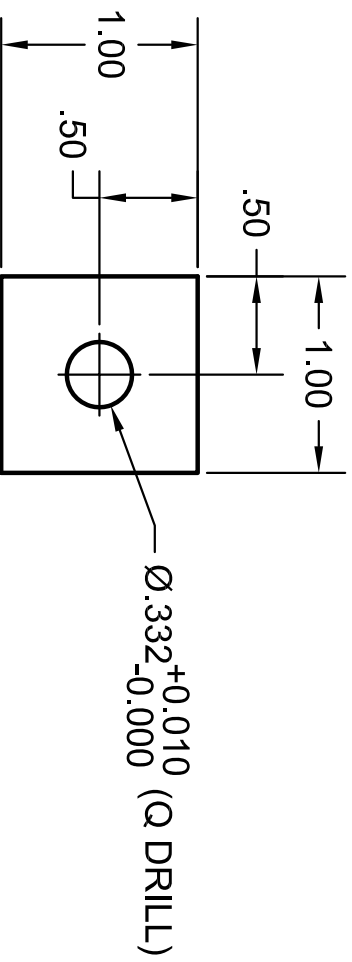


REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	4-24-2014	



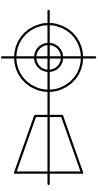
NOTE 1: BREAK EDGES & CORNERS

MATERIAL: ASTM A1011/A1011M-14 HOT ROLLED STEEL FLAT BAR.
 GRADE 36
 .125 THICK

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH ANSI/ASME Y14.5M - 1994

THIRD ANGLE

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UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE INCHES

UNSPECIFIED TOLERANCES

LENGTH	SURFACE FINISH
.0 = ±.1	RMS 140
.00 = ±.01	µin
.000 = ±.005	ANGULAR ±.25°
.0000 = ±.005	

UNIVERSITY OF MEMPHIS
 DEPARTMENT OF ENGINEERING TECHNOLOGY

MOUNT, PANEL
 TX MODEL EXTRUDER

SIZE	DATE	DWG NO	REV
A	4-24-2014	TX-001	A

SCALE: 1=1
 DRAWN BY: R.H.

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	4-15-2014	

PURCHASED ITEM

Zinc-Plated Steel Rivet Nut
 1/4"-20 Internal Thread, .080"-.140" Material Thickness

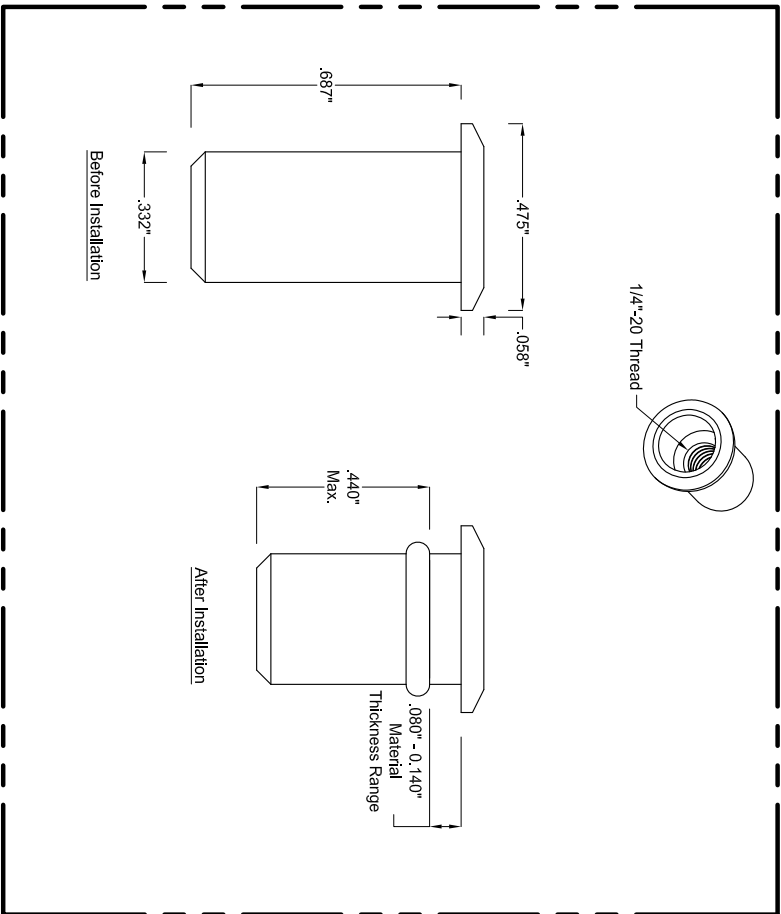
NOTE: THE FOLLOWING PART HAS BEEN APPROVED FOR USE AS THIS COMPONENT:

MCMASTER CARR PART NUMBER 93483A691

(URL:<http://www.mcmaster.com/#93483a691/=roy5tn>)

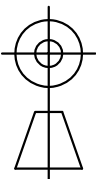
- Thread 1/4"-20
- Drill Size Q
- Material Thickness 0.080"-0.140"
- Body Diameter 0.332"
- Length 0.687"
- Flange Diameter 0.475"
- Thickness 0.058"
- Maximum Installed Length 0.440"
- Additional Specifications Zinc-Plated Steel

Use these rivet nuts to add threads to materials that are too thin to top. They have a smooth body and flange. Install in a drilled hole using a tool (required). The tool collapses the nut, creating a backside flange that holds the nut to the material. Thread class is 2B.



