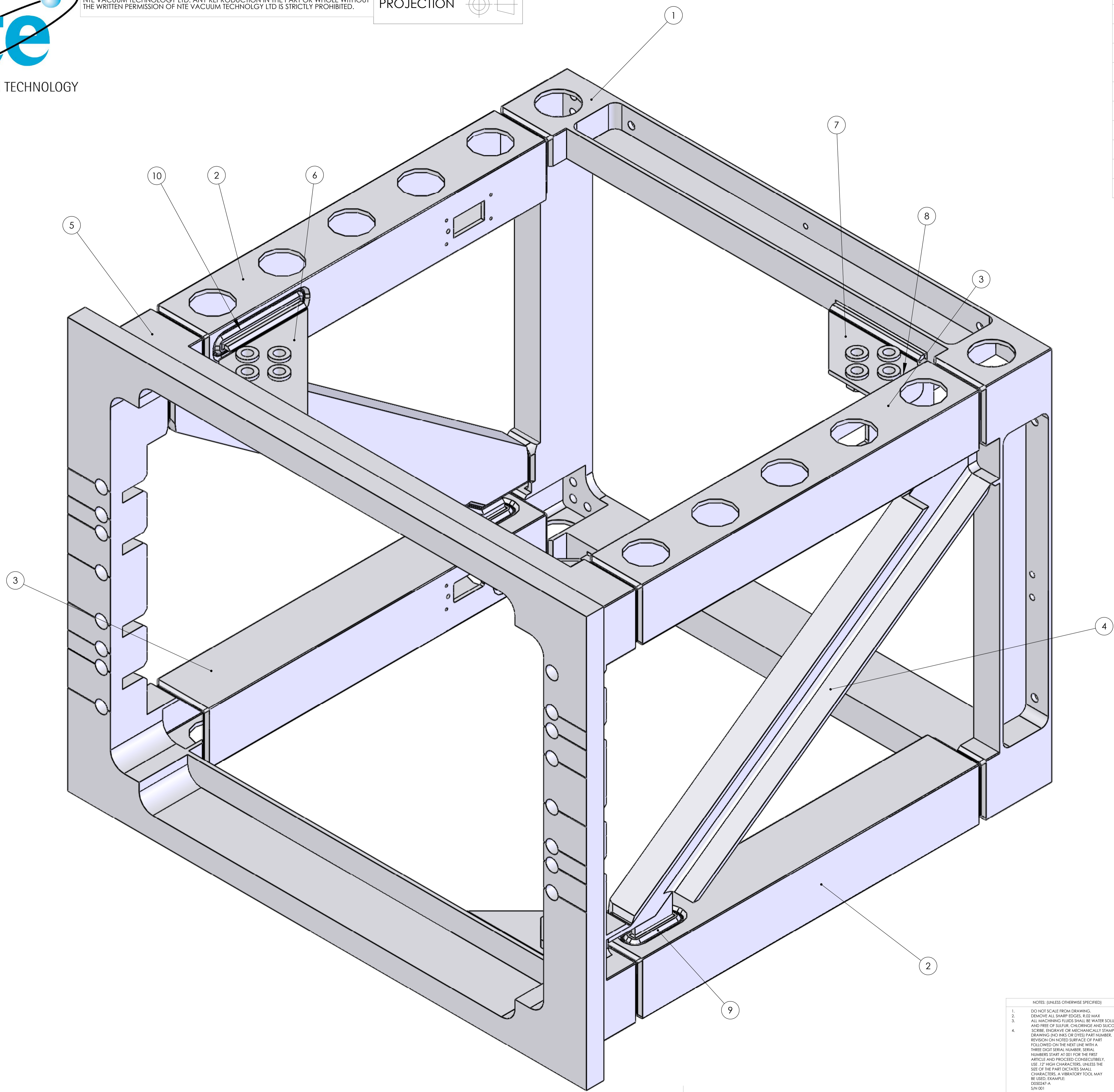


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	D060494-00-K	BOTTOM RING	1
2	D060496-00-K	VERTICAL BOX No1	2
3	D060497-00-K	VERTICAL BOX No2	2
4	D060499-00-K	WELDED TRUSS MEMBER No1	2
5	D060493-00-K	TOP RING	1
6	D060500-00-K	FULL GUSSET	2
7	D060501-00-K	SHORT GUSSET	2
8	D060499-02_02	SHORT GUSSET SUPPORT	2
9	D060499-02_03	WELDED TRUSS MEMBER SUPPORT	4
10	D060499-02_01	FULL GUSSET SUPPORT	2



NOTES: (UNLESS OTHERWISE SPECIFIED)

- DO NOT SCALE FROM DRAWING.
- REMOVE ALL SHARP EDGES R.02 MAX
- ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SILICONE, CHLORINE AND SULFONE. SCRIBE, ENGRAVE OR MECHANICALLY STAMP DRAWING (DO NOT USE) PART NUMBER, REVISION ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE 12 HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALL CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE: D060494-001
- UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: XX ±0.01mm XX ±0.005mm ANGULAR: ±0.5°

