Boccia Ramps Resources and Ideas

The examples for ramps made of PVC and wood were developed by Bill Drobny, a Coach in Topeka, KS. If you have questions, contact him at cathy.drobny@gmail.com . Photos can be sent if that is helpful.

Another good contact for ramp building is Kathy Brinker in the Chicago area- tbrinker@aol.com

Excerpts from a memo sharing information about ramp design is below:

I received requests for boccia assistive devices (ramp) plans. I am happy to share with you the information that I have which hopefully will get you started. However, I think it is important to point out that each athlete's boccia ramp is unique and built for their specific abilities and needs. If you are just getting started with boccia and don't really have a handle on the athletes' needs, I'd suggest you start very simply. For example, take a 5 foot piece of 4 inch PVC pipe (Schedule 20 works for athletes with pretty good trunk and arm control but I usually use schedule 40. It is a bit heavier but much more stable and durable.) and cut it in half lengthwise creating 2 half-round troughs.
This simple design allows you to teach athletes the aiming concept. Placing the end near their chin allows them to sight directly down the trough. Use the angle to determine speed and distance by lowering and raising the end away from the athlete. For example, lower the end away from the athlete toward the floor and the ball rolls faster and further or hold the ramp more level with the end away from the athlete higher and the ball rolls slower and shorter.

As you begin working on aiming you will quickly identify the athletes who need more sophisticated devices. For example, athletes with athetosis or poor trunk control often require a more stable base for the device. When a base is used, the athlete will need to have another way to determine speed and distance. Some athletes are able to place their hand in the trough at a variety of heights; therefore, releasing the ball at a lower height to control the speed. Others use head pointers or mouth sticks. As you begin trying to determine the design needed for a specific athlete, an easy design that has been used is to take PVC and attach a 60 degree or 90 degree bend joint with a short straight piece after it. Others have used PVC and attached a PVC sweep to it for a softer curve. One group is able to bend PVC and achieve a smooth customized curve. Once a design is selected, the athlete may continue using the PVC ramp or may have the curve re-created in wood, fiberglass, etc.

Please feel free to contact me if you have any questions. I can talk to you about designs and/or put you in touch with others who have built devices for their athletes. I have found for my athletes, it was best to build something simple, go to a competition and ask to look at everyone's design.

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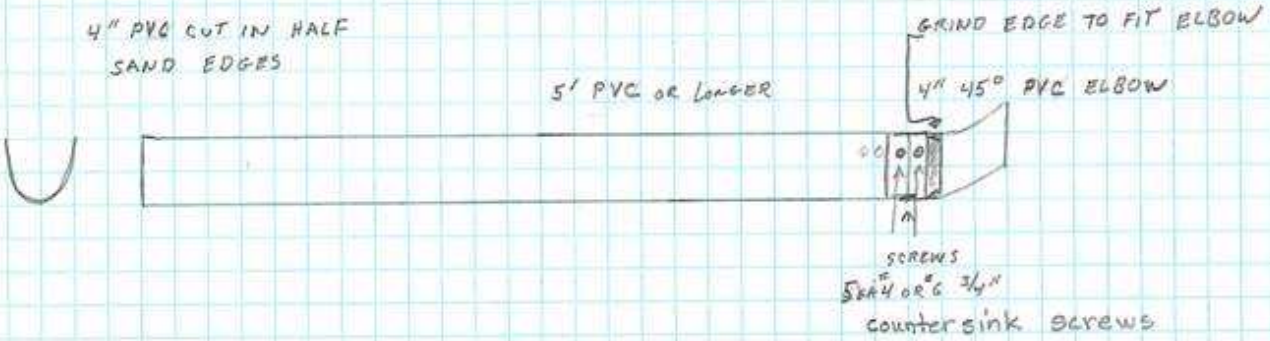
HAND HELD RAMP



