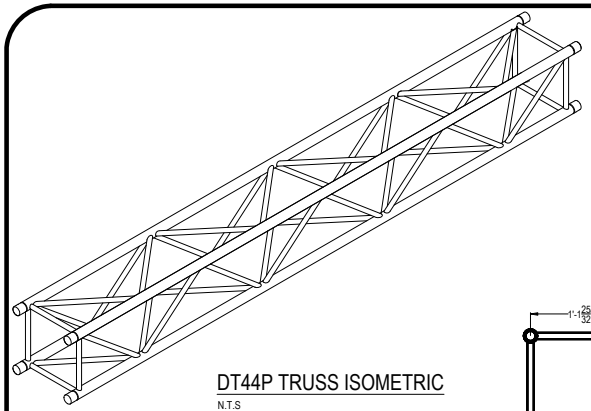
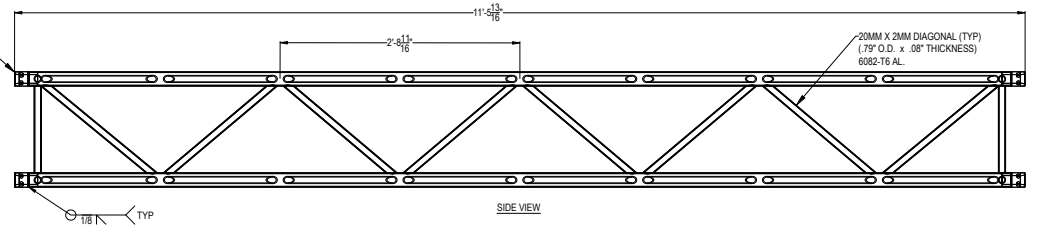
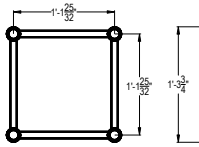


DT44P TRUSS ISOMETRIC

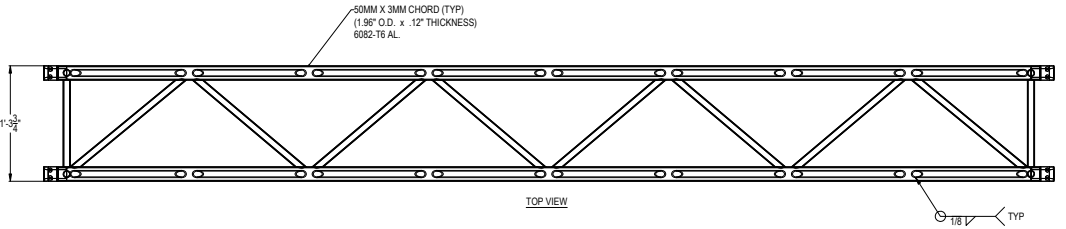
N.T.S



SIDE VIEW



END ELEVATION



TOP VIEW

TYPICAL DT44P TRUSS

1-1/2" = 1'-0"

NOTES:
GENERAL CONSTRUCTION SHOWN ONLY. LENGTH OF INDIVIDUAL TRUSS UNITS USED IN CONSTRUCTION WILL VARY
SEE MANUFACTURERS WEBSITE FOR ADDITIONAL INFORMATION ON AVAILABLE LENGTHS.
TRUSS IS FABRICATED USING METRIC UNITS, DIMENSIONS ON THESE DRAWINGS ARE ROUNDED TO THE NEAREST 1/16". DO NOT USE THESE DRAWINGS FOR FABRICATION OR REPAIR. DRAWINGS ARE FOR GENERAL DESCRIPTION AND ALLOWABLE LOADING ONLY.

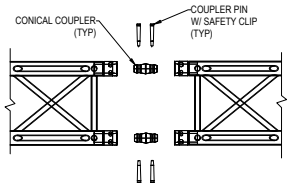
GENERAL NOTES

REFERENCED CODES

1. **2018 INTERNATIONAL BUILDING CODE**
2. **ANSI E1.21 2020 'ENTERTAINMENT TECHNOLOGY – DESIGN, MANUFACTURE AND USE OF ALUMINUM TRUSSES AND TOWERS'**
3. **ADM 2015 'SPECIFICATION FOR ALUMINUM STRUCTURES'**
4. **AISC 360-16 'SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS'**

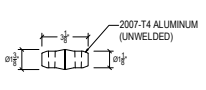
ALUMINUM TRUSS

1. **FABRICATION AND ERECTION OF STRUCTURAL ALUMINUM SHALL CONFORM TO THE ALUMINUM DESIGN MANUAL - 2015**
2. **STRUCTURAL ALUMINUM SHALL BE ALLOY 6082-T6 (U.N.O.)**
3. **ALL WELD FILLER SHALL BE 5556 (U.N.O.)**
4. **ALL WELDING MUST CONFORM TO AWS D1.2**
5. **TAPERED PINS SUPPLIED BY GLOBAL TRUSS MUST BE USED IN INSTALLATION**
6. **WHERE THE CONTACT OF DISSIMILIAR METALS MAY CAUSE CORROSION, THE CONTACT SURFACE OF EITHER METAL MUST BE PROPERLY COATED TO PREVENT THE EFFECT.**