FINISH: CLEAN to LIGO SPEC

DEBUR AND BREAK SHARP EDGES

DO NOT SCALE DRAWING

REVISION: B

PARTS LIST CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY IGR, GLASGOW UNIVERSITY GEO440 GROUP

TITLE: UPPER STRUCTURE ASSEMBLY

DRAWN: TOMASZ BAK DATE: 12.04.2008

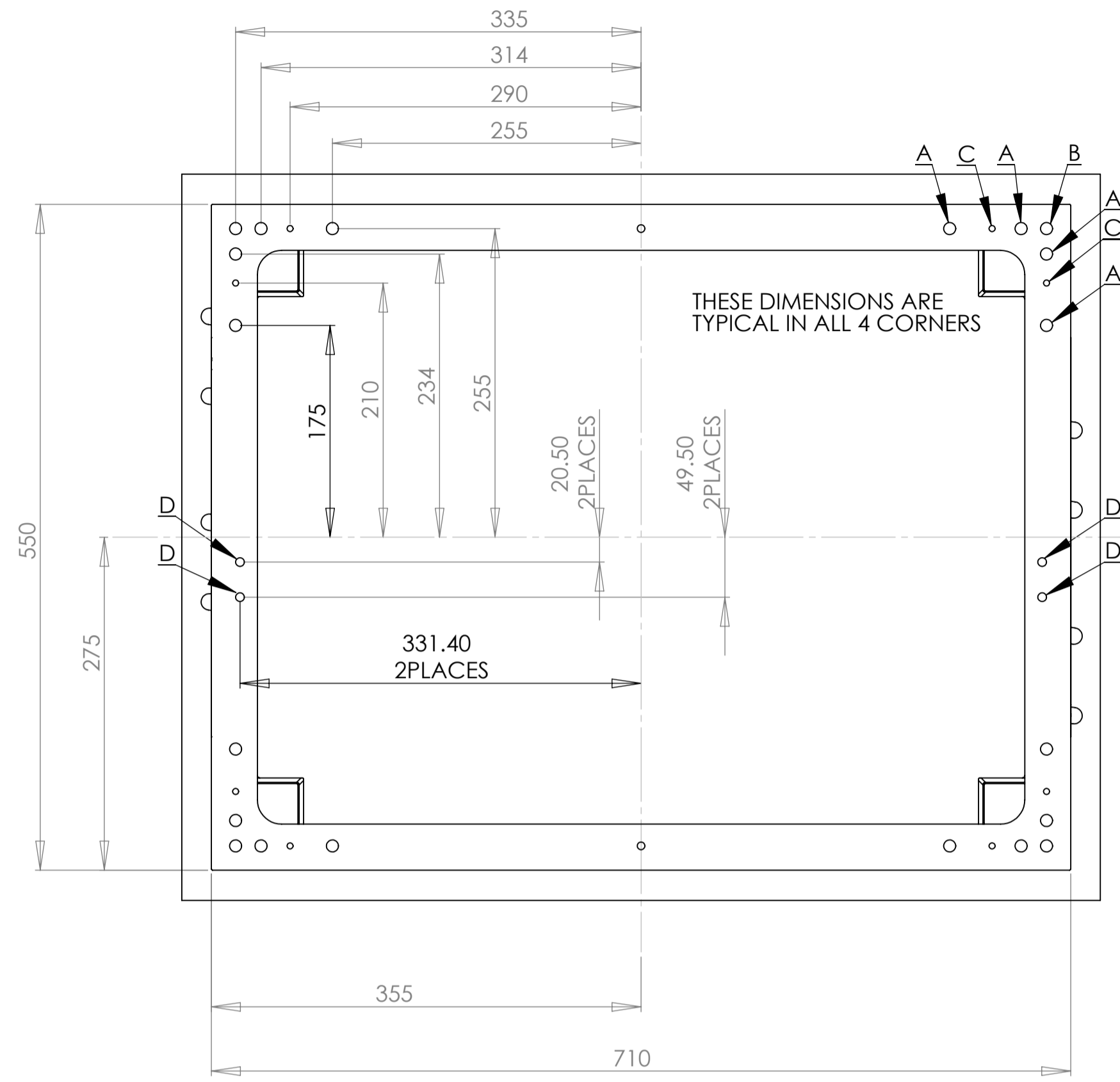
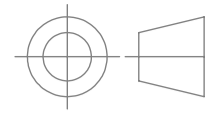
CHKD: APPVD: MFG: Q.A:

