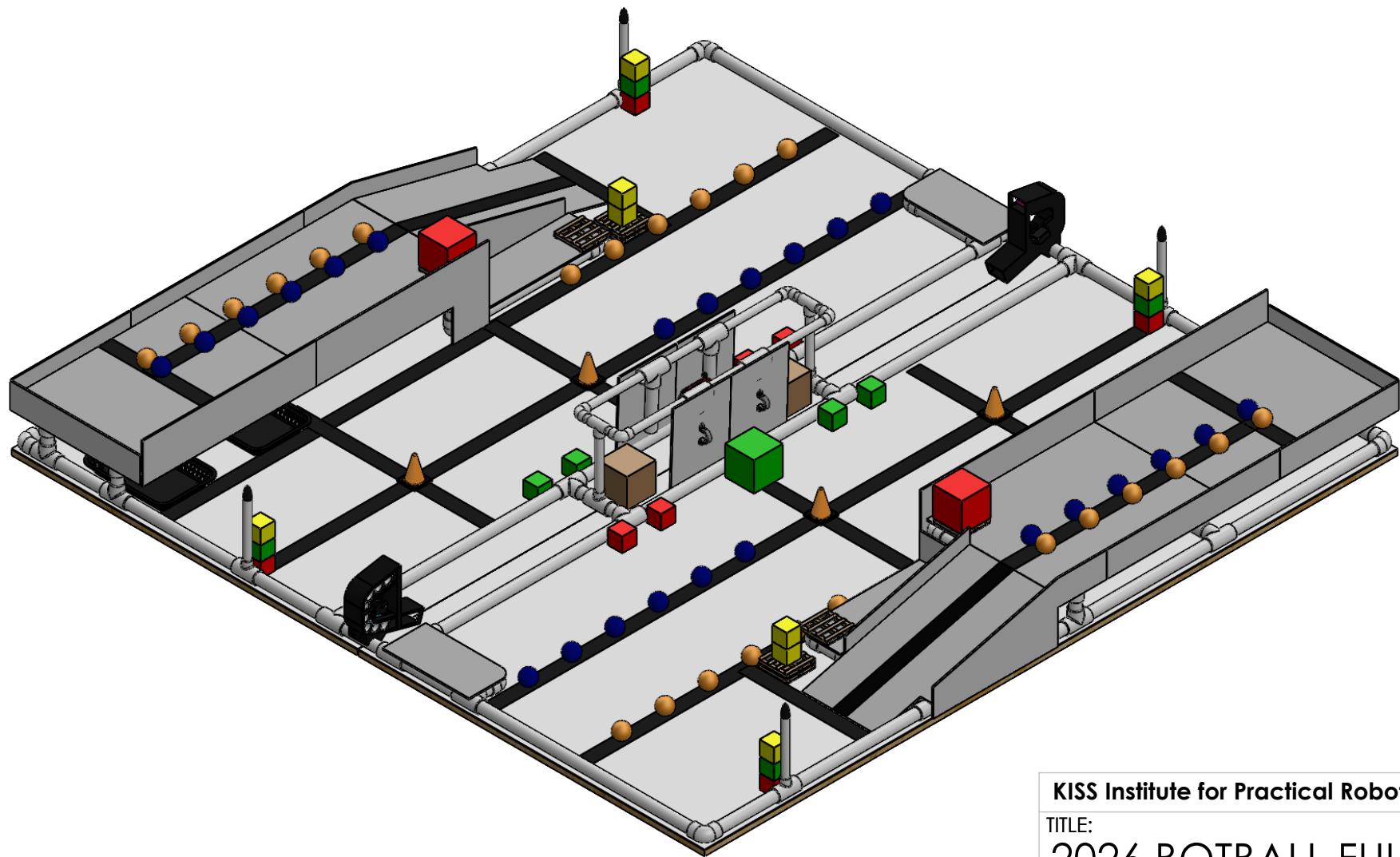


2

1

B

B



KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE

DWG. NO.

REV

A
Cover

SCALE: 1:15

SHEET 1 OF 16

2

1

Bill of Materials

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2 inch - 1/2" PVC	0.5" ID SCH 40	4
2	8 inch - 1/2" PVC	0.5" ID SCH 40	6
3	28 inch - 1/2" PVC	0.5" ID SCH 40	2
4	1.75 inch pvc	1" ID SCH 40	22
5	2 inch pvc	1" ID SCH 40	16
6	3.000 inch PVC	1" ID SCH 40	20
7	4.500 inch PVC	1" ID SCH 40	4
8	5.750 inch PVC	1" ID SCH 40	4
9	6.5 inch pvc	1" ID SCH 40	4
10	7.000 inch PVC	1" ID SCH 40	2
11	8.250 inch PVC	1" ID SCH 40	8
12	9.000 inch PVC	1" ID SCH 40	4
13	10.000 inch PVC	1" ID SCH 40	2
14	10.75 inch pvc	1" ID SCH 40	2
15	16.125 inch pvc	1" ID SCH 40	4
16	16.875 inch pvc	1" ID SCH 40	2
17	18.50 inch PVC	1" ID SCH 40	6
18	18.625 inch pvc	1" ID SCH 40	2
19	19.000 inch PVC	1" ID SCH 40	4
20	21.750 inch PVC	1" ID SCH 40	6
21	26.875 inch pvc	1" ID SCH 40	2
22	27.75 inch pvc	1" ID SCH 40	2
23	31.25 inch pvc	1" ID SCH 40	4
24	Black duct tape	3M Black Duct Tape - Model #3920-BK	2
25	Conduit Clamp	CANTEX 3/4" Two hole Conduit Clamp	4
26	0.5" Elbow Connector	Connector SCH 40	4
27	1" Elbow Connector	Connector SCH 40	20
28	1" T Connector	Connector SCH 40	52
29	1" x 0.5" T Connector	Connector SCH 40	6
30	1/2" T Connector	Connector SCH 40	2
31	18"x24" Sheet	Corrugated Plastic	1
32	FRP 4' x 8'	White	2
33	Particle Board 4' x 8' x 3/8" thick	or similar	2
34	Blue duct tape	Duck Tape Electric Blue - 1.88"	1
35	Pink duct tape	Duck Tape Neon Pink - 1.88"	1

