside edges of your cyc. This is so each end of the cyc can have a flat, smooth side of the stud facing outward. (See Figure 2.)

Next, bolt together the 69.5 inch steel studs using the 8 inch aluminum connector and connect the 2 inch x 5 inch steel flange brackets to the stud columns. Be sure to use a straight edge to make sure the steel studs are properly aligned before tightening the bolts. Make sure the 2 inch x 5 inch steel flange brackets attach to the outside (smooth side) of the

studs in the exact positions shown in Figure 1.

#### 4. Optional Wheel Assembly

If you purchased optional wheel assemblies attach them to the leg support assemblies exactly as shown in Figure 3, Figure 4, Figure 5 and Figure 6 using 5/16"-18 x 1-1/4" bolts, washers and nuts. Be sure to install 3" x 5" steel braces as shown in Figure 4.

**\*\*\*Important Note: The mounting holes in the wheel assemblies are slotted. When mounting, make sure to pull the wheel assemblies as far backwards (away from the plastic cove modules) as you can.**

When attaching your wheel assemblies you must match left-footed leg assemblies with left wheel assemblies and right-footed leg assemblies with right wheel assemblies.

#### 5. Assembly

(If your cyc doesn't have a corner, go to **6. Assembling a Straight-Wall Cyc.**)

Start assembling your cyc by attaching your corner modules to the leg assemblies. For standard corner assembly fasten Part #4A45-QS to Part #4A45-QS. For expanded corner assembly fasten Part #4A45-QS to Part #4B-QS. (See generic schematics on Page 12.)

Loosely fasten the two modules together 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 six (counting from the top) and holes one through five (counting from the bottom of the cove). Using a straight edge,

make sure the top flanges and the faces of the modules are flush and even; then tighten the bolts.

Lift the pair of modules upright and position them on one steel leg assembly so the top center of the module assembly is resting on top of the 2 inch x 5 inch steel flange bracket and the back edges of the flanges are 1/2 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 7.)

**\*\*\*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 (see Figure 8).**

Clamp the module flanges to the diagonal brace of the leg assembly. (See Figure 9.) Make sure the faces of the modules are FLUSH & EVEN, and that the back edge of the module flanges are 1/4 inch from the front edge of the leg assembly stud.

Drill through the holes in the flange bracket 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 10.)

Repeat the above procedure for each pair of remaining floor modules using one steel leg assembly in the center of each pair. Next, pull these assemblies together, adding the remaining

steel leg assemblies at each seam.

Once everything is aligned, tighten the bolts. When you come to the diagonal braces, align the parts then use a 9/32" drill bit to drill through the holes in the diagonal braces and the flanges. (See Figure 11) Insert and tighten a 1/4"-20 x 1" bolt, nut and two washers in the first hole before proceeding to the next hole. Now go back and bolt all of the holes that are exposed in the radius modules. 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 corner. Pairs of Part #4B45-QS can be bolted together before being lifted up and stacked vertically on top of Part #4A45-QS. Make sure the flanges and faces of the modules are flush with one another before tightening bolts.

Pairs of Part #4C-QS can be bolted together while laying face down on the floor. This assures that the faces of the 4C-QS's will be aligned flush with one another. Before tightening the bolts, make sure the flanges of the 4C-QS's are also flush and even with one another.

Attach and then secure pairs of 4C-QS modules stacked vertically above Part #4B-QS until your cyc is complete – always making sure to keep the fronts of the modules flush and even with one another.

## 6. Assembling a Straight-Wall Cyc

If you have a straight-wall cyc it is best to start building out your wall in the middle. Begin by assembling two of the floor-cove modules (Part #4B-QS) together using 1/4"-20 x 1" bolts, 1/4"-20 nuts and 1/4" flat washers under the bolt heads and the nuts – placing bolts only in holes two through six, counting from the top, and holes two through five, counting from the bottom of the cove. Using a straight edge, make sure the top flanges and the faces of the modules are flush and even; then tighten the bolts.

