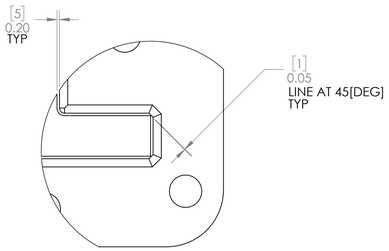
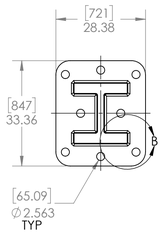
ITEM NO.	PART NUMBER	DESCRIPTION	WEIGHT [LBF]	QTY.
1	W14x455 1 20210525		8,864	1
2	Plate w14x455 20210525		448	2
3	bolt 2.5in 4tpi 14.5 HD 1 20210525 w455	G8 2.5[IN]-4[TPI], L=14.5[IN]		8
4	nut 2.5in 4tpi HD 1 20210524 w455			8
5	wash 2.5in HD 1 20210524 w455			16
6	nut 2.5in 4tpi HD 1 half 20210524 w455			8

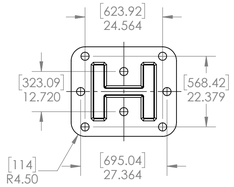
TOTAL WEIGHT W/O OXIDATION PROTECTION = 10,090[LBF]

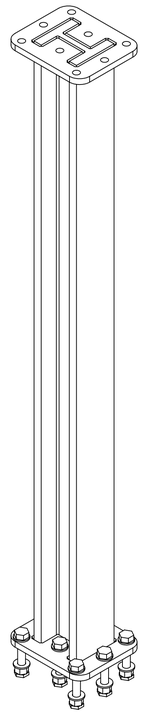


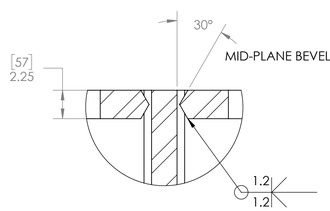
NOTE:
CENTERING BEAM INTO PLATE
HOLE ALIGNMENT IS TOP PRIORITY
GAP/S FOR ASSEMBLY MAY VARY
OUTSIDE TOLERANCE SPECIFICATION
TO ALIGN THE HOLES.