MATERIAL: Aluminium Alloy 6082

DWG NO: D060492-00-K

SCALE: 1:3

SHEET 1 OF 3



NOTE

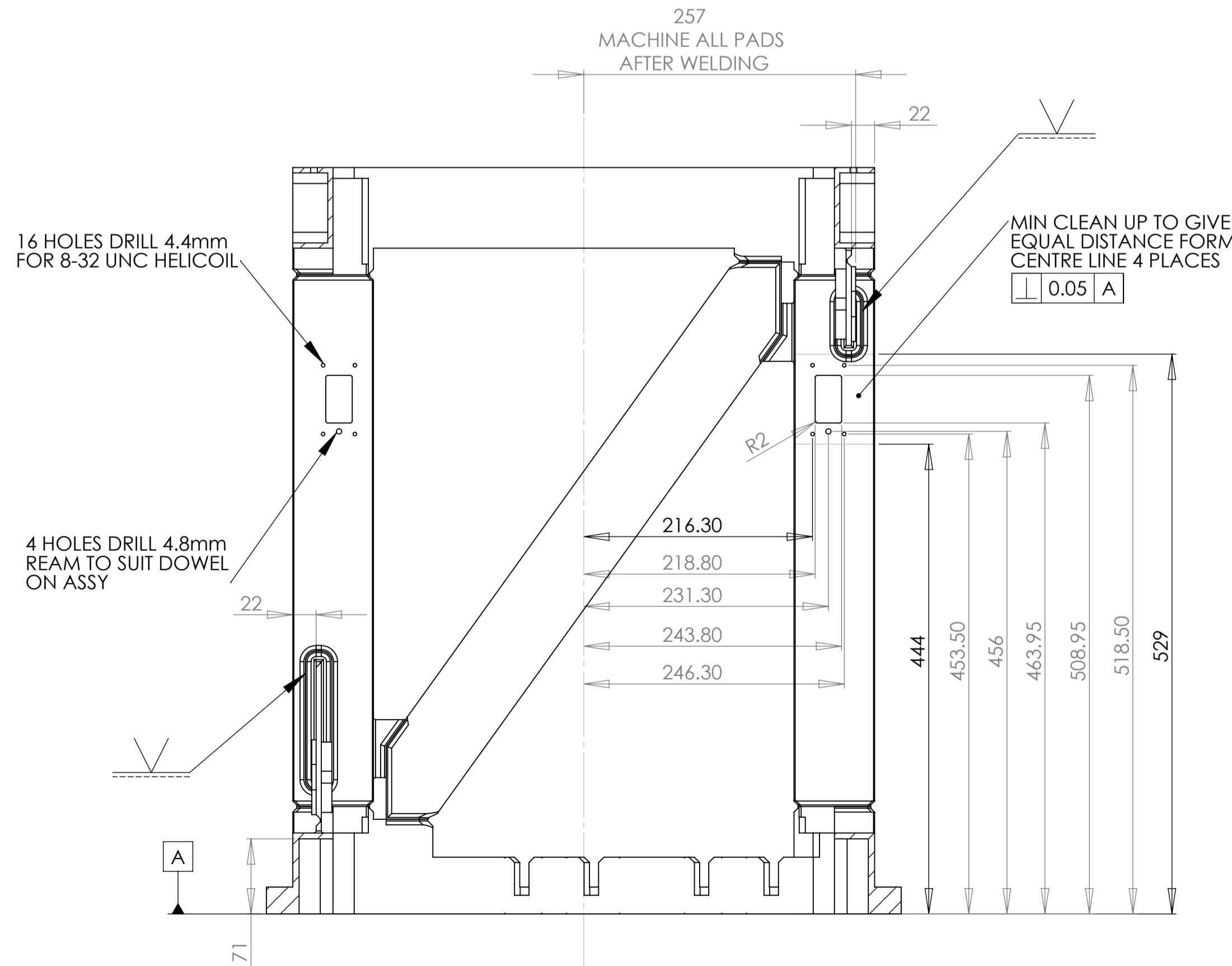
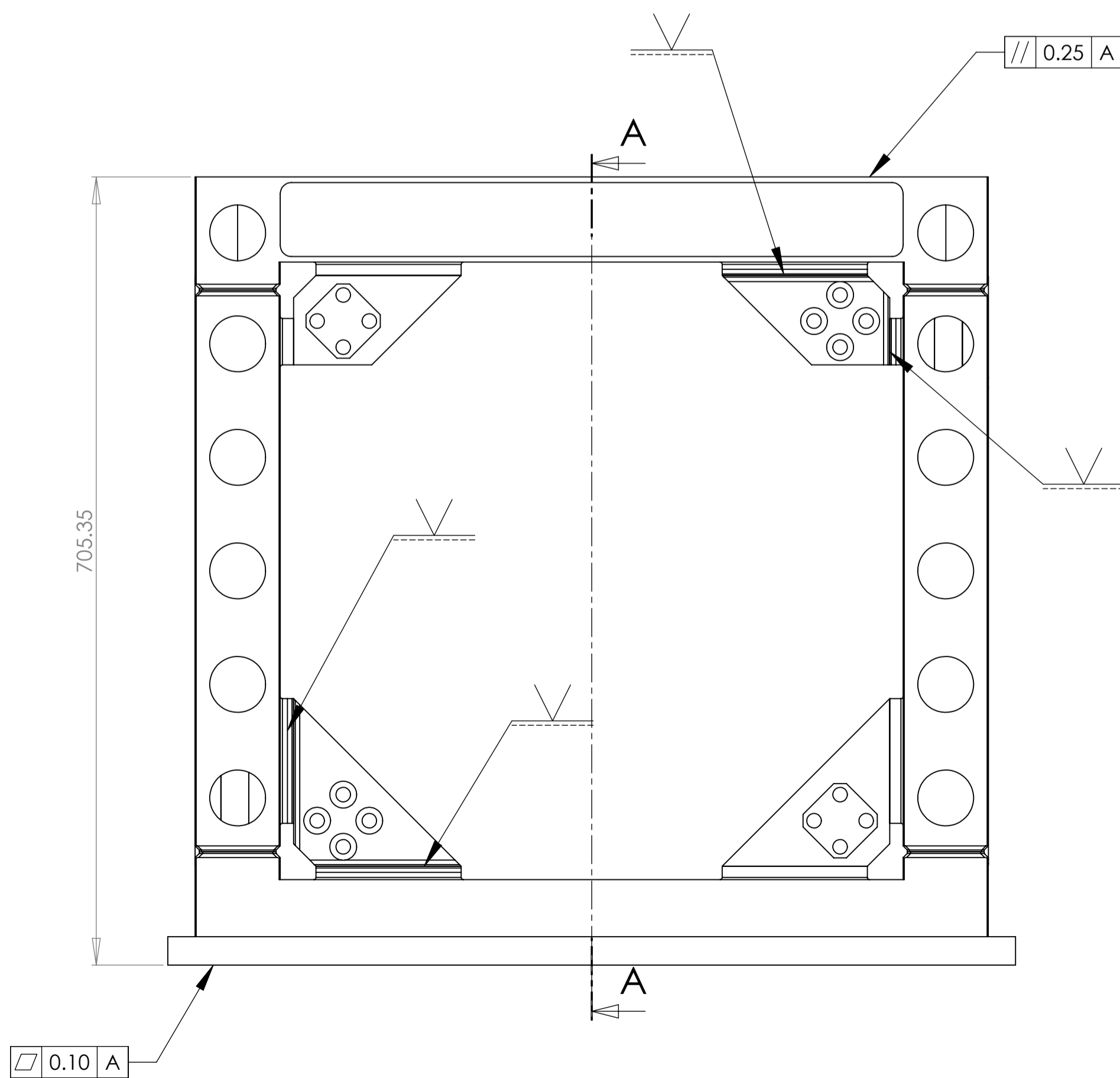