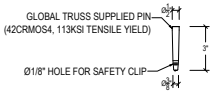
TRUSS TO TRUSS CONNECTION

1-1/2" = 1'-0"



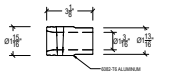
CONICAL COUPLER

3" = 1'-0"



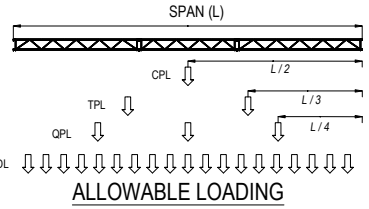
COUPLER PIN

3" = 1'-0"



CONICAL ADAPTER

3" = 1'-0"



ALLOWABLE LOADING

NOTES:

1. ALL LOADS MUST BE ATTACHED TO TRUSS PANEL POINTS
2. BRIDLES ARE NOT PERMITTED UNLESS APPROVED IN WRITTING BY A LICENSED STRUCTURAL ENGINEER.
3. SELF WEIGHT OF THE TRUSS HAS BEEN INCLUDED IN THE ALLOWABLE LOADING TABLES. NO REDUCTION IS REQUIRED TO ACCOUNT FOR THE TRUSS ITSELF.
4. NO SHOCK OR DYNAMIC FORCES HAVE BEEN INCLUDED IN THE ALLOWABLE LOADING.
5. UNIFORMLY DISTRIBUTED LOADS APPLY ONLY TO LOADS EVENLY DISTRIBUTED ACROSS THE ENTIRE SPAN
6. LOADS SEEN IN THE TABLE ARE NOT ADDITIVE.
7. THE ALLOWABLE LOADING TABLES HAVE BEEN PROVIDED FOR GENERAL REFERENCE ONLY AND ALL RIGGING PLOTS SHOULD BE REVIEWED BY A LICENSED STRUCTURAL ENGINEER.

GLOBAL TRUSS DT44P LOAD SPAN TABLE

Limited based on Strength and L/180 Deflections

TRUSS SPAN		UNIFORMLY DISTRIBUTED LOAD (UDL)		CENTER POINT LOAD (CPL)		THIRD POINT LOADS (TPL)		QUARTER POINT LOADS (QPL)	
METERS	FEET	LOAD (PLF)	DEFLECTION (IN)	LOAD (LBS)	DEFLECTION (IN)	LOAD (LBS)	DEFLECTION (IN)	LOAD (LBS)	DEFLECTION (IN)
2	6.56	430	0.07	2600	0.1	1300	0.07	900	0.08
2.5	8.2	373	0.11	2475	0.15	1295	0.12	890	0.13
3	9.84	315	0.14	2350	0.21	1290	0.17	875	0.18
3.5	11.48	258	0.18	2225	0.26	1280	0.22	865	0.24
4	13.12	200	0.22	2100	0.31	1275	0.27	850	0.29
4.5	14.76	183	0.30	2010	0.39	1270	0.38	840	0.39
5	16.41	165	0.38	1925	0.48	1260	0.50	825	0.50
5.5	18.05	148	0.46	1840	0.56	1255	0.61	815	0.60
6	19.69	130	0.54	1750	0.64	1250	0.73	800	0.70
6.5	21.33	123	0.71	1665	0.75	1245	0.92	790	0.89
7	22.97	115	0.88	1575	0.87	1240	1.11	775	1.08
7.5	24.61	108	1.05	1490	0.98	1230	1.30	765	1.27
8	26.25	100	1.22	1400	1.09	1225	1.49	750	1.46
8.5	27.89	94	1.46	1340	1.24	1145	1.67	725	1.64
9	29.53	88	1.71	1275	1.39	1065	1.84	700	1.82
9.5	31.17	81	1.95	1215	1.54	980	2.01	675	2.01
10	32.81	75	2.19	1150	1.69	900	2.19	650	2.19
10.5	34.45	67	2.3	1115	1.90	835	2.3	600	2.3
11	36.09	59	2.41	1075	2.11	765	2.41	550	2.41
11.5	37.73	51	2.52	1040	2.31	700	2.52	500	2.52
12	39.37	43	2.63	1000	2.52	630	2.63	450	2.63

GLOBAL TRUSS DT44P LOAD SPAN TABLE

Limited based on Strength Only (No Deflection Limits)