DRAWING BY MCMMASTER-CARR.COM

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH ANSI/ASME Y14.5M - 1994



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LENGTH	SURFACE FINISH
.0 = ±.1	RMS 140
.00 = ±.01	µin
.000 = ±.005	
.0000 = ±.005	ANGULAR ±.25°

UNIVERSITY OF MEMPHIS
 DEPARTMENT OF ENGINEERING TECHNOLOGY

TX SERIES EXTRUDER

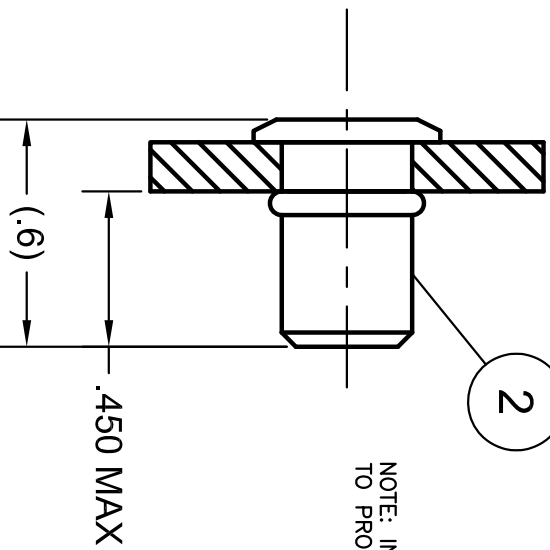
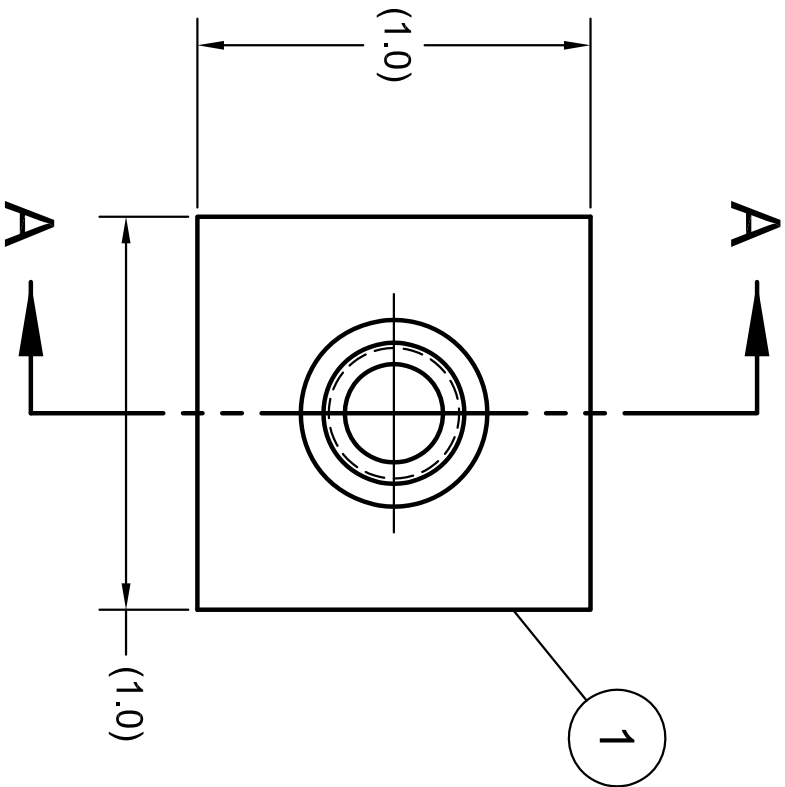
RIVNUT, .250-20 FOR .125

ITEM	PART NO.	DESCRIPTION	QTY
A			

SIZE	DATE	DWG NO	REV
A	4-15-2014	TX-008	A

SCALE: 2:1 DRAWN BY: R.H.

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	4-2452014	



SECTION A-A

ITEM	PART NO.	DESCRIPTION	QTY
2	TX-008	RIVNUT, .250-20 FOR .125	1
1	TX-001	MOUNT, PANEL	1

UNIVERSITY OF MEMPHIS
DEPARTMENT OF ENGINEERING TECHNOLOGY

ASSEMBLY, MOUNT, PANEL
TX MODEL EXTRUDER

SIZE	DATE	DWG NO	REV
A	4-25-2014	TX-003	A

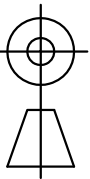
SCALE: 2:1 DRAWN BY: R.H.

UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE INCHES

UNSPECIFIED TOLERANCES

LENGTH	SURFACE FINISH
.0 = ±.1	RMS 140
.00 = ±.01	μin
.000 = ±.005	ANGULAR ±.25°
.0000 = ±.005	

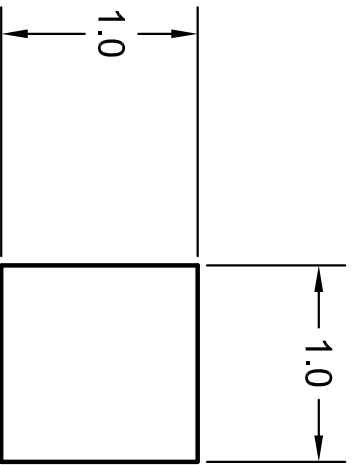
THIRD ANGLE



DIMENSIONING & TOLERANCING IN
ACCORDANCE WITH
ANSI/ASME Y14.5M - 1994

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REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	4-24-2014	