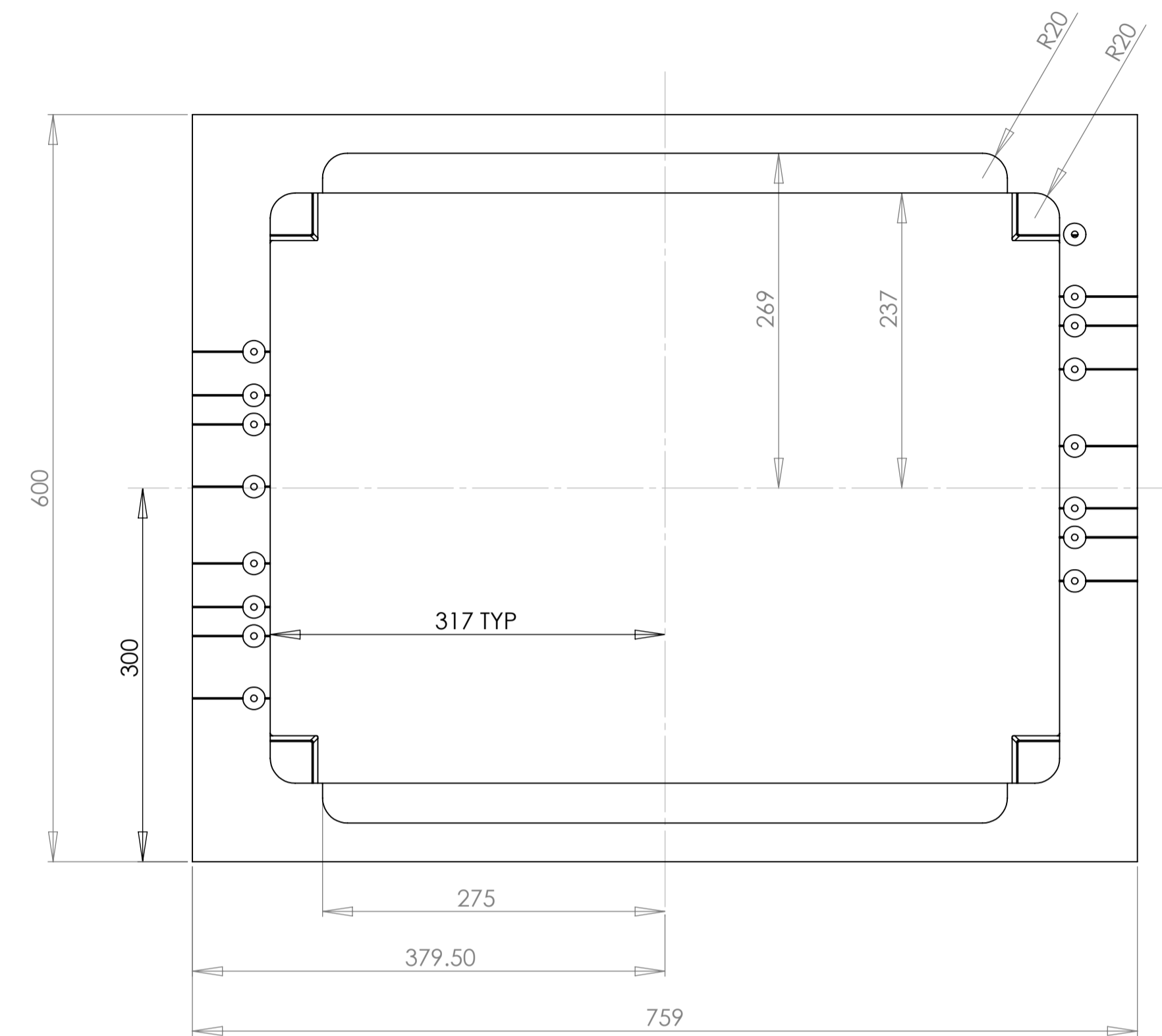
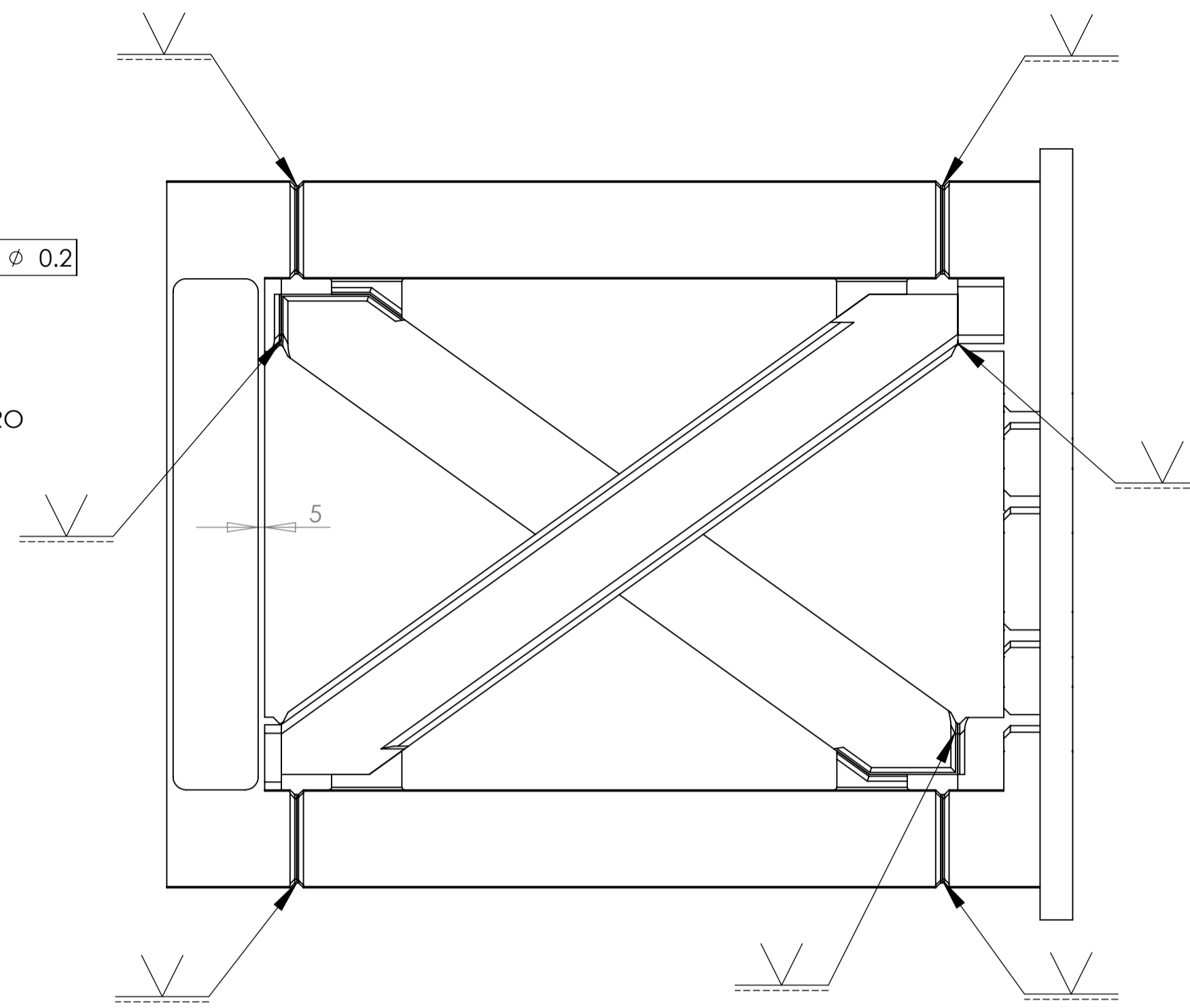
16 HOLES MARKED "A" ϕ 10.4mm THRO FIRST FACE ONLY

