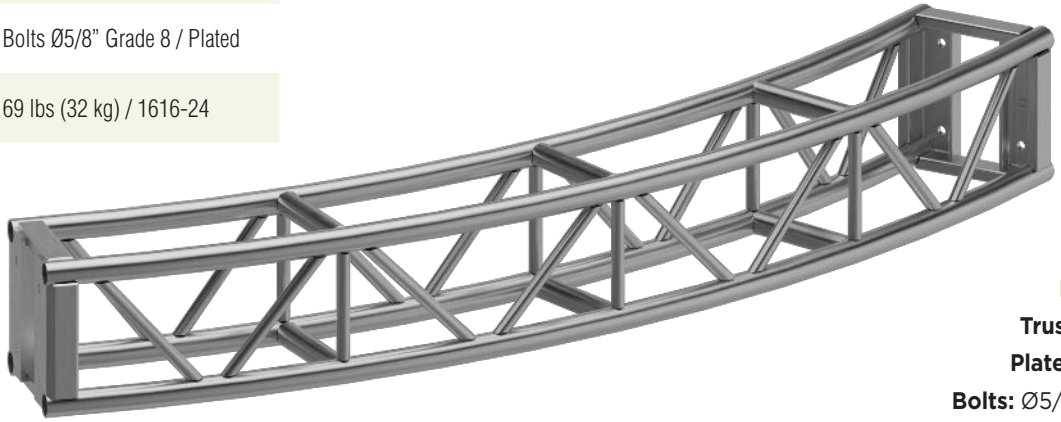
MAIN CHORDS	1.9" OD x 0.145" -> REF.9_145
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Bolts Ø5/8" Grade 8 / Plated
WEIGHT PER SECTION	69 lbs (32 kg) / 1616-24

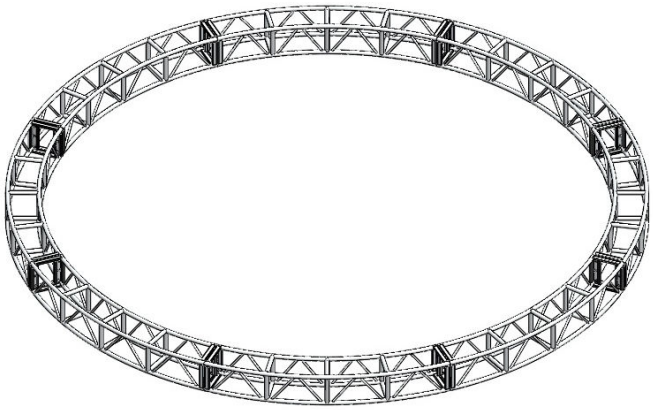


MATERIAL

Truss: 6061-T6

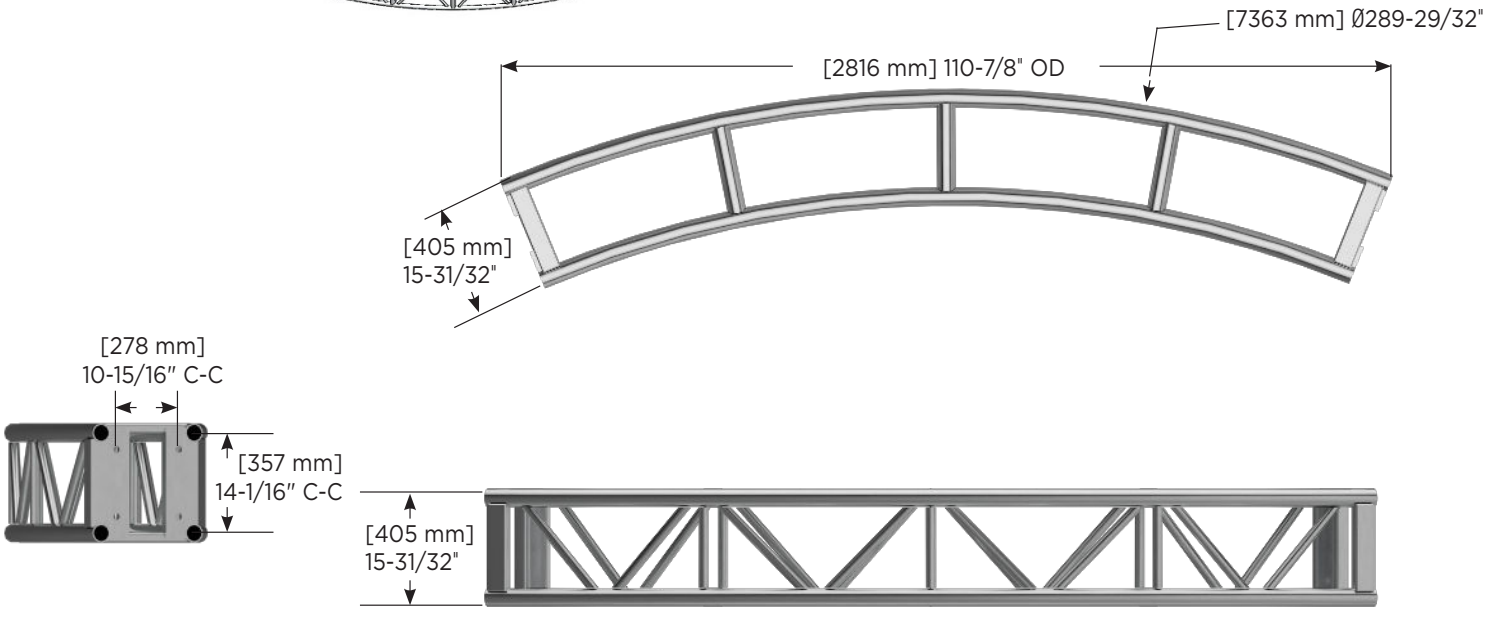
Plates: 6061-T6

Bolts: Ø5/8" Grade 8



RECOMMENDED TORQUE VALUES
Temporary installation: 80-100 ft-lb
Permanent installation: 130-150 ft-lb

