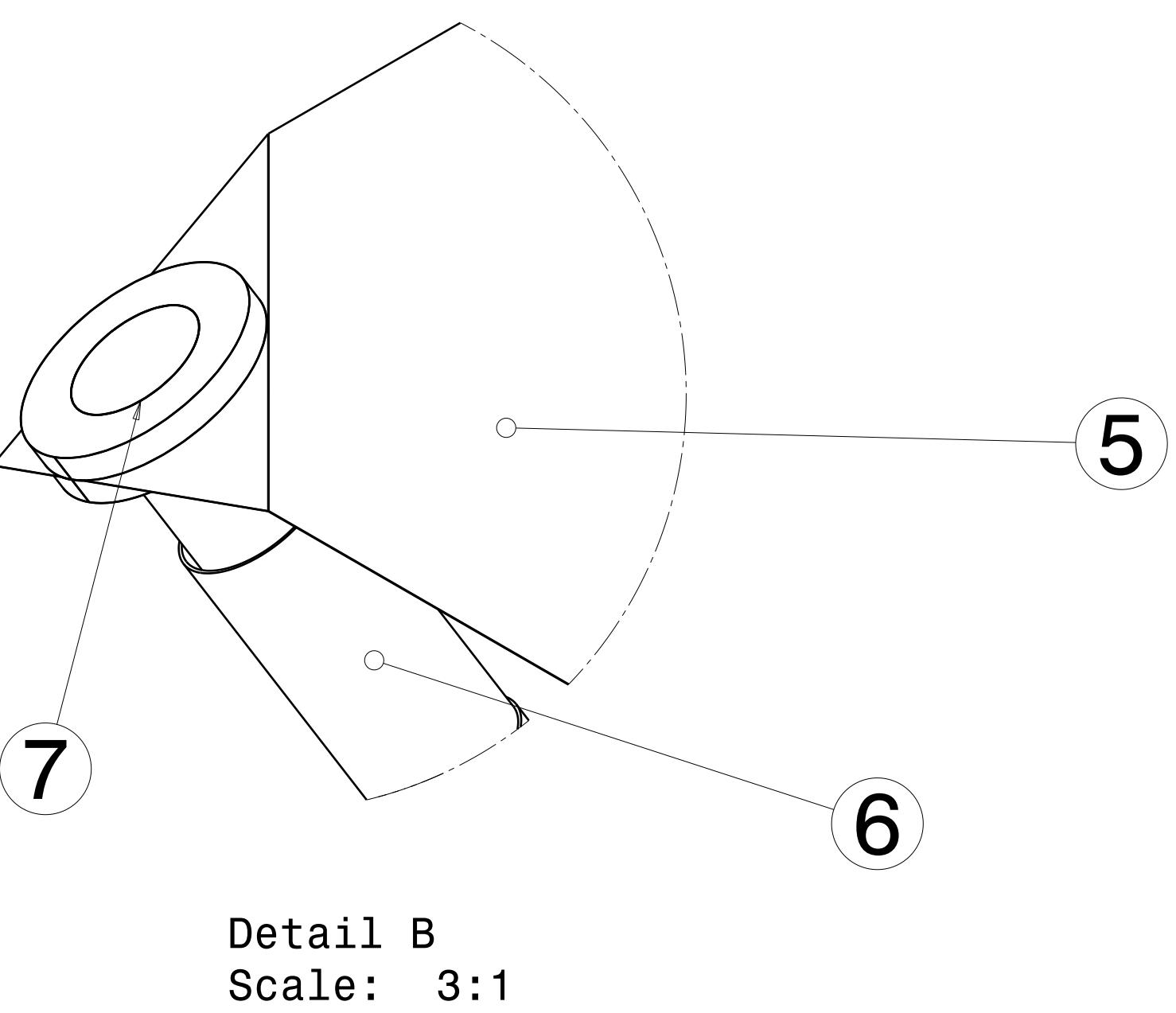
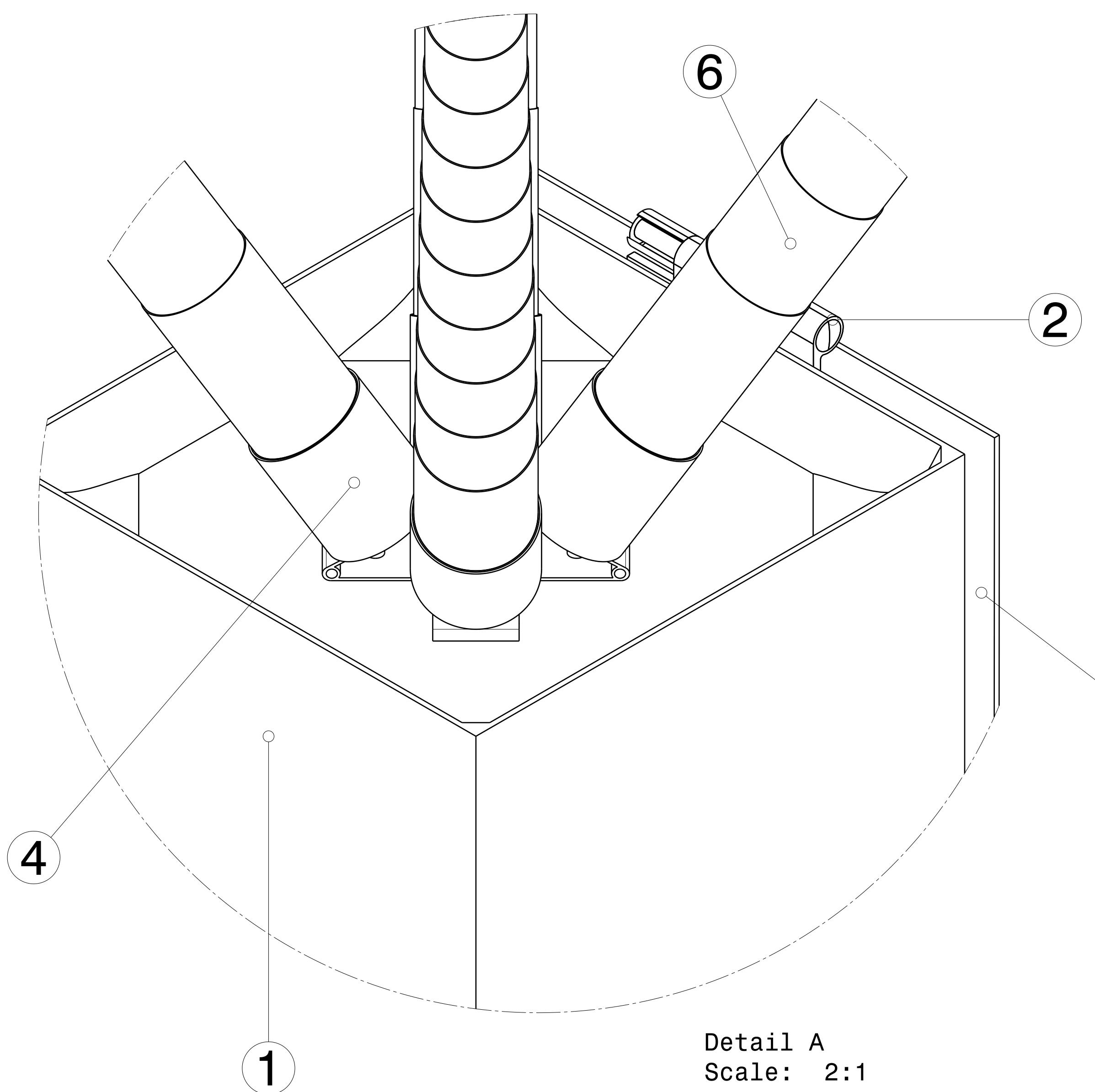