B

B

A

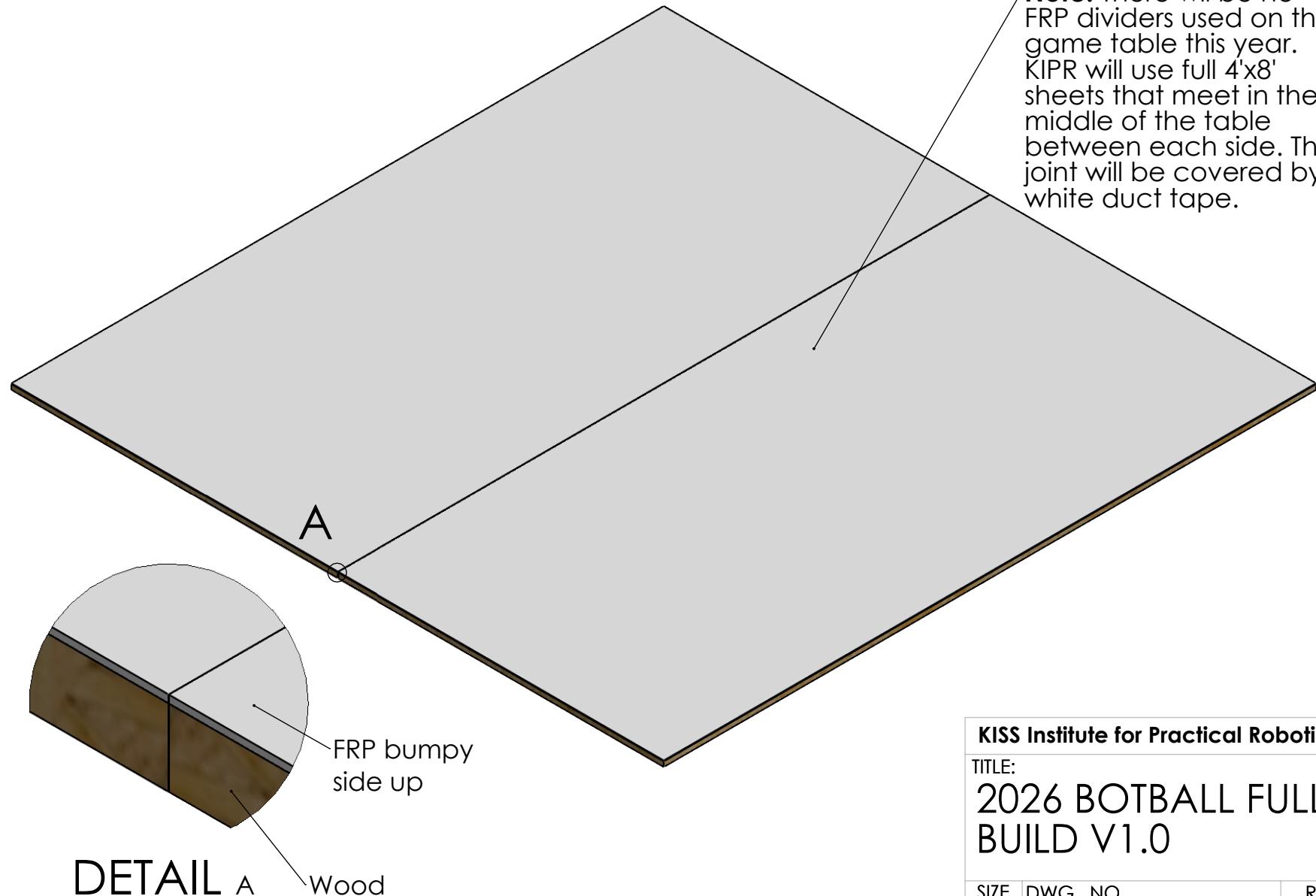
A

2

1

B

B



Note: There will be no FRP dividers used on the game table this year. KIPR will use full 4'x8' sheets that meet in the middle of the table between each side. This joint will be covered by white duct tape.

KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE

A

DWG. NO.
Game Surface

REV

SCALE: 1:15

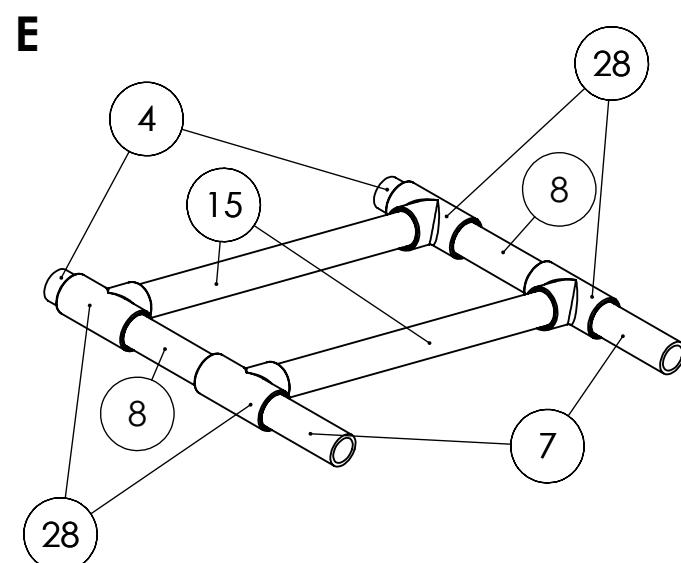
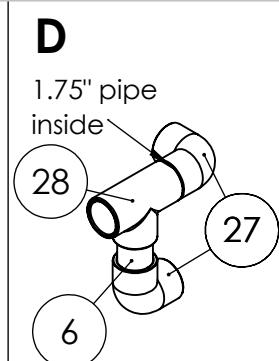
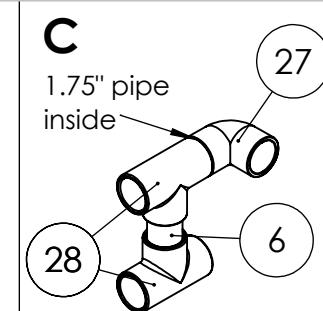
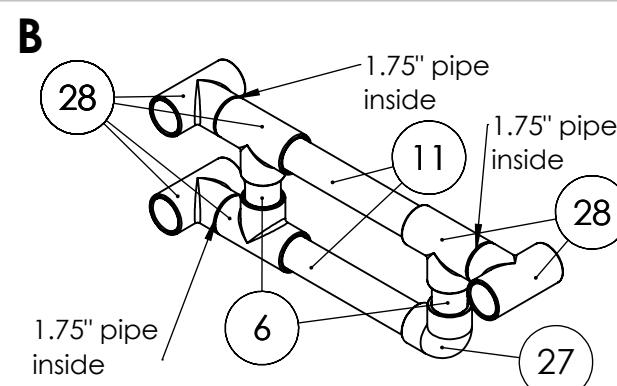
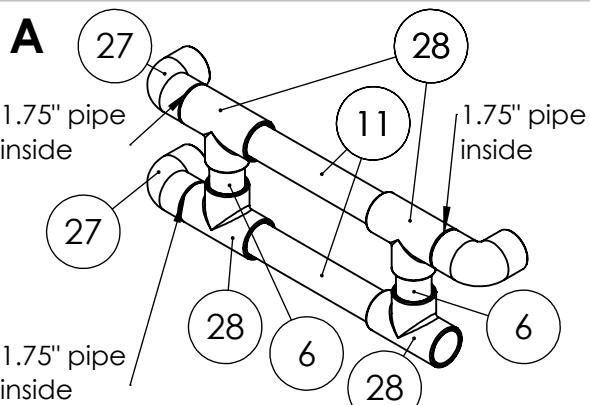
SHEET 3 OF 16

2

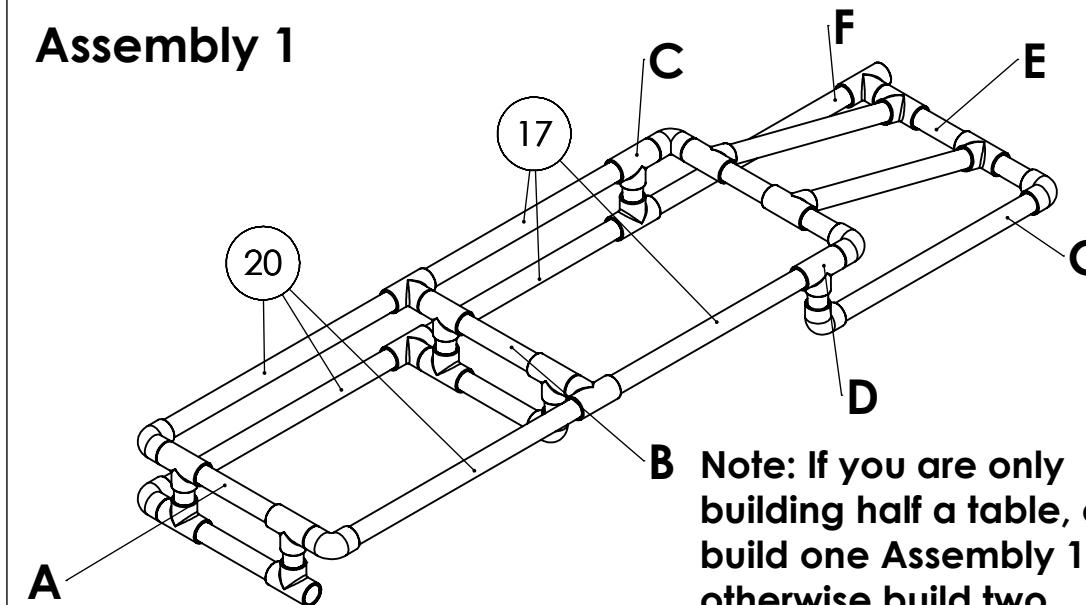
1

2

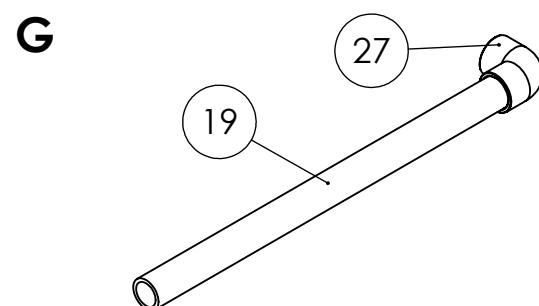
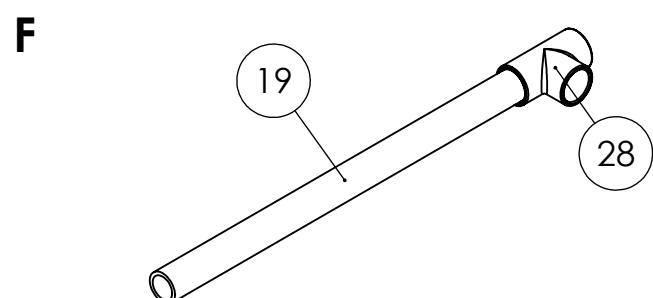
1



Assembly 1



B Note: If you are only building half a table, only build one Assembly 1, otherwise build two.



KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE DWG. NO.
A Assembly 1

REV

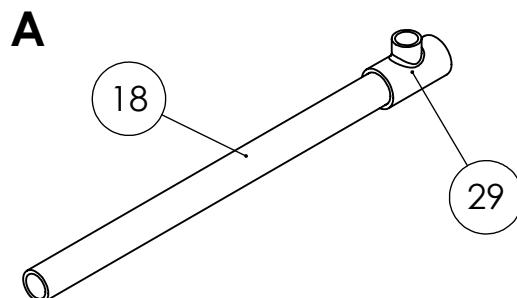
SCALE: 1:7

SHEET 4 OF 16

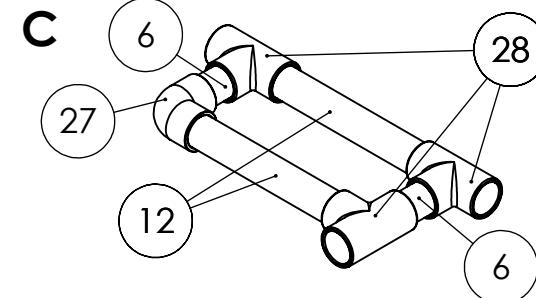
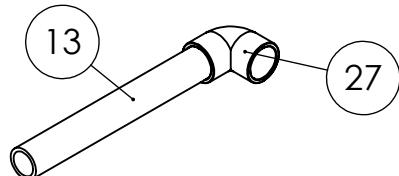
2

1

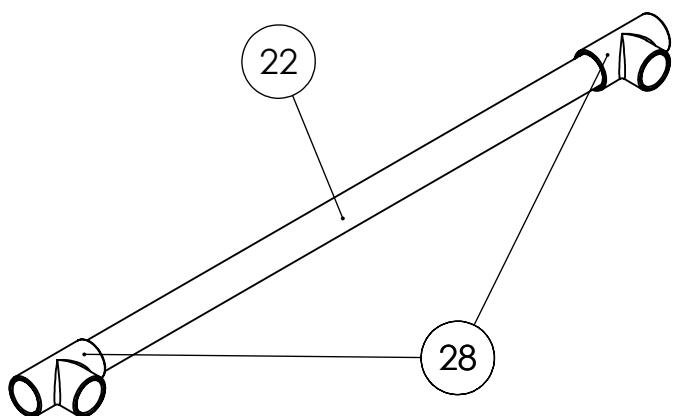
2



B

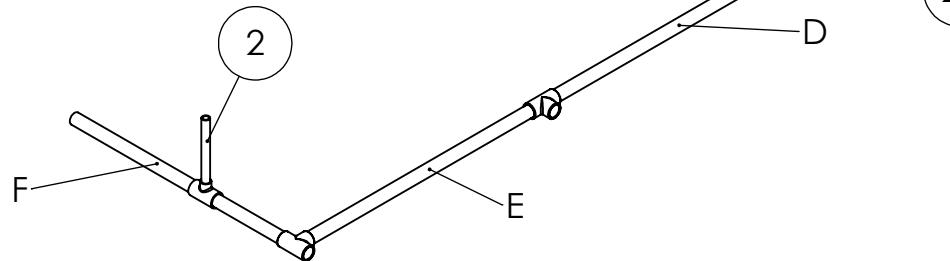
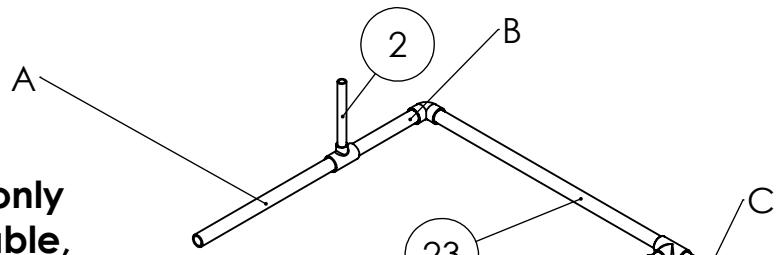


D

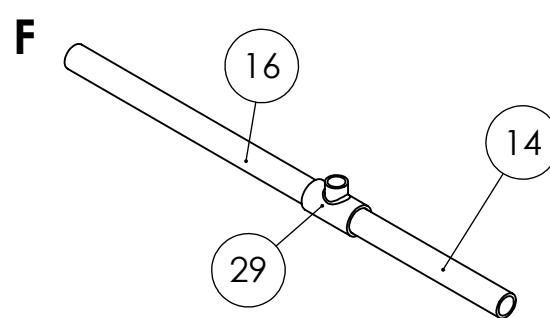
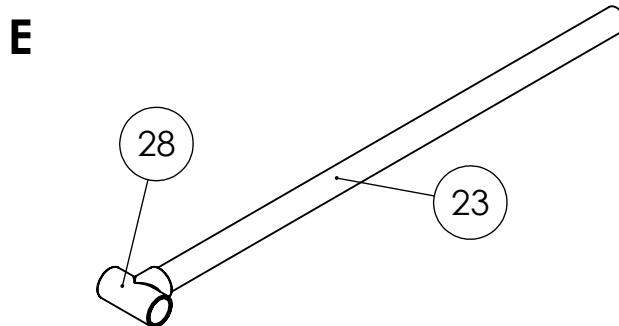


Assembly 2

Note: If you are only building half a table, only build one Assembly 2, otherwise build two.



