Assembly Instructions System 4FS

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
- 1/8" drill bit (only if attaching cyc to wood floor)
- Roto-hammer with 5/32" masonry drill bits (only if attaching cyc to concrete floor)
- Canned air
- Dry mortar mix (One 80-pound bag for every 12 linear feet of cyc floor length)
- Drift pin for hole alignment
- Framing hammer
- Screw drivers (Phillips & flat)
- 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:**
- 1/8 inch drill bit
- Counter sink
- 1 inch x 2 inch wood (to be used as a brace along cut edges)
- **Part #4B:**
- 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 sand paper. 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: You must make at least 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.)

If your cyc is going to be placed flush against an existing wall, the portion of the foot that extends behind the steel stud can be cut

off to provide sufficient clearance. However, make sure that you attach the top of the cyc to a permanent wall for stability. This is especially important if your cyc is a straight-wall configuration.

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 3.

4. Assembly
(If your cyc doesn't have a corner, go to **5. Assembling a Straight-Wall Cyc.**)

Start assembling your cyc by attaching your corner modules (Part #4A45) to the leg assemblies.

Loosely fasten corner modules Part #4A45 together with a floor cove module Part #4B using ¼"-20 x 1" bolts, ¼"-20 nuts and ¼" 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 four (counting from the bottom of the cove). You can skip holes. 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 so the top of the modules are resting on top of the 2 inch x 5 inch steel flange brackets and the back edges of the flanges are ¼ 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 4.)

*****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 5).**

Clamp the module flanges to the diagonal braces of the leg assemblies. (See Figure 5.) Make sure the faces of the modules are **FLUSH & EVEN**, and that the back edge of the module flanges are ¼ inch from the front edge of the leg assembly studs as shown in Figure 4.

Drill through the holes in the 2" x 5" flange brackets and through the module flanges using a 9/32" drill bit. Place a ¼"-20 x 1" bolt through these holes and tighten with ¼"-20 nuts. Make sure that you use a ¼" flat washer on the module side of the nut and bolt. (See Figure 6.)

Using Part #4B, repeat the above procedure for each leg support.

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 7). Insert and tighten a ¼"-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 can be bolted together before being lifted up and stacked vertically on top of Part #4A45. Make sure the flanges and faces of the modules are flush with one another before tightening bolts.

Pairs of Part #4C can be bolted together while laying 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 pairs of 4C modules stacked vertically above Part #4B until your cyc is complete – always making sure to keep the fronts of the modules flush and even with one another.

5. 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 at least two of the floor-cove modules (Part #4B) together using ¼"-20 x 1" bolts, ¼"-20 nuts and ¼" flat washers under the bolt heads and the

nuts – placing bolts only in holes two through six (counting from the top) and holes one through four (counting from the bottom of the cove). You can skip holes. 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 4B modules upright and position them so the top of the modules are resting on top of the 2 inch x 5 inch steel flange brackets and the back edges of the flanges are ¼ 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 4.)

*****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 5).**

Clamp the module flanges to the diagonal braces of the leg assemblies. (See Figure 5.) Make sure the faces of the modules are **FLUSH & EVEN**, and that the back edge of the module flanges are ¼ inch from the front edge of the leg assembly studs as shown in Figure 4.

Drill through the holes in the 2" x 5" flange brackets and through the module flanges with a 9/32" drill bit. Place a ¼"-20 x 1" bolt through these holes and tighten with ¼"-20 nuts. Make sure that you use a ¼" flat washer on the module side of the nut and bolt. (See Figure 6.)

Repeat the above procedure for each leg support.

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 7) Insert and tighten a ¼"-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 can be bolted together while laying 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 pairs of 4C modules stacked vertically above Part #4B until your cyc is complete – always making sure to keep the fronts of the modules flush and even with one another.

6. Trimming Your Cyc to Fit Your Studio

Curved Modules (Part #4B - 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, 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 does not need to have the flange glued back on. The cut edge will become the top of the cyc.

Flat Modules (Part #4C):
Snap a chalk line at the desired length and use a circular saw to cut the module to size.

After cutting to size, Part #4C 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 ¼" Phillips drywall screws.

Cover the screw heads with drywall mud only (do not use self-adhesive fiberglass mesh tape over the screw heads) when finishing the joints. (See Section 8.)