Lift the pair of modules upright and position them on one steel leg assembly so the top center of the module assembly is resting on top of the 2 inch x 5 inch steel flange bracket and the back edges of the flanges are 1/2 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 7.)

**\*\*\*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 (see Figure 8).**

Clamp the module flanges to the diagonal brace of the leg assembly. (See Figure 9.) Make sure the faces of the modules are **FLUSH & EVEN**, and that the back edge of the module flanges are 1/4 inch from the front edge of the leg assembly stud.

Drill through the holes in the flange bracket and through the module flanges with 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 10.)

Repeat the above procedure for each pair of remaining floor modules using one steel leg assembly in the center of each pair. Next, pull these assemblies together, adding the remaining steel leg assemblies at each seam.

Once everything is aligned, tighten the bolts. When you come to the diagonal braces, align the parts then use a 9/32" drill bit to drill through the holes in the diagonal braces and the flanges. (See Figure 11) Insert and tighten a 1/4"-20 x 1" bolt, nut and two washers in the first hole before proceeding to the next hole. Now go back and bolt all of the holes that are exposed in the radius modules. 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. Pairs of Part #4C-QS can be bolted together while laying face down on the floor. This assures that the faces of the 4C-QS's will be aligned flush with one another. Before tightening the bolts, make sure the flanges of the 4C-QS's are also flush and even with one another.

Attach and then secure pairs of 4C-QS modules stacked vertically above Part #4B-QS until your cyc is complete – always making sure to keep the fronts of the modules flush and even with one another.

## 7. Trimming Your Cyc to Fit Your Studio

### Curved Modules (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 on the plastic before using an ABS plastic glue or cement (available at plumbing supply stores) to fasten the flanged end behind (under) the cut-to-length module. Clamp the parts together until the glue is dry.

Since you will be attaching the flanged end under the part of the module that is cut to length, you will also need to drill new holes in the flange to mate with the adjoining module.

For Part #4B-QS, you will need to trim the floor 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.

The top of Part #4B45-QS does not need to have the flange glued back on.

### Flat Modules (Part #4C-QS):

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

After cutting to size, Part #4C-QS will need to be braced to keep it flat. Cut a 1 inch x 2 inch strip of wood to a length that allows it to just fit between the flanges and flush with the cut edge. Clamp the wood in position and use a 1/8 inch drill bit to drill through the plastic module and into the center of the wood strip every four inches along the length of the cut edge. Countersink each hole with a countersink bit so that the head of the screws will end up below the surface of the cyc. Fasten the wood to the plastic module using 1-1/4" Phillips drywall screws.

Cover the screw heads with drywall mud when finishing the joints. (See Step 8 below).

## 8. Finish the Joints

Before mudding your joints make certain that all the outside edges of your modules have been well sanded with 60-grit sandpaper. The joint area must be very rough. Use Durabond® 90-Minute Setting-Type Joint Compound to mud the joints.

**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.

To finish the area between the cove and the floor, use Pro Cyc's Virtual Green™ Chroma Key Pro Matte™ Flooring.

## 9. Prime & Paint the Cyclorama

Wipe the entire cyc with a clean damp cloth. 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 coves during rehearsal or studio prep will prolong the time between new coats of paint.

## 10. 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 4QS.** Please note – if you find any differences between the video and the written installation instructions always follow the written instructions.





**Figure 1.**



**Figure 2.**

**Use left photo for Left Wheel Assemblies.**

**Use right photo for Right Wheel Assemblies.**



Figure 3.