TRUSS SPAN		UNIFORMLY DISTRIBUTED LOAD (UDL)		CENTER POINT LOAD (CPL)		THIRD POINT LOADS (TPL)		QUARTER POINT LOADS (QPL)	
METERS	FEET	LOAD (PLF)	DEFLECTION (IN)	LOAD (LBS)	DEFLECTION (IN)	LOAD (LBS)	DEFLECTION (IN)	LOAD (LBS)	DEFLECTION (IN)
2	6.56	430	0.07	2600	0.1	1300	0.07	900	0.08
2.5	8.2	373	0.11	2475	0.15	1295	0.12	890	0.13
3	9.84	315	0.14	2350	0.21	1290	0.17	875	0.18
3.5	11.48	258	0.18	2225	0.26	1280	0.22	865	0.24
4	13.12	200	0.22	2100	0.31	1275	0.27	850	0.29
4.5	14.76	183	0.30	2010	0.39	1270	0.38	840	0.39
5	16.41	165	0.38	1925	0.48	1260	0.50	825	0.50
5.5	18.05	148	0.46	1840	0.56	1255	0.61	815	0.60
6	19.69	130	0.54	1750	0.64	1250	0.73	800	0.70
6.5	21.33	123	0.71	1665	0.75	1245	0.92	790	0.89
7	22.97	115	0.88	1575	0.87	1240	1.11	775	1.08
7.5	24.61	108	1.05	1490	0.98	1230	1.30	765	1.27
8	26.25	100	1.22	1400	1.09	1225	1.49	750	1.46
8.5	27.89	95	1.49	1340	1.24	1155	1.68	735	1.66
9	29.53	90	1.76	1275	1.39	1080	1.87	715	1.87
9.5	31.17	85	2.03	1215	1.54	1010	2.06	700	2.07
10	32.81	80	2.29	1150	1.69	940	2.25	680	2.28
10.5	34.45	74	2.53	1115	1.90	895	2.46	650	2.50
11	36.09	68	2.78	1075	2.11	845	2.68	615	2.72
11.5	37.73	61	3.02	1040	2.32	800	2.89	585	2.95
12	39.37	55	3.26	1000	2.53	750	3.10	550	3.17

GLOBAL TRUSS DT44P LOAD SPAN TABLE

Limited based on Strength and Reduced per ANSI E1.21

TRUSS SPAN		UNIFORMLY DISTRIBUTED LOAD (UDL)		CENTER POINT LOAD (CPL)		THIRD POINT LOADS (TPL)		QUARTER POINT LOADS (QPL)	
METERS	FEET	LOAD (PLF)	DEFLECTION (IN)	LOAD (LBS)	DEFLECTION (IN)	LOAD (LBS)	DEFLECTION (IN)	LOAD (LBS)	DEFLECTION (IN)
2	6.56	366	0.06	2210	0.09	1105	0.06	765	0.07
2.5	8.2	317	0.09	2105	0.13	1100	0.10	755	0.11
3	9.84	268	0.12	2000	0.17	1095	0.14	745	0.16
3.5	11.48	219	0.15	1890	0.22	1090	0.19	735	0.20
4	13.12	170	0.18	1785	0.26	1085	0.23	725	0.25
4.5	14.76	155	0.25	1710	0.33	1080	0.33	710	0.33
5	16.41	140	0.32	1640	0.40	1075	0.42	700	0.42
5.5	18.05	125	0.39	1560	0.47	1070	0.52	690	0.51
6	19.69	111	0.45	1490	0.54	1065	0.62	680	0.60
6.5	21.33	104	0.60	1415	0.64	1065	0.78	670	0.76
7	22.97	98	0.75	1340	0.74	1055	0.94	660	0.92
7.5	24.61	91	0.89	1265	0.83	1050	1.10	650	1.08
8	26.25	85	1.04	1190	0.93	1045	1.27	640	1.24
8.5	27.89	81	1.27	1135	1.05	1040	1.43	625	1.41
9	29.53	77	1.49	1085	1.18	980	1.59	610	1.59
9.5	31.17	72	1.72	1030	1.31	930	1.75	595	1.76
10	32.81	68	1.95	980	1.44	800	1.91	580	1.93
10.5	34.45	63	2.15	945	1.61	760	2.09	550	2.12
11	36.09	57	2.36	915	1.79	720	2.27	525	2.32
11.5	37.73	52	2.57	880	1.97	680	2.45	495	2.51
12	39.37	47	2.77	850	2.15	640	2.64	470	2.70

ER ENGINEERING

Entertainment and Rigging Engineering, LLC
6310 Donegal Drive
West Chester, OH 45069

STATE OF OHIO
ANDREW SAVAGE
P.E.86205
REGISTERED PROFESSIONAL ENGINEER

01/25/2021

Project Name: DT44P Truss Load Span Tables

Event/Venue Name and Address: General Use

Client Name and Address
Global Truss America, LLC
4295 Charter Street
Vernon, CA 90058

ISSUE/REVISIONS

	REV A

Sheet Name: DT44P Load Span Tables

Project No.: 20.104.06

Date: 01/25/2020

Sheet: S1.0