4 HOLES MARKED "B" ϕ 8.2 - 8.3 \pm 0.2

10 HOLES MARKED "C" 1/4-20 UNC HELICOILS THRO FIRST FACE ONLY \pm 0.25

4 HOLES MARKED "D" ϕ 7.2mm THRO BOTH FALCES OF BOTTOM RING

THESE DIMENSIONS ARE TYPICAL IN ALL 4 CORNERS



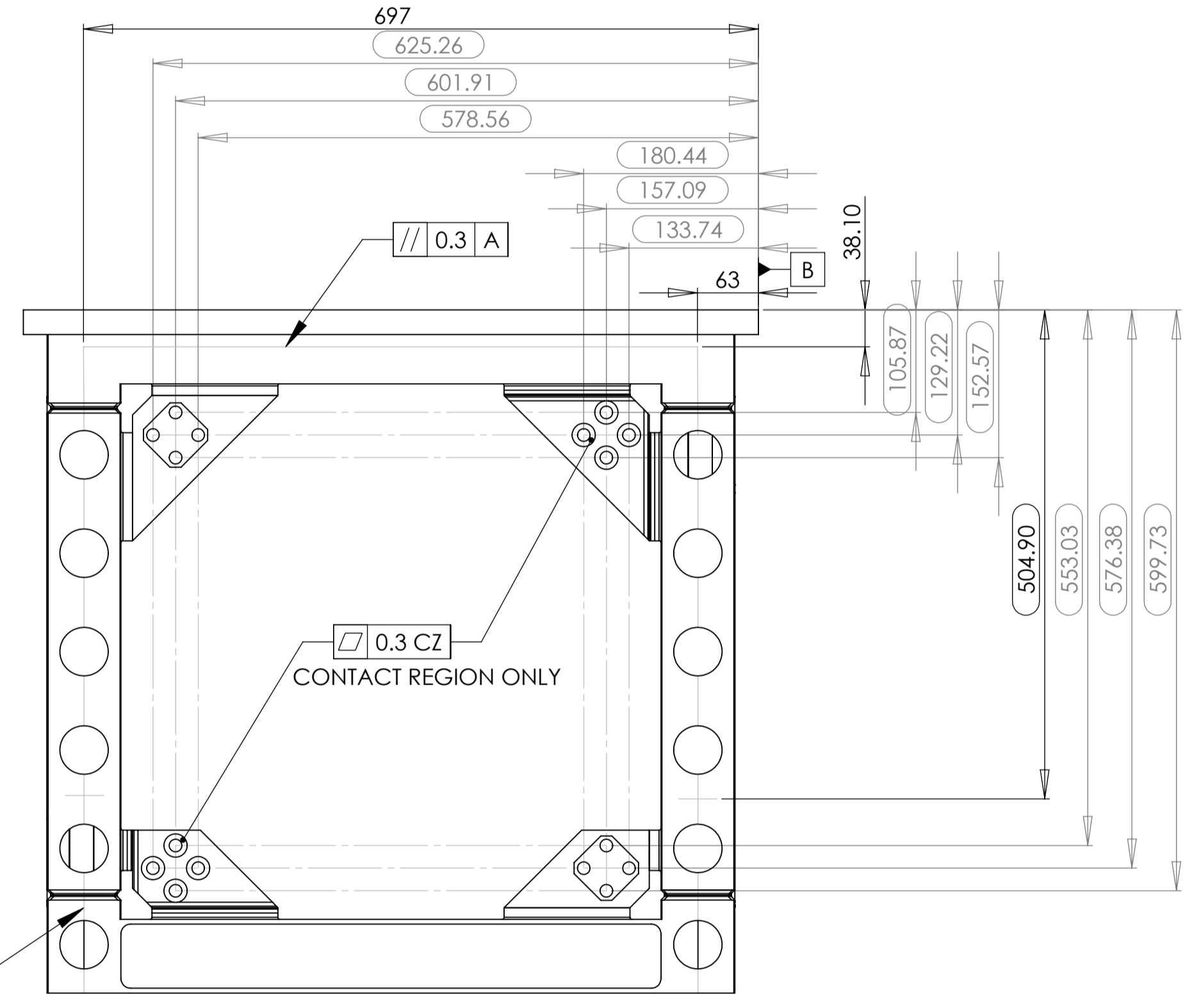
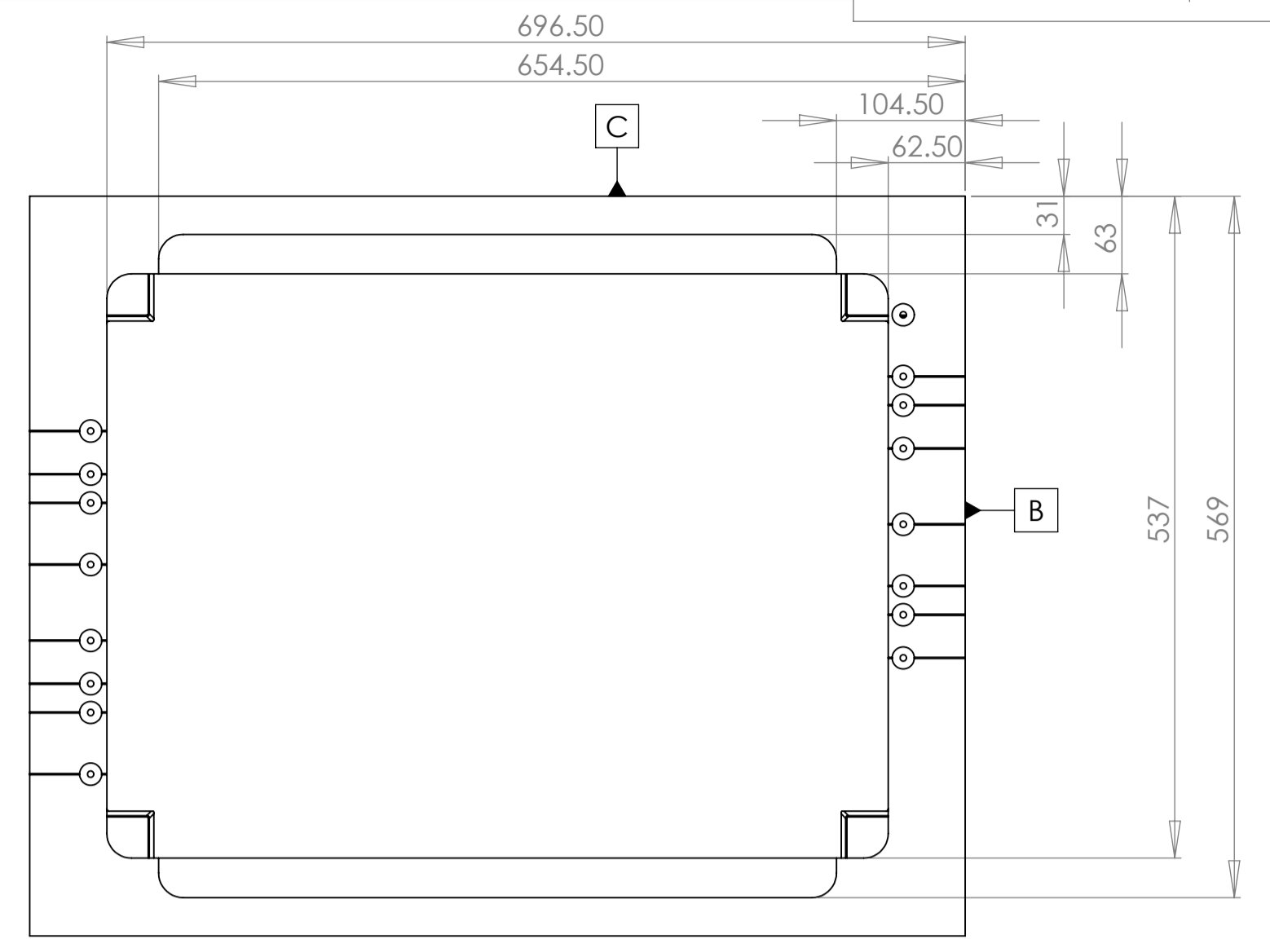
SECTION A-A