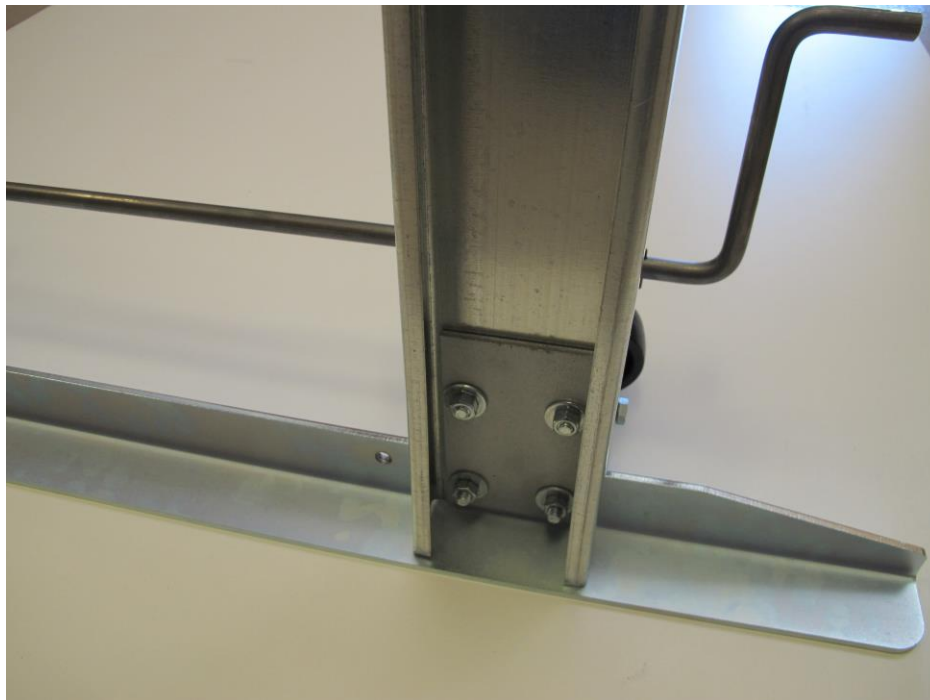


Figure 4.



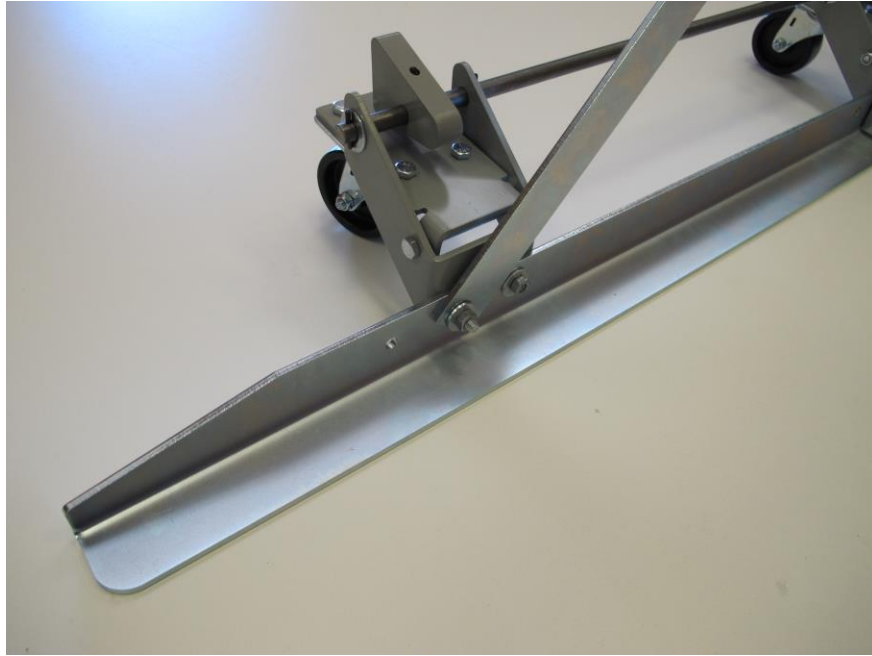


Figure 5.



Figure 6. (Left Wheel Assembly shown.)



Figure 7.



Figure 8.





