THERIO
INNOVATION



INNOVATIVE SOLUTIONS FOR OUR WORLD

CREATION
TO REALIZATION

PRODUCT CATALOG

CREATION
TO REALIZATION

THERIO
INNOVATION

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ENGINEERING

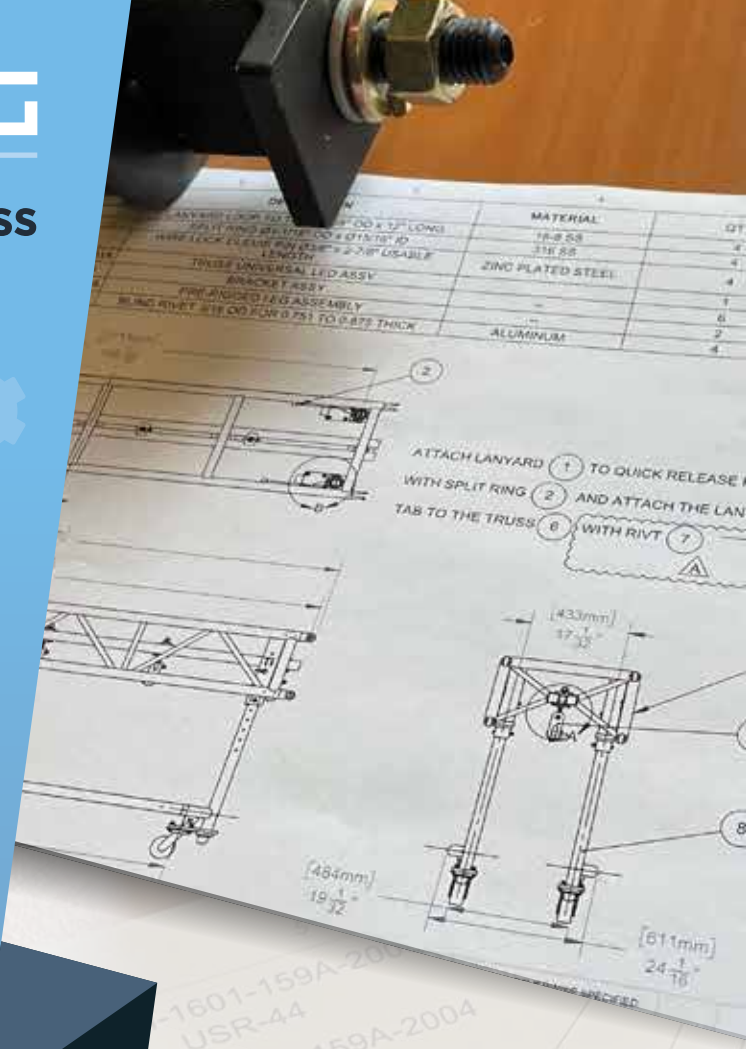
We Are More Than Just Truss

Our engineering department designs structures for live entertainment and film. From scenic elements, acrobatic apparatus and AV brackets, Therio Innovation provides fully engineered designs... and then we fabricate them in our shop that is CWB Division 1 certified.

Therio Innovation Engineering is licensed to work in all the Canadian Provinces.

We can also work in all 50 US states, Puerto Rico, Guam and the District of Columbia.

We fabricate great fully engineered standard and custom truss that meet or exceed AINSI Technical Standards.



- Scenic Engineering
- Temporary & Permanent Structures
- Sports and Leisure Installations
- Themed Attractions & Museums
- Artistic and sculptural Installations
- Industrial applications
- Research & Development Projects
- Consumer & Marketing projects

Sectors

Our engineering team are specialists in developing solutions for unique projects that require an expertise that has been honed over the course of more that twenty years.

Our engineering team, led by Luc Dorion P.ENG, who is certified both in structural and in welding engineering, is specialized in many application types.

ENGINEERING

EXPERTISE & SERVICES

Therio Innovation Engineering brings a multi-disciplined approach to its projects. We can tailor our services to the project's specific needs.

We make life easier for you by offering all the services and expertise in product and project development under one roof, without worry.

We can support you from A to Z in the development of new products. Our team is a dynamic and dedicated and will support you with the challenges of your project.

Engineering

- Mechanics
- Structures
- Design
- Materials
- Processes
- Optimization

Simulation

- Finite Elements
- Dynamic Analysis
- Validation
- Prototypes & Tests
- Numerical Simulation

Project Management

- Coordination
- Supervision
- Product Development

Portfolio

Design, analysis and fabrication of a structure in the shape of a giant fir tree on which to hang LED lights.

Design, analysis and fabrication of a self-supporting structure in the shape of a crown for Cirque du Soleil's production of Alegria.

Design, analysis and manufacture of the technical grid supporting the pulley systems for Cirque Du Soleil's Echo show.

Engineering, designand fabrication of projector support towers. We also engineered several other elements made on site in Osaka (Screen structures, chat status display support, etc.)

Design, analysis and fabrication of floating platforms for Justin Bieber's tour. LED screen on one side and dancers (live load) on the other.

Design, analysis (including siesmic) and fabrication of a permanent structure in a pharmaceutical factory.

Design, analysis and supply of standard Therio Innovation truss.

Fabrication of propriatary truss and other specialized equipment.

Design, engineering, and fabrication of modular structures for the immersive Minecraft Experience.



Creation Solutions

SCENIC

Our team of Engineers, Designers, Welders, and Artisans works with your creative team to bring your vision to life.

We begin by performing an engineering review of the concept to ensure its structural integrity and to begin mapping out fabrication solutions.

Our designers work with your team to ensure that our solutions respond to all the artistic and production requirements of your project, and we carefully review the fabrication drawings together.

Now our welders and artisans get to work and carefully craft your scenery while all the time respecting the production schedule.



