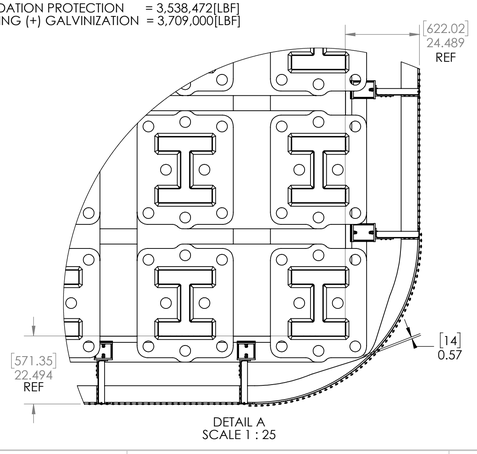
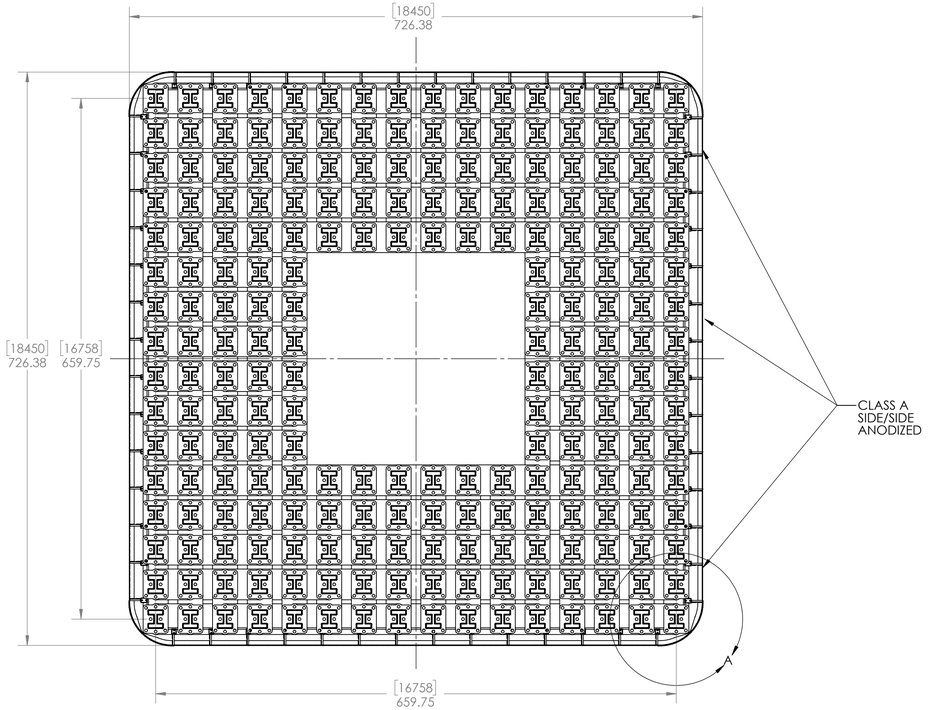
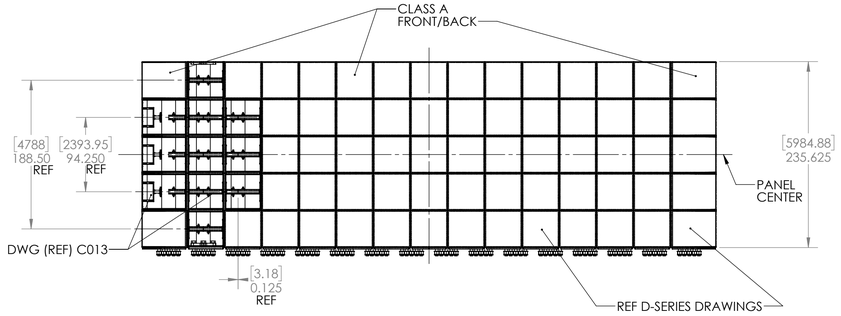
| ITEM NO. | PART NUMBER | DESCRIPTION | WEIGHT | QTY. |
|---|---|---|---|---|
| 1 | Panel sq 47.125in 20200513 S | | | 260 |
| 2 | Rivet Brazier head for Panel 20200510 S | | | 26640 |
| 3 | Rib 31 20210118 S | | | 280 |
| 4 | L2x2x0.125 3 20210118 S | | | 280 |
| 5 | L2x2x0.125 3 20210118 S | | | 280 |
| 6 | Plate Pnl sup 2 20210118 S | | | 280 |
| 7 | Rivet Brazier 2t +0.0625 20210107 S | | | 1680 |
| 8 | Rivet Brazier t+0.313+0.0625 20210104 S | | | 1680 |
| 9 | LS6x3.5x0.312 2 20210118 S | | | 280 |
| 10 | W6x9 1 20210118 S | | | 140 |
| 11 | Plate pnl sup 3 20210118 S | | | 560 |
| 12 | Shim Plate 30 1 pnl 20210120 S | | | 280 |
| 13 | Shim Plate 30 2 pnl 20210120 S | | | 280 |
| 14 | Shim Plate 30 3 pnl 20210120 S | | | 280 |
| 15 | Shim Plate 30 4 pnl 20210120 S | | | 280 |
| 16 | Plate pnl was 1 20210120 S | | | 280 |
| 17 | 91286A377 | | | 1120 |
| 18 | 98180A150 | | | 4640 |
| 19 | 93827A249 | | | 2320 |
| 20 | 93839A825 | | | 3520 |
| 21 | Rib 32 20210118 S | | | 260 |
| 22 | Rivet Brazier 3t 20200514 S | | | 1680 |
| 23 | W6x9 1 20210118 S | | | 140 |
| 24 | Rib Radius 3 20200515 S | | | 20 |
| 25 | Rib Radius 30 20210120 S | | | 20 |
| 26 | C6x10.5 2 20210312 S | | | 300 |
| 27 | Plate bolt hold 1 20210312 S | | | 600 |
| 28 | Plate bolt hold 2 20210315 S | | | 600 |
| 29 | Plate C6bk 1 20210315 S | | | 1200 |
| 30 | Thread rod madetoOrd 0.5x12 - 20tpi S | | | 600 |
| 31 | W14X665 1 20210309 S | | | 220 |
| 32 | Plate base W14x665 1 20210309 S | | | 440 |
| 33 | bolt 3.5in HD 1 20210310 S | | | 1760 |
| 34 | nut 3.5in HD 1 20210310 S | | | 1760 |
| 35 | wash 3.5in HD 1 20210310 S | | | 3520 |
| 36 | nut 3.5in HD 1 half 20210310 S | | | 1760 |
| 37 | Plate connect 1 20210310 S | | | 198 |
| 38 | Plate connect 2 20210310 S | | | 198 |
| 39 | Shim Plate conct 1 20210310 S | | | 4 |
| 40 | Shim Plate conct 1 20210310 S | | | 80 |