<p>NOTES: (UNLESS OTHERWISE SPECIFIED)</p> <ol style="list-style-type: none"> DO NOT SCALE FROM DRAWING. REMOVE ALL SHARP EDGES R20 MAX ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SILICONE, CHLORINE AND SILICONE. SCRIBE, ENGRAVE OR MECHANICALLY STAMP DRAWING (DIN) AND (DIN) PART NUMBER, REVISION ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER, SERIAL NUMBER START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE 12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALL CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE: D0624F-A S/N001 		<p>UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH:</p> <p>LINEAR: \pm 0.01mm \pm 0.005mm</p> <p>ANGULAR: \pm 0.5°</p>	<p>FINISH: CLEAN TO LIGO SPEC</p>	<p>DEBUR AND BREAK SHARP EDGES</p>	<p>DO NOT SCALE DRAWING</p>	<p>REVISION B</p>
<p>DRAWN: TOMASZ BAK</p> <p>DATE: 12.04.2008</p>		<p>NAME: CALIFORNIA INSTITUTE OF TECHNOLOGY</p> <p>LOCATION: MASSACHUSETTS INSTITUTE OF TECHNOLOGY</p> <p>ADDRESS: 100, GLASGOW UNIVERSITY G00 400 GROUP</p>		<p>TITLE: UPPER STRUCTURE ASSEMBLY</p>		<p>DWG NO: D060492-00-K</p>
<p>MATERIAL: Aluminium Alloy 6082</p>		<p>WEIGHT:</p>		<p>SCALE: 1:4</p>		<p>SHEET 2 OF 3</p>