DETAIL B
SCALE 1 : 6

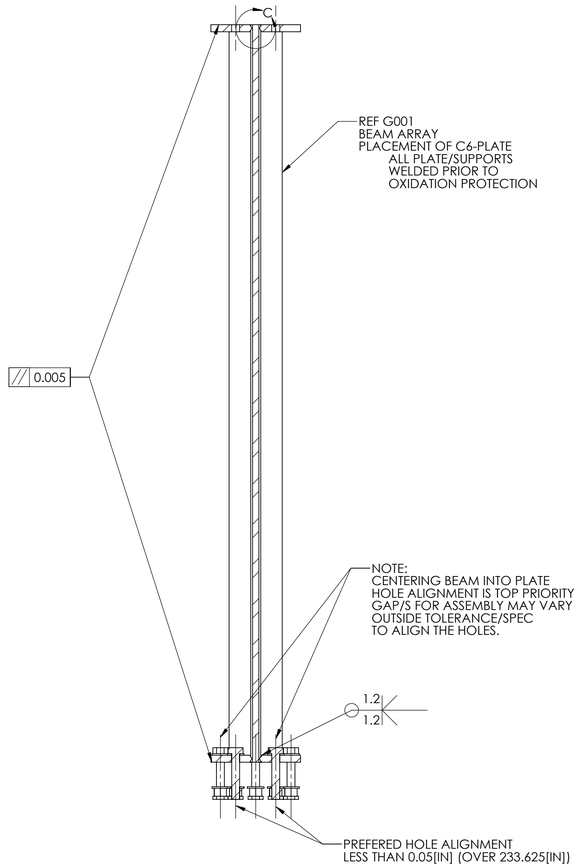




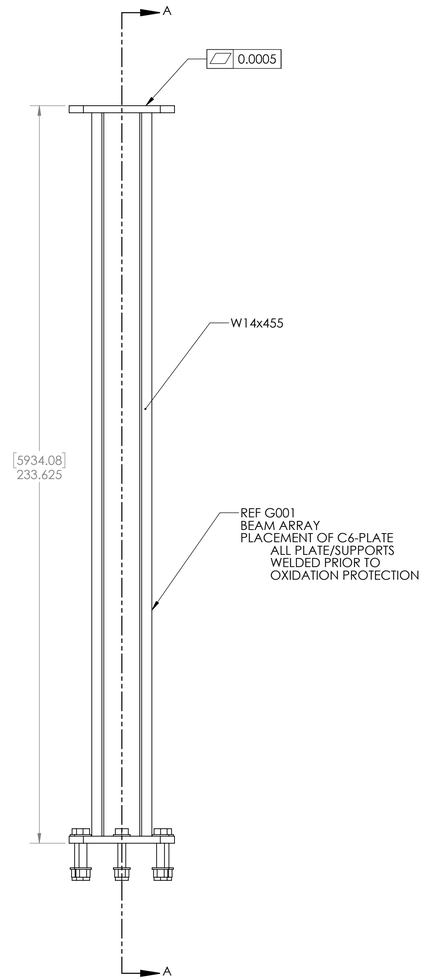




DETAIL C
SCALE 1 : 6



SECTION A-A



NOTE/S:
NO SHARP EDGES/CORNERS
BEAM/S ASTM 913 G65
PLATE/S AISI 1045, Sy 75[KSI]
OXIDIATION PROTECTION
ALUMINIZATION TYPE II (PREF)
ELSE GALV, ASTM 123 G100
MASK MATING SURFACES
MASK BOLT HOLES
POLY-FILM OR OTHER FOR SHIPPING
OIL-SHEEN, SAE 50+ FOR ASM
NO AGGLOMERAITON
CAD IS MASTER

EXAMPLE: AMBIENT TEMP [F]	EXAMPLE: AMBIENT TEMP [C]	T6061-T6 dL PER 1000[IN]	T6061-T6 dL PER 1000[mm]
45.00	7.22	-0.183	-4.658
59.00	15.00	0.0	0.0
86.00	30.00	0.354	8.984

EXAMPLE:
LET DIM = 47.125[IN] (T6061-T6)
dL = 0.000013 [86 - 59]47.125
dL = 0.0167[in] [0.4234[mm]]

AT 86[F] THE DIMENSION OF THE PART IS 47.125 + 0.0167 =47.142[IN]

GALVONIC PROTECTION REQUIRED:
ALUMINIZE TYPE II PREFERRED
GALVANIZE G100 ACCEPTABLE
THERMAL SPRAY AS/FOR ASSEMBLED

UNLESS OTHERWISE SPECIFIED:
TOLERANCES:
DIMENSIONS TAKEN AT 59[F]
DIMENSIONS TAKEN AT 15[C]
FRACTIONAL±0.13[1%]
ANGULAR: 0.3[DEG]
TWO PLACE DECIMAL ±0.05[IN]
THREE PLACE DECIMAL ±0.005[IN]
VERIFICATION OF COMPONENTS MUST BE PERFORMED WITH TEMPERATURE COMPENSATION
INTERPRET GEOMETRIC TOLERANCING PER: ASME Y14.5

PARALLEL PLANES MAX 0.002[IN]
FLATNESS MAX 0.002[IN]
FINISH: AS REQUIRED

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		

GAUGE/S:
DRAWINGS ARE AT 59[F] (15[C]): REFER TO MATERIAL SUPPLIER FOR THERMAL EXPANSION COEFFICIENT (CTE)
dL(ENG) = (DIM)*(CTE[1/R])*(TEMP-59)
dL(SI) = (DIM)*(CTE[1/K])*(TEMP-15)
***TOLERANCES DO NOT CHANGE

CREO DESIGNS, ENG DPT

TITLE: GLORIOUS CROSS
W14x455 STD
BEAM ASM

SIZE	DWG. NO.	REV
D	G - 003	1
SCALE: 1:24		SHEET 1 OF 1