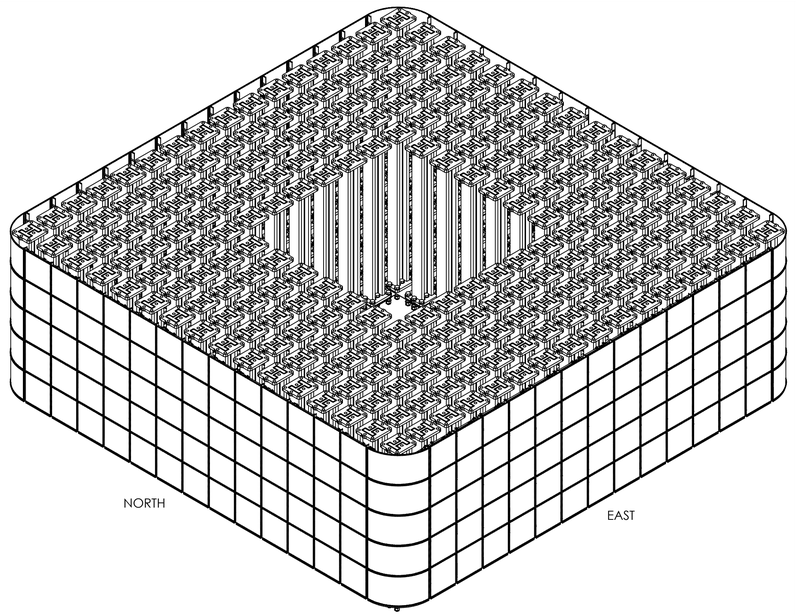
TOTAL WEIGHT W/O OXIDATION PROTECTION = 3,538,472[LBF]
TOTAL WEIGHT W/ WELDING (+) GALVINIZATION = 3,709,000[LBF]