A



2

1

KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE

DWG. NO.
A Assembly 2

REV

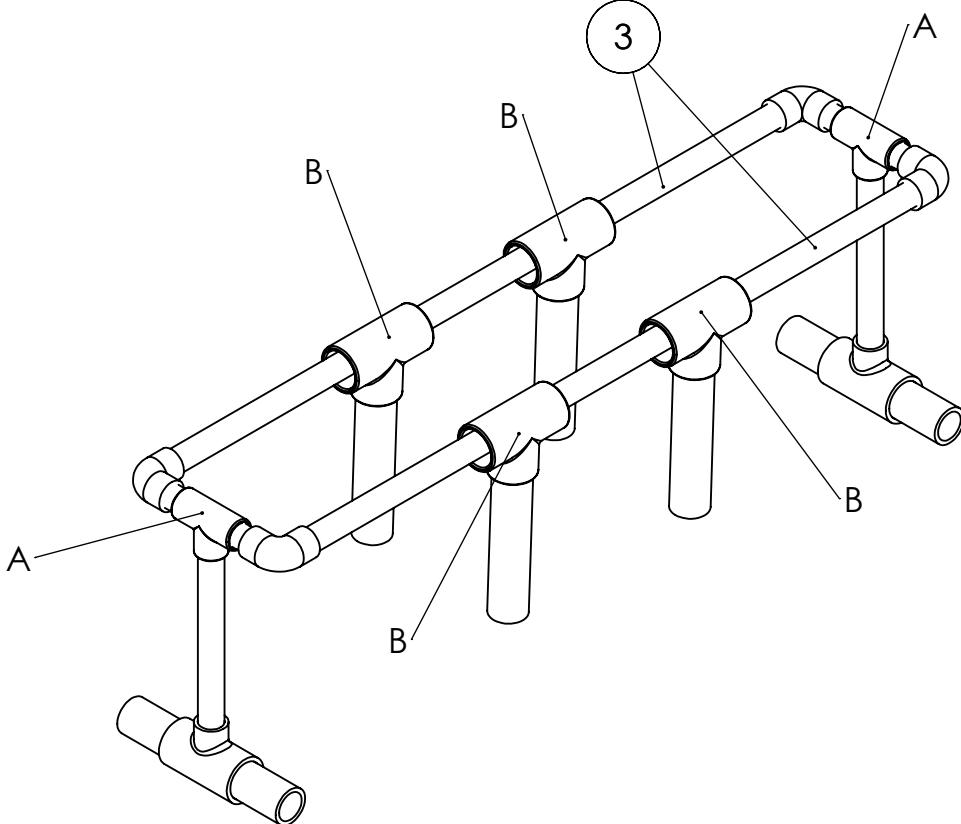
SCALE: 1:7

SHEET 5 OF 16

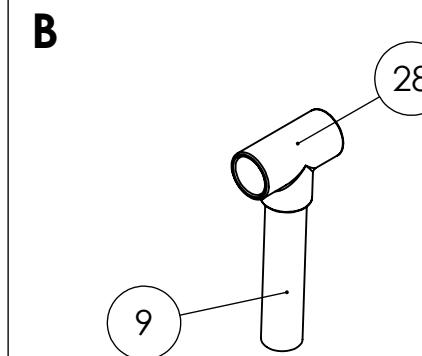
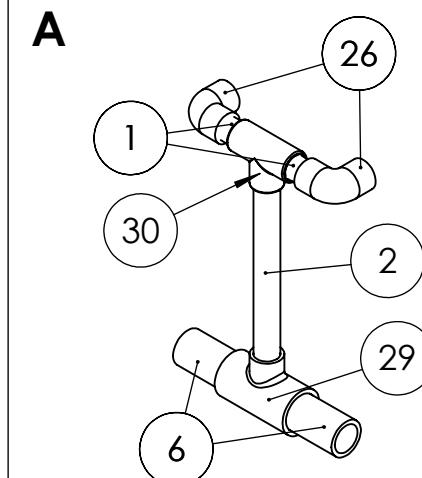
B

A

Assembly 3



Note: Whether you are building a full or half table, only build one Assembly 3.



KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE	DWG. NO.	REV
A	Assembly 3	

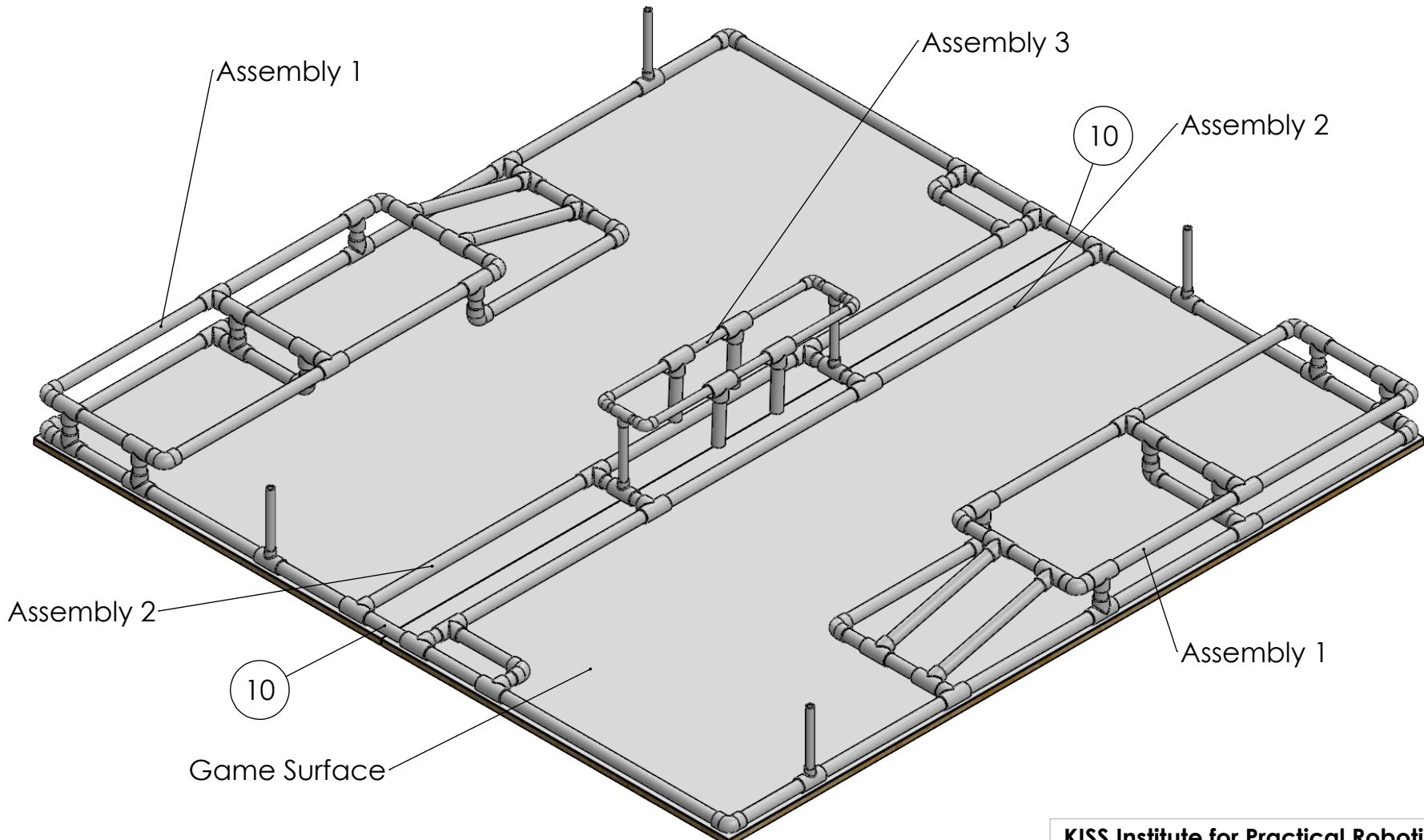
SCALE: 1:6 SHEET 6 OF 16

2

1

B

B



KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE

A

DWG. NO.

Full Assembly

REV

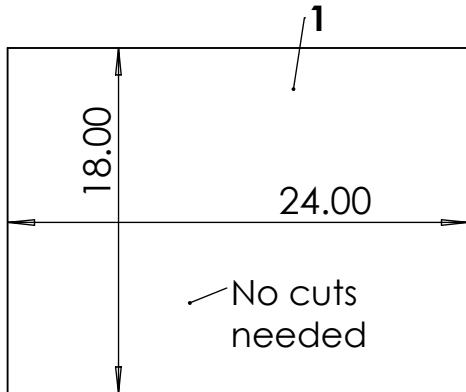
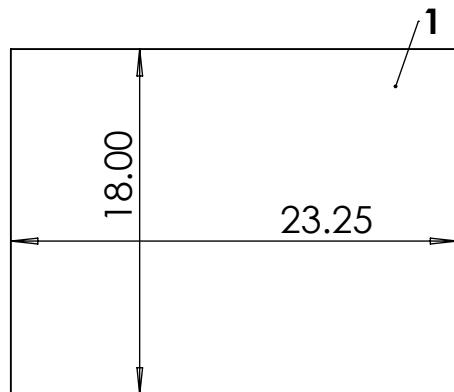
SCALE: 1:15

SHEET 7 OF 16

2

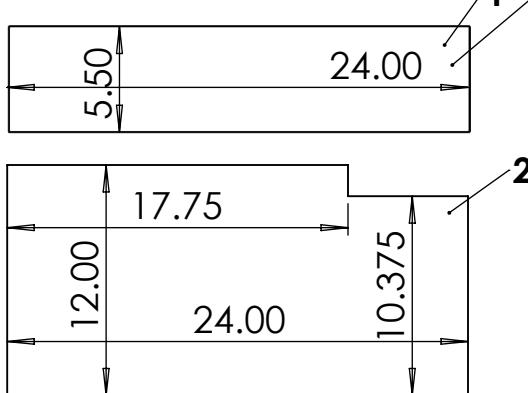
1

A

Sheet A**Sheet B**

B

B

Sheet C

Note: The outside of any walls on the platform or ramp will have vinyl stickers on them and will not be plain white corrugated plastic.

Note: All corrugated plastic cuts are for one half of the game table. If you are building a full game table, make sure to double these cuts.

Each cut is labeled with a number and will be shown with the sheet letter and number on the Corrugated Plastic Positions page (eg. B2).

KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE	DWG. NO.	REV
A	Corrugated Plastic	
	Cuts A-C	
SCALE: 1:10	SHEET 8 OF 16	

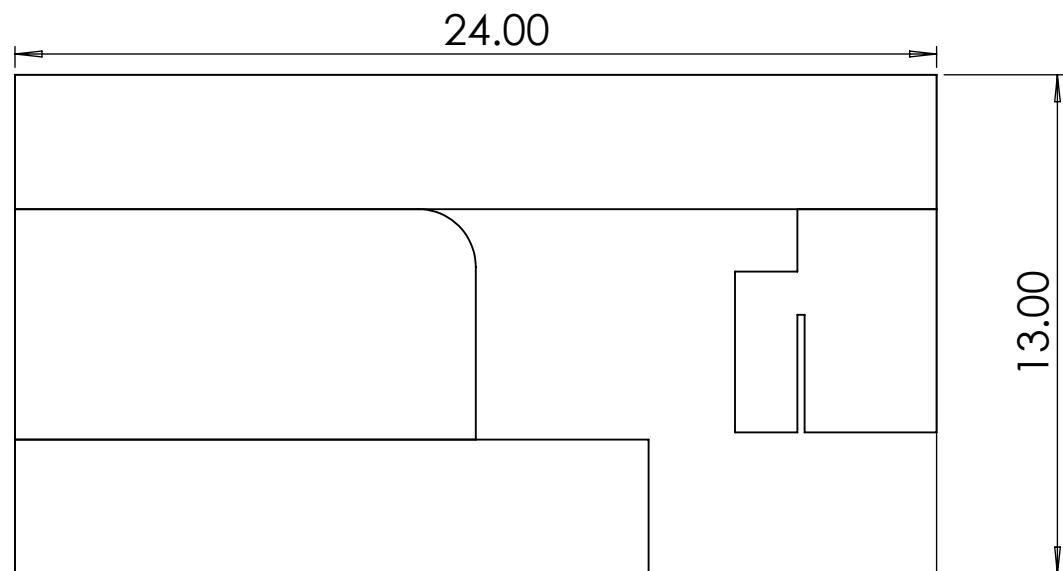
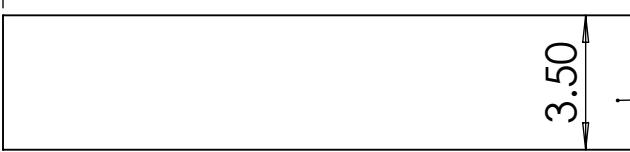
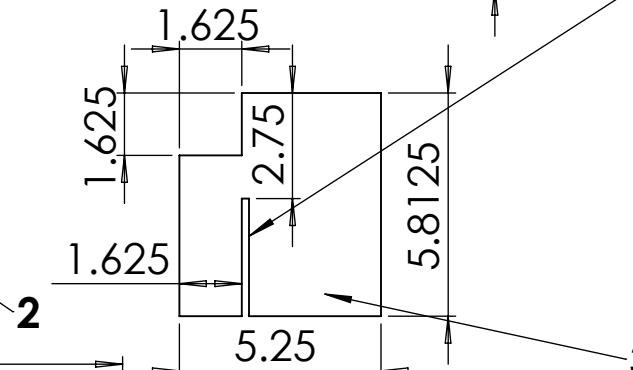
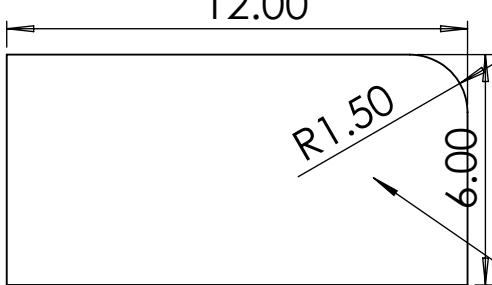
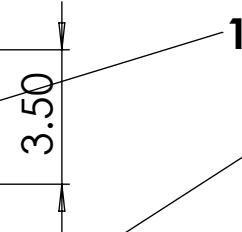
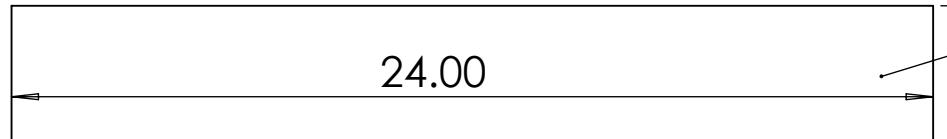
2

1

Sheet D

B

B



2

1

KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE

DWG. NO.

REV

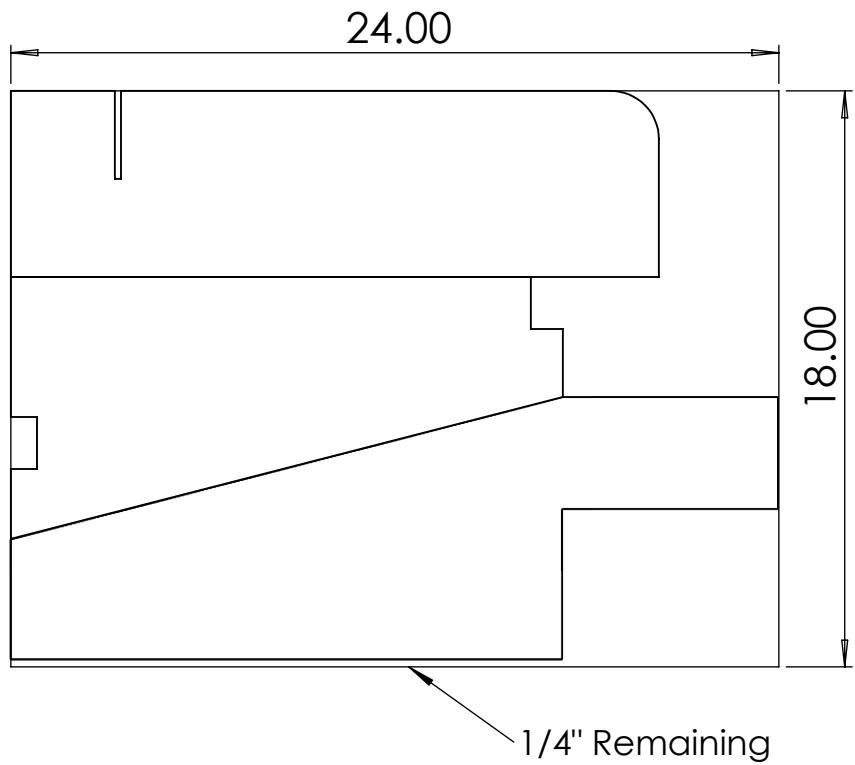
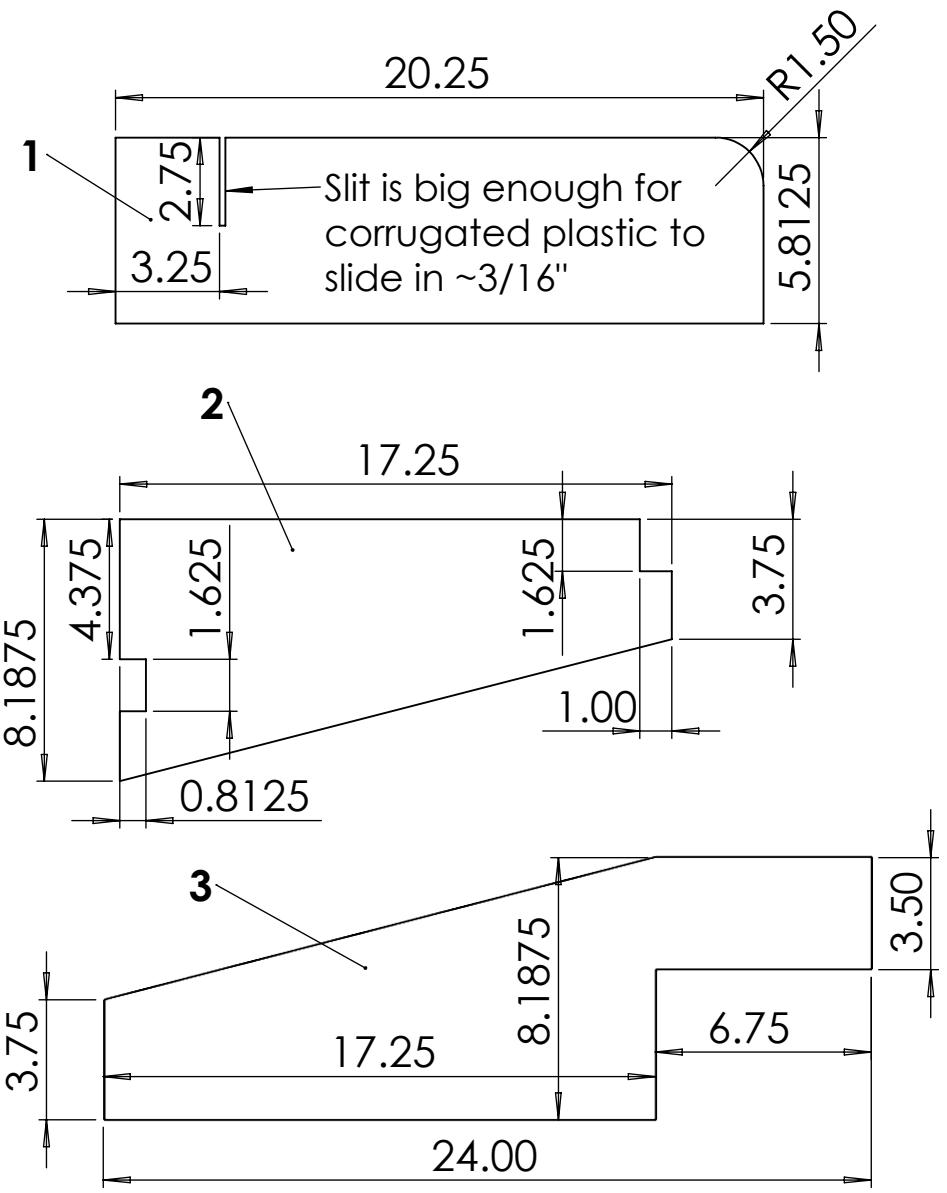
A Corrugated Plastic
Cuts D