Bill of Material: DEPLOYED SATELLITE SHIELD ASSEMBLY

Number	Component Description	Quantity
1	Cube Satellite	1
2	Hinge	1
3	Door	1
4	Holder	4
5	Shield	1
6	Extendable Arm - Extended	4
7	Washer	8



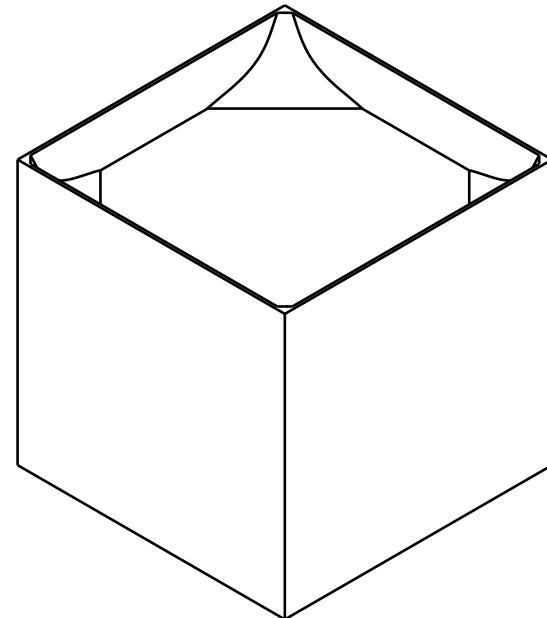
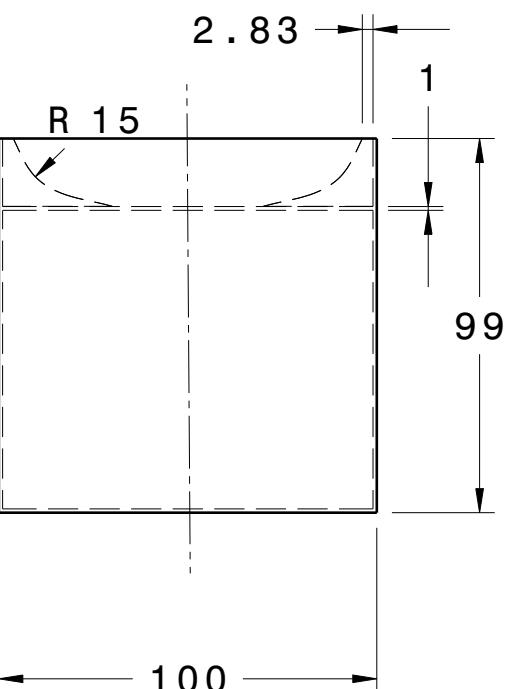
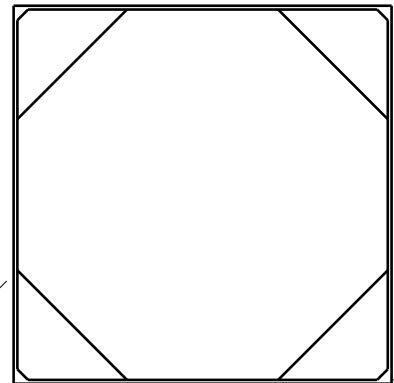
AERO 2001	SATELLITE SHIELD DESIGN PROJECT		
DRAWN BY ANDRES MANRIQUE		DRAWING TITLE DEPLOYED SATELLITE SHIELD ASSEMBLY	
DATE 12/11/20	DRAWING NUMBER D 3	REV 1	
DATE OF SUBMISSION 12/11/20	SCALE 1:2	SHEET 1/1	