to

Realisation Solutions

ACROBATIC

Montreal is the Circus Capital of the World

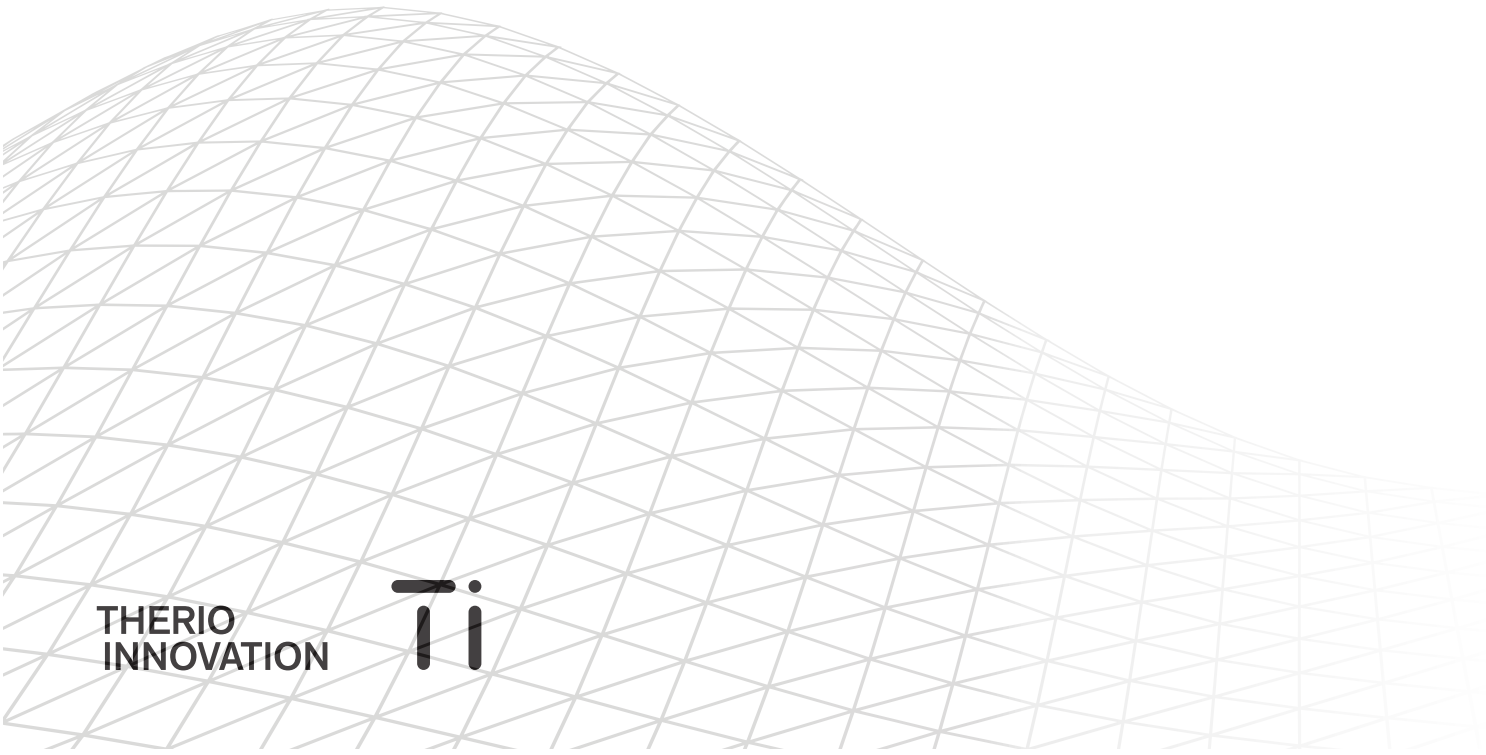
Therio Innovation is part of the magical ecosystem that has given us those bragging rights.

Working directly with the artists in conjunction with the production team, we engineer a safe acrobatic rig that meets all the code and life safety requirements.

A painstaking process of minute adjustments during a prototyping phase guarantees that the final product will make the performance look effortless to your bewildered audience.

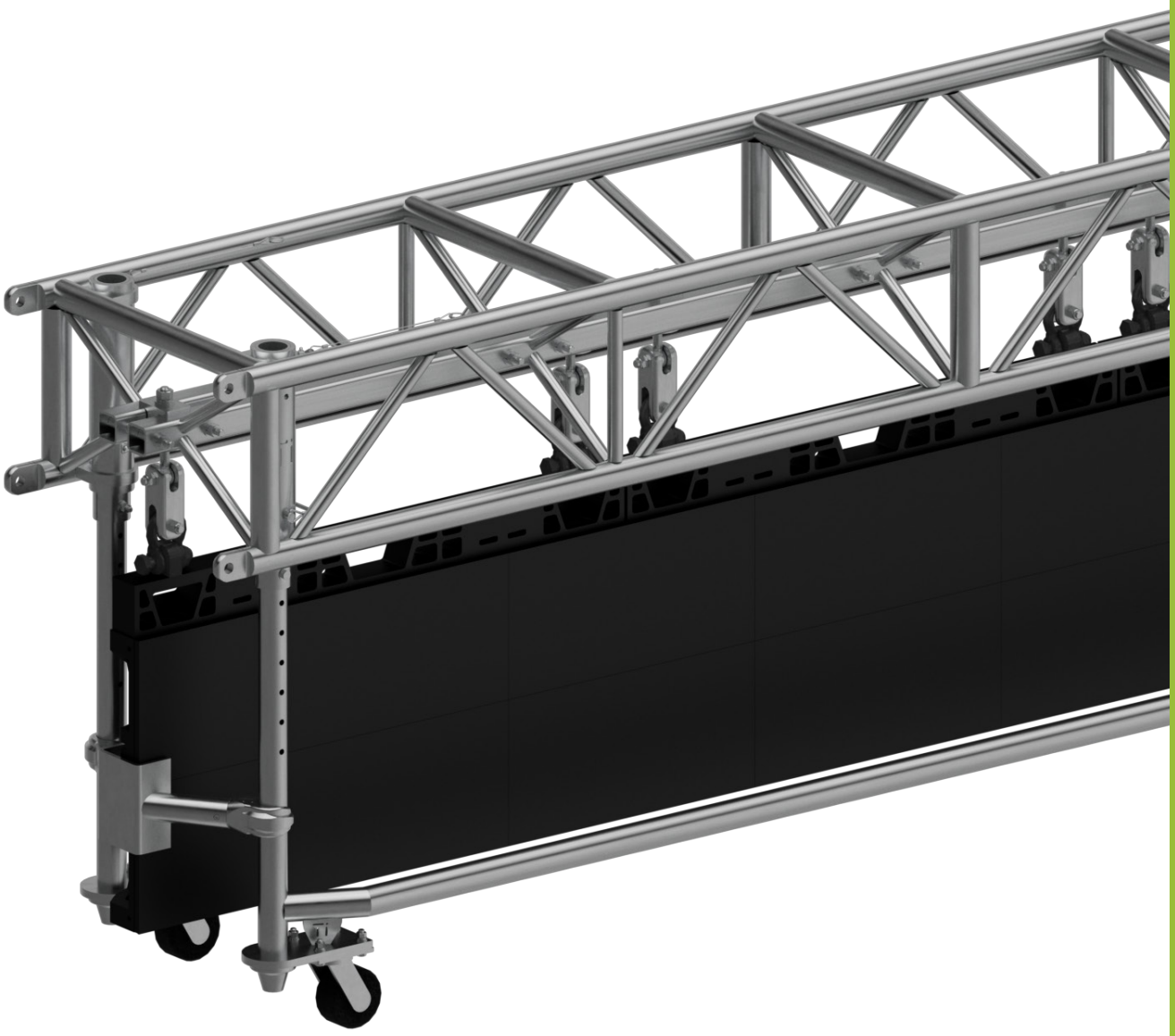


CREATION
TO REALIZATION



THERIO
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UNIVERSAL LED



THE PERFECT PRODUCT FOR VIDEO WALLS

Eliminate the use of span sets.
Use any shackle/eyebolt header bar in your inventory.
Pre-rig header bars and the first row of the LED in the shop for a faster load in (500 x 500).
Eliminates all issues by building the first row on site.
(*The first row always takes the longest and has the most issues.*)
Reduce and eliminate tile gaps during installation due to rigid hang points (no span sets).
Anti-sway bars and edge protector for screen transport.
1424 footprint allows for connection to pre-rigged lighting truss.
Greatly reduce load in/out times.