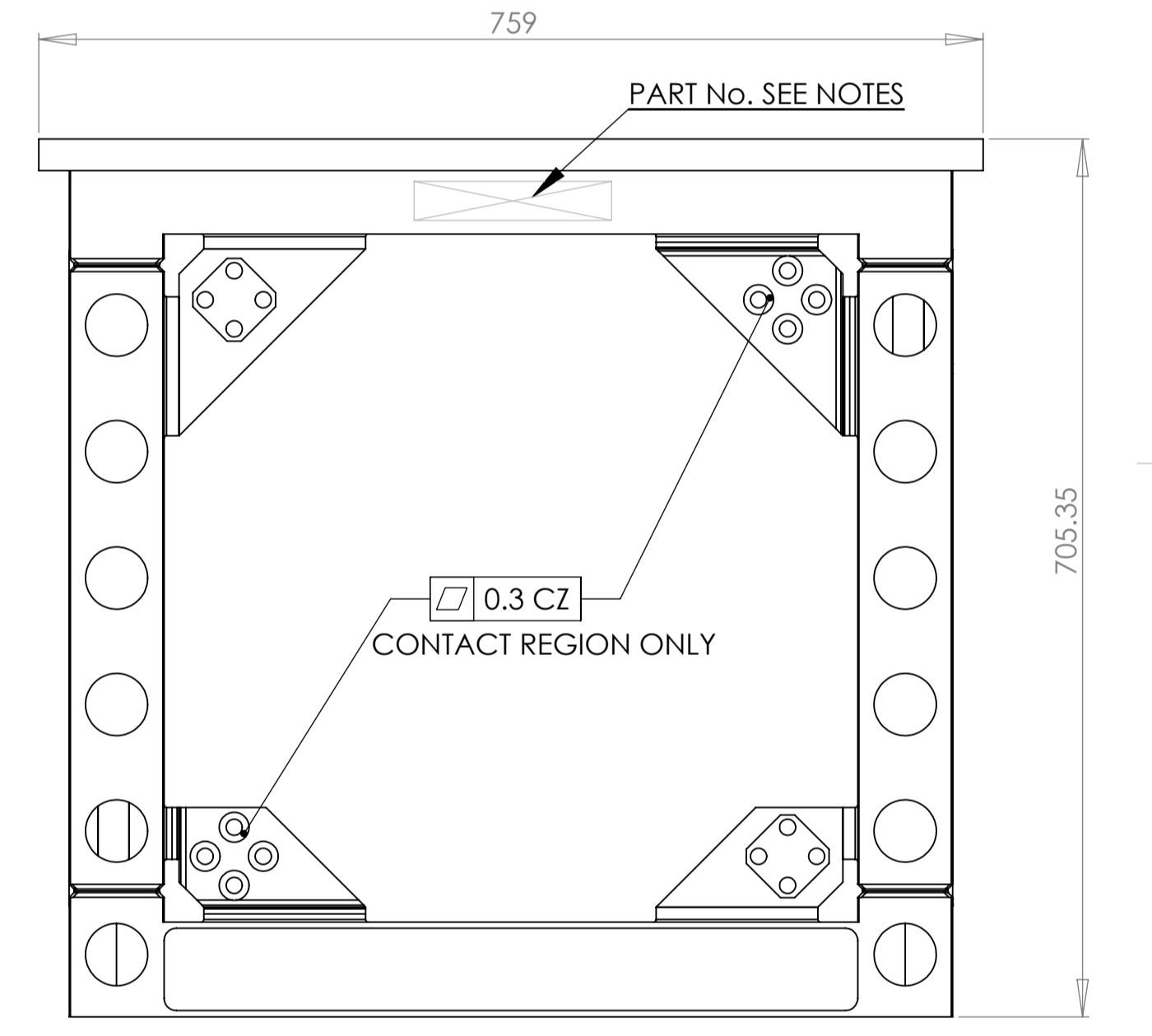
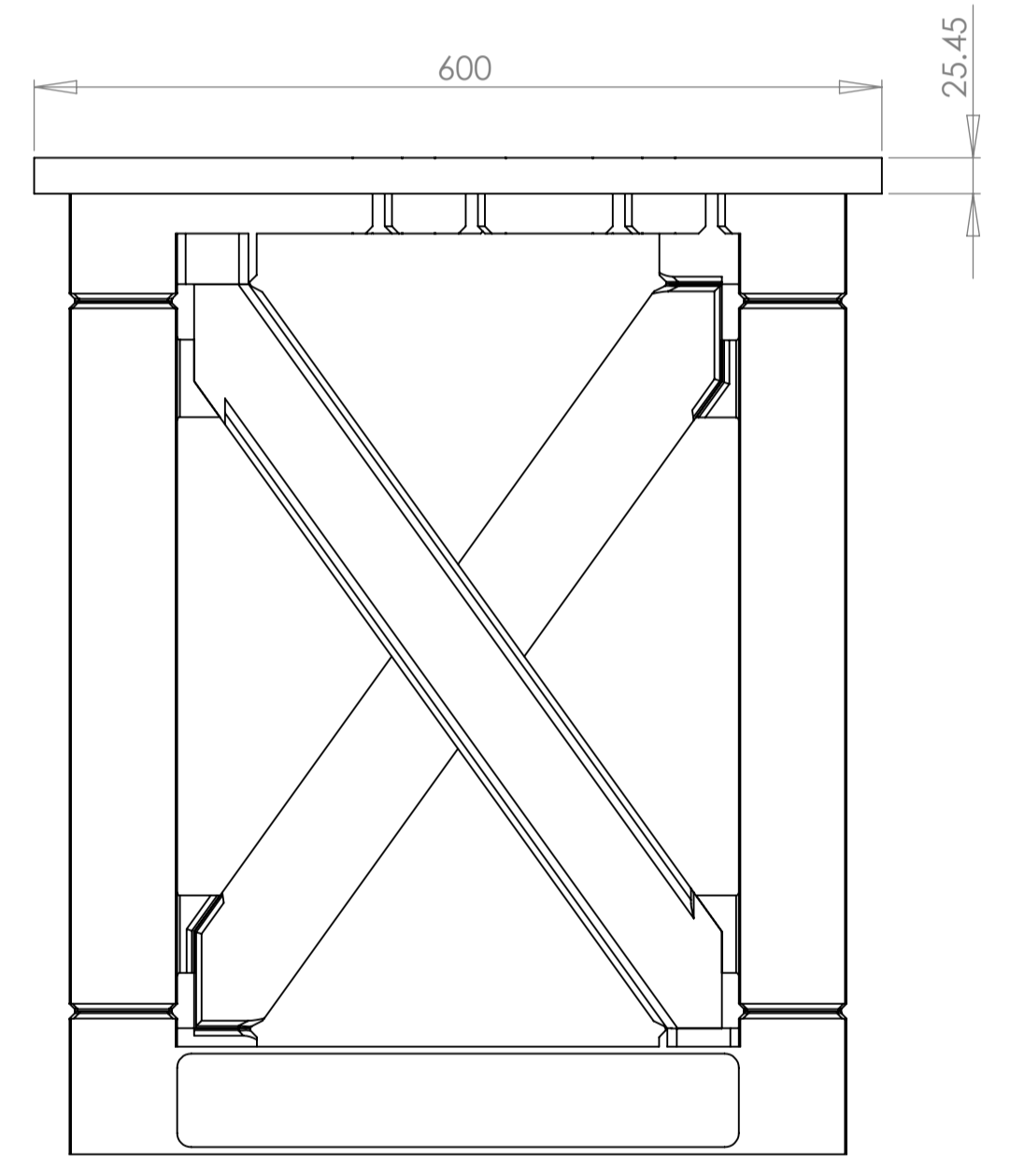
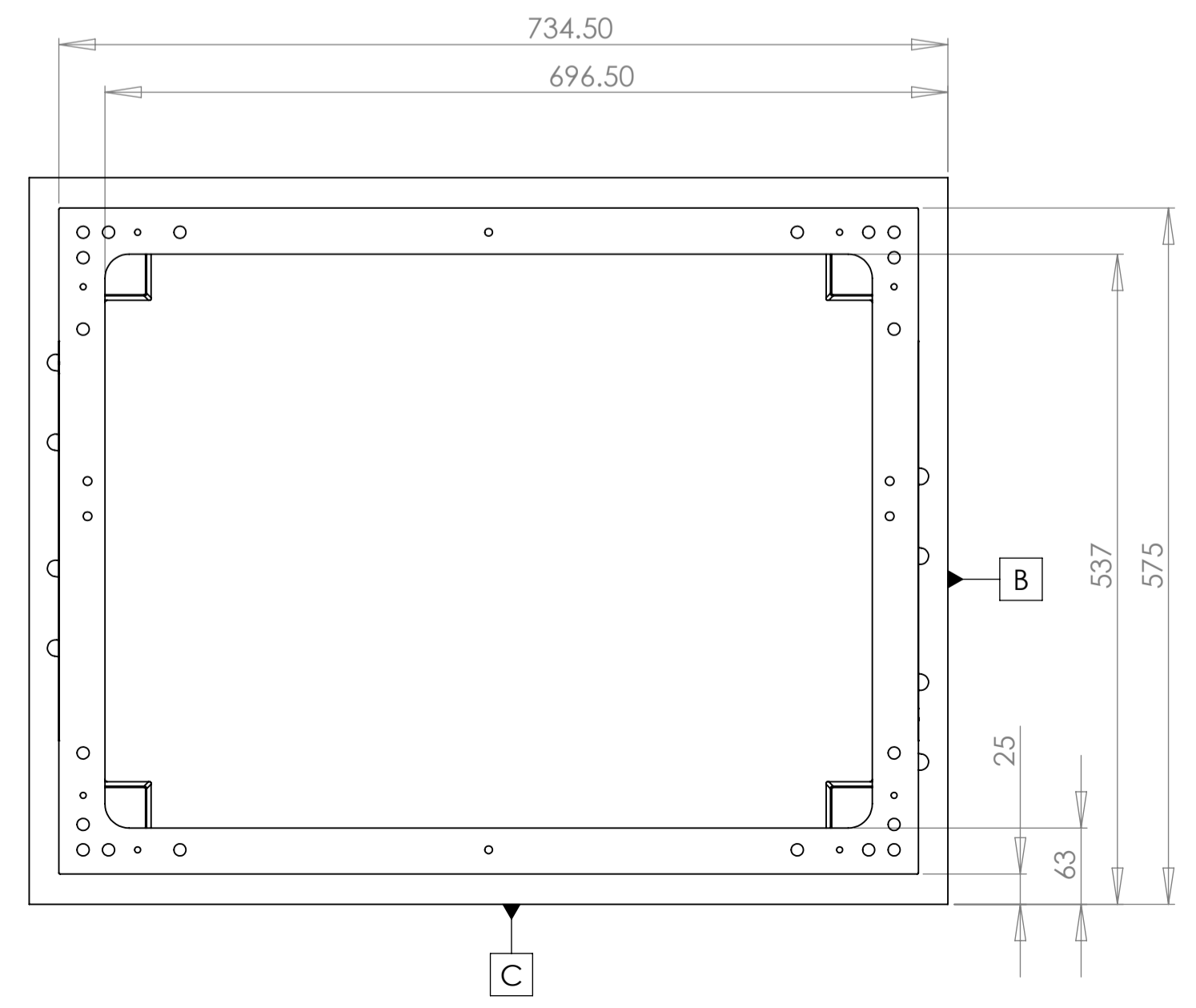
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF NTE VACUUM TECHNOLOGY LTD. ANY REPRODUCTION IN THE PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF NTE VACUUM TECHNOLOGY LTD IS STRICTLY PROHIBITED.