NOTE 1: BREAK EDGES & CORNERS

MATERIAL: ASTM A1011/A1011M-14 HOT ROLLED STEEL FLAT BAR.
 GRADE 36
 .125 THICK

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH ANSI/ASME Y14.5M - 1994

THIRD ANGLE

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UNSPECIFIED TOLERANCES

LENGTH	SURFACE FINISH
.0 = ±.1	RMS 140
.00 = ±.01	μin
.000 = ±.005	ANGULAR ±.25°
.0000 = ±.005	

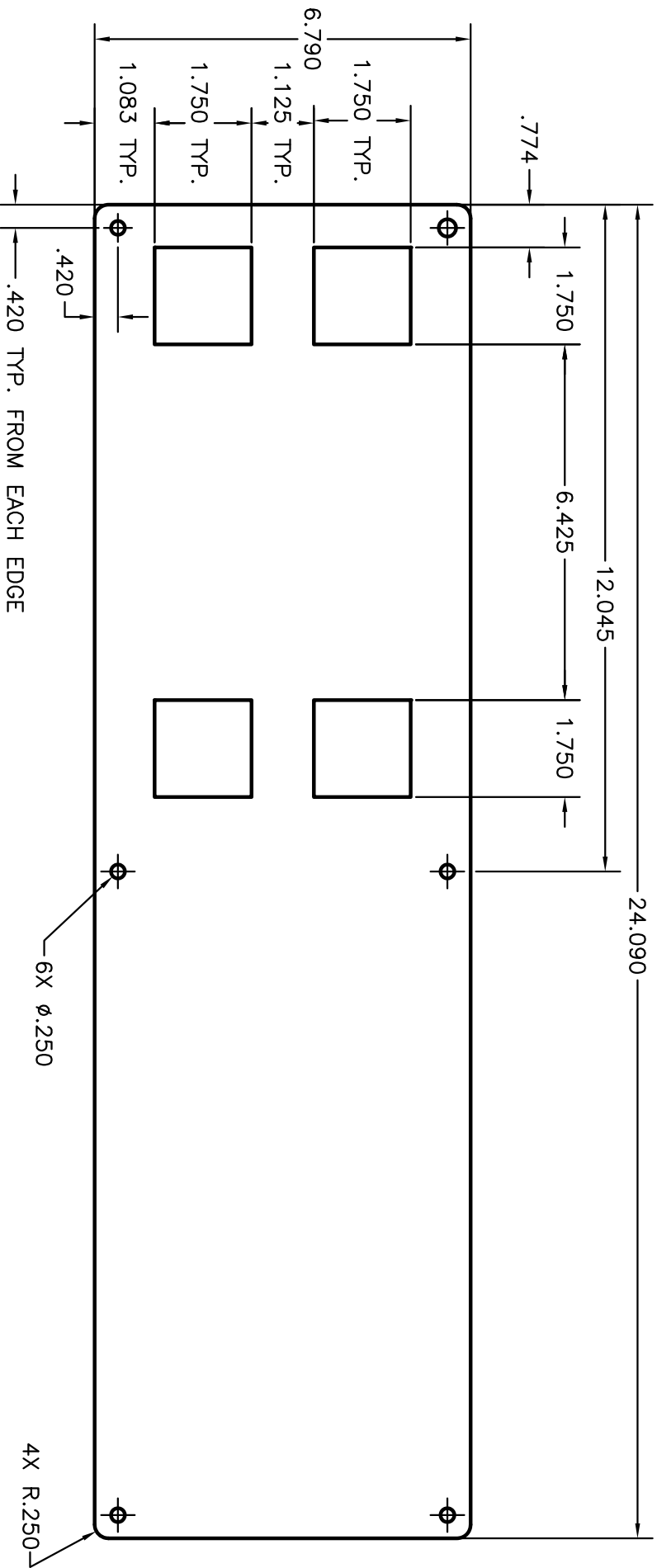
UNIVERSITY OF MEMPHIS
 DEPARTMENT OF ENGINEERING TECHNOLOGY

MOUNT, PANEL, BLANK
 TX MODEL EXTRUDER

SIZE	DATE	DWG NO	REV
A	4-24-2014	TX-002	A

SCALE: 1=1
 DRAWN BY: R.H.

REVISION HISTORY		
REV	DESCRIPTION	DATE
A	ORIGINAL RELEASE	4-25-2014



MATERIAL: ASTM A1011
 GRADE 36
 HOT ROLLED SHEET
 .06 THICK (16 GA)

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH ANSI/ASME Y14.5M - 1994

THIRD ANGLE

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UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE INCHES

UNSPECIFIED TOLERANCES

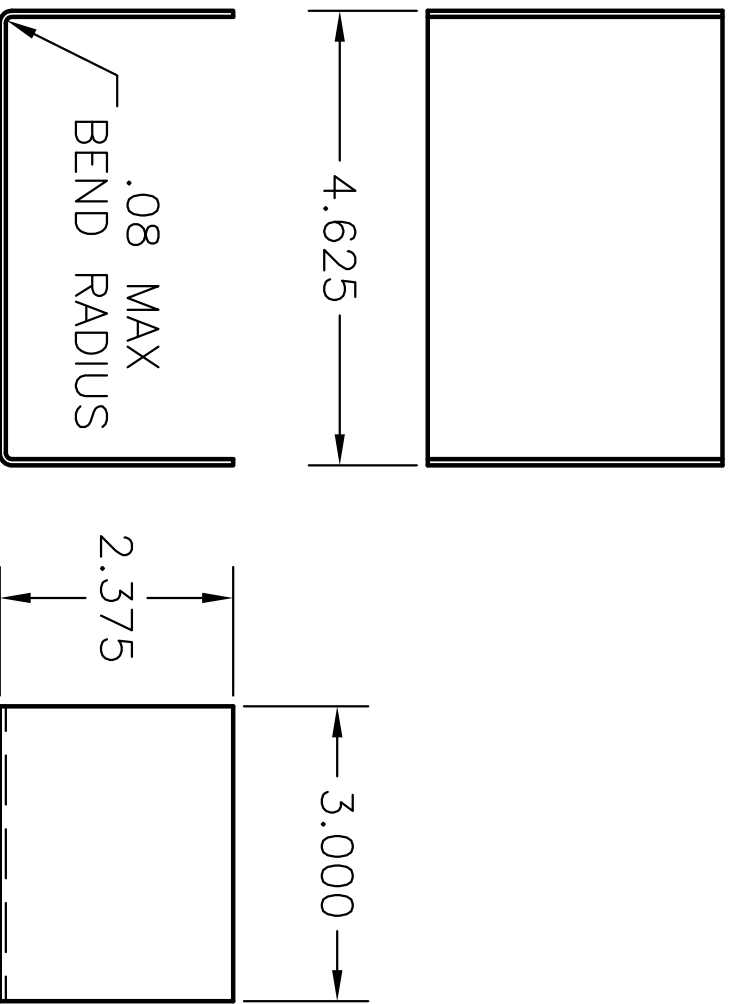
LENGTH: .0 = ±.1
 .00 = ±.01
 .000 = ±.005

SURFACE FINISH: RMS 140 μin

ANGULAR ±.25°

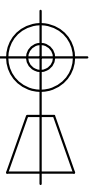
ITEM	PART NO.	DESCRIPTION	QTY
UNIVERSITY OF MEMPHIS DEPARTMENT OF ENGINEERING TECHNOLOGY			
TX SERIES EXTRUDER PANEL, CONTROL			
SIZE	DATE	DWG NO	REV
B	4-25-2014	TX-007	A
SCALE: 1/2" = 1"			
DRAWN BY: R.H.			

