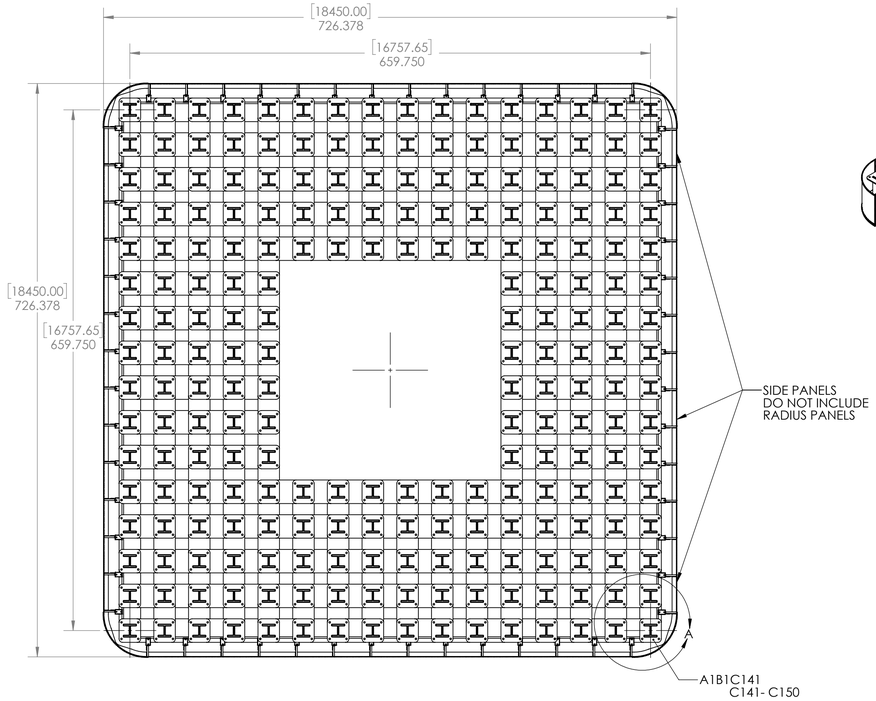
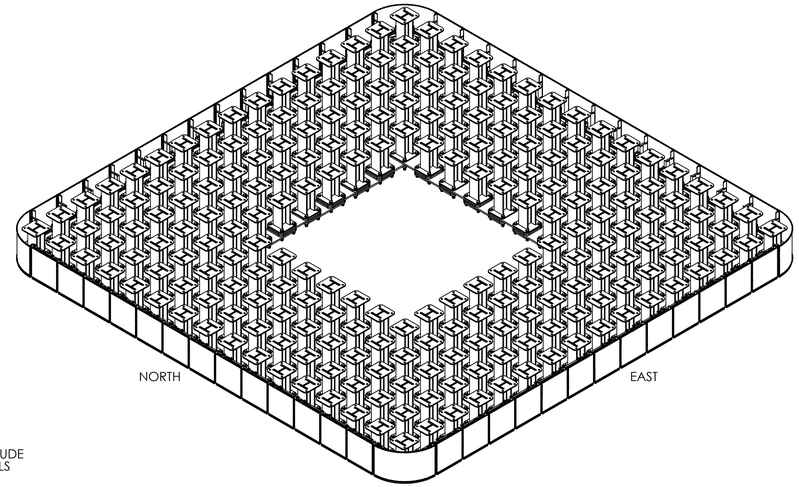
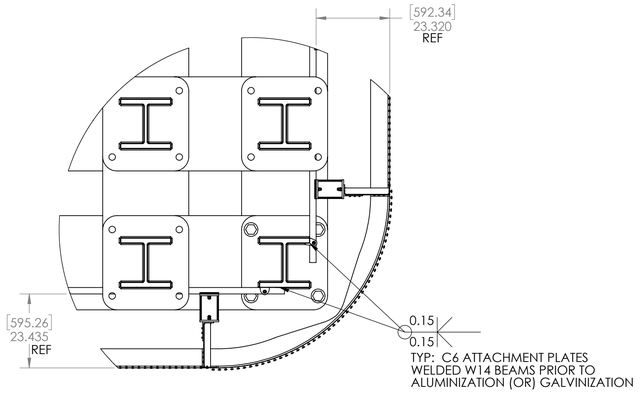
| ITEM NO. | PART NUMBER | DESCRIPTION | WEIGHT | QTY. |
|---|---|---|---|---|
| 1 | W14x193 1 20210528 H1 | | | 220 |
| 2 | Plate w14x193 20210528 s1 ShortBeam H1 | | | 440 |
| 3 | bolt 2in 4tpi 15.5in DH3 1 20210528 w193 s1 ShortBeam H1 | | | 880 |
| 4 | nut 2in 4tpi HD 1 20210527 w193 s1 ShortBeam H1 | | | 880 |
| 5 | wash 2in HD 1 20210528 w193 s1 ShortBeam H1 | | | 1760 |
| 6 | nut 2in 4tpi HD 1 half 20210528 w193 s1 ShortBeam H1 | | | 880 |
| 7 | Plate connect 1 20210527 w193 s1 H1 | | | 198 |
| 8 | Plate connect 2 20210527 w193 s1 H1 | | | 198 |
| 9 | Shim Plate conct 1 20210527 w193 s1 H1 | | | 4 |
| 10 | Shim Plate conct 1 20210527 w193 s1 H1 | | | 80 |
| 11 | Panel sq 47.125in 20200513 w550 w455 w370 w283 w193 H1 | | | 52 |
| 12 | Rivet Brazier head for Panel 20200510 w550 w455 w370 w283 w193 H1 | | | 5328 |
| 13 | Rib 31 20210118 w550 w455 w370 w283 w193 H1 | | | 56 |
| 14 | L2x2x0.125 3 20210118 w550 w455 w370 w283 w193 H1 | | | 56 |
| 15 | L2x2x0.125 3 20210118 w550 w455 w370 w283 w193 H1 | | | 56 |
| 16 | Plate Pnl sup 2 20210118 w550 w455 w370 w283 w193 H1 | | | 56 |
| 17 | Rivet Brazier 2t +0.0625 20210107 w550 w455 w370 w283 w193 H1 | | | 336 |
| 18 | Rivet Brazier t+0.313+0.0625 20210104 w550 w455 w370 w283 w193 H1 | | | 336 |
| 19 | LS6x3.5x0.312 2 20210118 w550 w455 w370 w283 w193 H1 | | | 56 |
| 20 | W6x9 1 20210118 w193 H1 | | | 28 |
| 21 | Plate pnl sup 3 20210118 w550 w455 w370 w283 w193 H1 | | | 112 |
| 22 | Shim Plate 30 1 pnl 20210120 w550 w455 w370 w283 w193 H1 | | | 56 |
| 23 | Shim Plate 30 2 pnl 20210120 w550 w455 w370 w283 w193 H1 | | | 56 |
| 24 | Shim Plate 30 3 pnl 20210120 w550 w455 w370 w283 w193 H1 | | | 56 |
| 25 | Shim Plate 30 4 pnl 20210120 w550 w455 w370 w283 w193 H1 | | | 56 |
| 26 | Plate pnl was 1 20210120 w550 w455 w370 w283 w193 H1 | | | 56 |
| 27 | 91286A377 | | | 224 |
| 28 | 98180A150 | | | 928 |
| 29 | 93827A249 | | | 464 |
| 30 | 93839A825 | | | 704 |
| 31 | Rib 32 20210118 w550 w455 w370 w283 w193 H1 | | | 52 |
| 32 | Rivet Brazier 3t 20200514 w550 w455 w370 w283 w193 H1 | | | 336 |
| 33 | W6x9 1 20210118 w193 H1 | | | 28 |
| 34 | Rib Radius 3 20200515 w550 w455 w370 w283 w193 H1 | | | 4 |
| 35 | Rib Radius 30 20210120 w550 w455 w370 w283 w193 H1 | | | 4 |
| 36 | C6x10.5 2 20210312 w455 w370 w283 w193 H1 | | | 60 |
| 37 | Plate bolt hold 1 20210312 w455 w370 w283 w193 H1 | | | 120 |
| 38 | Plate bolt hold 2 20210315 w455 w370 w283 w193 H1 | | | 120 |
| 39 | Plate C6bk 1 20210315 w455 w370 w283 w193 H1 | | | 180 |
| 40 | Thread rod madetoOrd 0.5x12 - 20tpi w550 w455 w370 w283 w193 H1 | | | 120 |

