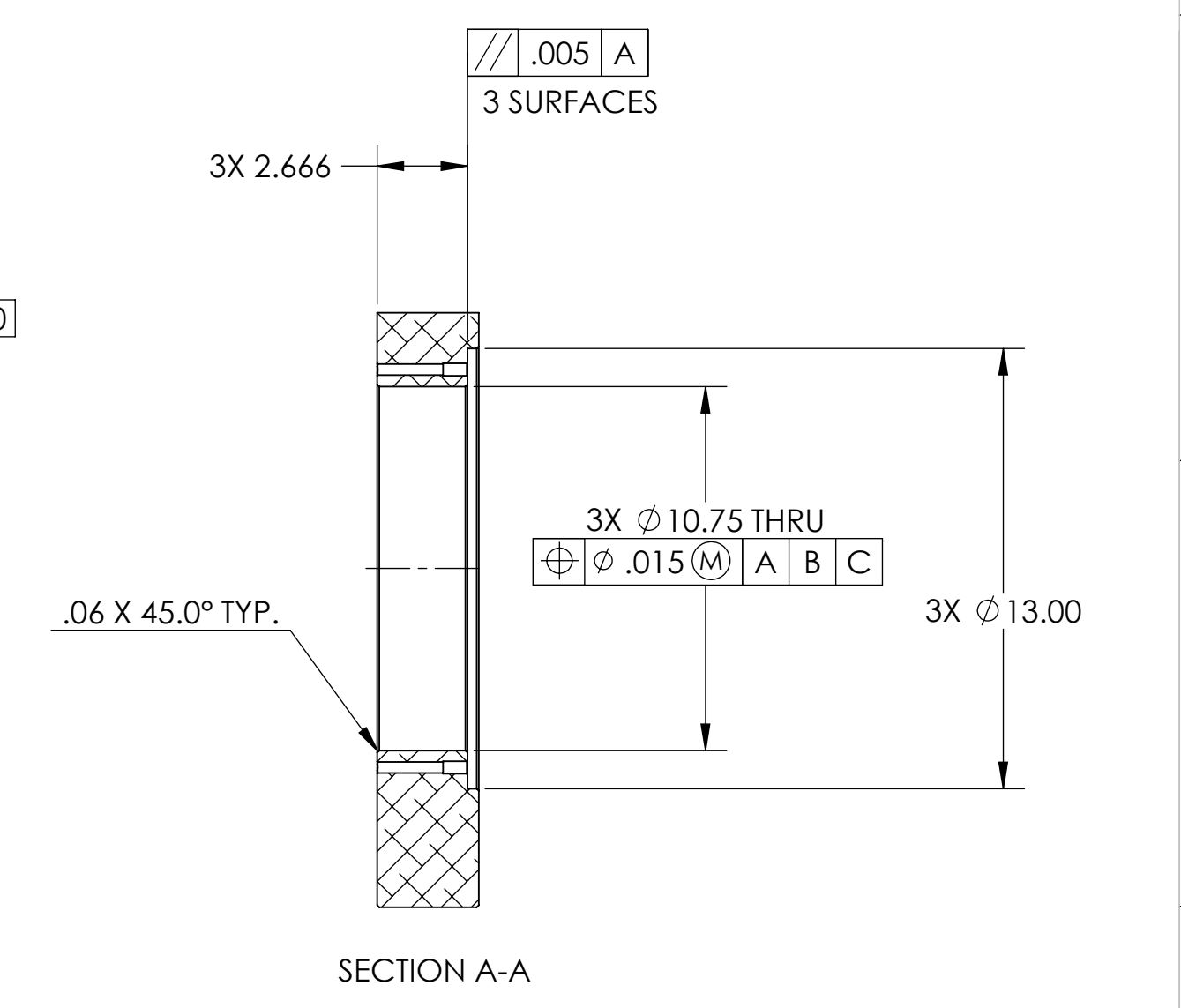
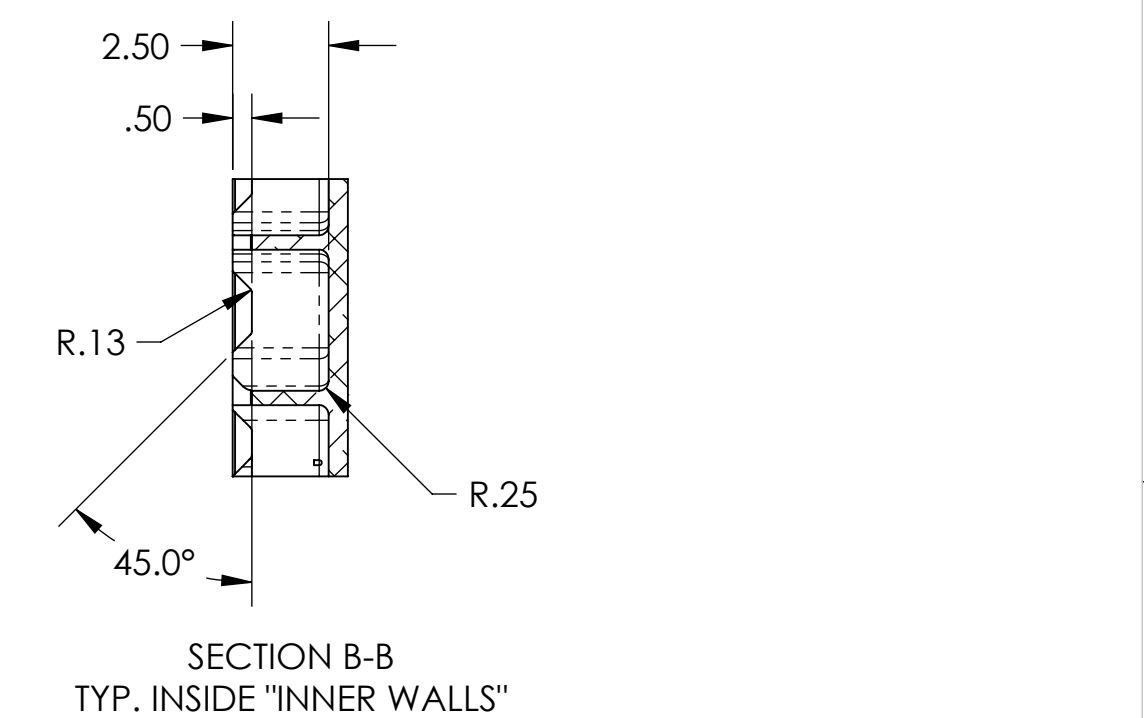
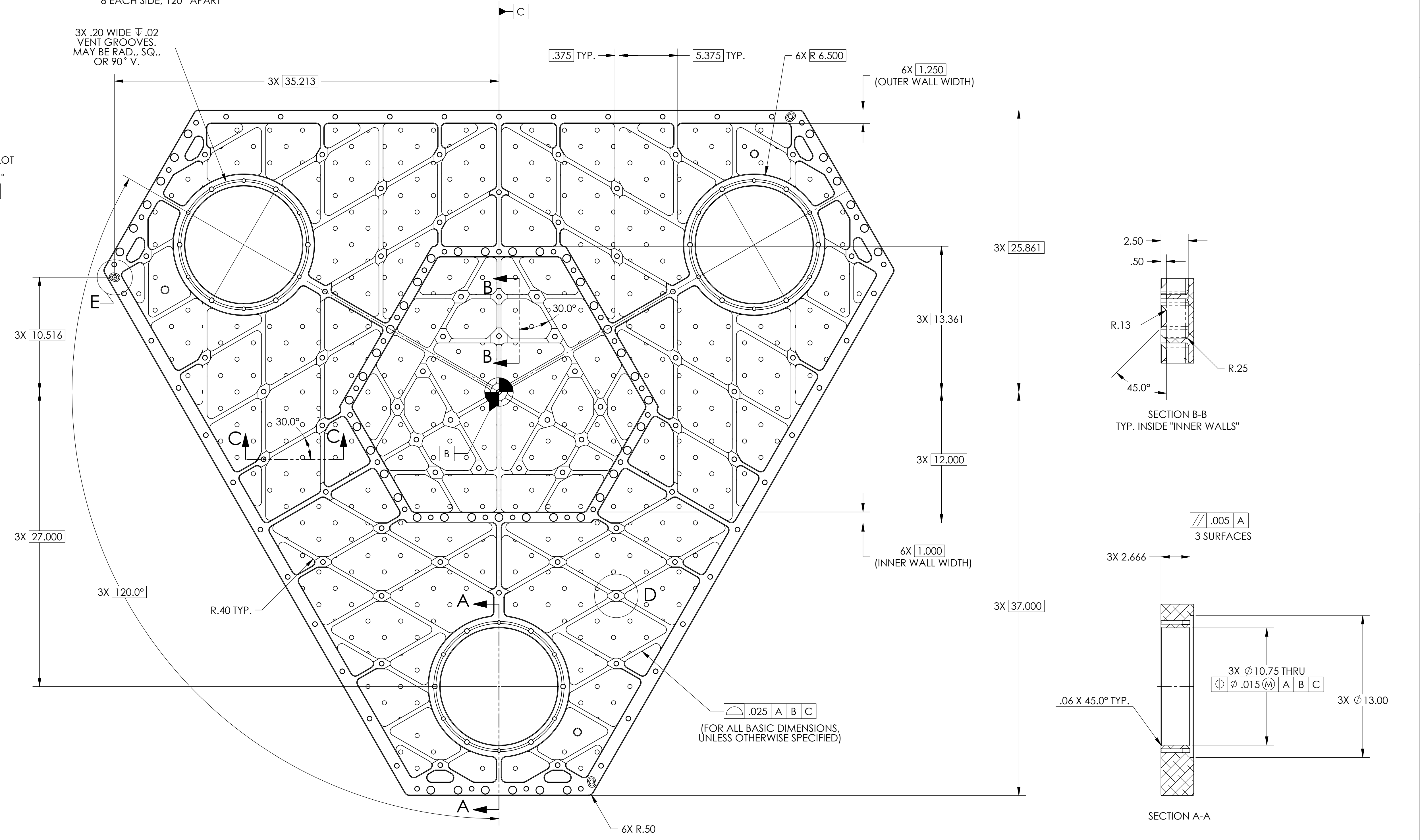
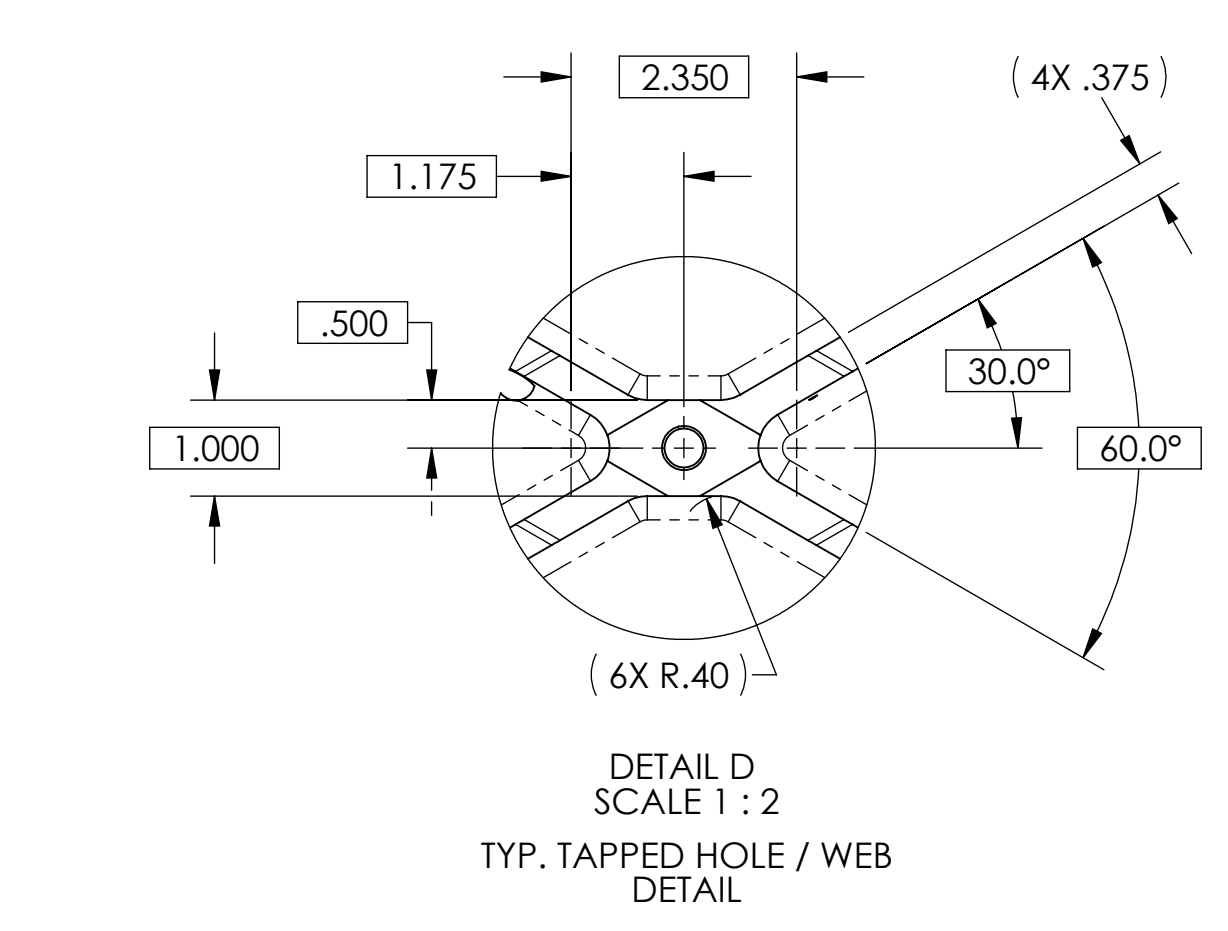
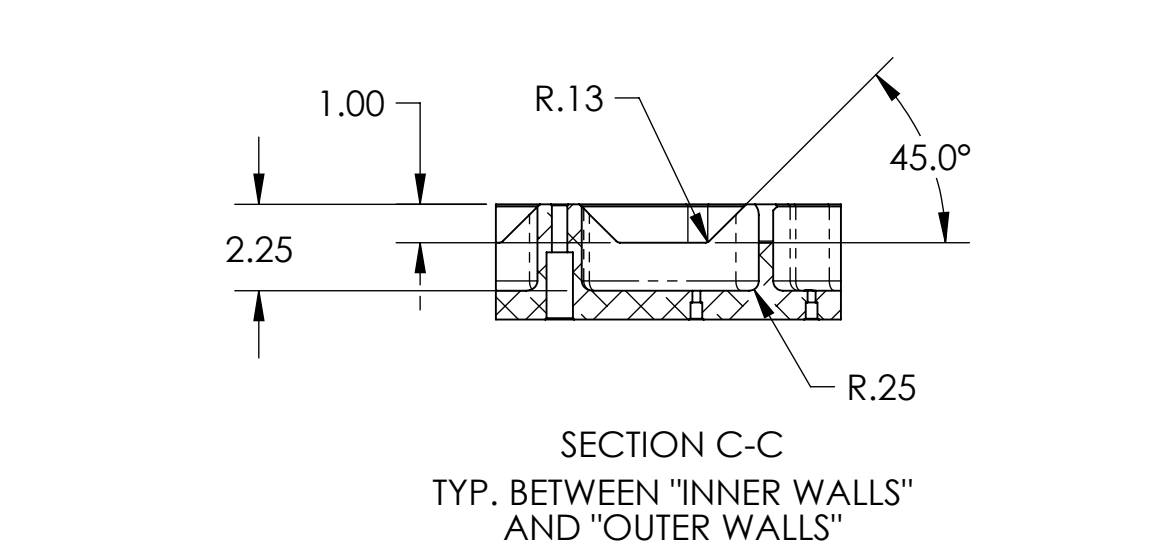
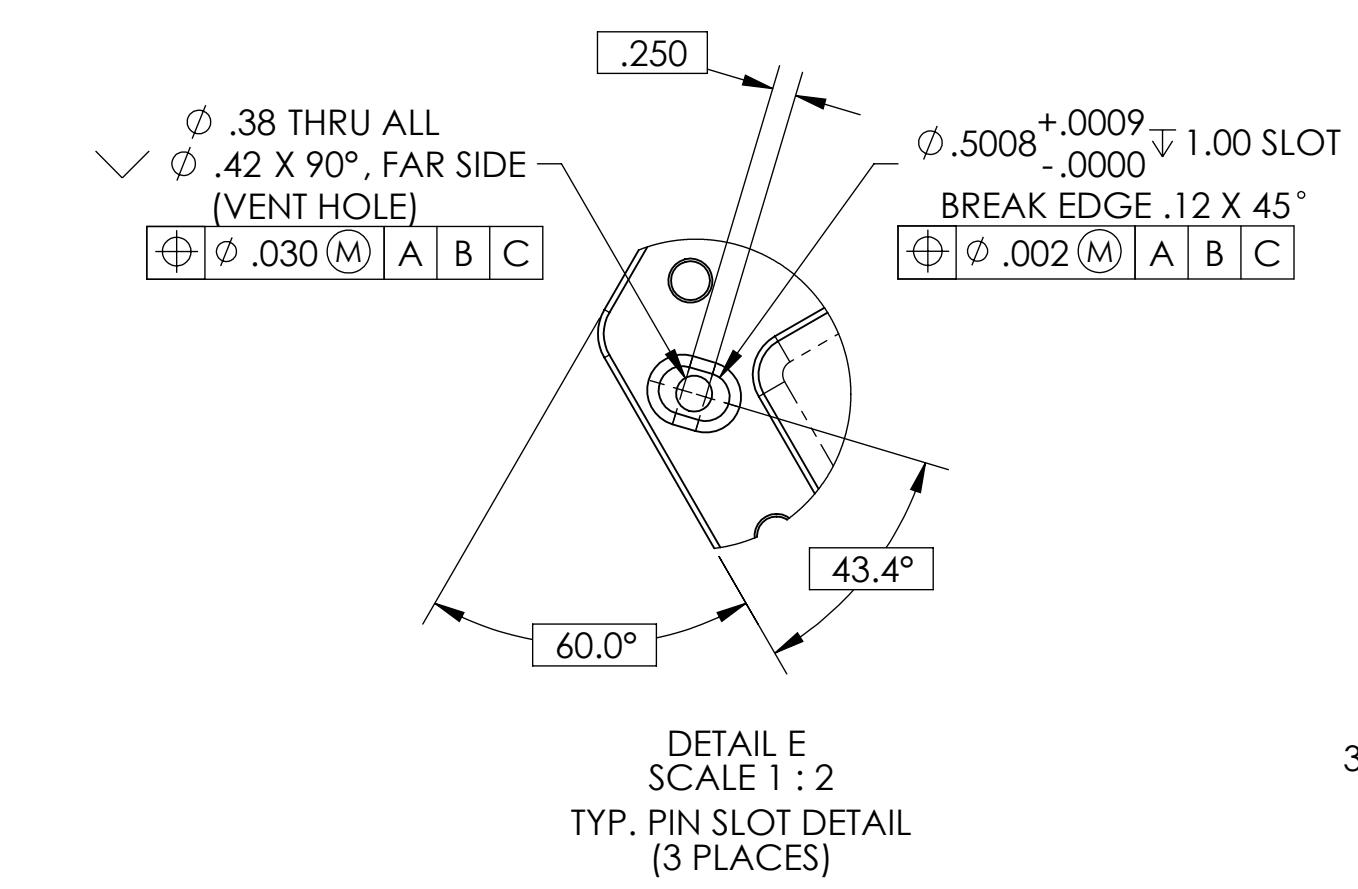
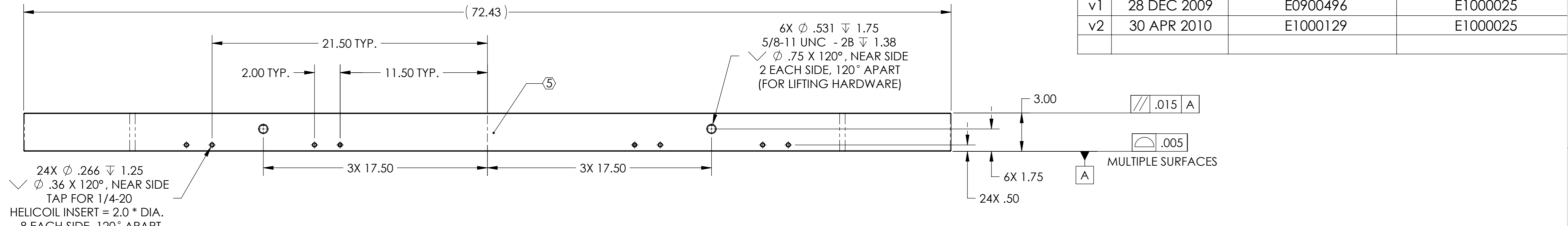