Measures: 1616-24



MANUFACTURED BY CERTIFIED WELDERS

OPTIONS AVAILABLE:

TIRS-1616-08

ALLOWABLE LOAD TABLE





Rigging Points	Uniformly Distributed Load						Center Point			
	Load Capacity				Deflection		Load Capacity		Deflection	
	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
10	514	(766)	12663	(5744)	0,04	(1.1)	1500	(681)	0,18	(4.6)
8	492	(732)	12112	(5494)	0,04	(1.1)	1500	(681)	0,04	(1.1)
6	285	(425)	7020	(3185)	0,04	(1)	1500	(681)	0,03	(0.8)
4	234	(349)	5768	(2617)	0,04	(1.1)	1500	(681)	0,12	(3.1)
3	231	(344)	5684	(2579)	0,12	(3)	1235	(561)	0,22	(5.6)

Load per applied point

TIRS-1616-12

ALLOWABLE LOAD TABLE





Rigging Points	Uniformly Distributed Load						Center Point			
	Load Capacity				Deflection		Load Capacity		Deflection	
	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
10	333	(496)	12558	(5697)	0,04	(1.1)	1484	(674)	0,18	(4.6)
8	333	(496)	12558	(5697)	0,04	(1)	1484	(674)	0,05	(1.3)
6	267	(397)	10050	(4559)	0,04	(0.9)	1280	(581)	0,10	(2.6)
4	178	(265)	6698	(3039)	0,05	(1.4)	640	(291)	0,22	(5.7)
3	143	(213)	5390	(2445)	0,11	(2.9)	510	(232)	0,40	(10.1)

Load per applied point

MANUFACTURED BY CERTIFIED WELDERS

TIRS-1616-16

ALLOWABLE LOAD TABLE





Rigging Points	Uniformly Distributed Load						Center Point			
	Load Capacity				Deflection		Load Capacity		Deflection	
	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
10	307	(458)	15456	(7011)	0,03	(0.9)	1251	(568)	0,18	(4.6)
8	246	(367)	12364	(5609)	0,03	(0.8)	1251	(568)	0,09	(2.2)
6	176	(262)	8831	(4006)	0,08	(2.1)	1000	(454)	0,17	(4.3)
4	137	(204)	6868	(3116)	0,09	(2.3)	627	(285)	0,46	(11.7)
3	89	(133)	4480	(2033)	0,23	(5.9)	490	(223)	0,65	(16.6)

Load per applied point

TIRS-1616-24

ALLOWABLE LOAD TABLE





Rigging Points	Uniformly Distributed Load						Center Point			
	Load Capacity				Deflection		Load Capacity		Deflection	
	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
10	268	(399)	20189	(9158)	0,05	(1.3)	1176	(534)	0,18	(4.6)
8	211	(315)	15939	(7230)	0,05	(1.3)	1135	(515)	0,13	(3.4)
6	129	(193)	9744	(4420)	0,10	(2.5)	710	(323)	0,27	(6.9)
4	89	(133)	6729	(3053)	0,13	(3.4)	323	(147)	0,88	(22.3)
3	54	(81)	4095	(1858)	0,44	(11.3)	315	(143)	1,00	(25.4)

Load per applied point

MANUFACTURED BY CERTIFIED WELDERS

TIRS-1616-32

ALLOWABLE LOAD TABLE





Rigging Points	Uniformly Distributed Load						Center Point			
	Load Capacity				Deflection		Load Capacity		Deflection	
	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
10	192	(286)	19320	(8764)	0,06	(1.6)	925	(420)	0,18	(4.6)
8	152	(226)	15258	(6921)	0,07	(1.7)	753	(342)	0,18	(4.7)
6	107	(159)	10732	(4868)	0,09	(2.3)	580	(264)	0,33	(8.4)
4	57	(85)	5680	(2577)	0,26	(6.6)	254	(116)	1,36	(34.6)
3	21	(32)	2156	(978)	0,44	(11.3)	160	(73)	1,49	(37.8)

Load per applied point

TIRS-1616-40

ALLOWABLE LOAD TABLE





Rigging Points	Uniformly Distributed Load						Center Point			
	Load Capacity				Deflection		Load Capacity		Deflection	
	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
10	152	(226)	19040	(8637)	0,09	(2.4)	789	(358)	0,18	(4.6)
8	117	(175)	14700	(6668)	0,09	(2.3)	627	(285)	0,32	(8.2)
6	80	(120)	10080	(4573)	0,17	(4.4)	520	(236)	0,68	(17.4)
4	25	(38)	3150	(1429)	0,32	(8.1)	138	(63)	1,89	(48.1)
3	6	(10)	812	(369)	0,56	(14.3)	70	(32)	1,48	(37.6)

Load per applied point

MANUFACTURED BY CERTIFIED WELDERS

NOTES

- Capacities shown in this table are valid for structures manufactured after January 2020.
- Trusses must be loaded uniformly on both sides of their longitudinal axis.
- Loads must be applied to or as close as possible to the nodes of the trusses.
- Deflection of truss is theoretical and based solely on their rigidity. It therefore does not take into account the possible movement between the truss sections due to the tolerance of the pins/bolts.
- Data are valid for indoor use only.
- Trusses are hung from the top chord only.
- Data are valid only for static loads and span, with two support points (one at each end).
  - If dynamic loads or more attachment points are needed, contact **Therio Innovation**.
- All rigging points must be equidistant.