D

C

B

A



SURFACE FINISH



ALL TOLERANCES +/- 0.01mm

UNITS : mm

MATERIAL : N/A

AER02001

SATELLITE SHIELD DESIGN PROJECT

DRAWN BY

Dominik Parpura

DRAWING TITLE

CUBE SATELLITE

Date

12/9/2020

DATE OF SUBMISSION

12/11/2020

SIZE

A

DRAWING NUMBER

4

REV

1

SCALE

1:2

WEIGHT(kg)

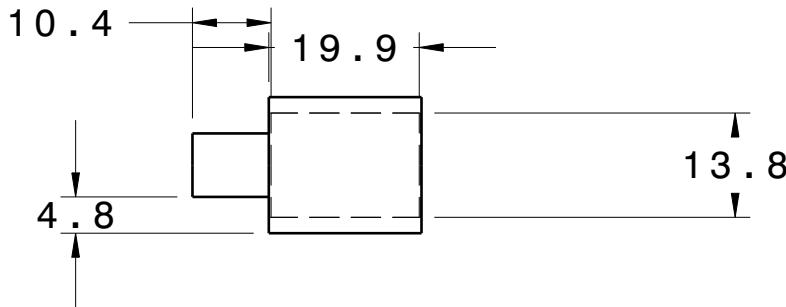
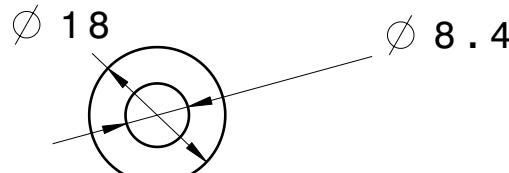
N/A

SHEET

1/1

D

A



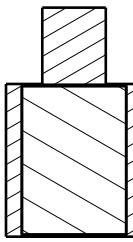
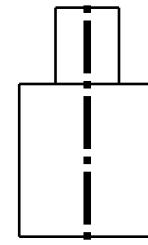
D

C

B

A

A



SURFACE FINISH ✓

ALL TOLERANCES:
+ - 0.01mm

UNITS: mm

MATERIAL:
ALUMINUM

AERO 2001

DRAWN BY
JeffreyDate
12/11/20Date of Submission
12/11/20

SATELLITE SHIELD DESIGN PROJECT

DRAWING TITLE

Extendable Arm - Contracted

SIZE

DRAWING NUMBER

REV

A

5

X

SCALE

1:1

WEIGHT(kg)