PROJECTION



ENGRAVED LINES AS DETAIL A
 ϕ 0.3 A

TAP ALL HOLES DIMENSIONED ON THIS VIEW
 3/8-16 UNC THRO 0.005" OBERSIZE ϕ 0.3 B A



DRAWING SHOWING FULL UPPER STRUCTURE WELDMENT
 DRAWING NOT INTENDED FOR MANUFACTURE
 DETAIL OF WELD PREPS, TOOLING RADS, FAB STEPS EXCLUDED
 SHEET 1 SHOWS ASSEMBLY
 SHEET 2,3 & 4 SHOW FULL WELDMENT DETAIL

NOTES: (UNLESS OTHERWISE SPECIFIED) 1. DO NOT SCALE FROM DRAWING. 2. REMOVE ALL SHARP EDGES R.02 MAX ALL MACHINING FLUIDS SHALL BE WATER SOLUBLE AND FREE OF SILICONE, CHLORINE AND SULFONE. 3. SCRIBE, ENGRAVE OR MECHANICALLY STAMP DRAWING (DO NOT USE) PART NUMBER, REVISION ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER, SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE 12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALL CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE: D060492-A S/N001 4.		UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS SURFACE FINISH: TOLERANCES: LINEAR: XX \pm 0.01mm XX \pm 0.005mm ANGULAR: \pm 0.5°	FINISH: CLEAN to LIGO SPEC	DEBUR AND BREAK SHARP EDGES	DO NOT SCALE DRAWING REVISION B
DRAWN: TOMASZ BAK DATE: 12.04.2008		CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY IOR, GLASGOW UNIVERSITY GEO4 400 GROUP		PARTS LIST TITLE: UPPER STRUCTURE WELDMENT	
MATERIAL: Aluminium Alloy 6082		DWG NO: D060492-00-K		A1	
WEIGHT:		SCALE: 1:3		SHEET 3 OF 3	