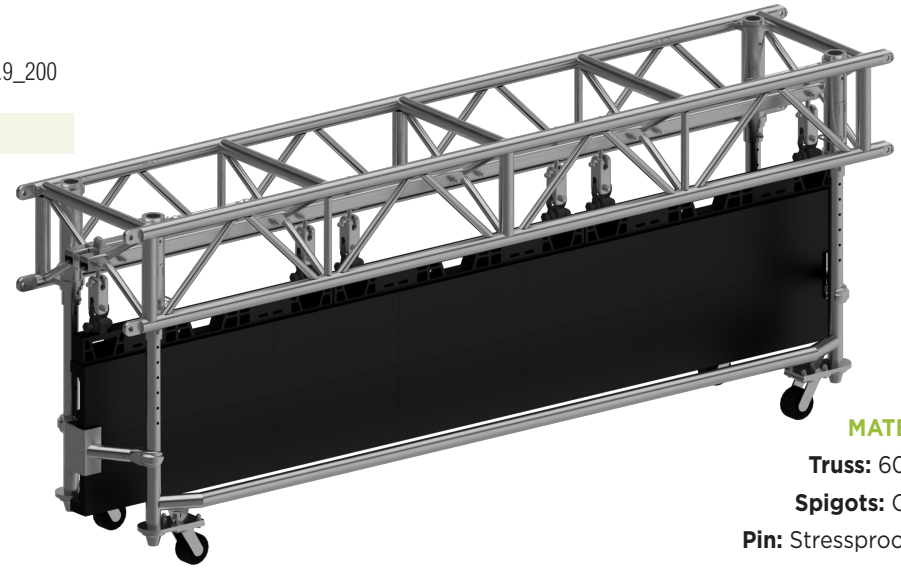
THERIO
INNOVATION

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V02 | 09-2023

MAIN CHORDS	1.9" OD x 0.200" -> REF.9_200
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø3/4" / Spigots

PATENT PENDING – BREVET EN ATTENTE

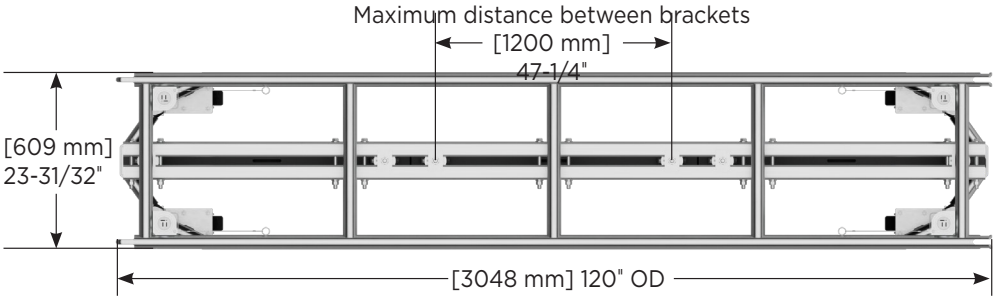


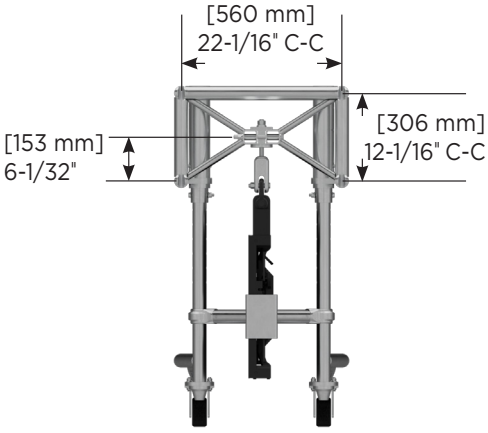
MATERIAL

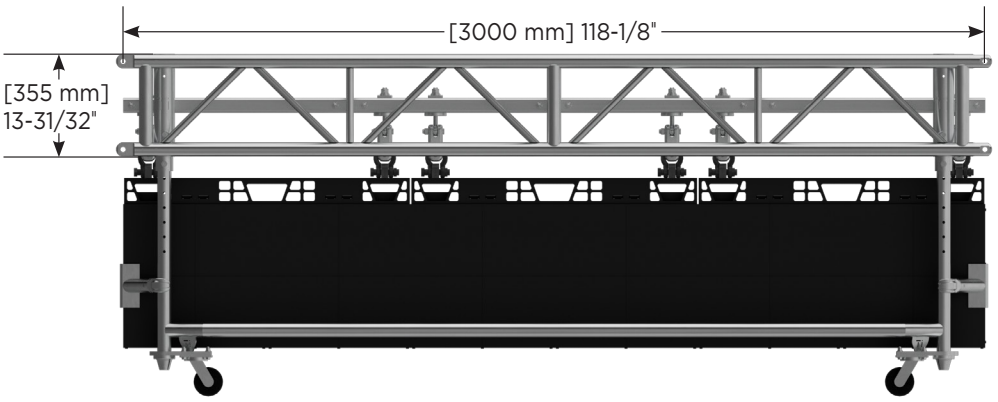
Truss: 6061-T6

Spigots: C12L14

Pin: Stressproof 1144







MANUFACTURED BY CERTIFIED WELDERS

MAIN CHORDS
1.9" OD x 0.200"

Weight lbs	Weight (kg)	Item References				LENGTH*
120	(54)	TIUL-	1424	-M100	F.9_200	<- 1 000 mm ->
141	(64)	TIUL-	1424	-M150	F.9_200	<- 1 500 mm ->
161	(73)	TIUL-	1424	-M200	F.9_200	<- 2 000 mm ->
172	(78)	TIUL-	1424	-M240	F.9_200	<- 2 400 mm ->
191	(87)	TIUL-	1424	-M250	F.9_200	<- 2 500 mm ->
210	(95)	TIUL-	1424	-M300	F.9_200	<- 3 000 mm ->

The indicated weights includes the truss, brackets and legs. The weight of the screen protectors is excluded.

*Custom lengths available upon request.

ALLOWABLE LOAD TABLE

Uniformly Distributed Load



Span Length		Load Capacity per bracket spacing				Load Capacity not on the center track (only on main chords)				Deflection	
ft	(m)	lb/0.5m	lb/0.6m	lb/1m	lb/1.2m	lb/ft	(kg/m)	lb	(kg)	in	(mm)
8	(2.44)	1300	1300	1300	1300	921	(1,371)	7 371	(3,343)	0,02	(0.4)
10	(3.05)	1015	1219	1300	1300	619	(921)	6 190	(2,808)	0,03	(0.7)
16	(4.88)	595	714	1191	1300	363	(540)	5 806	(2,634)	0,10	(2.6)
20	(6.1)	441	529	881	1058	269	(400)	5 373	(2,437)	0,19	(4.9)
24	(7.32)	294	353	588	706	179	(267)	4 302	(1,951)	0,28	(7)
30	(9.14)	174	209	348	418	106	(158)	3 183	(1,444)	0,43	(10.9)
32	(9.75)	148	178	296	356	90	(134)	2 891	(1,311)	0,49	(12.4)
40	(12.19)	81	97	161	194	49	(73)	1 968	(893)	0,77	(19.4)
48	(14.63)	44	53	88	106	27	(40)	1 288	(584)	1,10	(28)
50	(15.24)	37	45	75	90	23	(34)	1 143	(518)	1,20	(30.4)

