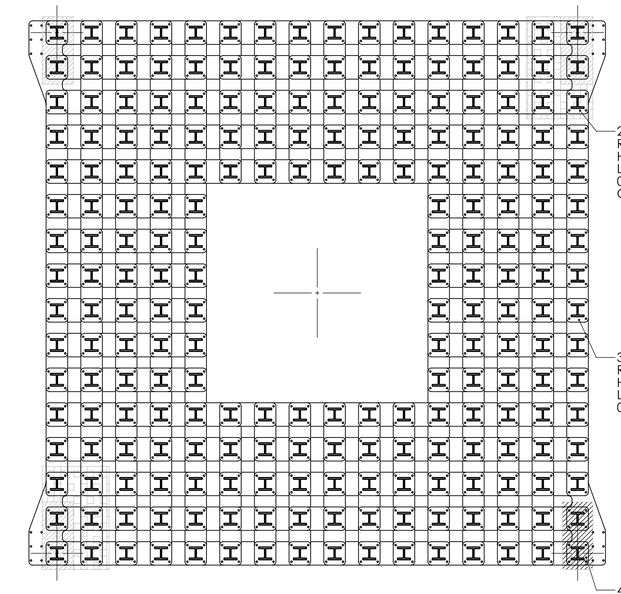
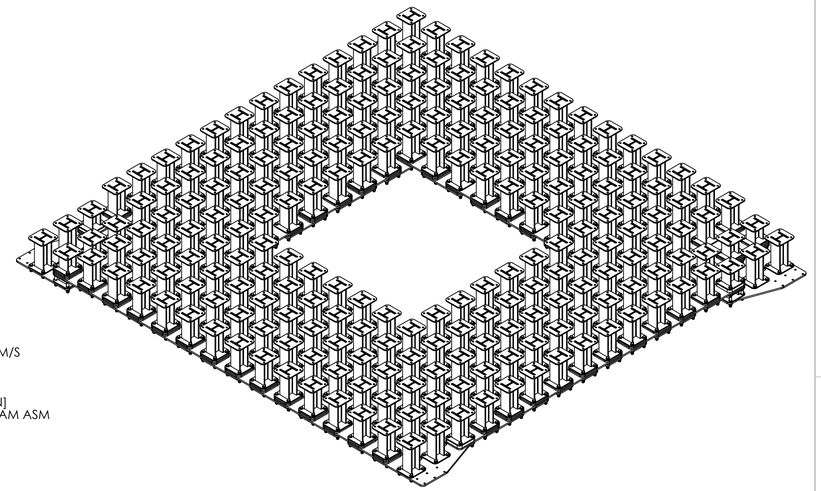
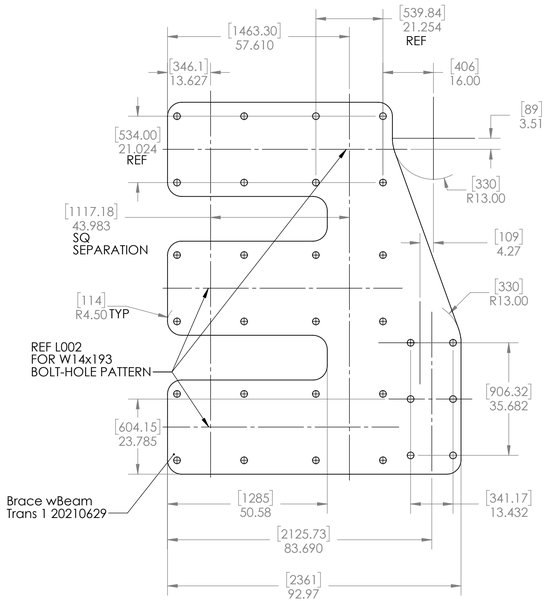
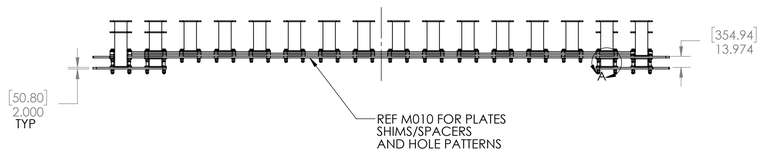
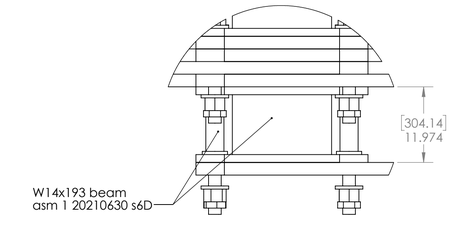
ITEM NO.	PART NUMBER	DESCRIPTION	WEIGHT	QTY.
1	Brace wBeam Trans 1 20210629	2.000[IN] THICK PLATE		4
2	Plate connect 1 20210527 dx basic			188
3	Plate connect 2 20210527 dz basic			190
4	Shim Plate conct 1 20210527 basic			76
5	Shim Plate conct 1 20210527 basic			4
6	W14x193 1 20210630 s6D	11.974[IN] CORNER TRANSITION BEAM		8
7	Plate w14x193 20210528 s1s5B s6ABCD			16
8	bolt 2in 4tpi 30in DH3 1 20210528 w193 s6ABCD			32
9	nut 2in 4tpi HD 1 20210527 w193 s1s5B s6ABCD			32
10	wash 2in HD 1 20210528 w193 s1s5B s6ABCD			64
11	nut 2in 4tpi HD 1 half 20210528 w193 s1s5B s6ABCD			32
12	Pipe sch80 2.5in pipe bolt sheath 20210630			32
13	Plate pipe end 1 20210630			64
14	W14x193 1 20210630 s7			204
15	Plate w14x193 20210528 s1s5B s6A s7A			16
16	bolt 2in 4tpi 15.5in DH3 1 20210528 w193 s1s5B s6A s7			816
17	nut 2in 4tpi HD 1 20210527 w193 s1s5B s6A s7			816
18	wash 2in HD 1 20210528 w193 s1s5B s6A s7			1632
19	nut 2in 4tpi HD 1 half 20210528 w193 s1s5B s6A s7			816
20	W14x193 1 20210630 s7A			8
21	Plate w14x193 20210528 s1s5B s6A s7			408
22	bolt 2in 4tpi 15.5in DH3 1 20210528 w193 s1s5B s6A s7A			32
23	nut 2in 4tpi HD 1 20210527 w193 s1s5B s6A s7A			32
24	wash 2in HD 1 20210528 w193 s1s5B s6A s7A			64
25	nut 2in 4tpi HD 1 half 20210528 w193 s1s5B s6A s7A			32
26	W14x193 1 20210623 s6			8
27	Plate w14x193 20210528 s6			16
28	bolt 2in 4tpi 9.5in DH3 1 20210528 w193 s6			32
29	nut 2in 4tpi HD 1 20210527 w193 s6			32
30	wash 2in HD 1 20210528 w193 s6			64
31	nut 2in 4tpi HD 1 half 20210528 w193 s6			32