7. Fastening the Bottom Edge to the Floor
To secure the cyc to the floor, begin in the corner and work toward each end of the cyc. Using both hands, grab the cyc from underneath, pull it forward, and then let it fall gently into place.

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. If you are fastening into a wood floor, you should use 1/8" drill bits to install 1 ¼" Phillips drywall screws.

Before installing the screws blow out each hole with canned or compressed air.

8. 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" beyond 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:

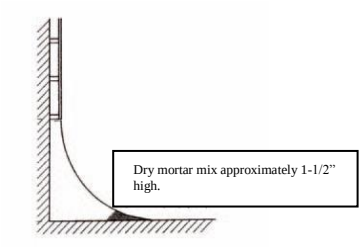
Make sure that the surfaces of all modules are properly sanded (see Step 2.) and wiped down in order to remove sanding dust. Use a self-adhesive fiberglass mesh tape on the joints. Be sure to press the tape into the crack with your finger as you apply the tape. Use a 90-minute drywall mud such as Durabond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

DO NOT USE 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.

9. 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.



10. 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.

11. Questions?
Please give us a call at: (503) 723-7448. You can also email us at: info@procyc.com.

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

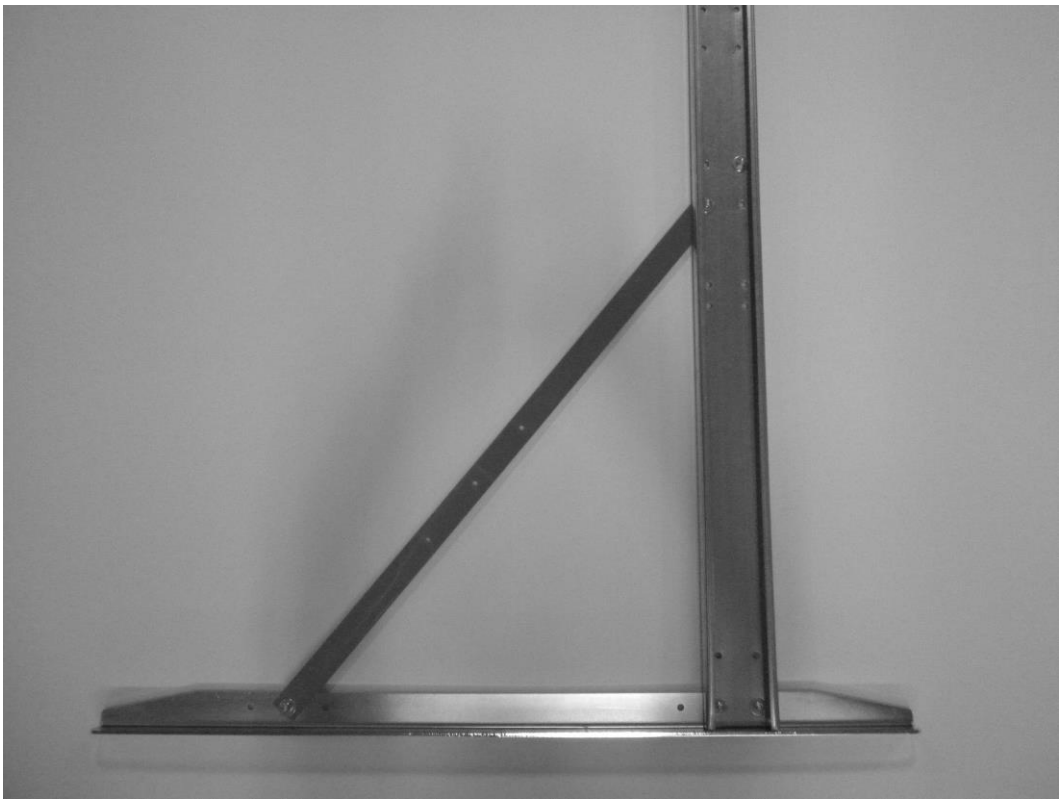


Figure 1. – Attach diagonal bar to center of three holes.
Attach steel stud to back two of three holes.