NOTES

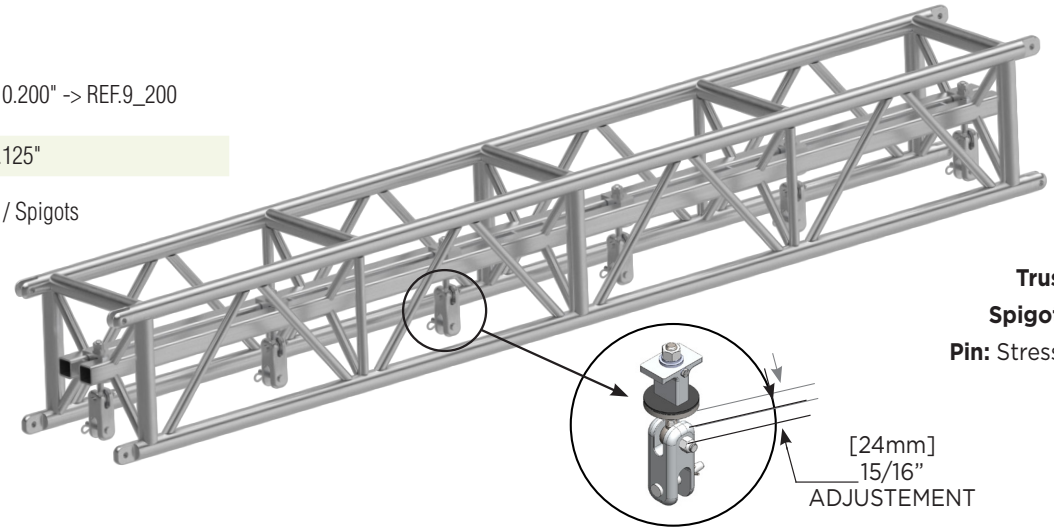
- Capacities shown in this table are valid for structures manufactured after January 2022.
- Trusses must be loaded uniformly on both sides of their longitudinal axis.
- Loads must be applied to or as close as possible to the nodes of the trusses.
- Deflection of truss is theoretical and based solely 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 and outdoor use:
  - Snow and rain load must not exceed truss's load capacity.
  - Maximum **constant wind speed of 32 km/h (20 mph).**
  - Maximum **gust wind speed of 80 km/h (49 mph).**
- 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**.
- Never exceed maximum load capacity (uniformly distributed).
- Never exceed maximum load per bracket.
- The use of a load cell on chain hoists is highly recommended.
- The truss must be leveled when load is applied to it.
- Maximum span between brackets is **47-1/4" (1,200 mm)**.
- Maximum screen height limited to **39'4" (12.0 m)**

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MAIN CHORDS	1.9" OD x 0.200" -> REF.9_200
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø5/8" / Spigots

PATENT PENDING – BREVET EN ATTENTE

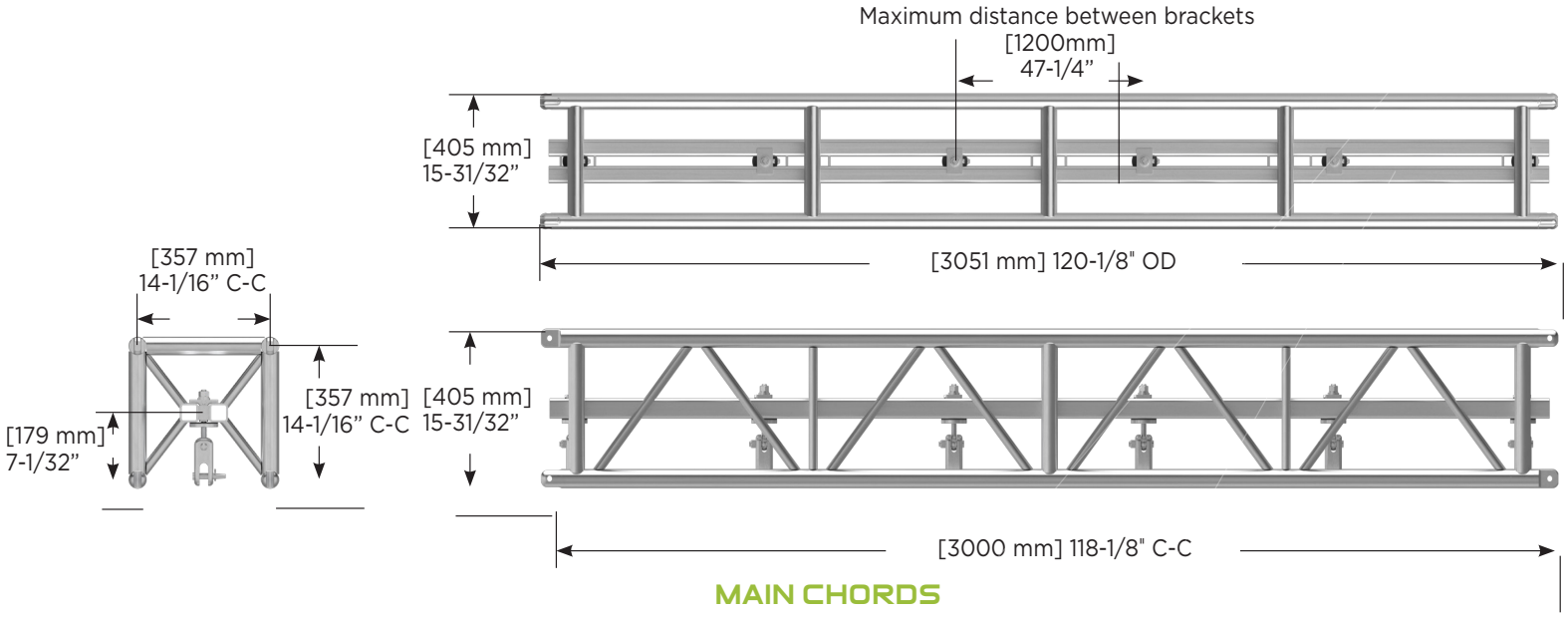


MATERIAL

Truss: 6061-T6

Spigots: 6061-T6

Pin: Stressproof 1144



MAIN CHORDS
1.9" OD x 0.200"

WEIGHT lbs	WEIGHT (kg)	Items references				LENGTH*
53	(24)	TIUL-	1616	-M100	F.9_200	1 000mm ->
72	(32)	TIUL-	1616	-M150	F.9_200	1 500mm ->
91	(41)	TIUL-	1616	-M200	F.9_200	2 000mm ->
113	(51)	TIUL-	1616	-M250	F.9_200	2 500mm ->
131	(59)	TIUL-	1616	-M300	F.9_200	<- 3 000 mm ->

The indicated weights includes the truss and brackets.

* Custom lengths available upon request (also available in imperial units).