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	4-25-2014	



MATERIAL: ASTM A1011
 GRADE 36
 HOT ROLLED SHEET
 .06 THICK (16 GA)

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH ANSI/ASME Y14.5M - 1994



THIRD ANGLE

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ALL DIMENSIONS ARE INCHES

UNSPECIFIED TOLERANCES

LENGTH	SURFACE FINISH
.0 = ±.1	RMS 140
.00 = ±.01	μin
.000 = ±.005	ANGULAR ±.25°
.0000 = ±.0005	

UNIVERSITY OF MEMPHIS
 DEPARTMENT OF ENGINEERING TECHNOLOGY

BRACKET, DIN RAIL
 TX MODEL EXTRUDER

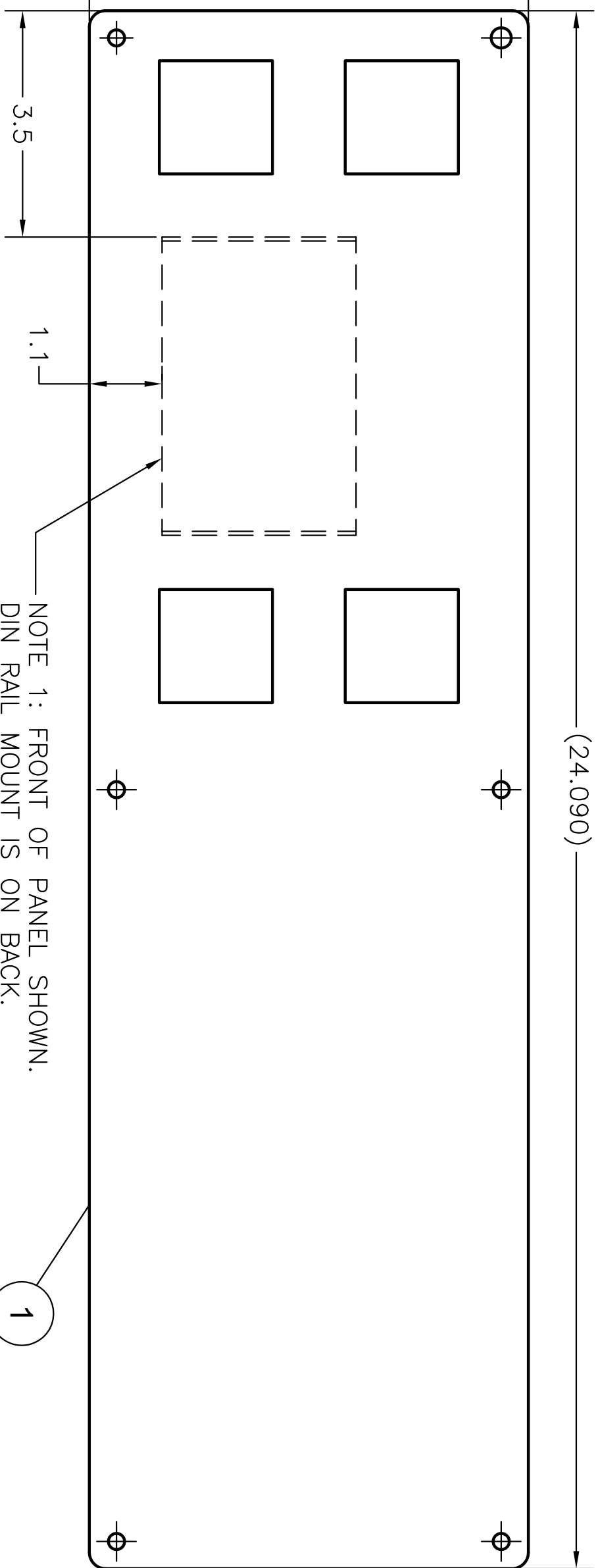
SIZE	DATE	DWG NO	REV
A	4-25-2014	TX-011	A
SCALE: HALF		DRAWN BY: R.H.	

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	4-25-2014	

(24.090)

(6.790)

(2.369)

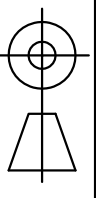


NOTE 1: FRONT OF PANEL SHOWN.
DIN RAIL MOUNT IS ON BACK.

SEE NOTES 2 & 3

NOTE 2: WELD .75 INCH LONG ON ALL FOUR CORNERS.
NOTE 3: SURFACE ROUGHNESS OF PANEL FRONT MUST BE 140 MICRO INCHES MAX

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH ANSI/ASME Y14.5M - 1994



THIRD ANGLE

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UNSPECIFIED TOLERANCES

LENGTH	SURFACE FINISH
.0 = ±.1	RMS 140
.00 = ±.01	µin
.000 = ±.005	ANGULAR ±.25°
.0000 = ±.0005	

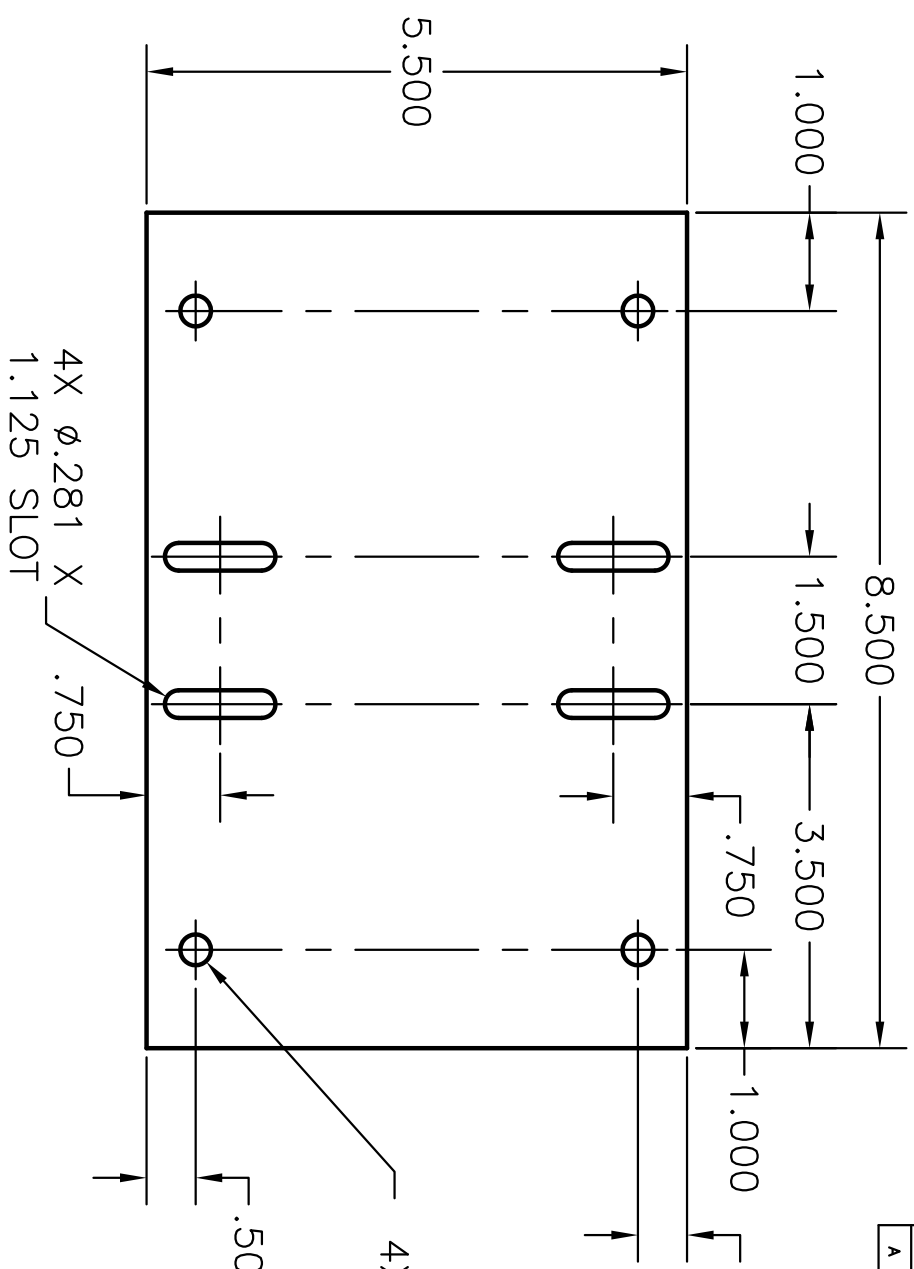
ITEM	PART NO.	DESCRIPTION	QTY
2	TX-010	BRACKET, DIN RAIL	1
1	TX-007	PANEL, CONTROL	1