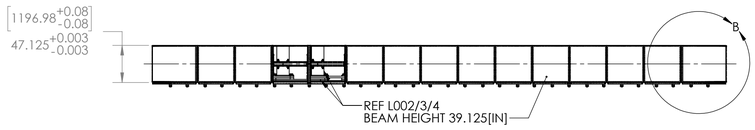
TOTAL WEIGHT W/O OXIDATION PROTECTION = 767,399[LBF]
TOTAL WEIGHT W/ GALVINIZATION AND WELDING = 819,000[LBF]

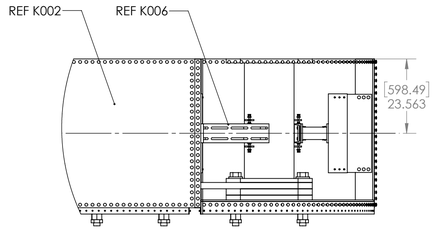



DETAIL A
SCALE 1 : 24




DETAIL B
SCALE 1 : 24

NOTE/S:
NO SHARP EDGES/CORNERS
W14, ASTM 913 G65
W6, Sy 42[KSI]
C6, Sy 36.3[KSI]
PLATE/S AISI 1045 Sy 75[KSI]
OXIDIATION PROTECTION
- POST WELDING/ASSEMBLY
- ALUMINIZATION TYPE II (PREF)
- GALV. ASTM123 G100 (OPT)
- MASK MATING SURFACES
- MASK BOLT HOLES
- NO MASKING FOR W6 ASM/SHIMS
- OIL-SHEEN, SAE 50+ PRIOR TO ASM
- APPLY TO BEAR SURFACES ONLY
- NO AGGLOMERATION

BOLT/S ASM G8, GALVINIZED OR TYPE II
MATING SURFACES PROTECTED FOR SHIPPING
- POLY-FILM OR OTHER

PANEL/SKIN/SHELL
- CLASS A, BRUSHED PATTERN, RANDOM, CIRCULAR SWIRL
- MAXIMUM DEPTH 115(MICRO-IN) (0.000115[IN])
- FLATNESS LESS THAN 0.001[IN]
- SIDE/SIDE (AST/WEST) ANODIZED
  - RGB (26.4, 48.7, 54.6)
  - VERIFIED IN NATURAL LIGHT

AL T6061-T6, Sy 40[KSI] FOR CLASS A PANEL
AL ALLOY Sy 40[KSI] MIN FOR OTHER
RIVET/S AL ALLOY
CLASS B, AS-BUILT
CAD/DATA IS MASTER

| EXAMPLE AMBIENT TEMP [F] | EXAMPLE AMBIENT TEMP [C] | T6061-T6 (.125") (.001") (1000IN) | T6061-T6 (.125") (.001") (1000mm) |
|---|---|---|---|
| 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[IN/ .5F)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
GALVINIZE G100 ACCEPTABLE
THERMAL SPRAY AS/PER 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 COEFFICENT (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
HEAD - ABOVE INTER, C141 THRU C150

| SIZE | DWG. NO. | REV |
|---|---|---|
| D | P - 001 | 1 |

SCALE: 1:96 SHEET 1 OF 1