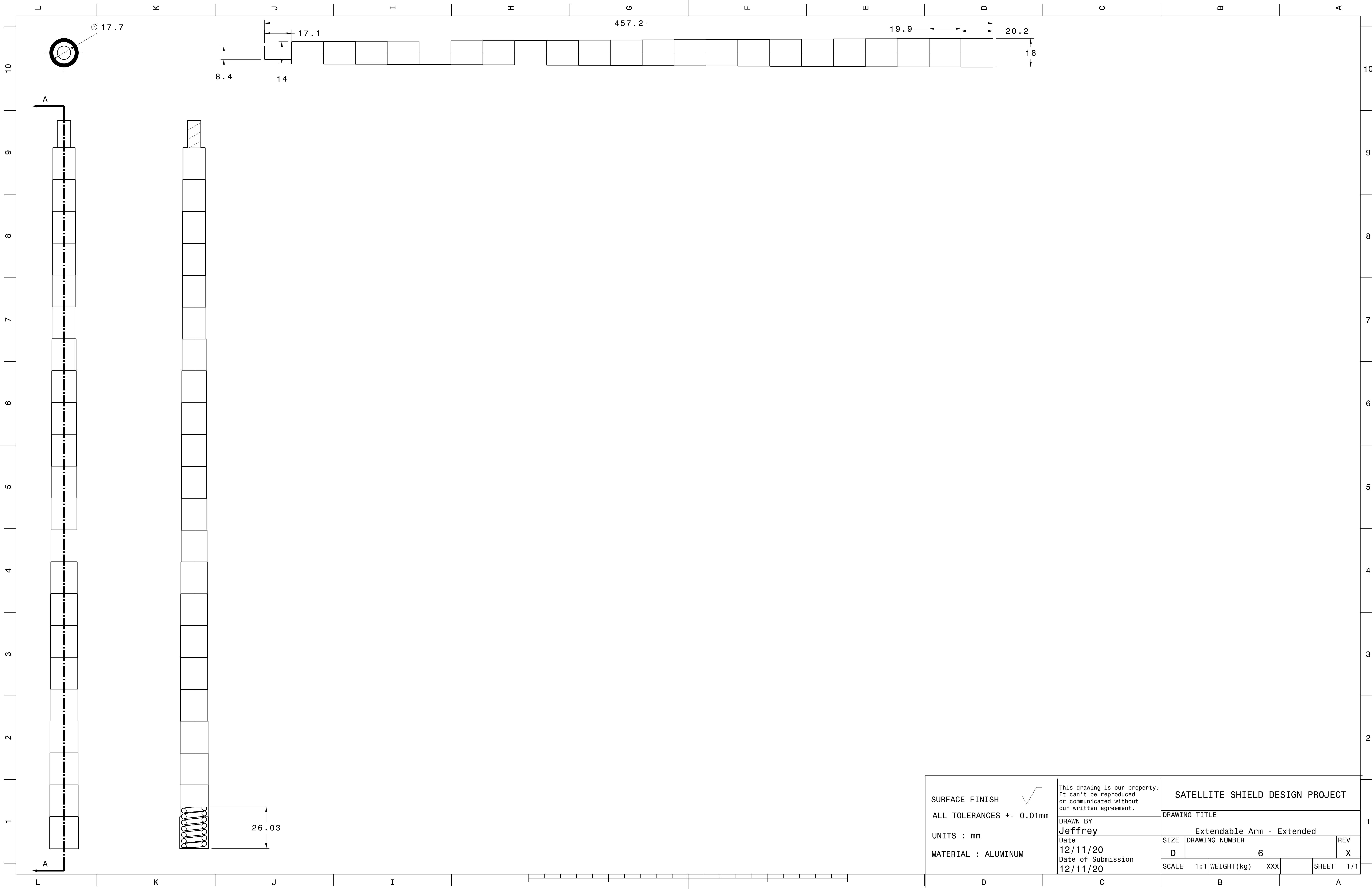
XXX

SHEET

1/1

D

A



D

C

B

A

4

4

3

3

400 . 00

2

2

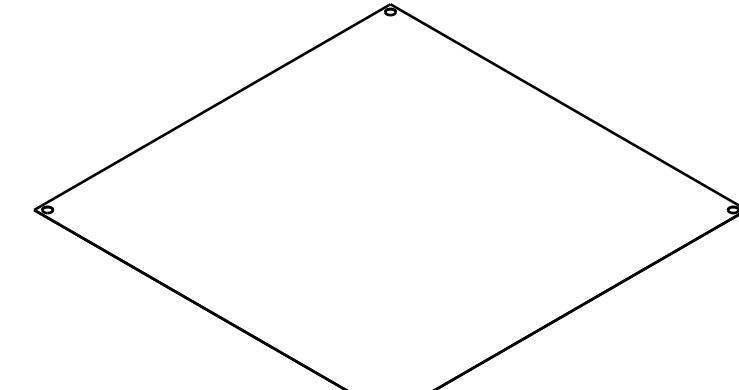
2

x 4 7 . 59

x 4 7 . 59

NOTES:
UNIFORM THICKNESS OF 0.012 MM

400 . 00



ALL TOLERANCES +- 0.01MM

UNITS : MM

MATERIAL : MYLAR

AER02001

DRAWN BY
MACIE ORRELL

Date
12/10/2020

DATE OF SUBMISSION
12/11/2020

SATELLE SHIELD DESIGN PROJECT

DRAWING TITLE

SHIELD

SIZE	DRAWING NUMBER	REV
A	07	1
SCALE 1:4		SHEET 1/1

D

A

1

D

C

B

A

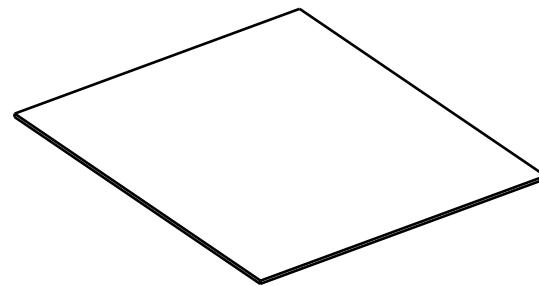
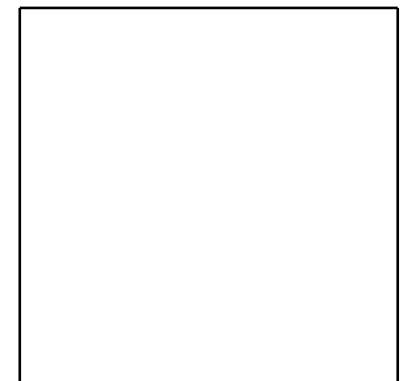
4