ALLOWABLE LOAD TABLE

Uniformly Distributed Load



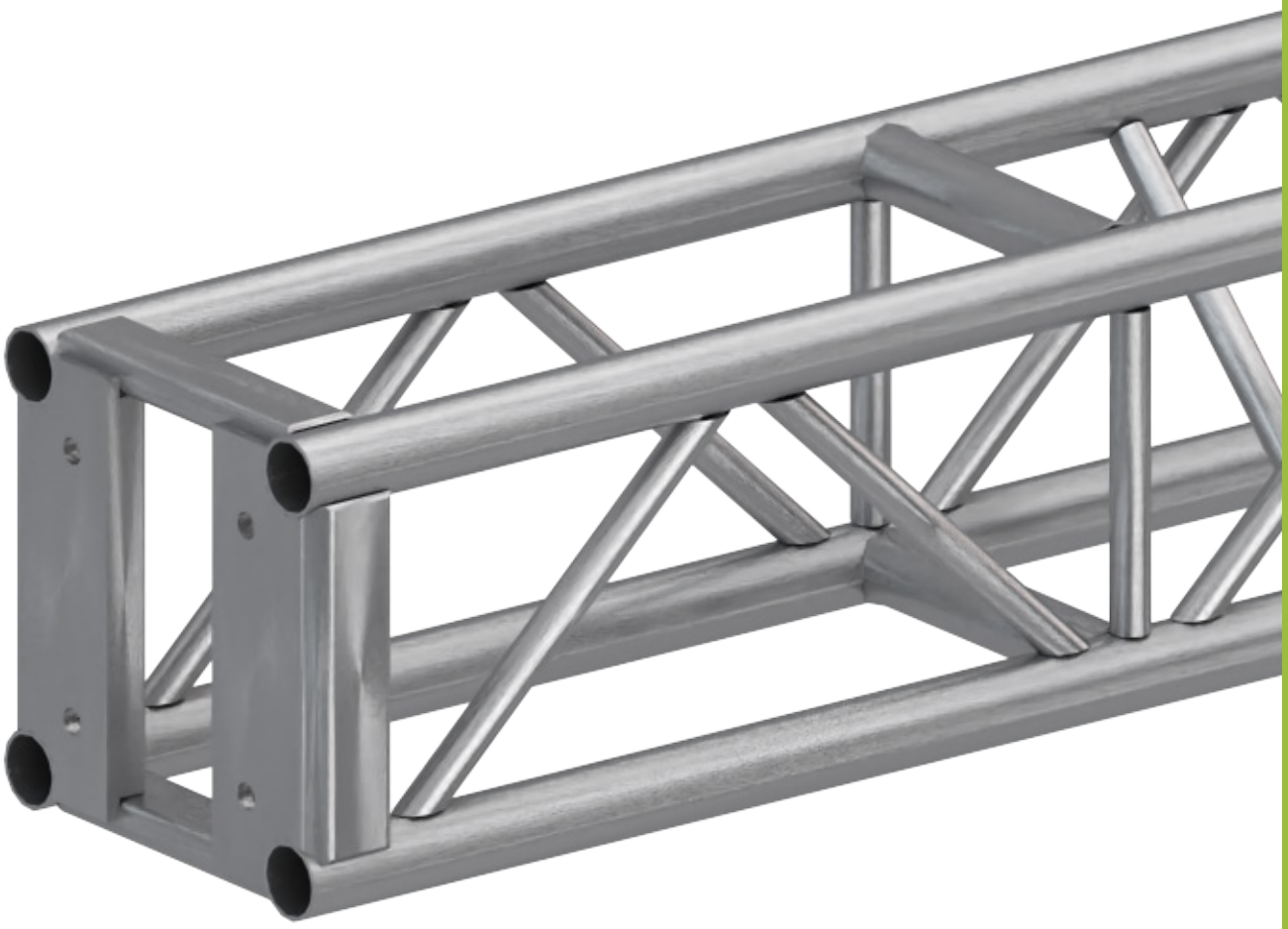
Span Length		Load Capacity per bracket spacing				Load Capacity not on the center track (only on main chords)				Deflection	
ft	**(m)**	**lb/0.5m**	**lb/0.6m**	**lb/1m**	**lb/1.2m**	**lb/ft**	**(kg/m)**	**lb**	**(kg)**	**in**	**(mm)**
8	(2.44)	1300	1300	1300	1300	986	(1467)	7888	(3578)	0,04	(1)
10	(3.05)	1270	1300	1300	1300	774	(1152)	7743	(3512)	0,08	(1.9)
16	(4.88)	767	920	1300	1300	467	(696)	7479	(3393)	0,31	(7.8)
20	(6.1)	535	642	1070	1284	326	(485)	6521	(2958)	0,53	(13.4)
24	(7.32)	364	437	728	873	222	(330)	5323	(2415)	0,76	(19.3)
30	(9.14)	224	269	448	538	137	(203)	4096	(1858)	1,19	(30.2)
32	(9.75)	194	233	388	465	118	(176)	3781	(1715)	1,35	(34.3)
40	(12.19)	115	138	230	276	70	(104)	2808	(1274)	2,11	(53.7)
48	(14.63)	72	87	145	174	44	(66)	2119	(961)	3,04	(77.3)
50	(15.24)	65	78	130	155	39	(59)	1975	(896)	3,30	(83.8)

NOTES

- Capacities shown in this table are valid for structures manufactured after January 2022.
- 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 and outdoor use:
  - Snow and rain load must not exceed truss's load capacity.
  - Maximum **constant wind speed of 32 km/h (20 mph).**
  - Maximum **gust wind speed of 80 km/h (49 mph).**
- 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**.
- Never exceed maximum load capacity (uniformly distributed).
- Never exceed maximum load per bracket.
- The use of a load cell on chain hoists is highly recommended.
- The truss must be leveled when load is applied to it.
- Maximum span between brackets is **47-1/4" (1,200 mm)**.
- Maximum screen height limited to **39'4" (12.0 m)**.

MANUFACTURED BY CERTIFIED WELDERS

BOX TRUSS



DIAGONALS ON THE VERTICAL SIDES
LADDER ON THE TOP AND BOTTOM

Designed for maximum versatility across multiple applications.

The integrated ladder on both the top and bottom makes it easy to hang various types of gear and provides smoother movement during climbs.
Compatible with all connection systems.

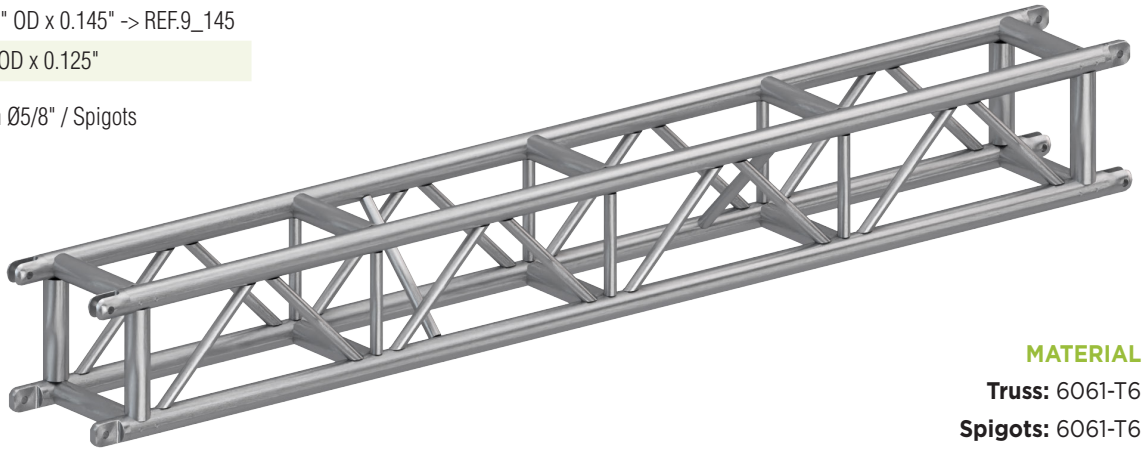
Other series available upon request.

THERIO
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V02 | 09-2023

MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø5/8" / Spigots

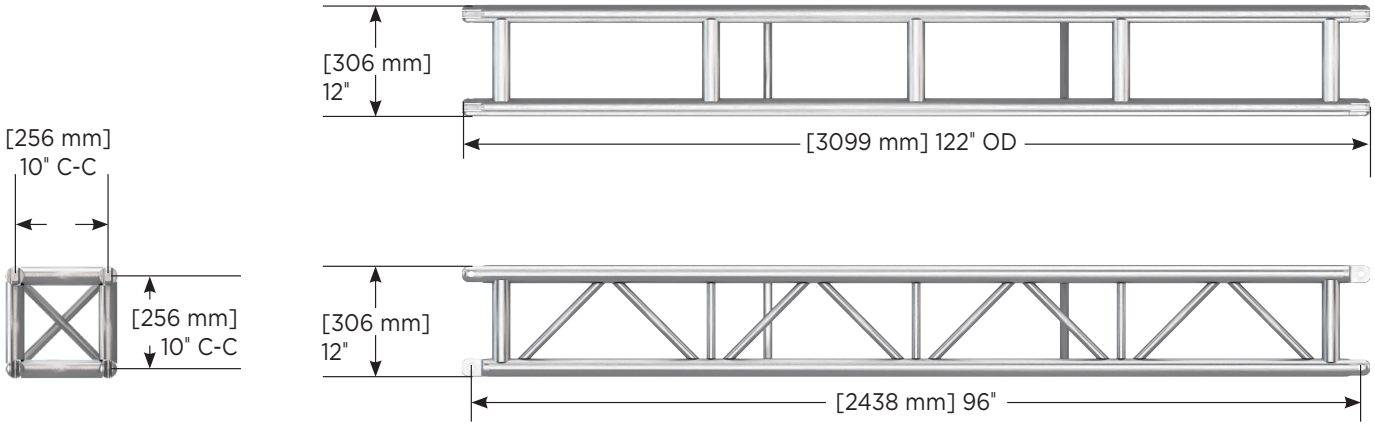


MATERIAL

Truss: 6061-T6

Spigots: 6061-T6

Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.188"