DETAIL A
SCALE 1 : 25




NOTES: W/R BOM, EST
FIRST USE OF THIS SEGMENT IS C17
USE OF THIS SEGMENT CONTINUES THRU C37 OR PR-110
HEIGHT 5.178[IN] (131.5[M])
FOUNDATION EST BOM
BEAM/S L=32.25[IN]-FOUNDATION, FIRST IN PLACE (x220)
BEAM/S L=32.25[IN] C2-C15, N=(x3,080)
BEAM/S L=246.283[IN] C16, N=(x220)
BEAM/S L=233.625[IN] C17-C37, N=(x4,620)
REBAR #14, L=2,317,000[FT] (706,120[M])
REBAR #4, L=14,000[FT] (4,166[M])
REBAR #3, L=4,000[FT] (1,321[M])
FLAT PANELS P41, N=(x52)
RADIAL PANELS P41, N=(x4)
FLAT PANELS P47, N=(x5,668)
RADIAL PANELS P47, N=(x436)
PANEL RIVETS, P47, N=(x521,456)
UPPER WIRE MESH, PREFERED, 6[IN] FROM Y = 0
PREVENT CRACKING
REF B011

NOTES:
NO SHARP EDGES/CORNERS
BEAM/S, W14, ASTM A913 G65, Sy 65[KSI]
W6-BEAMS, Sy 42[KSI]
C6-BEAMS, Sy 36.3[KSI]
PLATE/S AISI 1045, Sy 75[KSI] (MIN)
REBAR G60, Sy 60[KSI]
ALUMINIZATION TYPE II (PREF)
GALVINIZE ASTM A123 G100 ACCPTABLE
MASKING OF MATING SURFACES
MASKING OF BOLT-HOLES
OIL-SHEEN, SAE 50+, PRIOR TO ASM
NO AGGLOMERATION OF OIL
REBAR TO BE GALVINIZED OR ALUMINIZED
TO INCLUDE WIRE & WIRE-MESH
BOLT/S ASM G8 FOR STEEL INTERFACE
ACCESS PANEL BOLT ASM AL ALLOY
MATING SURFACES TO BE PROTECTED FOR SHIPPING
POLY-FILM
PREVENT OXIDATION OF SURFACE
PANELS/SKIN/SHELL
CLASS A, BRUSHED PATTERN, RANDOM, CIRCULAR/SWIRL
MAXIMUM DEPTH 115[MICOR-IN]
FLATNESS LESS THAN 0.001[IN]
SIDE/SIDE PANELS, ONLY
ANODIZED RGB 26.4, 48.7, 54.6
VERIFIED IN NATURAL LIGHT
AL, T6061-T6, Sy 40[KSI] (MIN)
RIVETS, AL ALLOY
CLASS B, AS-BUILT
CAD/DATA IS MASTER
REFERENCE DRAWINGS FOR TOLERANCES

| 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 = 0.000013186 - 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[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)*(CTE1)/R)*(TEMP-59)
dL(SI) = (DIM)*(CTE1)/R)*(TEMP-15)
***TOLERANCES DO NOT CHANGE

CREO DESIGNS, ENG DPT

TITLE: GLORIOUS CROSS
W14x665 STD SEG ASM FOR MAIN BODY

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

SCALE: 1:96 SHEET 1 OF 1