SCALE: 1:5

SHEET 9 OF 16

2

1

Sheet E

KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE

DWG. NO.

A

Corrugated Plastic

REV

Cuts E

SCALE: 1:6

SHEET 10 OF 16

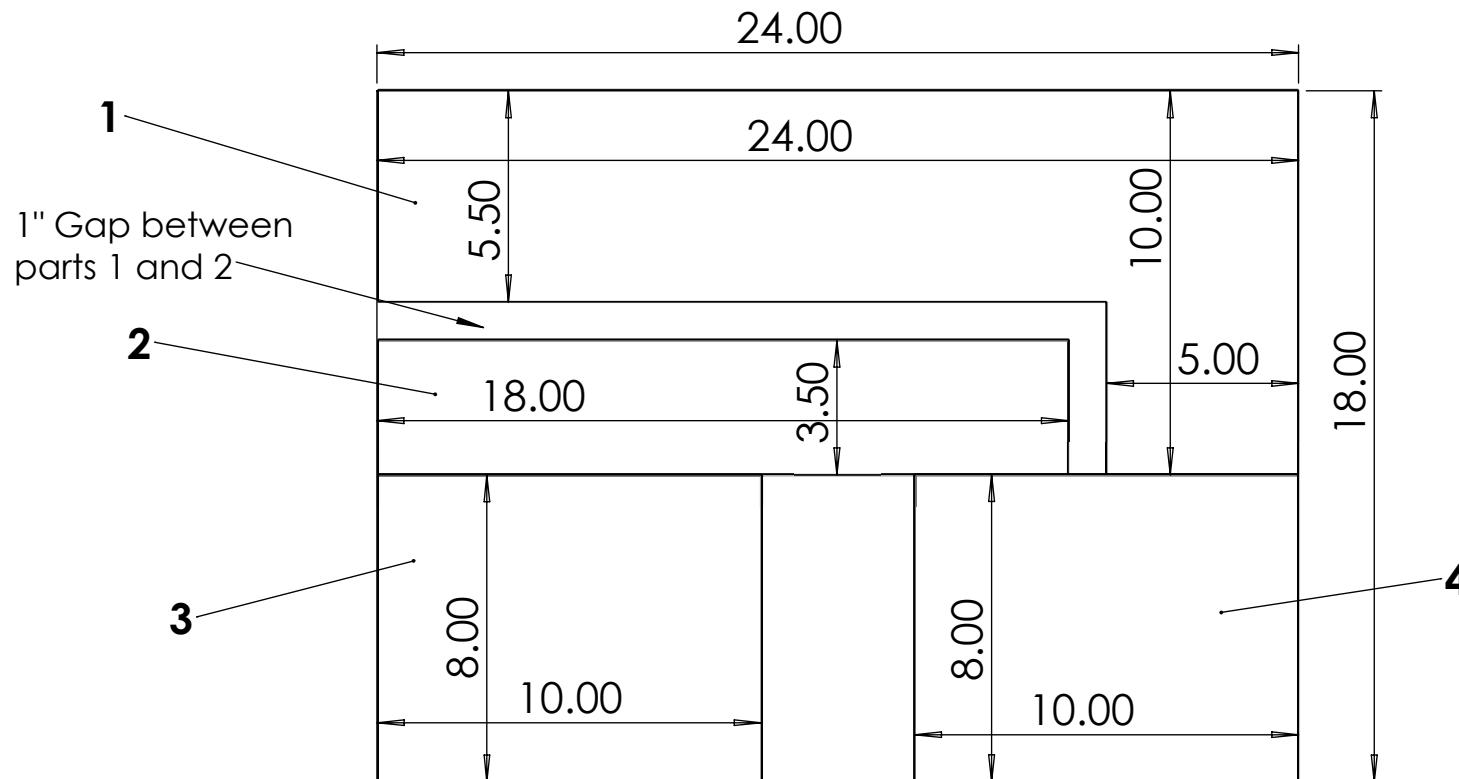
2

1

B

A

Sheet F



KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE

DWG. NO.

REV

A

Corrugated Plastic

Cuts F

SCALE: 1:5

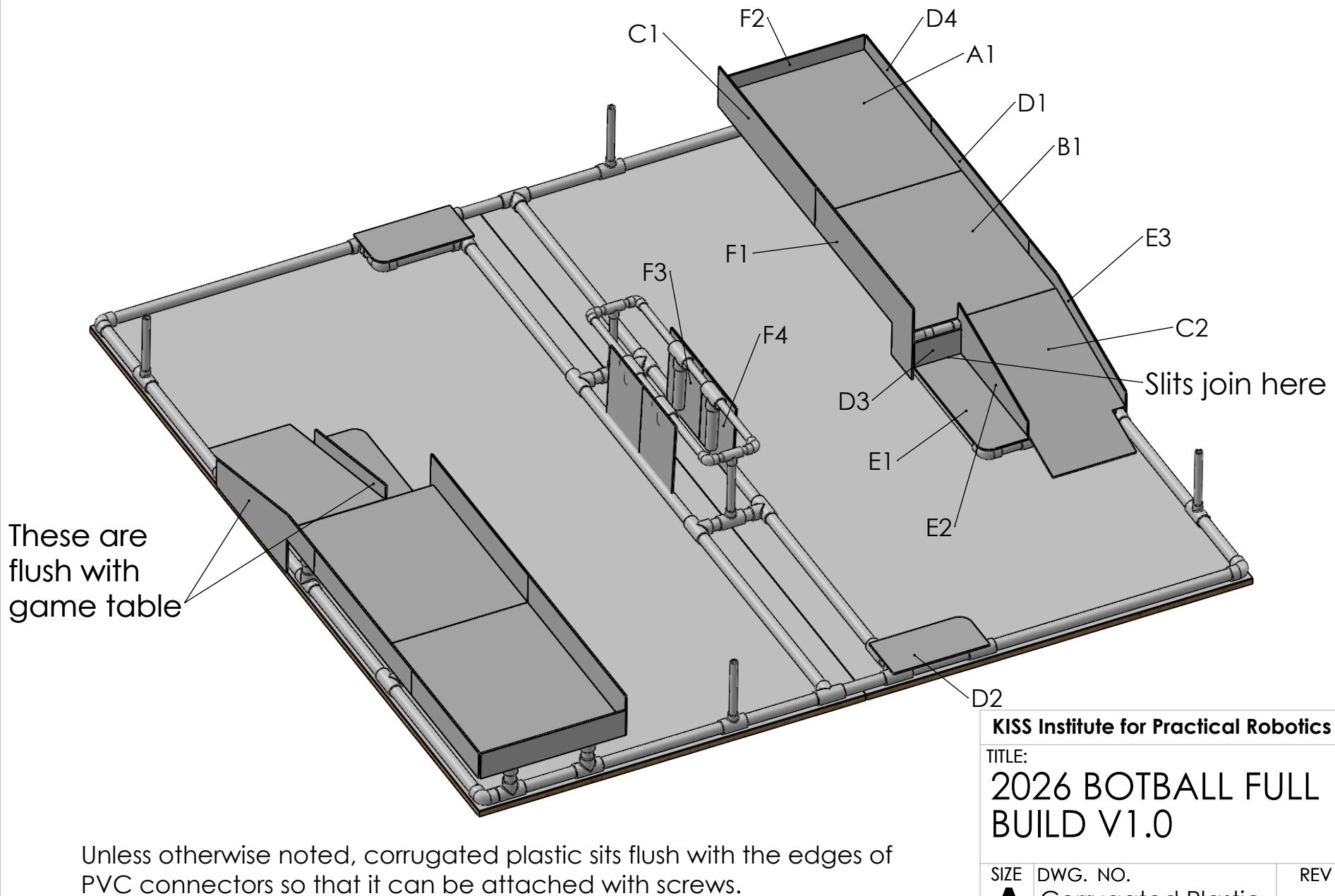
SHEET 11 OF 16

2

1

B

B



KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL BUILD V1.0

SIZE

DWG. NO. REV

A Corrugated Plastic
Positions

SCALE: 1:15

SHEET 12 OF 16

2

1

2

1

PVC Dispenser

A simpler manual ramp is also available on the team homebase that can be printed.