REV.	DATE	DCN #	DRAWING TREE #
v1	28 DEC 2009	E0900496	E1000025
v2	30 APR 2010	E1000129	E1000025

NOTES CONTINUED:

5. SCRIBE, ENGRAVE, OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) 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 MINIMUM 0.25" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. A VIBRATORY TOOL MAY BE USED. EXAMPLE DXXXXXX-VY, TYPE-XX, S/N XXX.
6. THIS DRAWING IS MINIMALLY DIMENSIONED. USE CAD MODEL TO EVALUATE FULL DIMENSIONAL DETAIL. UNLESS OTHERWISE SPECIFIED, THE MODEL TAKES PRECEDENCE OVER THE DRAWING WHEREVER THERE ARE DISCREPANCIES.
7. UNLESS OTHERWISE SPECIFIED, ALL SURFACES MUST SATISFY .025 PROFILE TOLERANCE WITH RESPECT TO DATUMS A, B, AND C.
8. APPROXIMATE WEIGHT = 347 LB.
9. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED.
10. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.
11. A TAPPED HOLE PITCH DIAMETER LIMIT OF H11 APPLIES TO ALL TAPPED HOLES, EXCLUDING THREADED INSERTS AND HOLES LABELED "FOR LIFTING HARDWARE."
12. ALL THREADED INSERTS TO BE INSTALLED BY LIGO PERSONNEL, AFTER DELIVERY OF FINISHED PARTS. USE ONLY NITRONIC 60 INSERTS.

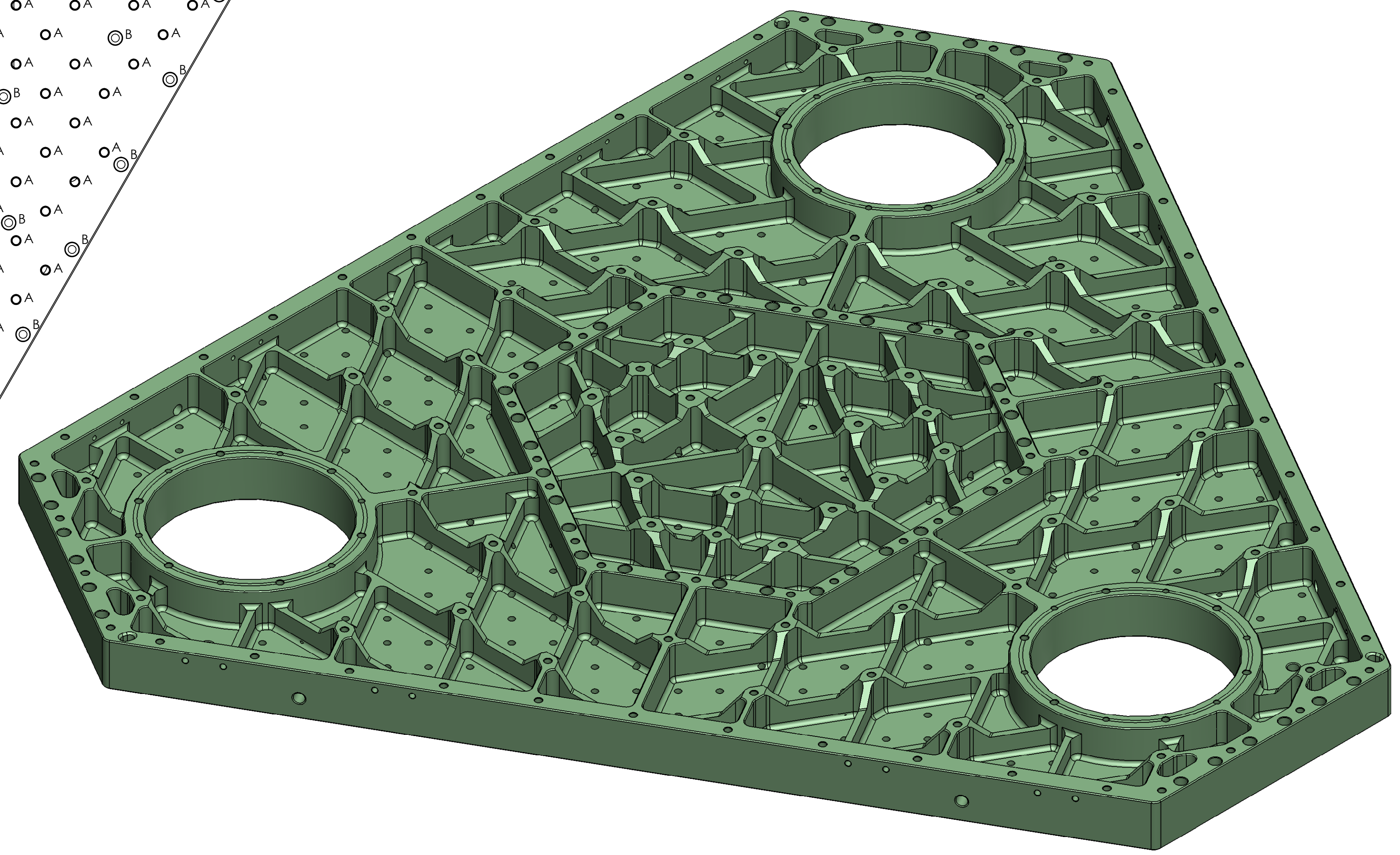
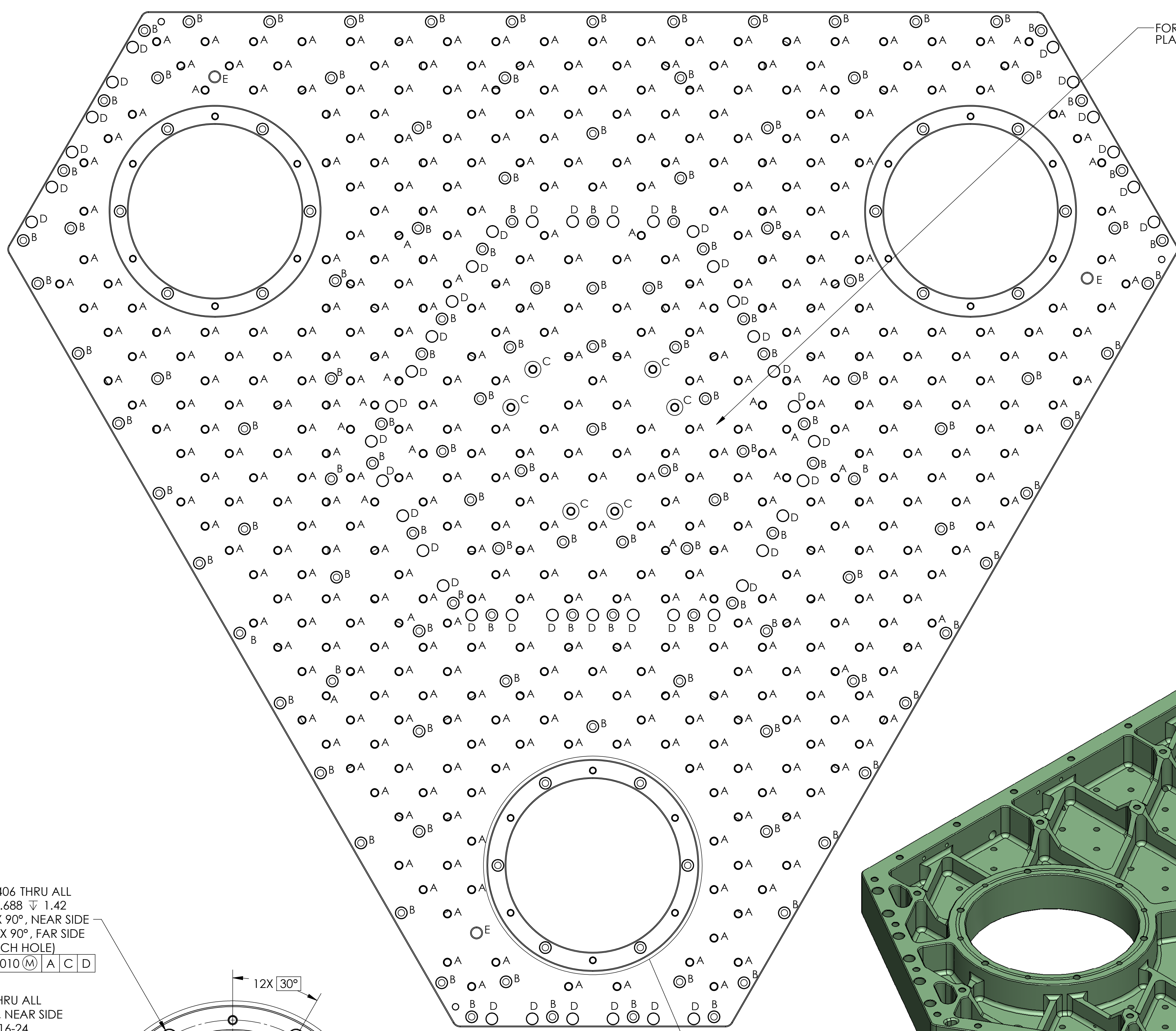


DIMENSIONS ARE IN INCHES		NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)		LIGO CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		PART NAME	
TOLERANCES: .XX ± .015 .XXX ± .005		1. INTERPRET DRAWING PER ASME Y14.5-1994. 2. BREAK ALL EDGES AND CORNERS .03 X 45°. 3. DO NOT SCALE FROM DRAWING. 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.		SYSTEM ADVANCED LIGO SUB-SYSTEM SEI		Keel Plate, Up-Facing, aLIGO BSC ISI	
ANGULAR ± .5°		MATERIAL 6061-T6 Al FINISH 63 μinch		NEXT ASSY D0901181		DESIGNER A.STEIN 28 Dec. 2009 SIZE DWG. NO. D0901519	
						CHECKER F.MATCHARD 28 Dec. 2009	
						APPROVAL K.MASON 28 Dec. 2009 SCALE: 1:5 PROJECTION: SHEET 1 OF 2	

D0901519\_Keel\_Plate-Up-Facing-BSC\_ISI\_PART\_FDM\_REV: X-040\_DRAWING\_FDM\_REV: X-010