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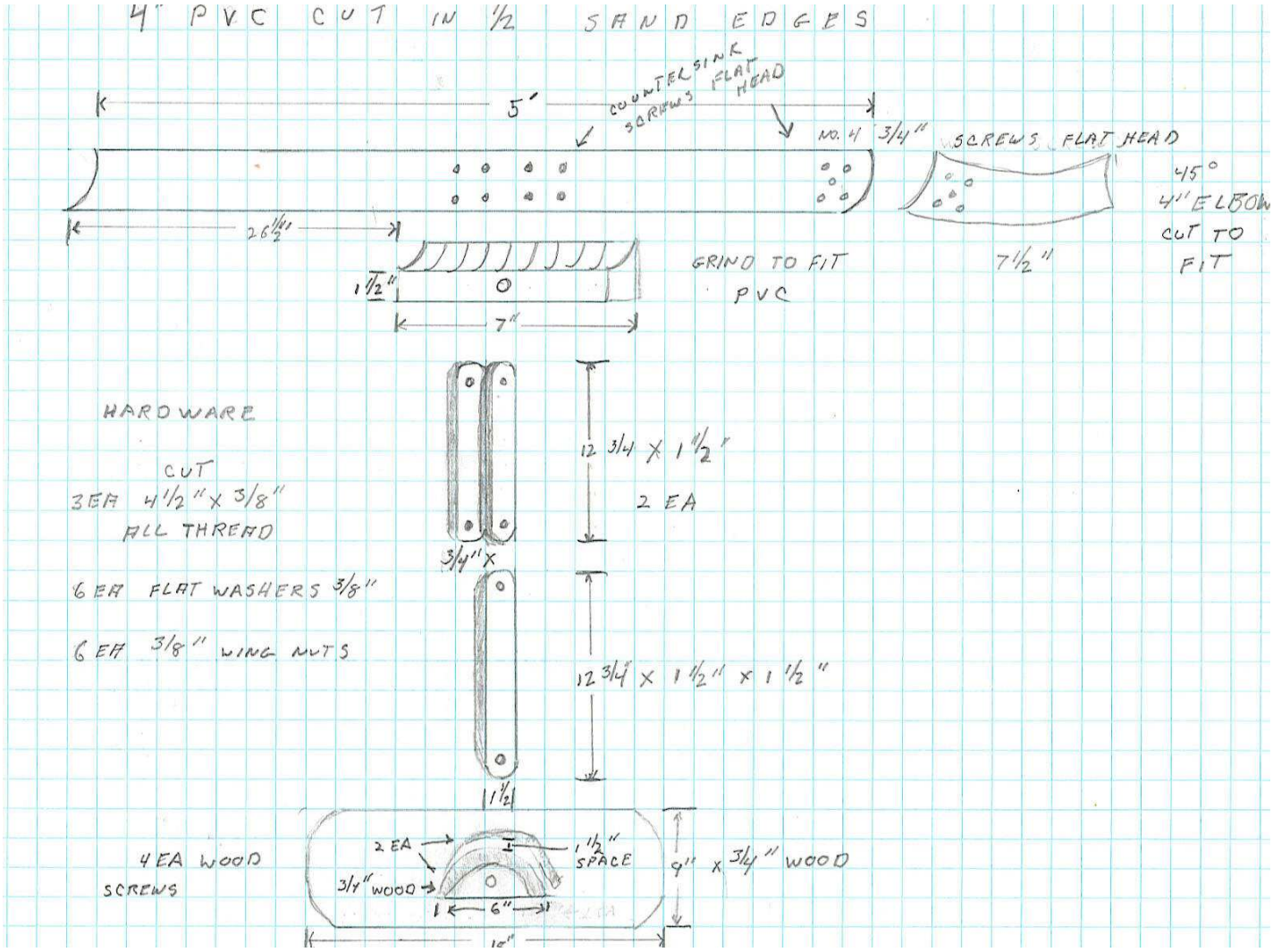