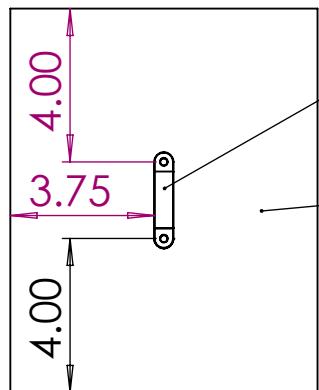
A second alternative is to use cardboard or leftover corrugated plastic. This only needs to be set up if you intend to go for the drums.



Attached with 0.75" Bolts and Keps Nuts

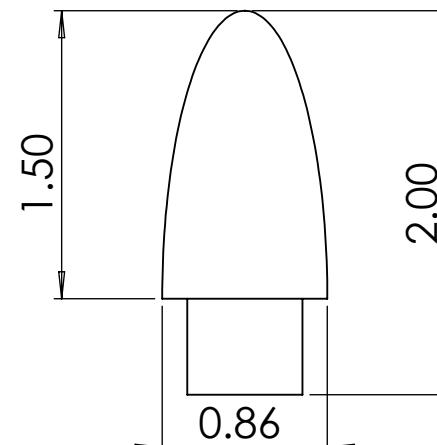
Tiny Black Servo Horn Screw
Small Two Arm Black Servo Horn Inside
Silver Servo Horn Screws

Door



x4

Nose Cone



KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE

A

DWG. NO.

Additional Assemblies

REV

SCALE: 1:2

SHEET 13 OF 16

2

1

B

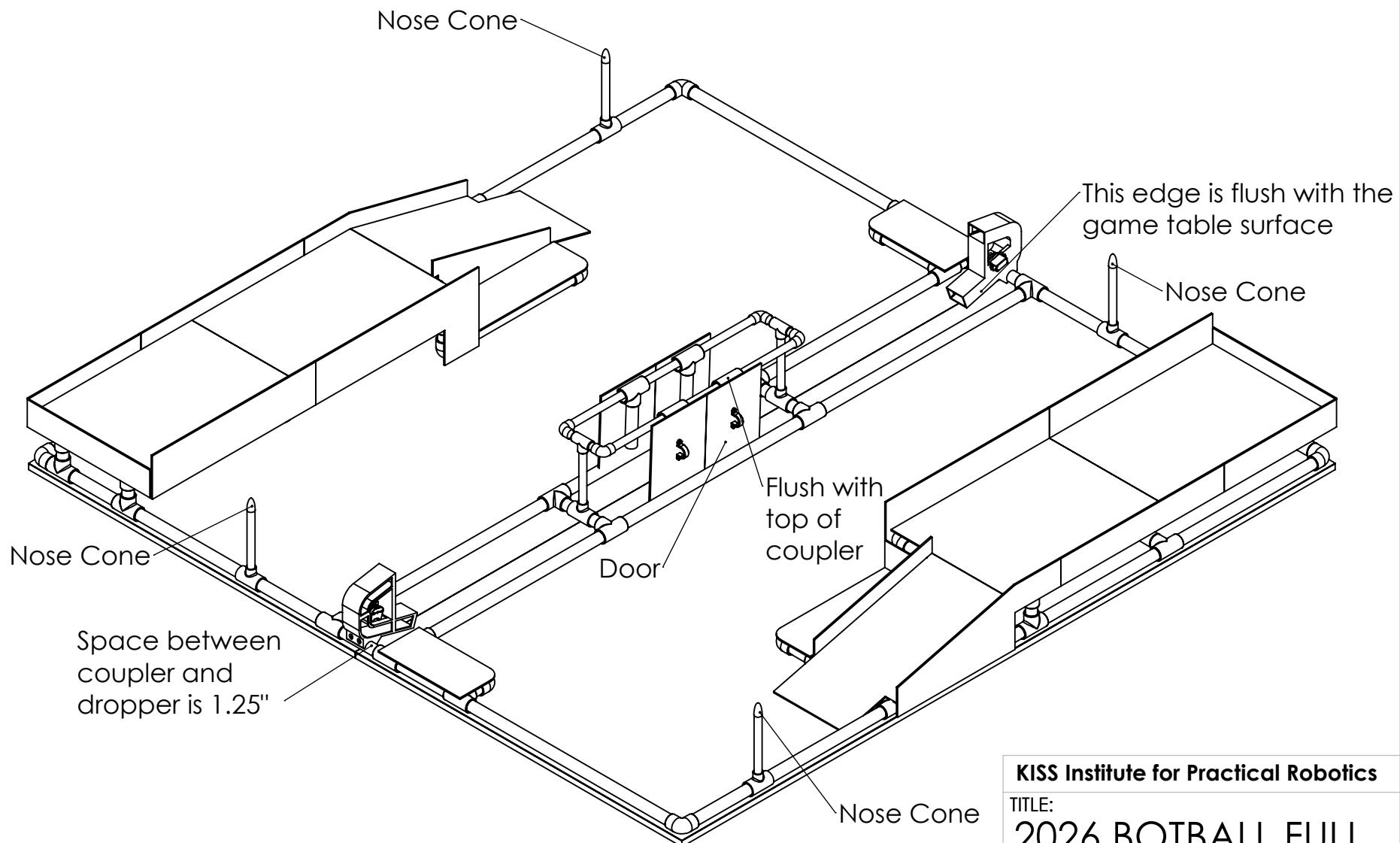
A

2

1

B

B



A

A

KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL
BUILD V1.0

SIZE

DWG. NO.