**Figure 9.**

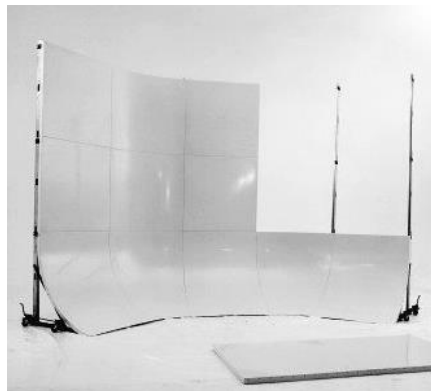
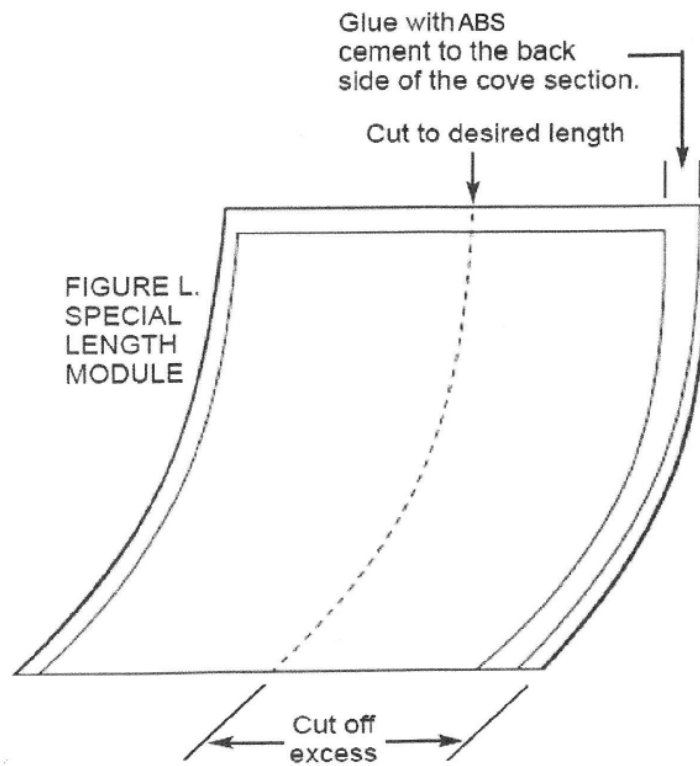


Figure 10.



Figure 11.

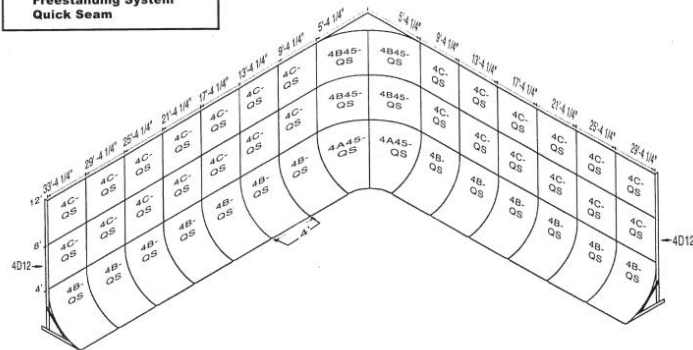
**Figure L**



**System 4QS with Expanded Corner & Wheels – Partially Assembled**

**System 4 QS**

3'6" radius  
45° corner  
Freestanding System  
Quick Seam

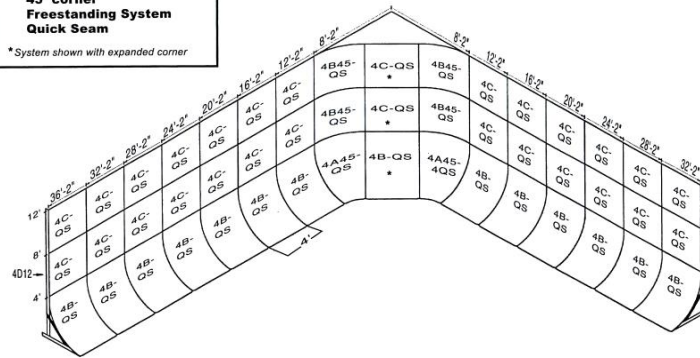


**Standard Corner Assembly**

**System 4 QS**

3'6" radius  
45° corner  
Freestanding System  
Quick Seam

\* System shown with expanded corner



**Expanded Corner Assembly**