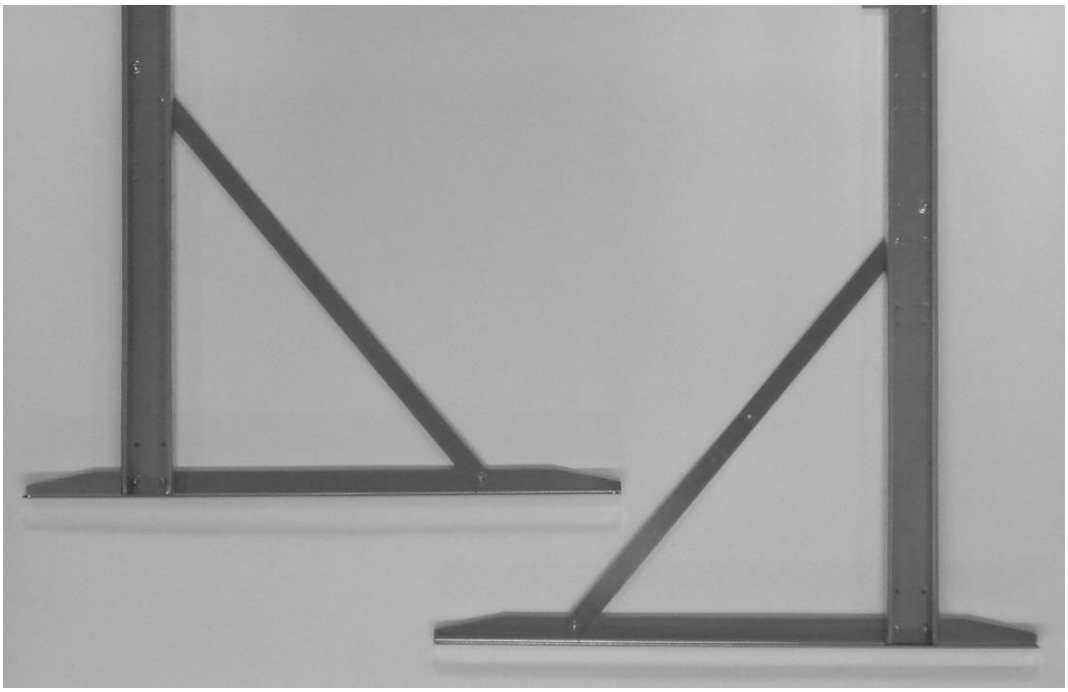


Figure 2.

Figure 3.

Figure 4.

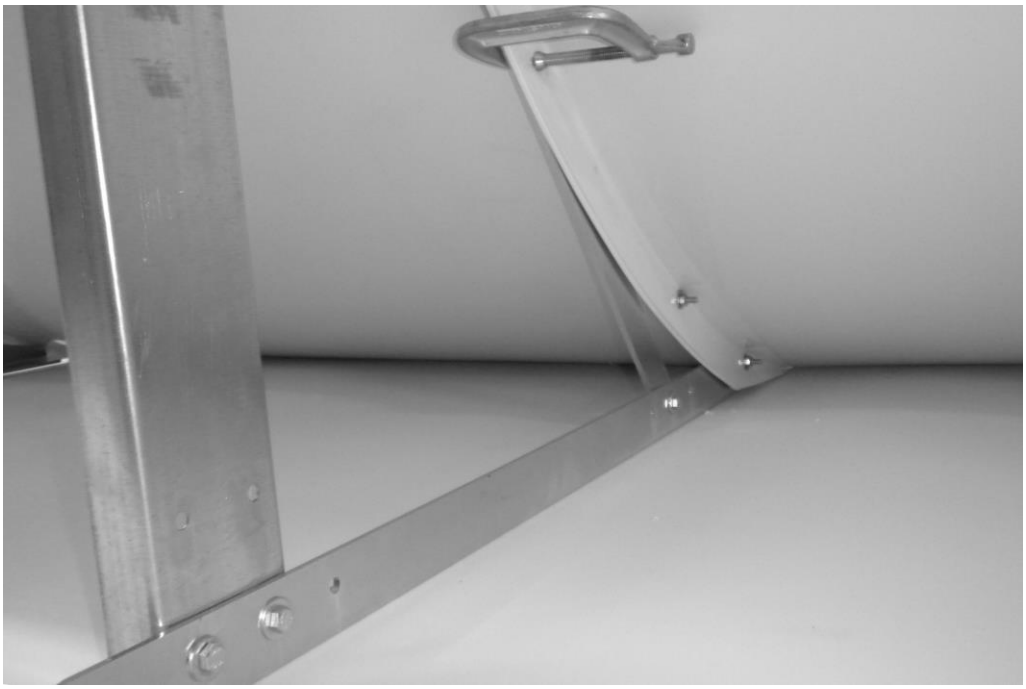


Figure 5.

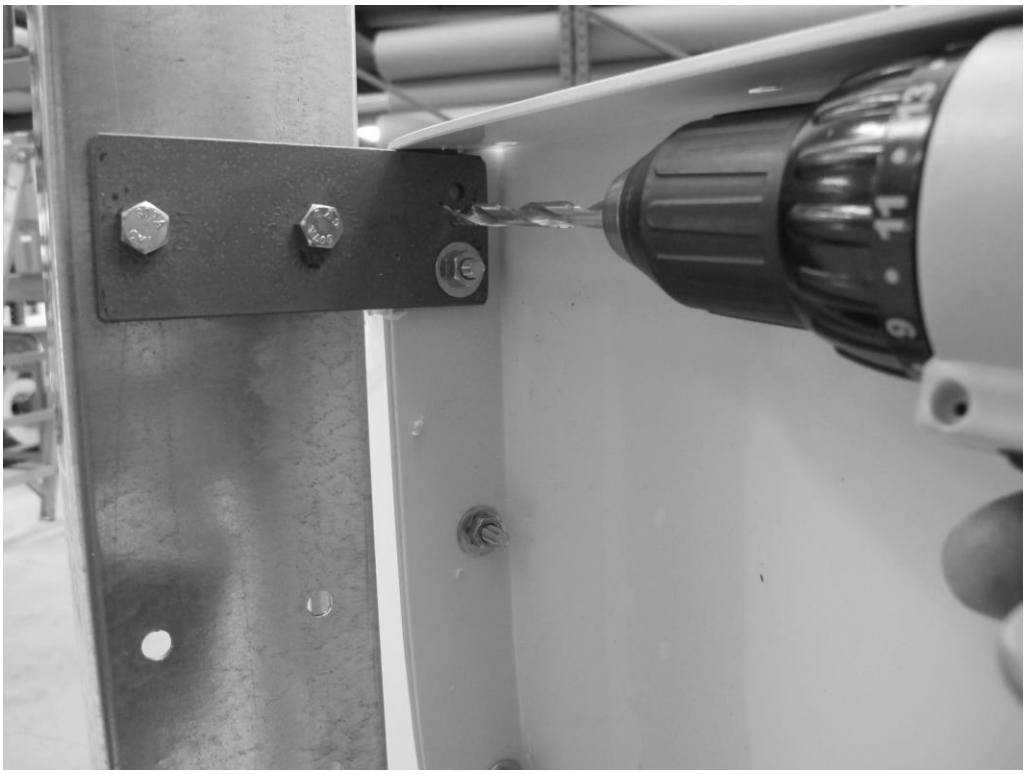


Figure 6.

Figure 7.

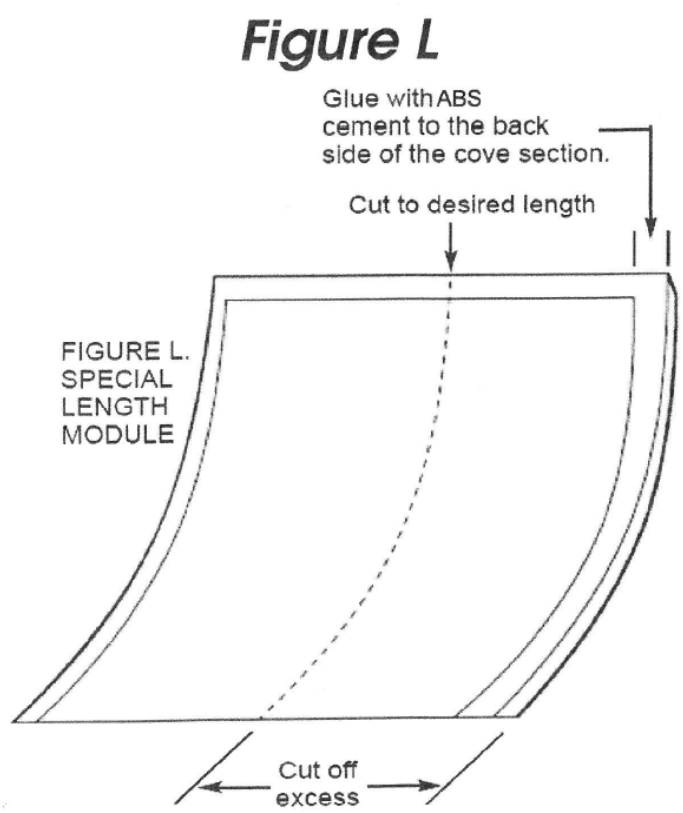
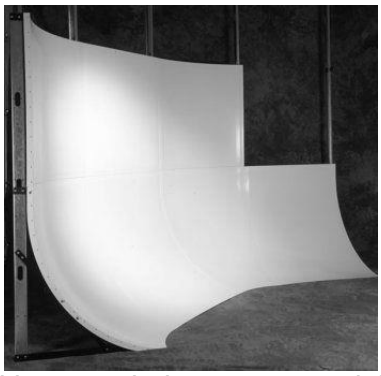
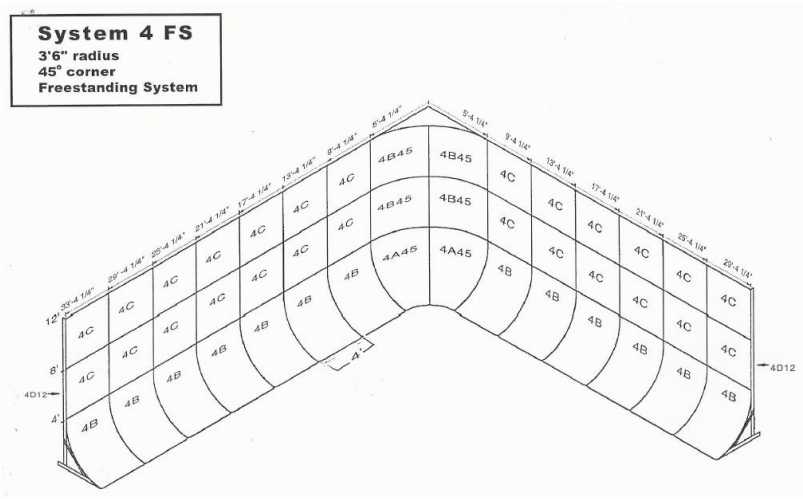


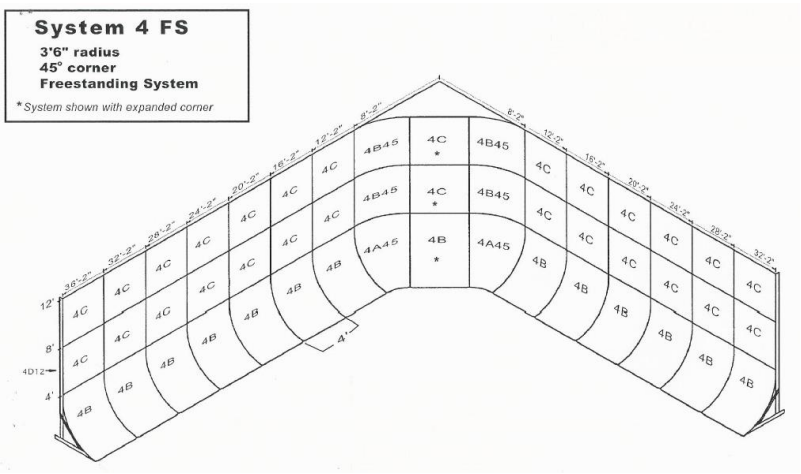
Figure L
Glue with ABS cement to the back side of the cove section.
Cut to desired length
FIGURE L. SPECIAL LENGTH MODULE
Cut off excess



System 4FS with Expanded Corner – Partially Constructed



Standard Corner Assembly



Expanded Corner Assembly