REV

A
Additional Assembly
Positions

SCALE: 1:15

SHEET 14 OF 16

2

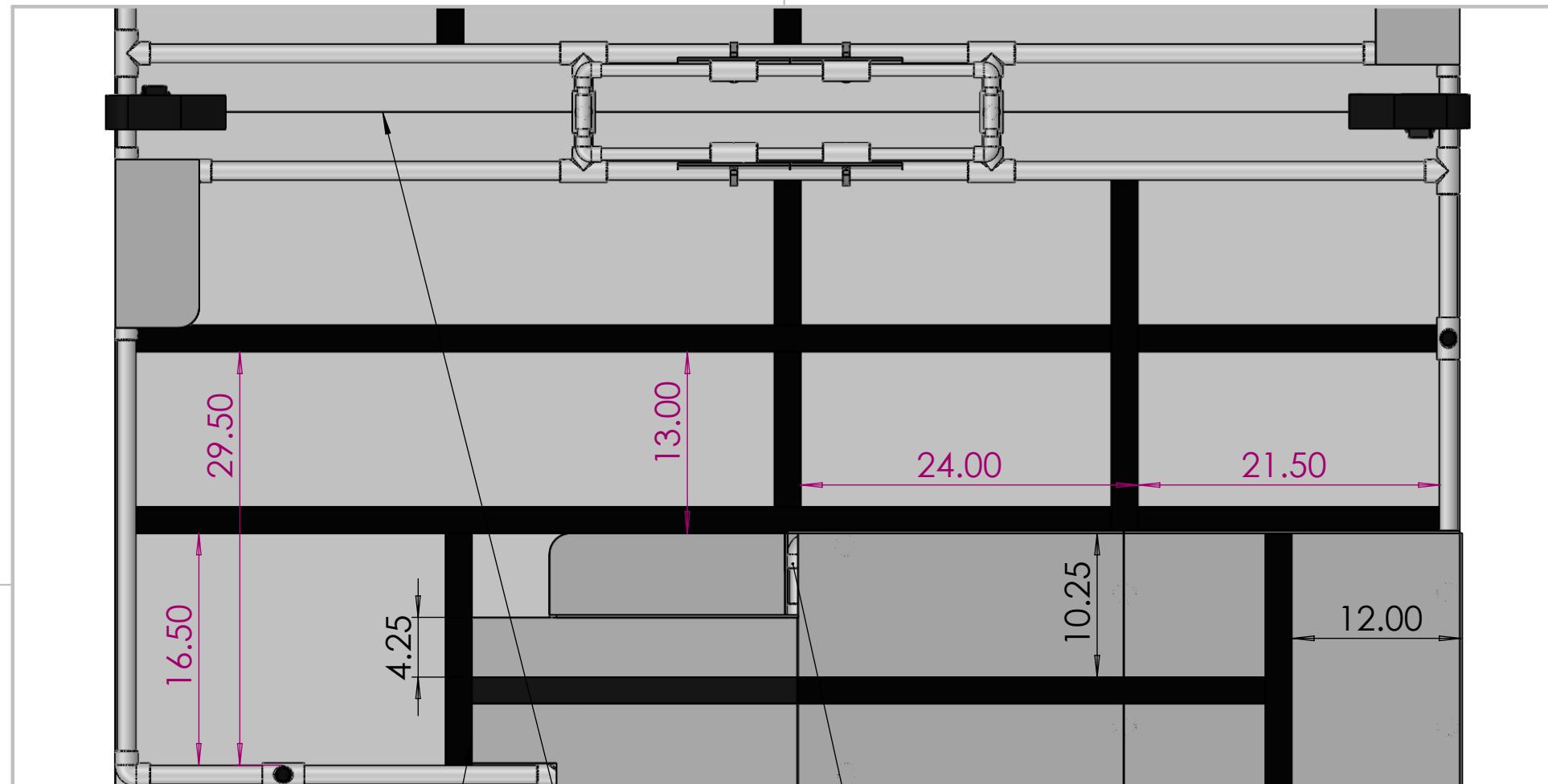
1

2

1

B

B



A

A

White tape will cover this joint where the ramp meets the table

White tape will cover the center seam

White tape will cover the PVC here.

KISS Institute for Practical Robotics

TITLE:

2026 BOTBALL FULL BUILD V1.0

SIZE

DWG. NO.

REV

A
Tape

SCALE: 1:11

SHEET 15 OF 16

2

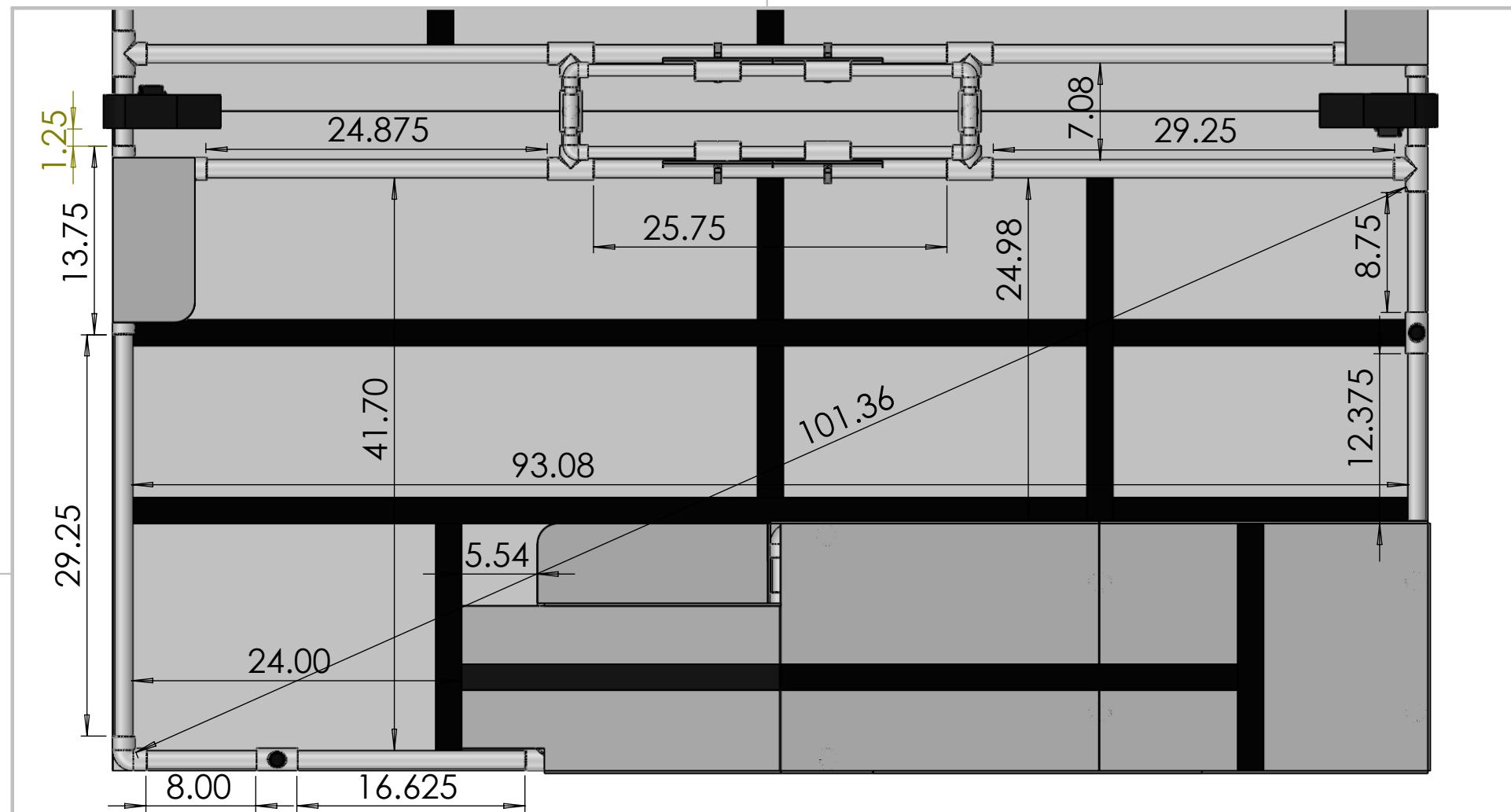
1

2

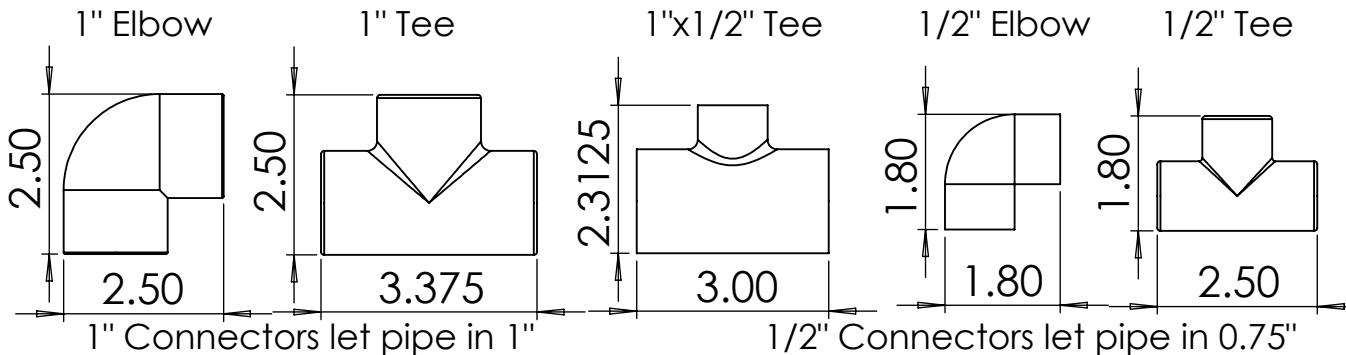
1

B

B



LASCO Connector Dimensions



KISS Institute for Practical Robotics

TITLE:
2026 BOTBALL FULL
BUILD V1.0

SIZE	DWG. NO.	REV
A	Additional Measurements	
SCALE: 1:11		SHEET 16 OF 16

2

1