12" X 12" X 60" AV, 3/16" chord Bolt Plate Truss Load Capacity (Repetitive Use)

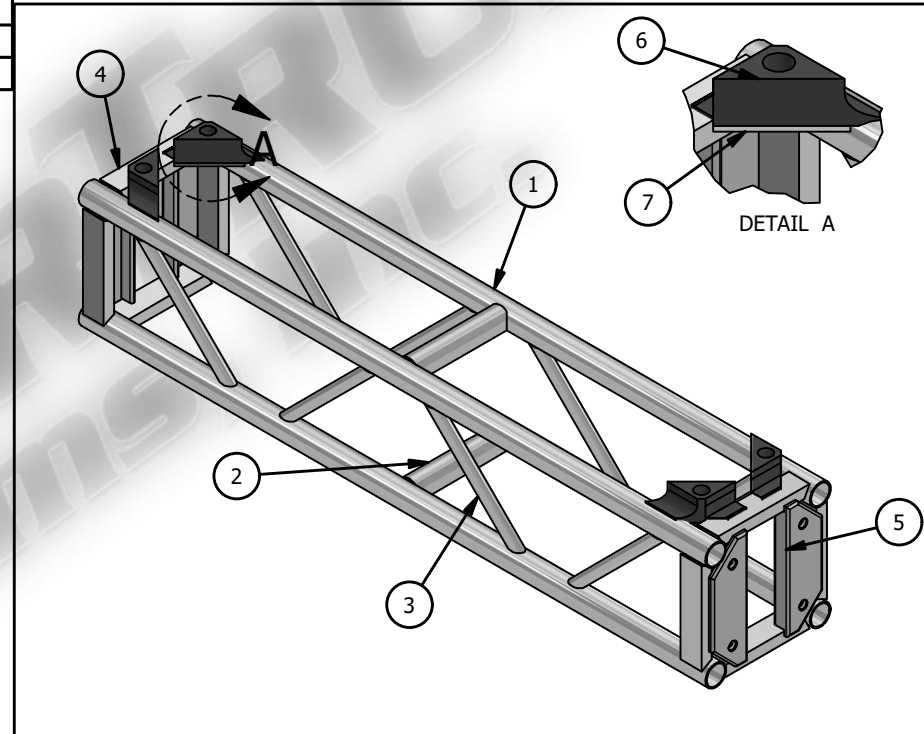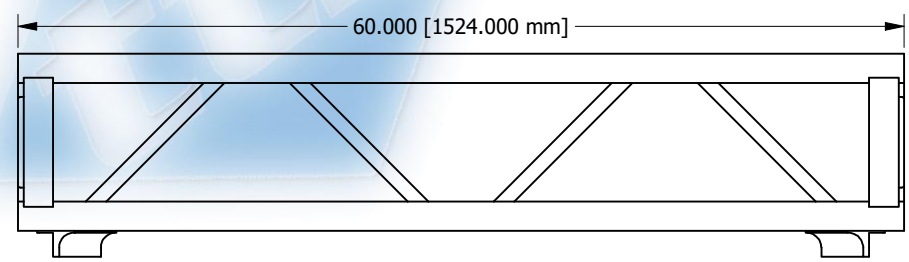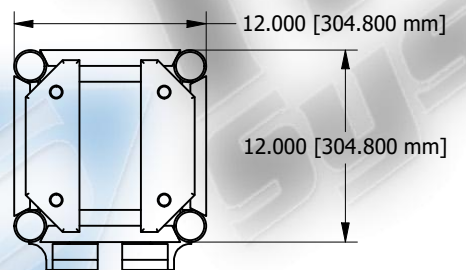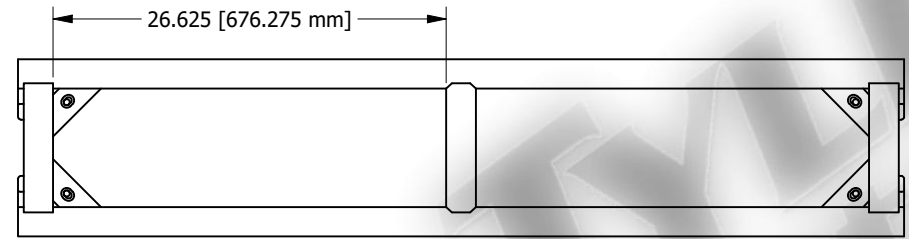| TRUSS SPAN	UNIFORMLY DISTRIBUTED LOAD		CENTER POINT LOAD		THIRD POINT LOAD		QUARTER POINT LOAD		FIFTH POINT LOAD	
	LOAD (pfl)	DEFL. (in)	LOAD (lbs)	DEFL. (in)	LOAD (lbs)	DEFL. (in)	LOAD (lbs)	DEFL. (in)	LOAD (lbs)	DEFL. (in)
5'-0"	1291	0.017	6455	0.027	3228	0.023	2152	0.021	1614	0.02
10'-0"	643	0.133	4768	0.159	3217	0.183	2144	0.17	1608	0.16
15'-0"	421	0.442	3161	0.358	2371	0.458	1581	0.425	1317	0.446
20'-0"	235	0.787	2353	0.638	1764	0.816	1176	0.756	980	0.793
25'-0"	149	1.232	1862	1.002	1397	1.276	931	1.185	776	1.242
30'-0"	102	1.778	1532	1.45	1149	1.841	766	1.711	638	1.792
35'-0"	71	2.337	1293	1.987	892	2.322	646	2.333	513	2.333
40'-0"	46	2.671	1111	2.615	659	2.654	477	2.667	379	2.667
45'-0"	31	3	855	3	496	3	359	3	285	3
50'-0"	21	3.33	650	3.33	377	3.33	273	3.33	217	3.333

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 at the centroid of the truss between the two ladder trusses below the truss.
5. All loads are applied at the panel points of the truss as to not induce local bending stresses in the chords.
6. All capacities are reduced by 0.85 per ANSI E1.2-2012 for repetitive use members.
7. Self weight 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 .1875" ALUMINUM TUBE
2	HORIZONTALS	Ø2" X .125" ALUMINUM TUBE
3	DIAGONALS	Ø1" X .125" ALUMINUM TUBE
4	ENDS	1" X 2" X .125" ALUMINUM TUBE
5	SMALL CAMLOCK	.375" ALUMINUM
6	STACKING BLOCK	BLACK UHMW
7	STACKING PLATE	ALUMINUM FLAT BAR

DETAIL A

26.625 [676.275 mm]

12.000 [304.800 mm]

12.000 [304.800 mm]

60.000 [1524.000 mm]

Notes: