

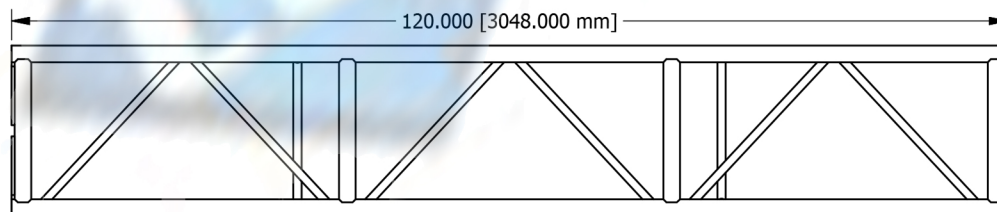
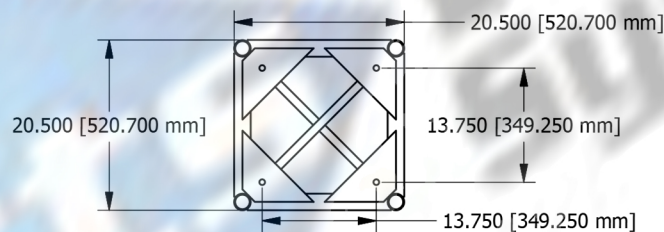
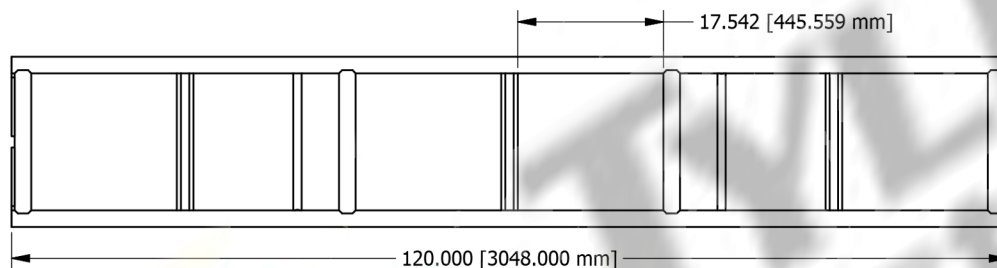
### 20.5" x 20.5" x 120" Medium Duty Bolt Plate Truss Load Capacity Table (Repetitive Use)

| TRUSS SPAN | UNIFORMLY DISTRIBUTED LOAD |            | CENTER POINT LOAD |            | THIRD POINT LOAD |            | QUARTER POINT LOAD |            | FIFTH POINT LOAD |            |
|------------|----------------------------|------------|-------------------|------------|------------------|------------|--------------------|------------|------------------|------------|
|            | LOAD (pfl)                 | DEFL. (in) | LOAD (lbs)        | DEFL. (in) | LOAD (lbs)       | DEFL. (in) | LOAD (lbs)         | DEFL. (in) | LOAD (lbs)       | DEFL. (in) |
| 10'-0"     | 640                        | 0.060      | 6060              | 0.090      | 3202             | 0.080      | 2134               | 0.070      | 1601             | 0.070      |
| 20'-0"     | 298                        | 0.430      | 2975              | 0.350      | 2231             | 0.440      | 1488               | 0.410      | 1240             | 0.430      |
| 30'-0"     | 128                        | 0.970      | 1924              | 0.790      | 1442             | 1.000      | 961                | 0.930      | 802              | 0.970      |
| 40'-0"     | 69                         | 1.720      | 1380              | 1.420      | 1034             | 1.770      | 689                | 1.650      | 575              | 1.730      |
| 50'-0"     | 42                         | 2.680      | 1039              | 2.240      | 779              | 2.770      | 519                | 2.590      | 433              | 2.700      |

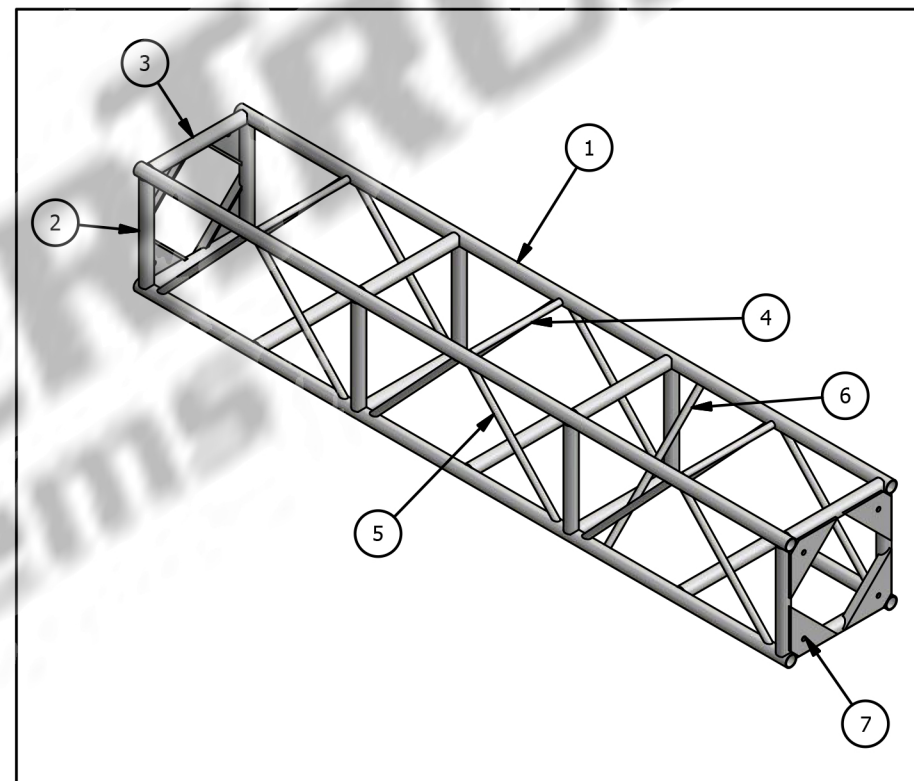
#### Table Usage Notes:

1. The truss is supporting vertical loads only, i.e. the truss diagonals are oriented vertically and no lateral loads are applied to the truss.
2. The truss is analyzed as a simple span beam. Truss support points are located at truss panel points.
3. The truss has been analyzed for static loads only.
4. All loads are applied centered between the ladders.
5. All loads are applied at the panel points of the truss only.
6. All capacities are reduced by 0.85 per ANSI E1.2-2012 for repetitive use members.
7. Selfweight has been considered.
8. Maximum deflection limited to span/180.
9. Allowable loads based on 2010 Aluminum Design Manual.

Information extracted from the structural report by: **CLARK REDER ENGINEERING**



| PARTS LIST |                |                           |
|------------|----------------|---------------------------|
| ITEM       | PART NUMBER    | DESCRIPTION               |
| 1          | CHORDS         | Ø2" X .125" ALUMINUM TUBE |
| 2          | VERTICALS      | Ø2" X .125" ALUMINUM TUBE |
| 3          | HORIZONTALS    | Ø2 X .125" ALUMINUM TUBE  |
| 4          | HORIZONTALS    | Ø1" X .125" ALUMINUM TUBE |
| 5          | DIAGONALS      | Ø1" X .125" ALUMINUM TUBE |
| 6          | INTERNAL DIAGS | Ø1" X .125" ALUMINUM TUBE |
| 7          | LARGE CAMLOCK  | .375" ALUMINUM PLATE      |



#### Notes:

TITLE: 20.5" X 20.5" X 120" MEDIUM DUTY TRUSS

WEIGHT: 87 lbs

CREATION DATE: 12/02/2012

AUTHOR: NATHAN V

TOLERANCE: +/- 0.010 (0.254mm) U.O.S

REVISION: A



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