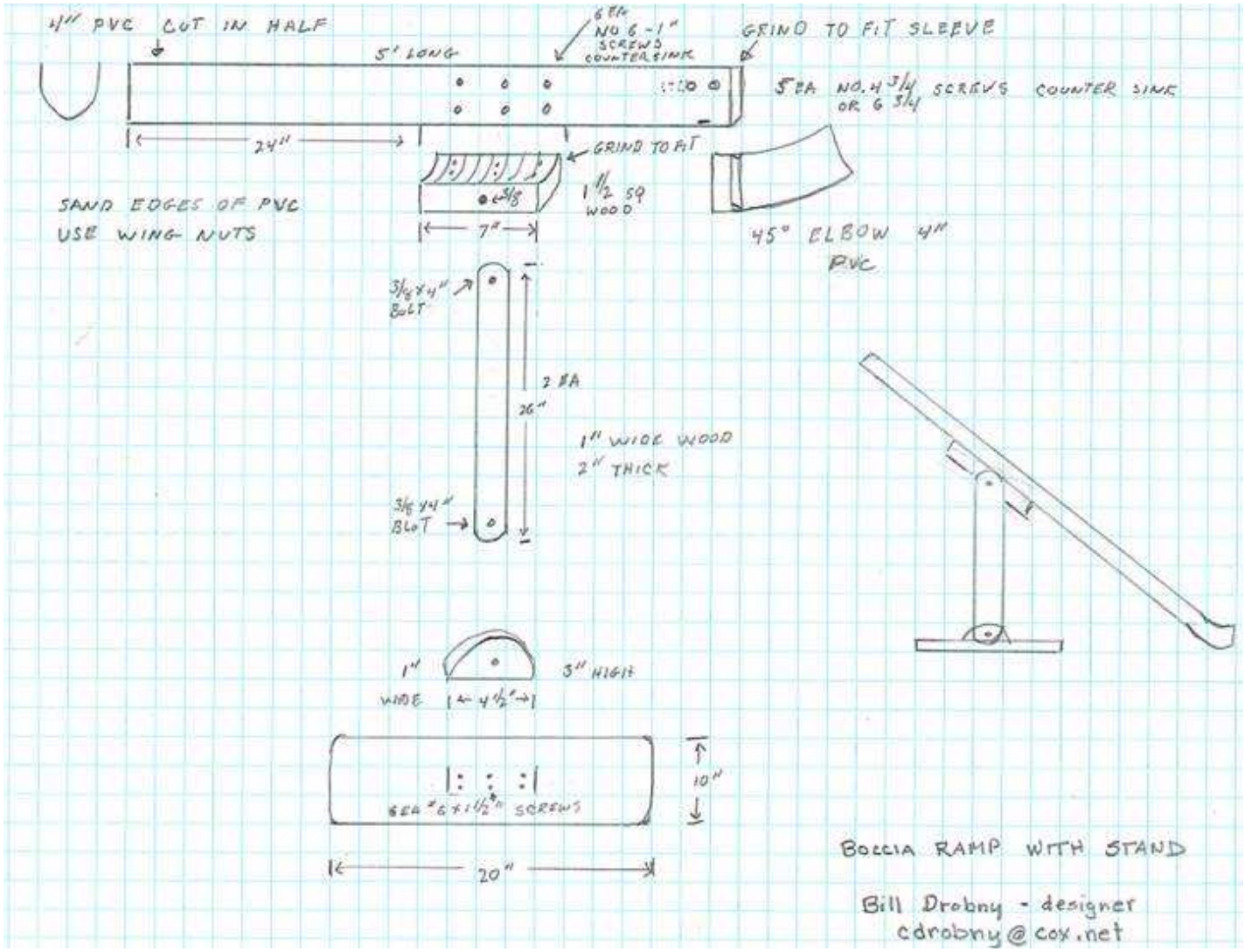
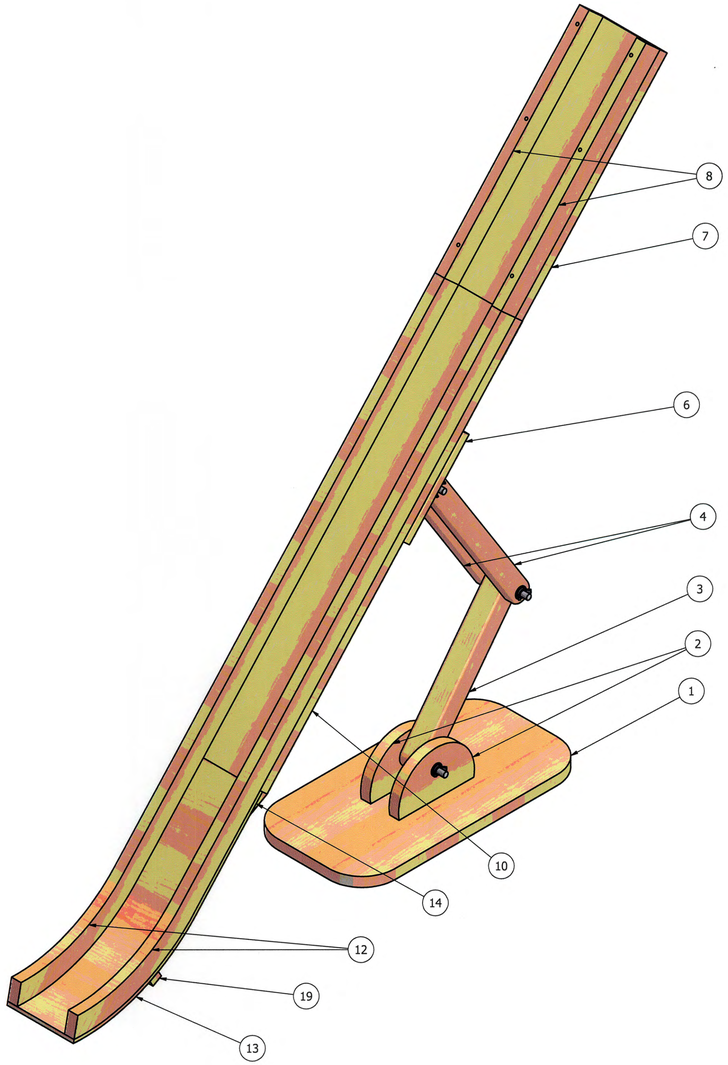
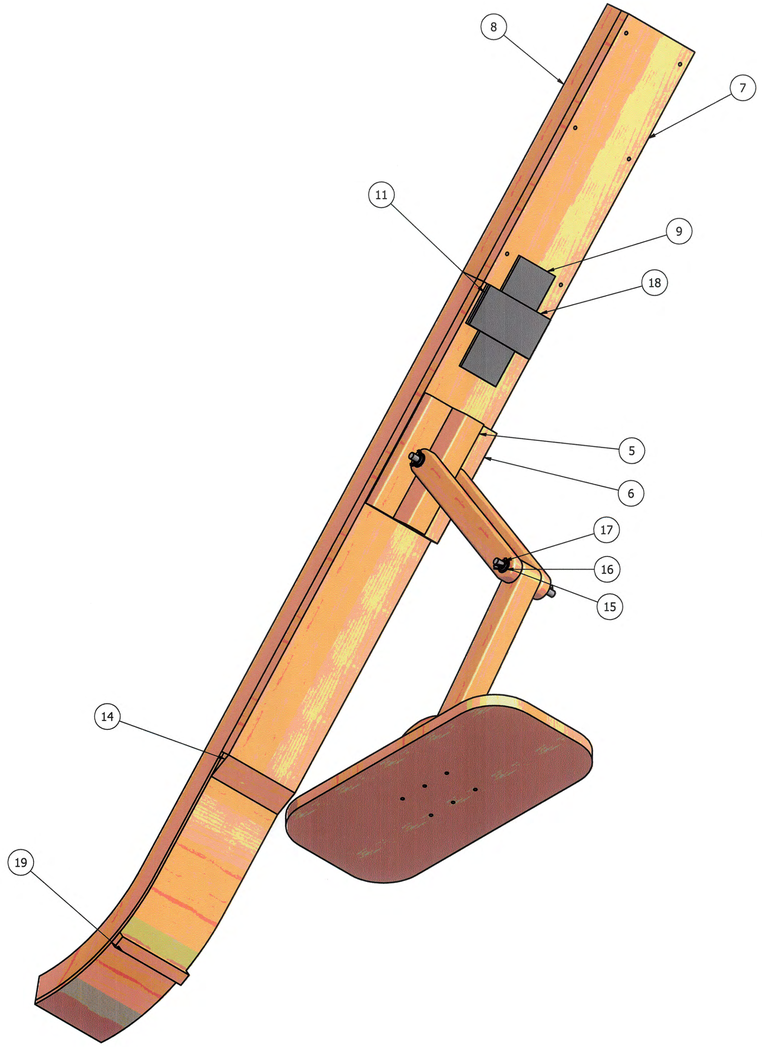

4" PVC CUT IN ½ SAND EDGES
5'
COUNTERSINK FLAT HEAD SCREWS
NO. 4 3/4"
SCREWS FLAT HEAD
45° 4" ELBOW CUT TO FIT
26½"
7½"
1½"
7"
GRIND TO FIT PVC
HARDWARE
CUT
3EA 4½" X 3/8" ALL THREAD
6 EA FLAT WASHERS 3/8"
6 EA 3/8" WING NUTS
12 3/4" X 1½"
2 EA
3/4" X
12 3/4" X 1½" X 1½"
1½"
4 EA WOOD SCREWS
2 EA
1½" SPACE
3/4" WOOD
6"
9" X 3/4" WOOD


4" PVC CUT IN HALF
5" LONG
6 EA NO 6 - 1" SCREWS COUNTERSINK
GRIND TO FIT SLEEVE
5 EA NO. 8 3/4 SCREWS COUNTER SINK OR 6 3/4
24"
GRIND TO FIT
1 1/2 SQ WOOD
SAND EDGES OF PVC
USE WING NUTS
7"
45° ELBOW 4" PVC
3/8 X 4" BOLT
2 EA
26"
1" WIDE WOOD
2" THICK
3/8 X 4" BOLT
1" WIDE
4 1/2"
3" HIGH
6 EA "6 X 1 1/2" SCREWS
10"
20"
BOCCIA RAMP WITH STAND
Bill Drobny - designer
cdrobny@cox.net





Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	Base	18 x 9 1/4 x 3/4
2	2	Brace	
3	1	Base Arm	12 1/2 x 1 1/2 x 1 1/2
4	2	Arm Link	14 x 1 1/2 x 3/4
5	1	Part 5	7 x 1 1/2 x 1 1/2
6	1	Part 6	7 x 5 1/4 x 3/4
7	1	Part 7	17 x 5 1/4 x 3/4
8	2	Part 8	17 x 1 1/2 x 3/4
9	1	Plate	STAINLESS STEEL
10	1	Part10	30 x 5 1/4 x 3/4
11	2	Plate	STAINLESS STEEL
12	2	Part 12	
13	1	Part 13	1/4" THICKNESS
14	1	Part 14	
15	3	Bolt	4 1/2 3/8-16 UNC THREAD
16	6	Washer	
17	6	Wing Nut	
18	1	Cover Plate	STAINLESS STEEL
19	1	Part 19	5 1/4 x 3/4 x 1/2

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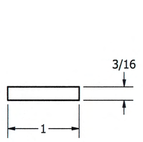

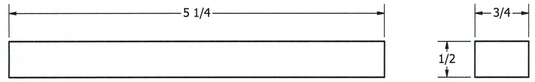

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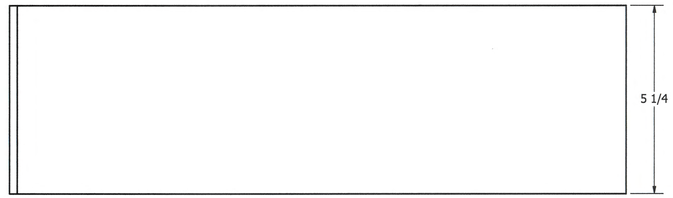

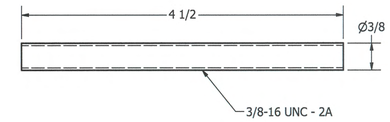

BOLT
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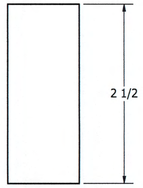
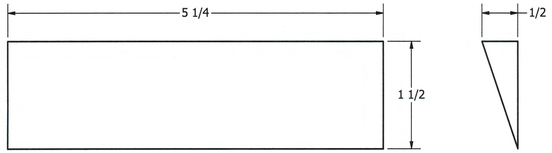


PLATE
SCALE 1 : 1



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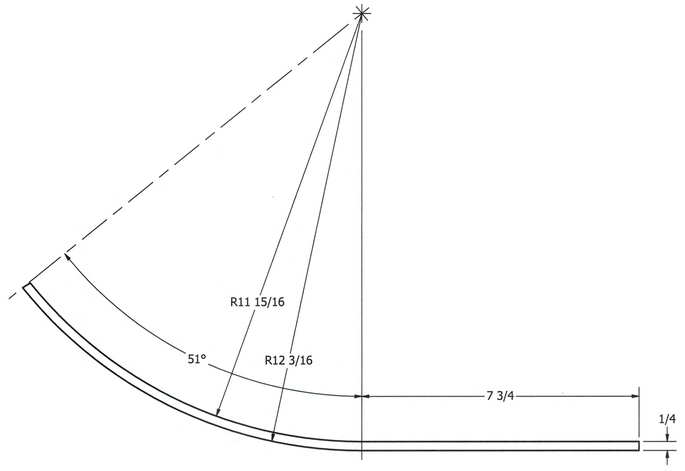

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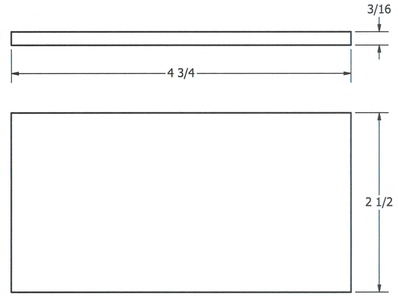

COVER PLATE
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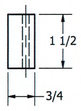

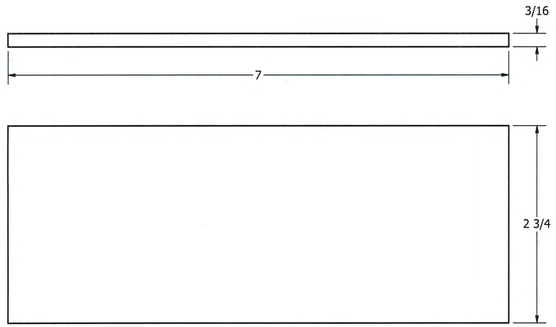

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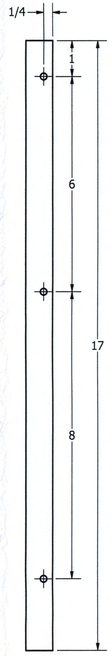

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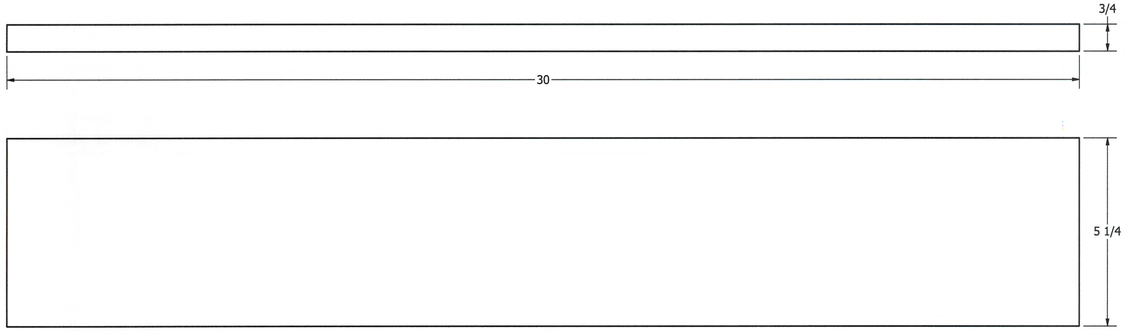

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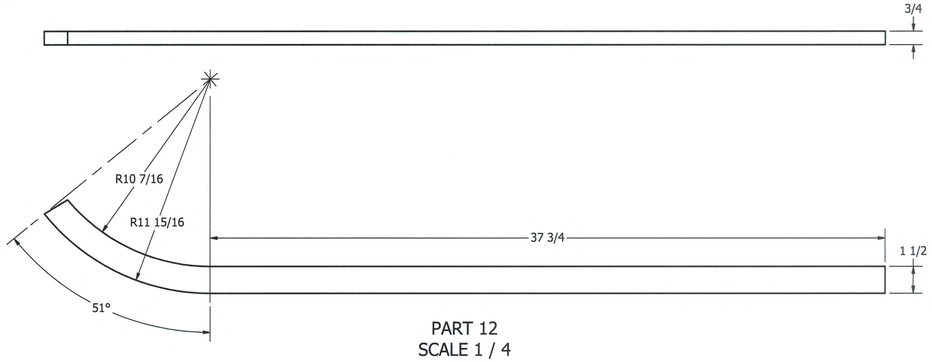

PART 12
SCALE 1 / 4

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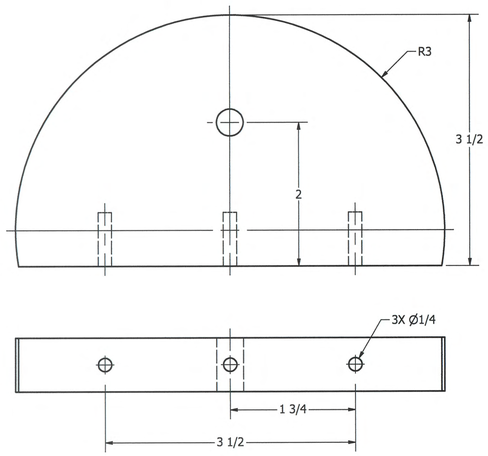

BRACE
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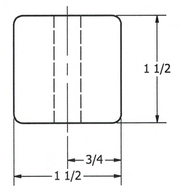

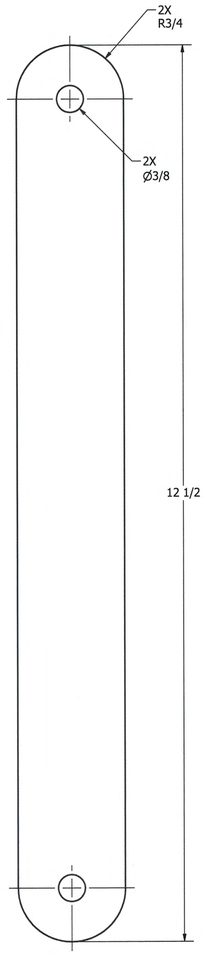

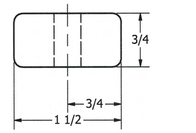

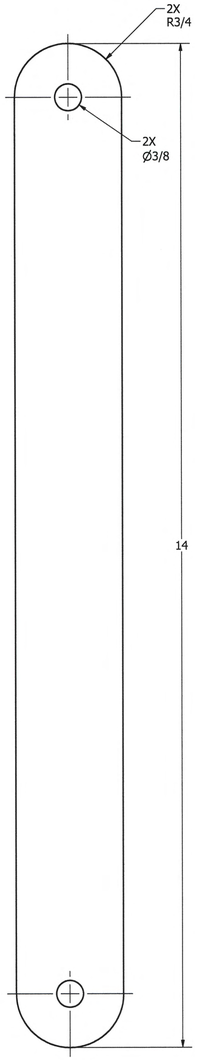

ARM LINK
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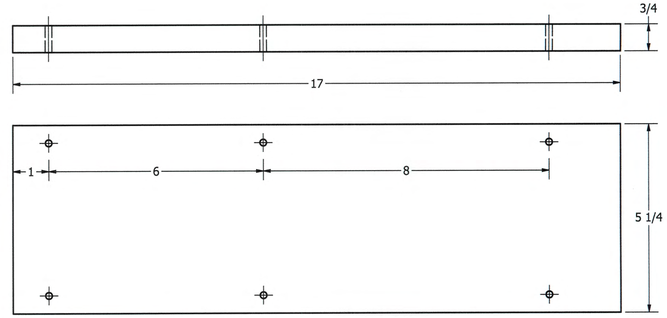

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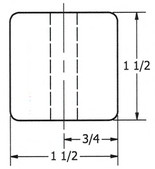
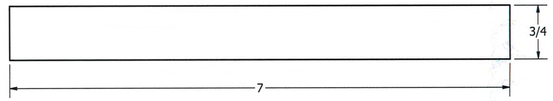
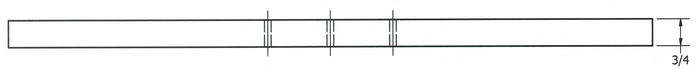
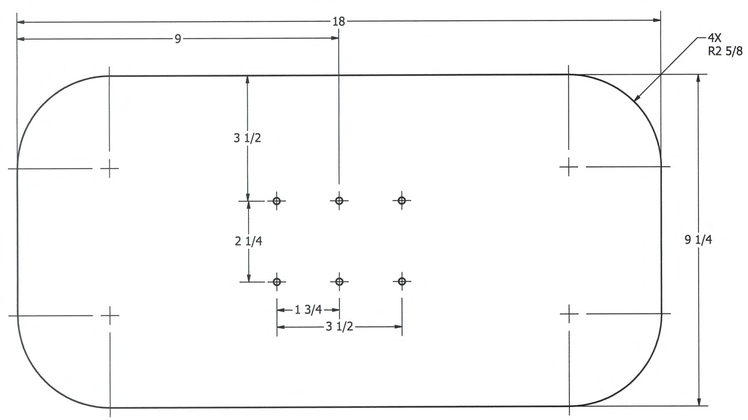


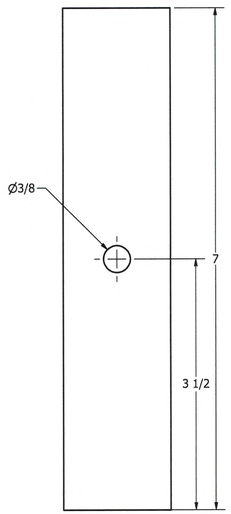






BASE
SCALE 1 / 2

BASE ARM
SCALE 1 : 1



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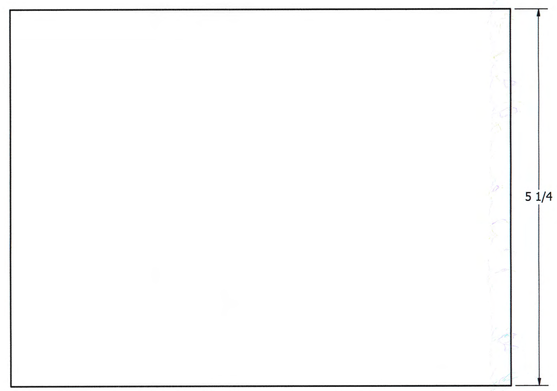

PART 6
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