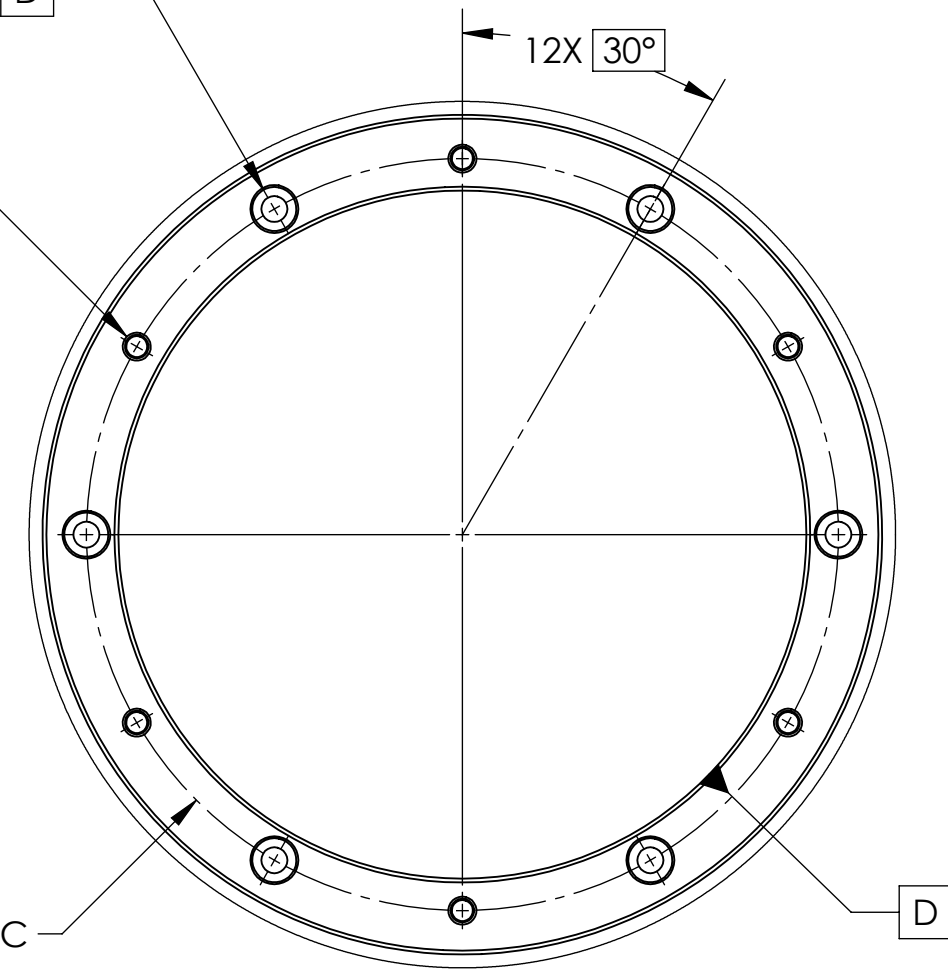
TAG	SIZE	QUANTITY	TOLERANCE
A	$\phi .397 \nabla .88$ $\nabla \phi .52 \times 120^\circ$ , NEAR SIDE TAP FOR 3/8-16 HELICOIL INSERT = 1.0 * DIA.	442	$\oplus \phi .030$ A B C
B	$\phi .406$ THRU ALL $\nabla \phi .688 \nabla 1.75$ $\nabla \phi .75 \times 90^\circ$ , NEAR SIDE $\nabla \phi .46 \times 90^\circ$ , FAR SIDE	127	$\oplus \phi .010$ (M) A B C
C	$\square \phi 1.00$ SPOTFACE $\nabla .02$ $\phi .397 \nabla .75$ $\nabla \phi .52 \times 120^\circ$ , NEAR SIDE TAP FOR 3/8-16 HELICOIL INSERT = 1.0 * DIA.	6	$\oplus \phi .010$ A B C
D	$\phi .688$ THRU ALL $\nabla \phi .75 \times 90^\circ$ , NEAR SIDE $\nabla \phi .75 \times 90^\circ$ , FAR SIDE	51	$\oplus \phi .030$ (M) A B C
E	$\phi .531$ THRU 5/8-11 UNC - 2B THRU $\nabla \phi .75 \times 120^\circ$ , NEAR SIDE $\nabla \phi .75 \times 120^\circ$ , FAR SIDE	3	$\oplus \phi .030$ A B C FOR LIFTING HARDWARE

FOR SHIPPING:  
PLACE INTO CRATE WITH THIS SIDE FACING UP.



18X  $\phi .406$  THRU ALL  
 $\square \phi .688 \nabla 1.42$   
 $\nabla \phi .75 \times 90^\circ$ , NEAR SIDE  
 $\nabla \phi .46 \times 90^\circ$ , FAR SIDE  
 (6 EACH HOLE)  
 $\oplus \phi .010$  (M) A C D

18X  $\phi .328$  THRU ALL  
 $\nabla \phi .44 \times 120^\circ$ , NEAR SIDE  
 TAP FOR 5/16-24  
 HELICOIL INSERT = 2.0 \* DIA.  
 $\nabla \phi .36 \times 90^\circ$ , FAR SIDE  
 (6 EACH HOLE)  
 $\oplus \phi .010$  A C D



DETAIL F  
SCALE 1 : 3

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 MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SIZE DWG. NO. **D0901519** REV. **v2**

SCALE: 1:4 PROJECTION: SHEET 2 OF 2

D0901519\_Keel\_Plate-Use-Forcing-85C.tbl PART PDM REV: X-040 DRAWING PDM REV: X-010