4

100

100

1



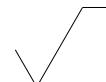
3

3

2

2

SURFACE FINISH



ALL TOLERANCES +/- 0.01mm

UNITS : mm

MATERIAL : N/A

AER02001

SATELLITE SHIELD DESIGN PROJECT

DRAWING TITLE

CUBE SATELLITE HATCH

SIZE

A

DRAWING NUMBER

REV

1

DRAWN BY

DOMINIK PARPURA

Date

12/9/2020

DATE OF SUBMISSION

12/11/2020

SCALE

1:2

WEIGHT(kg)

N/A

8

SHEET

1/1

1

1

D

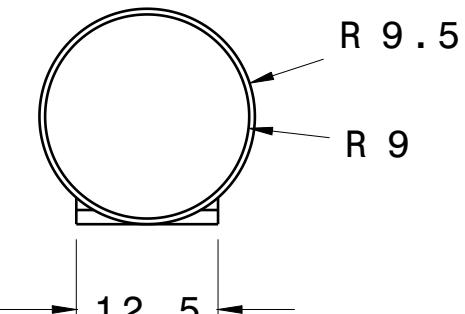
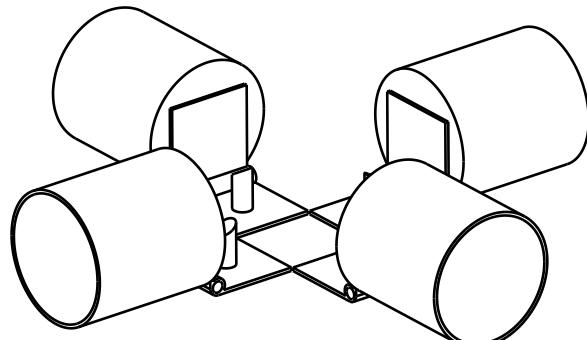
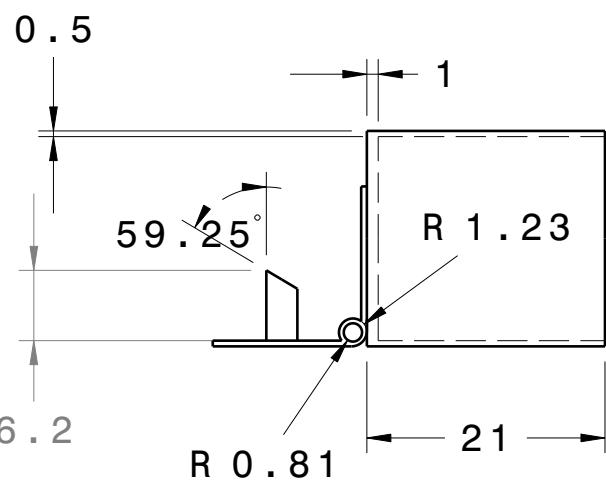
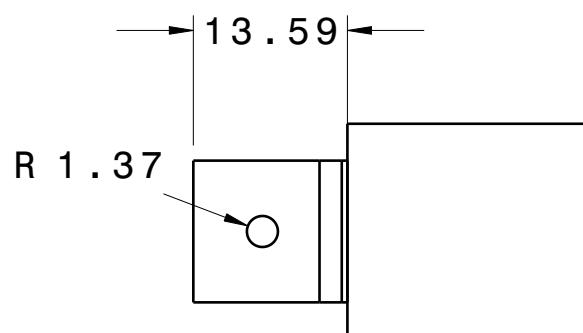
A