MAIN CHORDS 1.9" OD x 0.200"

Weight lbs	Weight (kg)	Item References	LENGTH*	Item References	Weight lbs	Weight (kg)
33	(15)	TIP-1212-048-F.2_125	<- 48" ->	TIP-1212-048-F.9_145	33	(15)
40	(18)	TIP-1212-060-F.2_125	<- 60" ->	TIP-1212-060-F.9_145	40	(18)
55	(25)	TIP-1212-096-F.2_125	<- 96" ->	TIP-1212-096-F.9_145	55	(25)
63	(29)	TIP-1212-120-F.2_125	<- 120" ->	TIP-1212-120-F.9_145	63	(29)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

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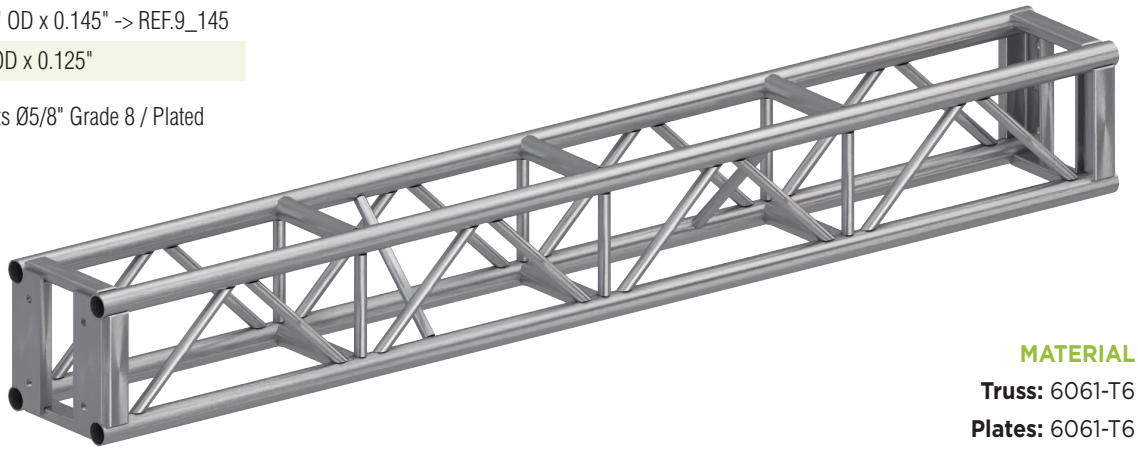
ALLOWABLE LOAD TABLE

Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	864	(1286)	6911	(3135)	0,10	(2.6)	4030	(1828)	0,10	(2.4)	3023	(1371)	0,12	(3.1)	2015	(914)	0,11	(2.9)
10	(3.05)	562	(836)	5617	(2548)	0,16	(4.2)	3212	(1457)	0,15	(3.8)	2409	(1093)	0,19	(4.9)	1606	(728)	0,18	(4.5)
16	(4.88)	247	(367)	3948	(1791)	0,48	(12.2)	1974	(895)	0,39	(9.8)	1481	(672)	0,49	(12.4)	987	(448)	0,46	(11.6)
20	(6.1)	155	(231)	3110	(1410)	0,75	(19)	1555	(705)	0,60	(15.4)	1166	(529)	0,76	(19.4)	777	(353)	0,71	(18.1)
24	(7.32)	106	(158)	2541	(1153)	1,08	(27.4)	1271	(576)	0,87	(22.2)	953	(432)	1,10	(27.9)	635	(288)	1,03	(26.1)
30	(9.14)	65	(97)	1959	(889)	1,68	(42.7)	980	(444)	1,38	(35)	735	(333)	1,72	(43.6)	490	(222)	1,61	(40.8)
32	(9.75)	57	(84)	1810	(821)	1,91	(48.6)	905	(411)	1,57	(39.9)	679	(308)	1,95	(49.6)	453	(205)	1,83	(46.5)
40	(12.19)	34	(50)	1350	(612)	2,99	(76)	675	(306)	2,49	(63.3)	506	(230)	3,05	(77.4)	338	(153)	2,87	(72.8)
								Load per applied point											

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 chords 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**.

MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Bolts Ø5/8" Grade 8 / Plated

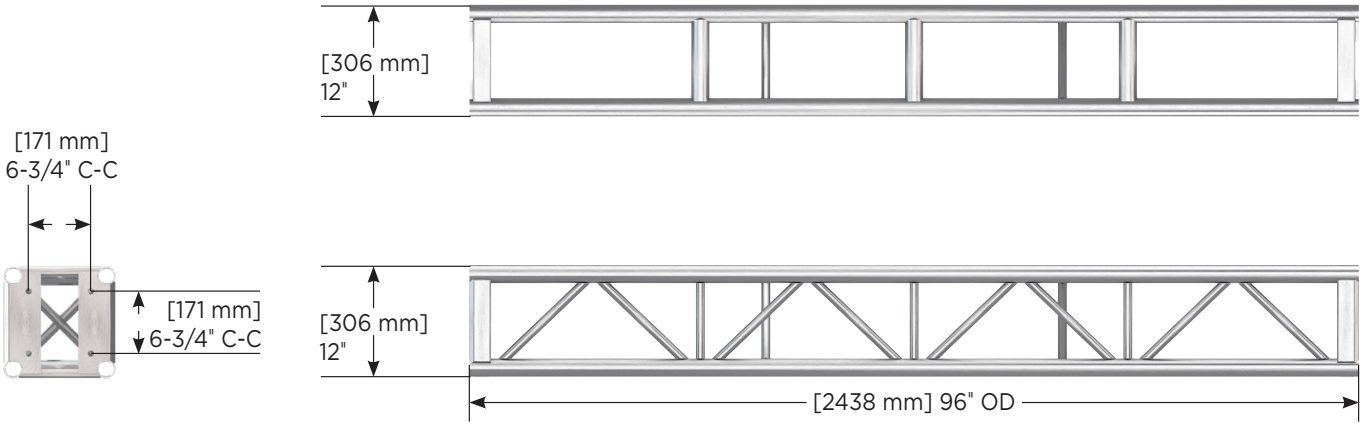


MATERIAL

Truss: 6061-T6

Plates: 6061-T6

Bolts: Ø5/8" Grade 8



MAIN CHORDS 2.0" OD x 0.188"

MAIN CHORDS 1.9" OD x 0.200"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
31	(14)	TIP-	1212	-048	P.2_125	<- 48" ->	TIP-	1212	-048	P.9_145	31	(14)
38	(17)	TIP-	1212	-060	P.2_125	<- 60" ->	TIP-	1212	-060	P.9_145	38	(17)
54	(24)	TIP-	1212	-096	P.2_125	<- 96" ->	TIP-	1212	-096	P.9_145	54	(24)
65	(29)	TIP-	1212	-120	P.2_125	<- 120" ->	TIP-	1212	-120	P.9_145	65	(29)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