UNIVERSITY OF MEMPHIS
DEPARTMENT OF ENGINEERING TECHNOLOGY

TX SERIES EXTRUDER
ASSEMBLY PANEL, CONTROL

SIZE	DATE	DWG NO	REV
B	4-25-2014	TX-010	A
SCALE: 1/2 = 1		DRAWN BY: R.H.	

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	4-25-2014	



NOTE 1: BREAK ALL SHARP EDGES.

MATERIAL: ASTM A1011 GRADE 36
HOT ROLLED SHEET
.250 THICK

UNIVERSITY OF MEMPHIS
DEPARTMENT OF ENGINEERING TECHNOLOGY

MOUNT, MOTOR
TX SERIES EXTRUDER

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH ANSI/ASME Y14.5M - 1994

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UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE IN INCHES

UNSPECIFIED TOLERANCES

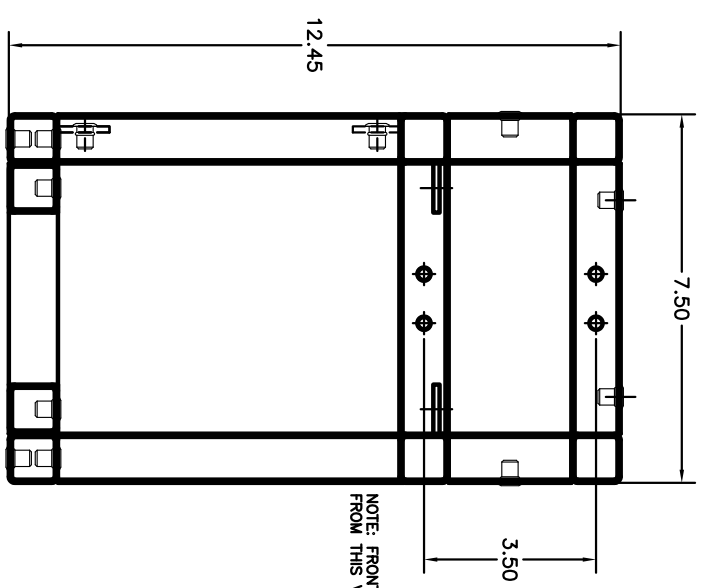
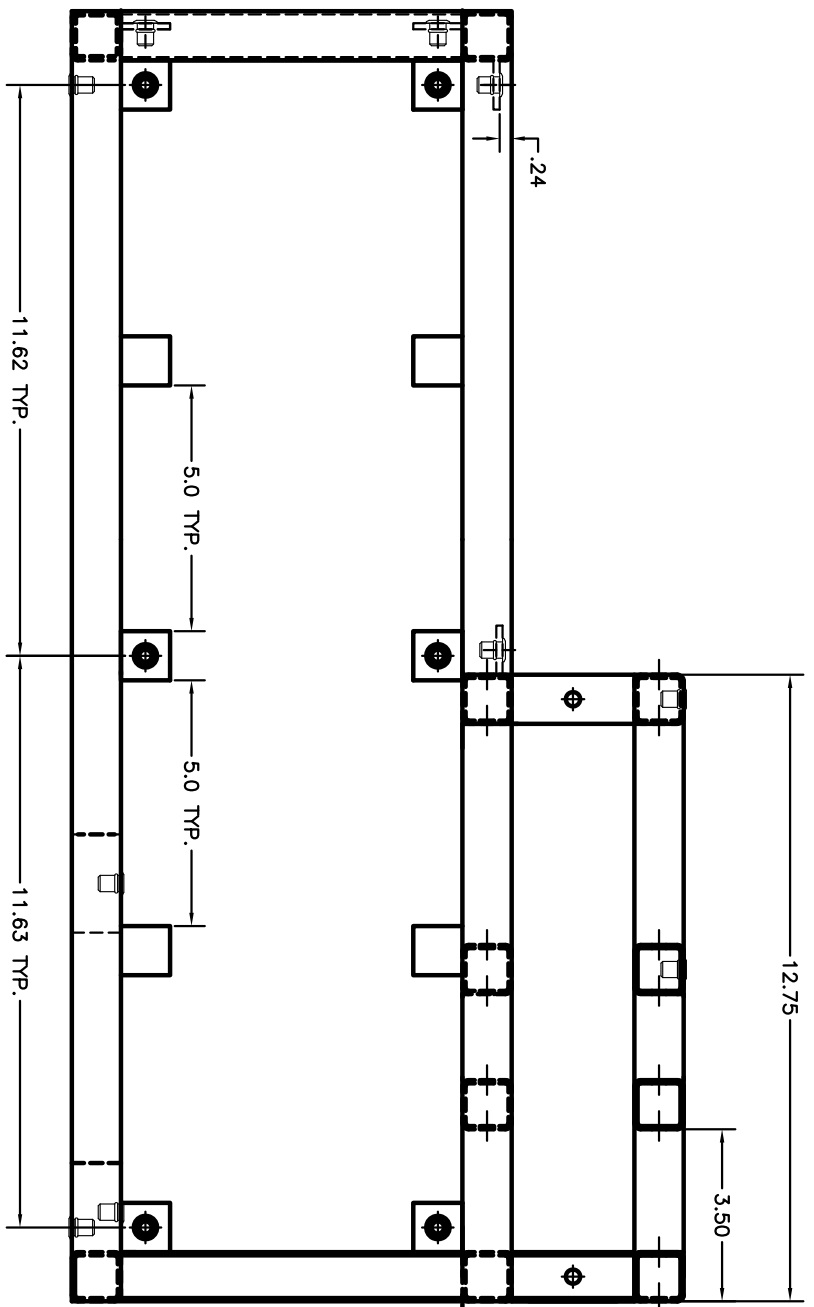
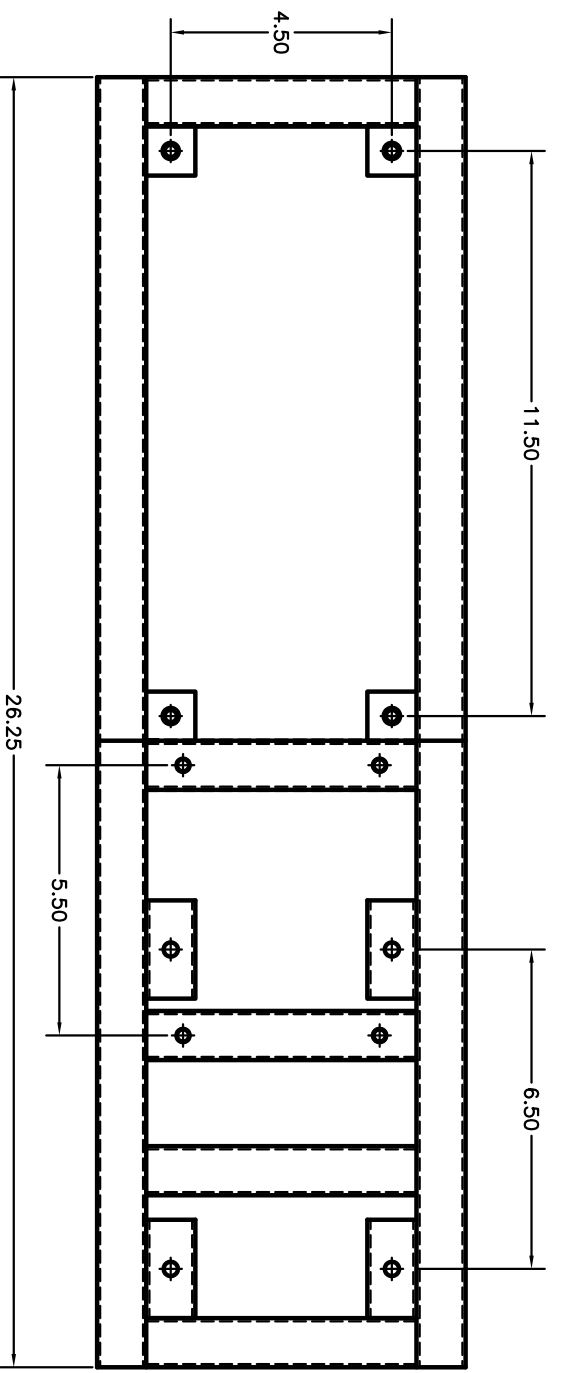
LENGTH .0 = ±.1
.00 = ±.01
.000 = ±.005
.0000 = ±.0005