CORNER TRANSITION SHORT BEAM
REF M035

DETAIL A
SCALE 1 : 12

NOTE/S:
DEFINITION:
INT = INTERSECTION
NO SHARP EDGES/CORNERS
W14/W10, ASTM A913 G65, Sy 65[KSI]
W6-BEAMS, Sy 42[KSI] (PERF A572 G42)
C6-BEAMS, Sy 36[KSI]
AL, T6061-T6, Sy 40[KSI] MIN
AL, ALLOY, Sy 40[KSI] MIN
PLATE/S AISI 1045, Sy 75[KSI] (MIN)
ALUMINIZATION TYPE II (PREF)
GALVINIZE ASTM A123 G100 ACCPTABLE
MASKING OF MATING SURFACES
OIL-SHEEN, SAE 50+, PRIOR TO ASM
NO AGGLOMERATION OF OIL
AL/ALLOY TO STEEL INTERFACE, POLYMER FILM OR OTHER
MINIMIZE/NEUTRALIZE IONIC EXHANGE
BOLT/S ASM G8
CLASS B, AS-BUILT
CAD/DATA 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	8.994

EXAMPLE:
LET DIM = 47.125[IN] (T6061-T6)
dL = 0.000013118(4 - 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 PREFERED
GALVINIZE G100 ACCEPTABLE
THERMAL SPRAY AS/FOR ASSEMBLED

UNLESS OTHERWISE SPECIFIED:
TOLERANCES:
DIMENSIONS TAKEN AT 59[F]
DIMENSIONS TAKEN AT 15[C]
FRACTIONAL±0.13[75]
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

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

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

CREO DESIGNS, ENG DPT

TITLE: GLORIOUS CROSS
INT - C128/37 BEAM/S
AND PLATE/S ARRAY/S

SIZE	DWG. NO.	REV
D	M - 034	1
SCALE: 1:96		SHEET 1 OF 1