D

C

B

A



SURFACE FINISH



ALL TOLERANCES +/- 0.01mm

UNITS : mm

MATERIAL : ALUMINUM

AER02001

SATELLITE SHIELD DESIGN PROJECT

DRAWING TITLE

CLOSED HOLDER

SIZE

DRAWING NUMBER

REV

A

9

1

DRAWN BY

DOMINIK PARPURA

Date

12/9/2020

DATE OF SUBMISSION

12/11/2020

SCALE

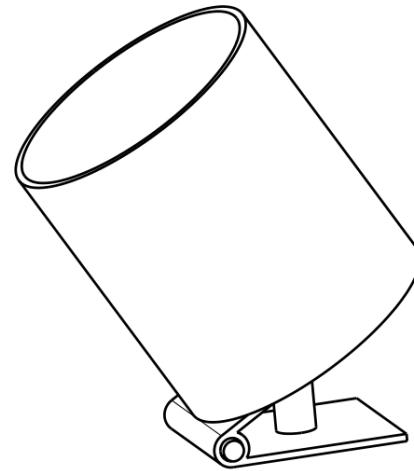
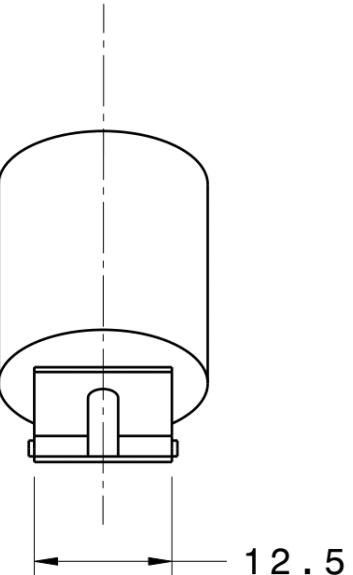
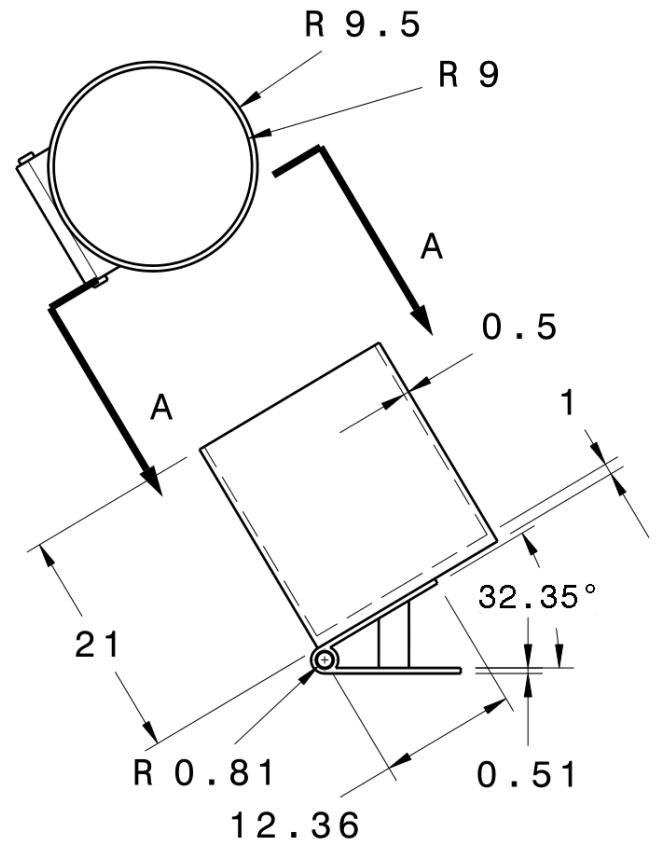
3:2

WEIGHT(kg) 0.012

SHEET 1/1

D

A



ISOMETRIC VIEW SCALE: 2:1

DEPLOYED FORM HAS 4
HOLDERS POSITIONED
MM APART

SURFACE FINISH

ALL TOLERANCES +/- 0.01mm

UNITS : mm

MATERIAL : ALUMINUM

AER02001

SATELLITE SHIELD DESIGN PROJECT

DRAWN BY
DOMNIK PARPURA

CHECKED BY
12/9/2020

DATE OF SUBMISSION
12/11/2020

DRAWING TITLE

EXTENDED SHAFT HOLDER

SIZE

A

DRAWING NUMBER

10

REV

1

SCALE

3:2

WEIGHT(kg) 0.012

SHEET 1/1

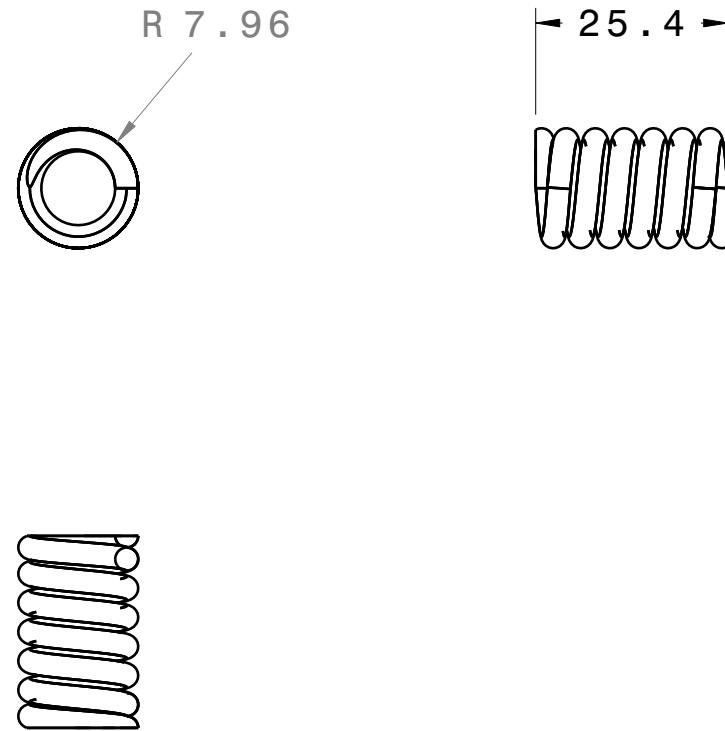
D

C

B

A

Compressed Length:
9.65mm



MATERIAL: ZINC -
PLATED STEEL

AER02001

SATELLITE SHIELD DESIGN PROJECT

DRAWN BY

Jeffrey

Date

12/11/20

Date of Submission

12/11/20

DRAWING TITLE

Extendable Arm - Compression Spring

SIZE

DRAWING NUMBER

REV

A

11

X

SCALE

1:1

WEIGHT(kg)