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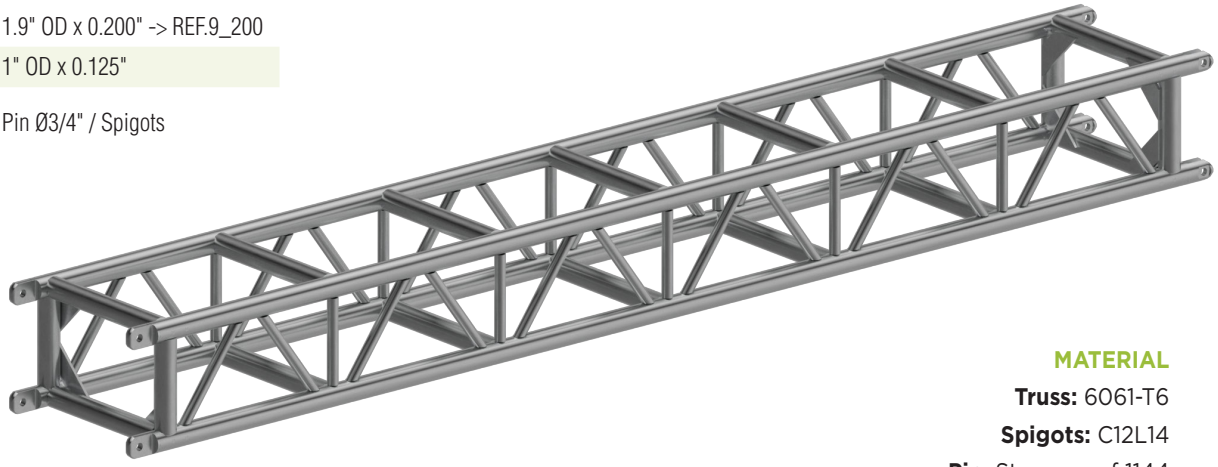
ALLOWABLE LOAD TABLE

Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	433	(645)	3466	(1572)	0.05	(1.2)	3489	(1583)	0.08	(1.9)	1747	(792)	0.07	(1.7)	1165	(528)	0.06	(1.5)
10	(3.05)	341	(508)	3410	(1547)	0.09	(2.3)	3414	(1549)	0.15	(3.7)	1723	(782)	0.13	(3.2)	1149	(521)	0.12	(3)
16	(4.88)	209	(311)	3342	(1516)	0.38	(9.5)	2101	(953)	0.38	(9.6)	1576	(715)	0.48	(12.2)	1051	(477)	0.45	(11.3)
20	(6.1)	164	(243)	3272	(1484)	0.72	(18.4)	1657	(751)	0.59	(15)	1242	(564)	0.75	(19)	828	(376)	0.70	(17.7)
24	(7.32)	113	(168)	2712	(1230)	1.06	(26.8)	1356	(615)	0.86	(21.8)	1017	(461)	1.08	(27.4)	678	(308)	1.01	(25.5)
30	(9.14)	70	(104)	2097	(951)	1.65	(41.9)	1048	(476)	1.35	(34.2)	786	(357)	1.68	(42.7)	524	(238)	1.57	(40)
32	(9.75)	61	(90)	1940	(880)	1.88	(47.7)	970	(440)	1.54	(39.1)	727	(330)	1.91	(48.6)	485	(220)	1.79	(45.5)
40	(12.19)	36	(54)	1455	(660)	2.93	(74.5)	728	(330)	2.44	(61.9)	546	(248)	2.99	(75.9)	364	(165)	2.81	(71.3)
								Load per applied point											

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 chords 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**.

MAIN CHORDS	2.0" OD x 0.188" -> REF.2_188 1.9" OD x 0.200" -> REF.9_200
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø3/4" / Spigots

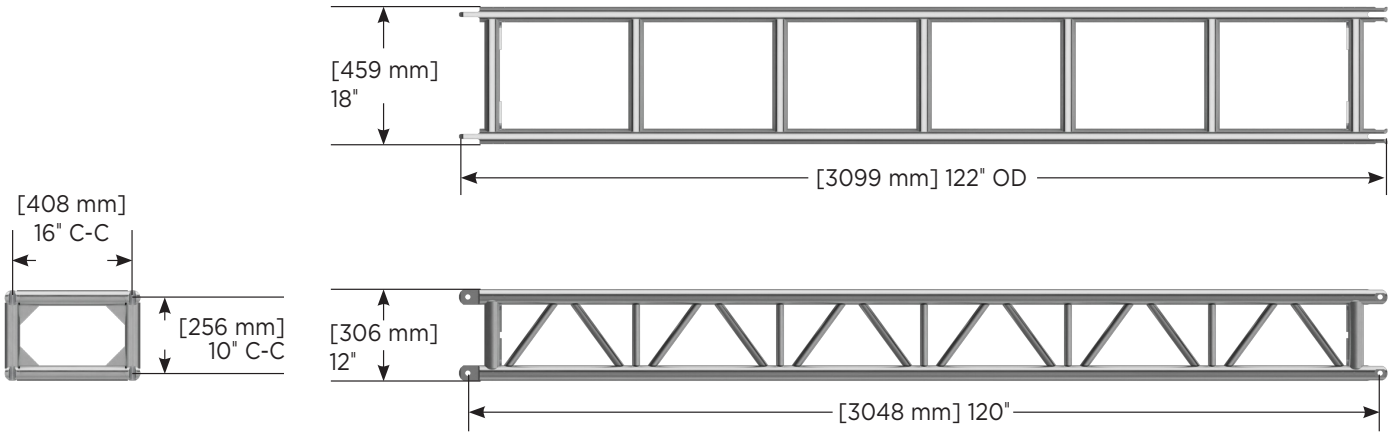


MATERIAL

Truss: 6061-T6

Spigots: C12L14

Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.188"

MAIN CHORDS 1.9" OD x 0.200"

Weight lbs	Weight (kg)	Item References	LENGTH*	Item References	Weight lbs	Weight (kg)
52	(24)	TIP-1218-048-F.2_188	<- 48" ->	TIP-1218-048-F.9_200	52	(24)
60	(27)	TIP-1218-060-F.2_188	<- 60" ->	TIP-1218-060-F.9_200	60	(27)
84	(38)	TIP-1218-096-F.2_188	<- 96" ->	TIP-1218-096-F.9_200	84	(38)
98	(44)	TIP-1218-120-F.2_188	<- 120" ->	TIP-1218-120-F.9_200	98	(44)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

MANUFACTURED BY CERTIFIED WELDERS

ALLOWABLE LOAD TABLE

Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	988	(1470)	7900	(3584)	0,08	(2.1)	6061	(2749)	0,10	(2.5)	3968	(1800)	0,11	(2.8)	2645	(1200)	0,10	(2.6)
10	(3.05)	761	(1132)	7606	(3450)	0,15	(3.9)	4830	(2191)	0,16	(4)	3622	(1643)	0,20	(5)	2415	(1095)	0,18	(4.7)
16	(4.88)	371	(552)	5935	(2692)	0,50	(12.6)	2968	(1346)	0,40	(10.2)	2226	(1010)	0,51	(12.9)	1484	(673)	0,47	(12)
20	(6.1)	234	(348)	4673	(2120)	0,78	(19.7)	2336	(1060)	0,63	(15.9)	1752	(795)	0,79	(20.1)	1168	(530)	0,74	(18.8)
24	(7.32)	159	(237)	3817	(1732)	1,12	(28.4)	1909	(866)	0,91	(23.1)	1432	(649)	1,14	(29)	954	(433)	1,07	(27.1)
30	(9.14)	98	(146)	2941	(1334)	1,75	(44.4)	1471	(667)	1,43	(36.4)	1103	(500)	1,78	(45.3)	735	(334)	1,67	(42.4)
32	(9.75)	85	(126)	2717	(1232)	1,99	(50.5)	1358	(616)	1,63	(41.5)	1019	(462)	2,03	(51.5)	679	(308)	1,90	(48.2)
40	(12.19)	51	(75)	2023	(918)	3,11	(78.9)	1011	(459)	2,59	(65.8)	759	(344)	3,16	(80.3)	506	(229)	2,98	(75.6)
								Load per applied point											

