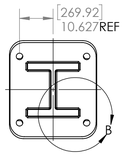
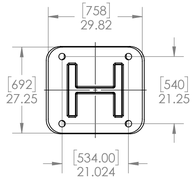
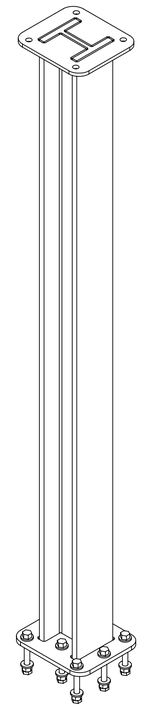
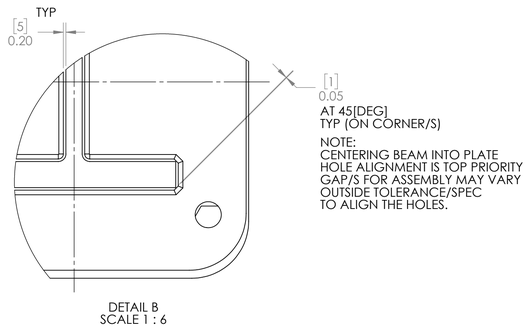
ITEM NO.	PART NUMBER	DESCRIPTION	WEIGHT	QTY.
1	W14x283 1 20210527			1
2	Plate w14x283 20210527			1
3	bolt 1.75in 4tpi 13.0 HD 1 20210527 w283			8
4	nut 1.75in 4tpi HD 1 20210527 w283			8
5	wash 1.75in HD 1 20210527 w283			16
6	nut 1.75in 4tpi HD 1 half 20210527 w283			8
7	Plate w14x283 TRANS 20210528			1

TOTAL WEIGHT W/O OXIDATION PROTECTION = 6,190[LBF]





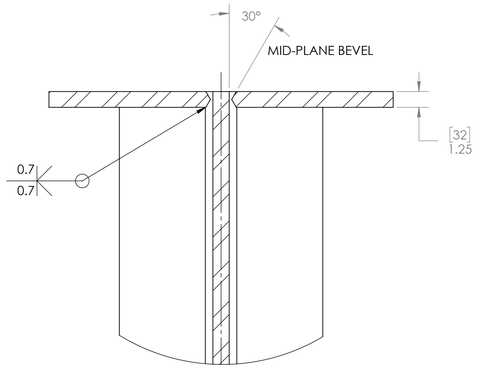




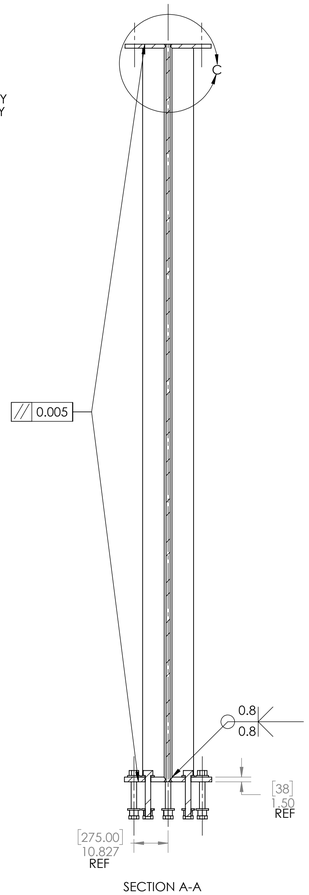
AT 45[DEG]
TYP (ON CORNER/S)

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

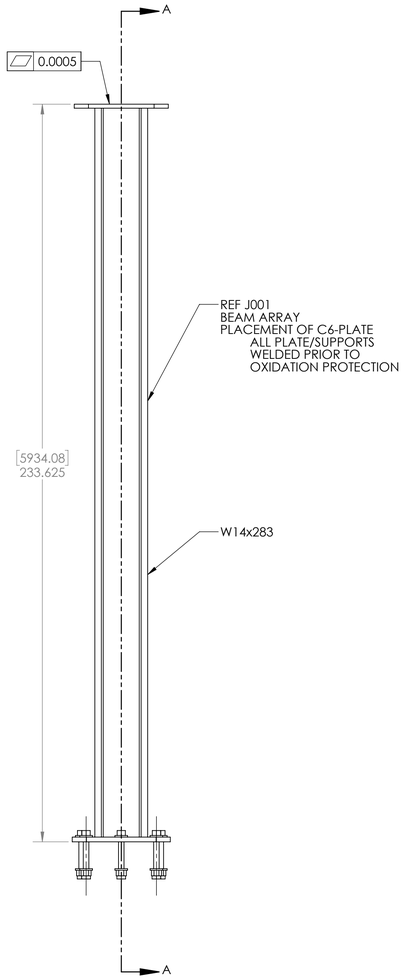
DETAIL B
SCALE 1 : 6



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 = 0.000015 [(86 - 59)47.125
dL = 0.0167[IN] [0.4234[mm]]

AT 86[F] THE DIMENSION OF THE PART
IS 47.125 + 0.0167 =47.1429[IN]

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

UNLESS OTHERWISE SPECIFIED:
TOLERANCES:
DIMENSIONS TAKEN AT 59[F]
DIMENSIONS TAKEN AT 15[C]
FRACTIONAL±0.13[IN]
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
W14x283 - C76
TRANSITION BEAM

SIZE	DWG. NO.	REV
D	J - 006	1

SCALE: 1:24 SHEET 1 OF 1