XXX

SHEET

1/1

D

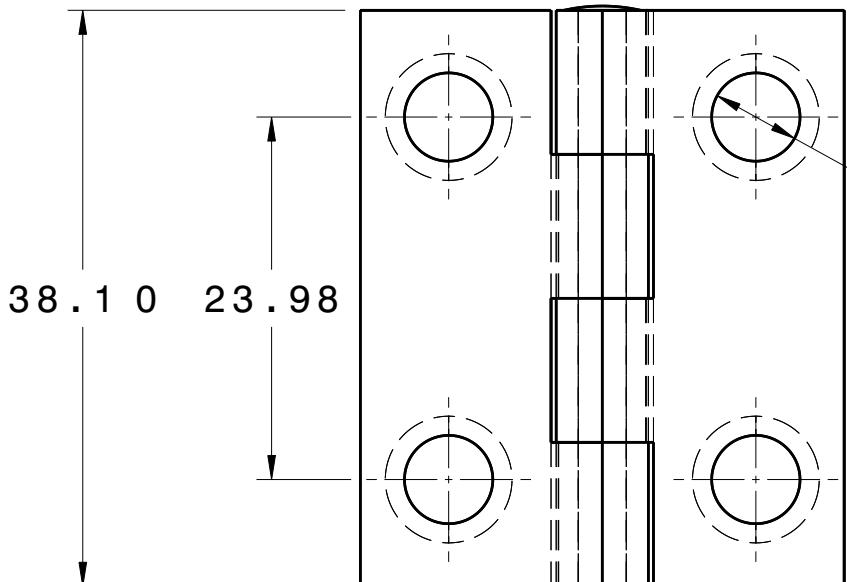
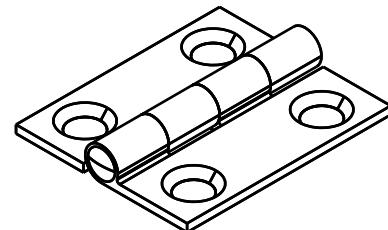
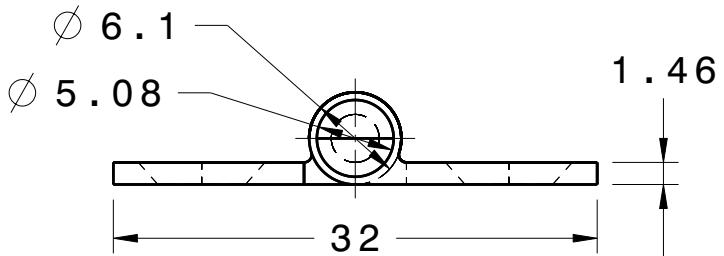
A

D

C

B

A



NOTES:

- HINGE IS STANDARDIZED PART 1586A22 AVAILABLE FROM MCMASTER CARR
- HINGE IS SURFACE MOUNT
- FITS MOUNTING SCREW SIZE NO.8
- MOUNTING HOLE STYLE IS COUNTERSUNK
- HINGE WITH NON-REMOVABLE PIN DETER TAMPERING

SURFACE FINISH

ALL TOLERANCES +/- 0.01MM

UNITS : MM

MATERIAL : POLISHED 304 STAINLESS STEEL

AER02001

DRAWN BY
MACIE ORRELL

Date
12/9/2020

DATE OF SUBMISSION
12/11/2020

SATELLITE SHIELD DESIGN PROJECT

DRAWING TITLE

HINGE

SIZE	DRAWING NUMBER	REV
A	12	1
SCALE 2:1	WEIGHT(kg) XX	SHEET 1/1

D

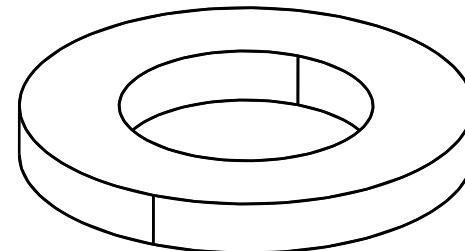
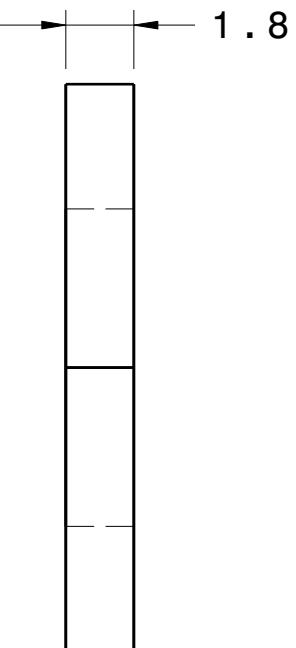
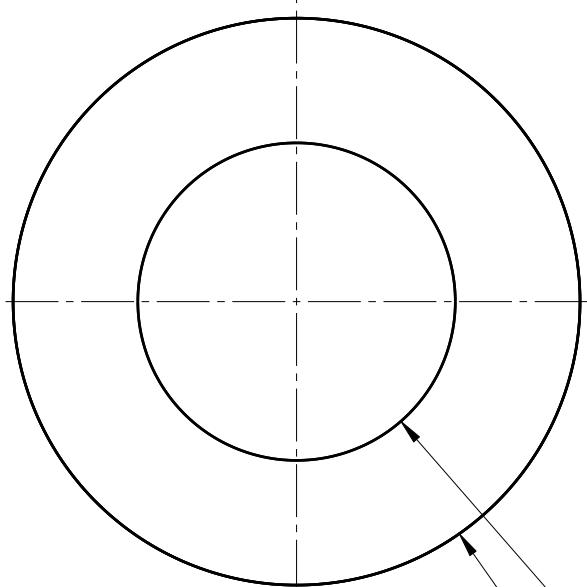
A