SURFACE FINISH RMS 140 μin

ANGULAR ±.25°

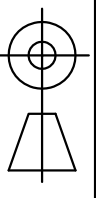
ITEM	PART NO.	DESCRIPTION	QTY
		UNIVERSITY OF MEMPHIS DEPARTMENT OF ENGINEERING TECHNOLOGY	
		MOUNT, MOTOR TX SERIES EXTRUDER	
SIZE	DATE	DWG NO	REV
A	4-25-2014	TX-009	A
SCALE: 1=1		DRAWN BY: R.H.	

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	4-25-2014	



NOTE: FRONT PANEL MOUNTS OMITTED FROM THIS VIEW FOR CLARITY.

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH ANSI/ASME Y14.5M - 1994



THIRD ANGLE

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UNSPECIFIED TOLERANCES

LENGTH	SURFACE FINISH
.0 = ±.1	RMS 140
.00 = ±.01	µin
.000 = ±.005	
.0000 = ±.0005	ANGULAR ±.25°

UNIVERSITY OF MEMPHIS
DEPARTMENT OF ENGINEERING TECHNOLOGY

TX SERIES EXTRUDER
ASSEMBLY, FRAME

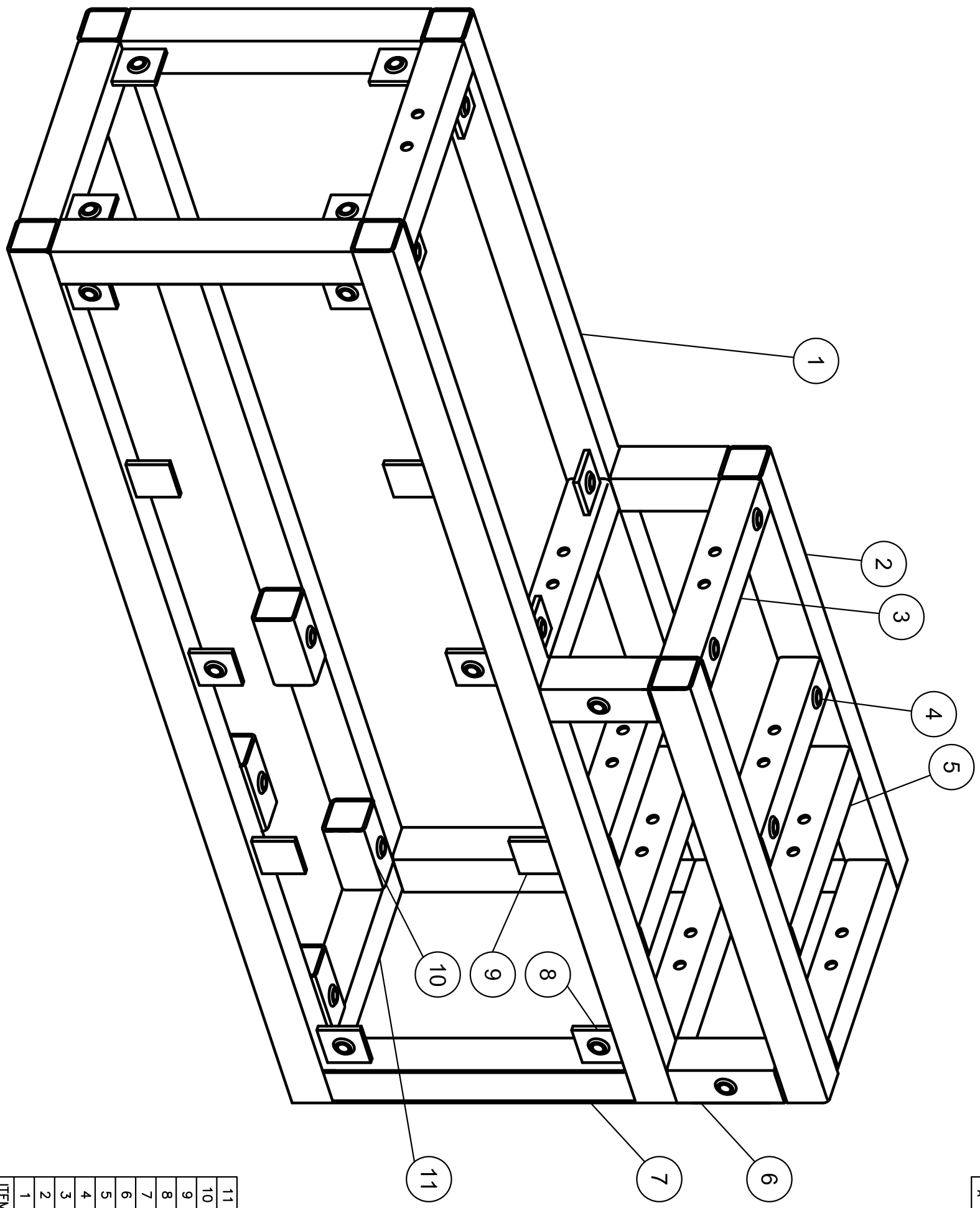
ITEM	PART NO.	DESCRIPTION	QTY
1	TX-0		1

SIZE	DATE	DWG NO	REV
B	4-25-2014	TX-006	A

SCALE: 1/2 = 1

DRAWN BY: R.H. SHEET 2 OF 2

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	4-25-2014	



ITEM	PART NO.	DESCRIPTION	QTY
11	TX-016	TUBE, CROSSBAR, PLAIN	2
10	TX-019	TUBE, MOUNT, MOTOR	4
9	TX-002	MOUNT, PANEL, BLANK	4
8	TX-003	ASSEMBLY, PANEL MOUNT	14
7	TX-018	TUBE, UPRIGHT, LONG	4
6	TX-017	TUBE, UPRIGHT, SHORT	4
5	TX-015	TUBE, CROSSBAR, STANDARD	7
4	TX-008	RIVNUT	12
3	TX-014	TUBE, CROSSBAR, HOPPER	2
2	TX-013	TUBE, RAIL, SHORT	2
1	TX-012	TUBE, RAIL, LONG	4

UNIVERSITY OF MEMPHIS
DEPARTMENT OF ENGINEERING TECHNOLOGY

TX SERIES EXTRUDER
ASSEMBLY, FRAME

SIZE	DATE	DWG NO	REV
B	4-25-2014	TX-006	A

SCALE: 3/4 = 1 DRAWN BY: R.H. SHEET 1 OF 2

UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE INCHES

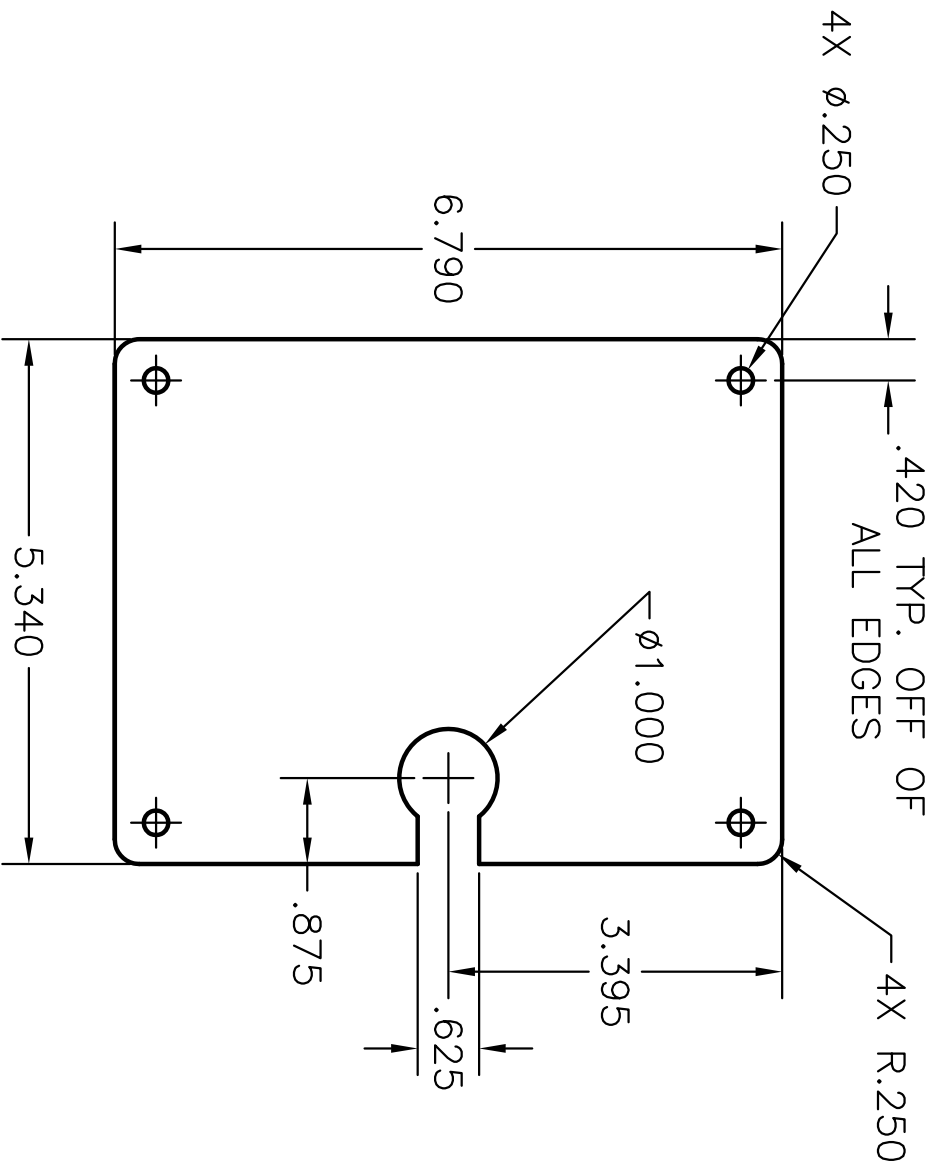
UNSPECIFIED TOLERANCES

LENGTH	SURFACE FINISH
.0 = ±.1	RMS 140
.00 = ±.01	µin
.000 = ±.005	
.0000 = ±.0005	ANGULAR ±.25°

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH
ANSI/ASME Y14.5M - 1994

THIRD ANGLE

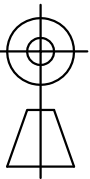
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MATERIAL: ASTM A1011
 GRADE 36
 HOT ROLLED SHEET
 .06 THICK (16 GA)

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	4-25-2014	

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH ANSI/ASME Y14.5M - 1994



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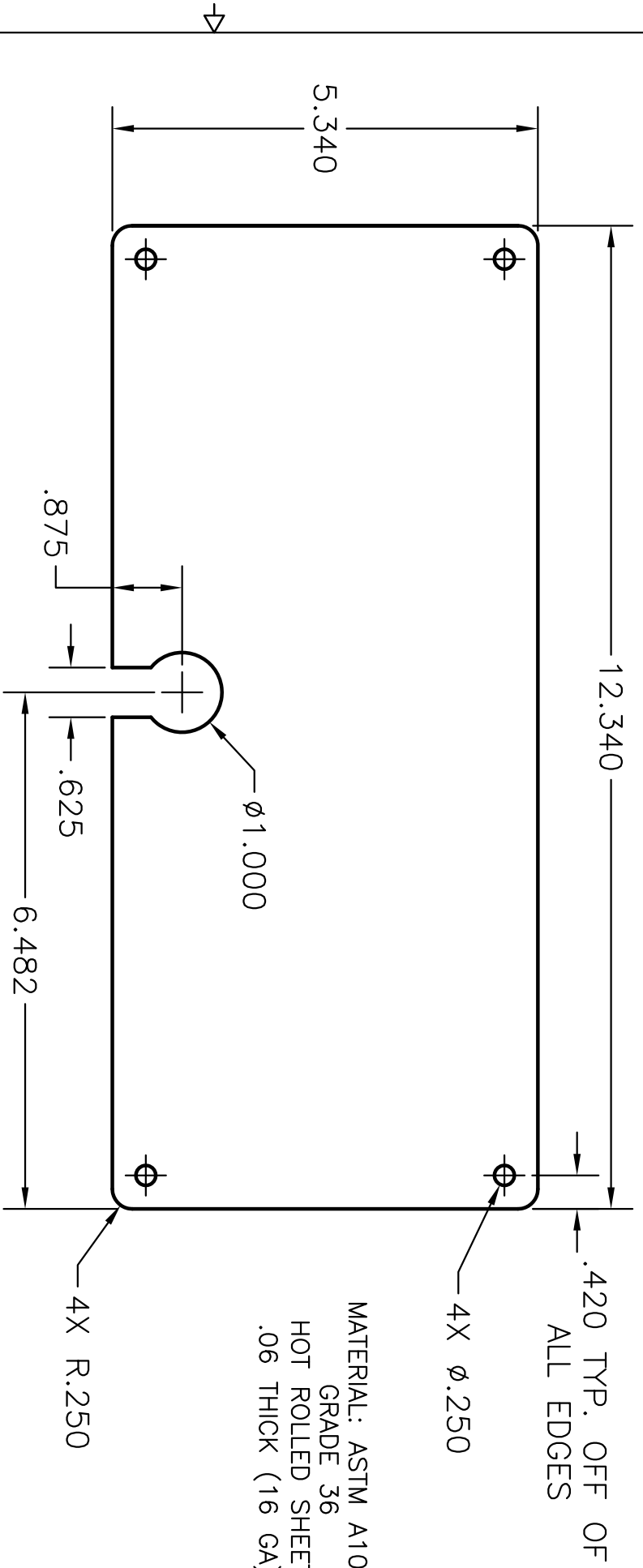
UNLESS OTHERWISE SPECIFIED: ALL DIMENSIONS ARE INCHES

UNSPECIFIED TOLERANCES

LENGTH	SURFACE FINISH
.0 = ±.1	RMS 140