D

C

B

A



R 4 . 2

R 7 . 5

NOTES:

- WASHER IS STANDARDIZED PART 98689A116
- AVAILABLE FROM MCMASTER CARR
- WASHER THICKNESS VARIES FROM 1.4MM - 1.8 MM
- WASHER INTENDED FOR M8 SCREW SIZE

SURFACE FINISH



ALL TOLERANCES +/- 0.05 MM

UNITS : MM

MATERIAL : 18-8 STAINLESS
STEEL

AER02001

SATELLITE SHIELD DESIGN PROJECT

DRAWN BY
MACIE ORRELL

DRAWING TITLE

Date

12/8/2020

WASHER

DATE OF SUBMISSION
12/11/2020

SIZE

A

DRAWING NUMBER

13

REV

1

SCALE

5:1

SHEET

1/1

D

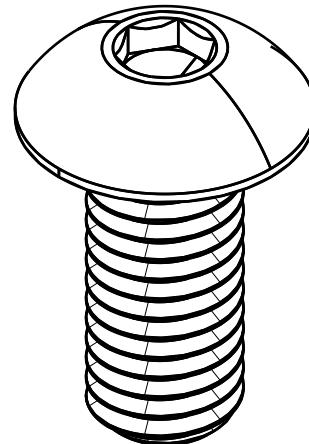
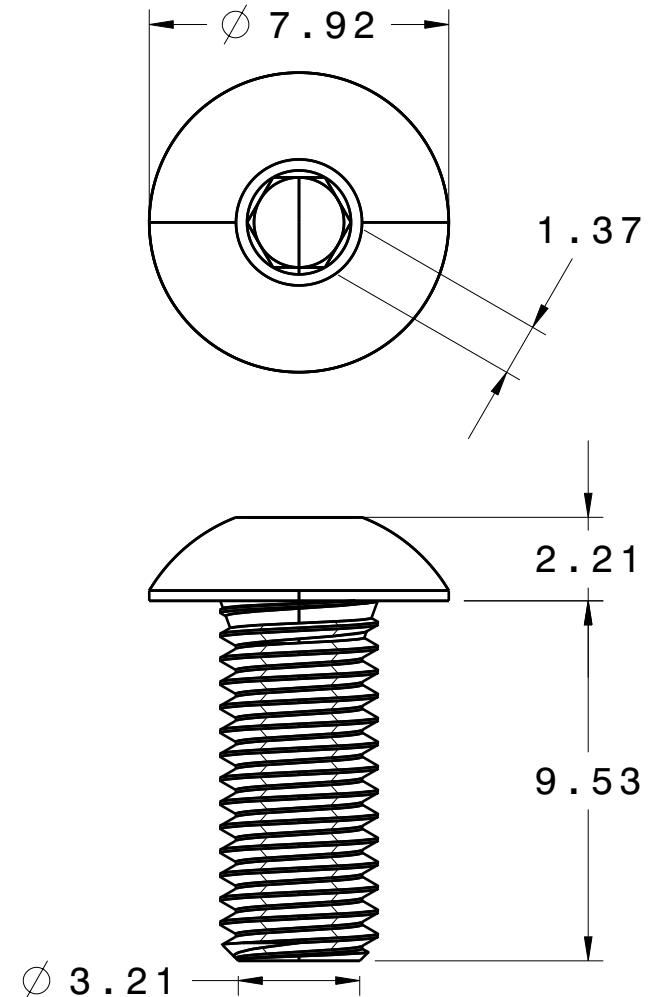
A

D

C

B

A



NOTES:

- SCREW IS STANDARDIZED PART 92949A428 AVAILABLE FROM MCMASTER CARR
- DRIVE SIZE IS 3/32" HEX
- THREAD SIZE IS 8-40
- THREAD TYPE IS UNS
- THREAD SPACING IS EXTRA FINE
- THREAD FIT IS CLASS 3A
- RIGHT HAND THREAD DIRECTION

ALL TOLERANCES +/- 0.01MM

UNITS : MM

MATERIAL : 8-18 STAINLESS
STEEL

AER02001

SATELLITE SHIELD DESIGN PROJECT

DRAWN BY
MACIE ORRELL

DRAWING TITLE

Date
12/9/2020

SCREW

DATE OF SUBMISSION
12/11/2020

SIZE	DRAWING NUMBER	REV
A	14	1
SCALE 5:1		SHEET 1/1

D

A