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.000 = ±.005	ANGULAR ±.25°
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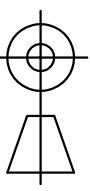
ITEM	PART NO.	DESCRIPTION	QTY
UNIVERSITY OF MEMPHIS DEPARTMENT OF ENGINEERING TECHNOLOGY PANEL, ACCESS, FRONT TX SERIES EXTRUDER			
SIZE	DATE	DWG NO	REV
A	4-25-2014	TX-005	A
SCALE: 1=1		DRAWN BY: R.H.	

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED
A	ORIGINAL RELEASE	4-25-2014	



MATERIAL: ASTM A1011
 GRADE 36
 HOT ROLLED SHEET
 .06 THICK (16 GA)

DIMENSIONING & TOLERANCING IN ACCORDANCE WITH ANSI/ASME Y14.5M - 1994



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UNSPECIFIED TOLERANCES

LENGTH	SURFACE FINISH
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.00 = ±.01	μin
.000 = ±.005	ANGULAR ±.25°
.0000 = ±.0005	

UNIVERSITY OF MEMPHIS
 DEPARTMENT OF ENGINEERING TECHNOLOGY

PANEL, ACCESS, TOP
 TX SERIES EXTRUDER

ITEM	PART NO.	DESCRIPTION	QTY

SIZE	DATE	DWG NO	REV
A	4-25-2014	TX-004	A

SCALE: 1=1 DRAWN BY: R.H.