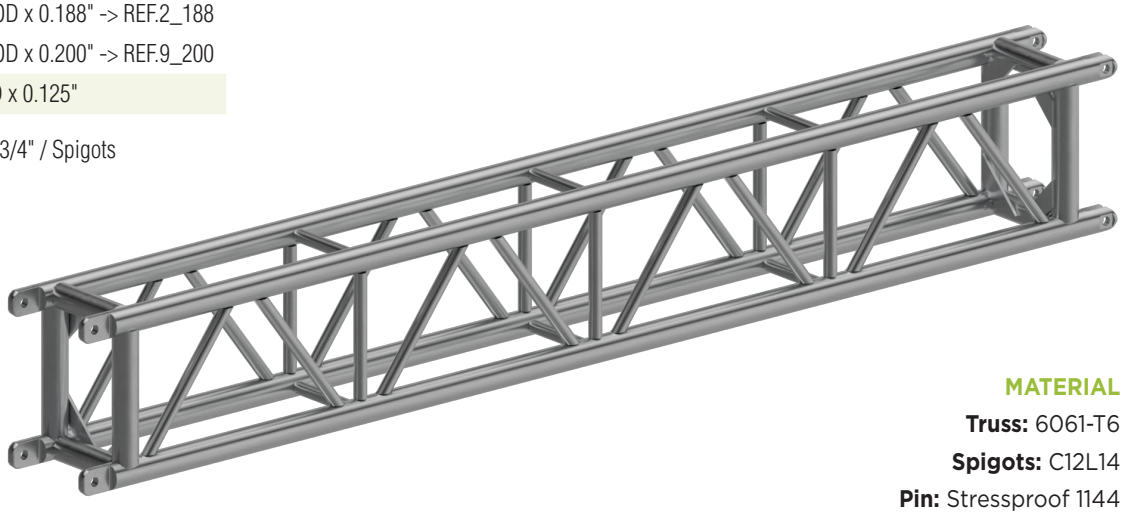
NOTES

- 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 chords 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**.

PRESTANCE SERIES

TIP-1310-F.2_188 LIGHT DUTY

MAIN CHORDS	2.0" OD x 0.188" -> REF.2_188 1.9" OD x 0.200" -> REF.9_200
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø3/4" / Spigots

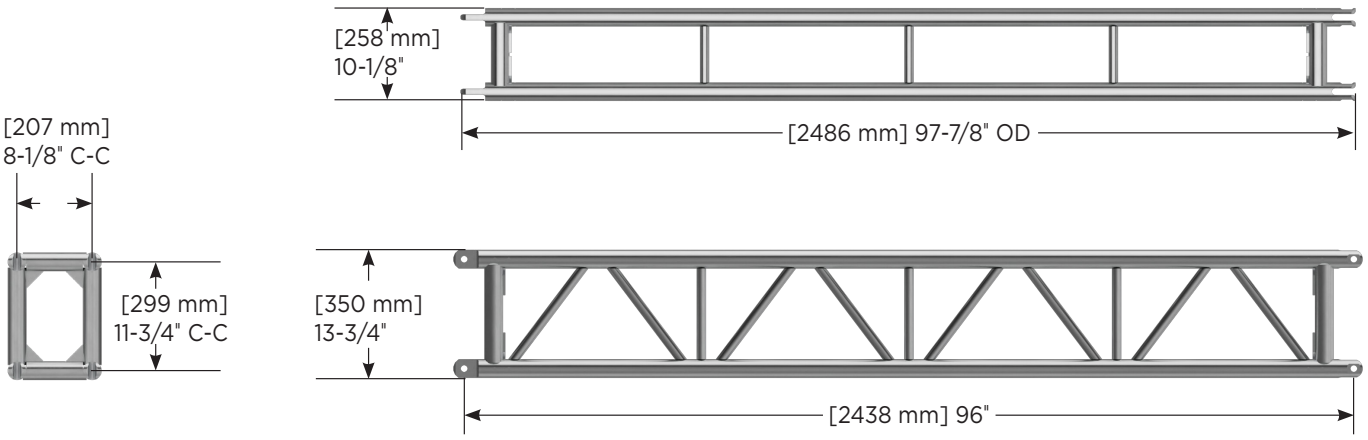


MATERIAL

Truss: 6061-T6

Spigots: C12L14

Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.188"

MAIN CHORDS 1.9" OD x 0.200"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
48	(22)	TIP-	1310	-048	F.2_188	<- 48" ->	TIP-	1310	-048	F.9_200	48	(22)
56	(25)	TIP-	1310	-060	F.2_188	<- 60" ->	TIP-	1310	-060	F.9_200	56	(25)
74	(34)	TIP-	1310	-096	F.2_188	<- 96" ->	TIP-	1310	-096	F.9_200	74	(34)
87	(39)	TIP-	1310	-120	F.2_188	<- 120" ->	TIP-	1310	-120	F.9_200	87	(39)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

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ALLOWABLE LOAD TABLE

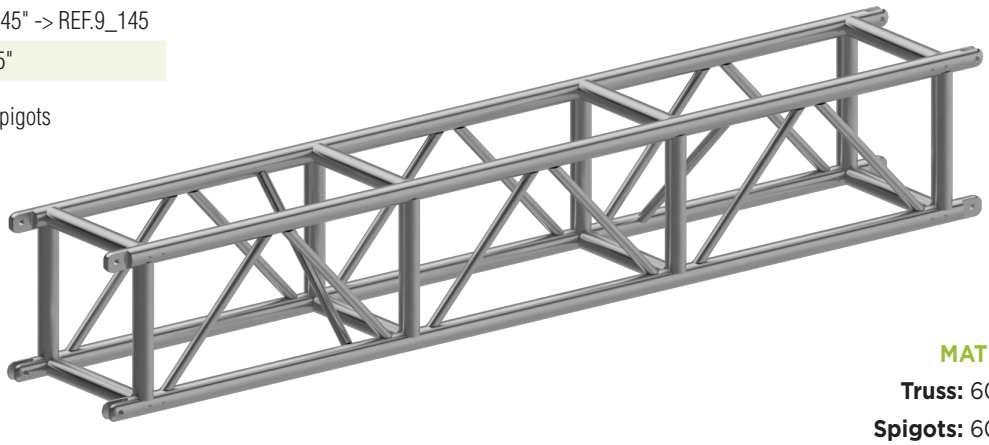
Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	930	(1383)	7437	(3373)	0,06	(1.4)	7107	(3224)	0,09	(2.2)	3731	(1692)	0,08	(1.9)	2488	(1128)	0,07	(1.8)
10	(3.05)	732	(1089)	7318	(3319)	0,11	(2.7)	5669	(2571)	0,13	(3.4)	3679	(1669)	0,15	(3.7)	2452	(1112)	0,14	(3.5)
16	(4.88)	437	(651)	6996	(3173)	0,43	(10.8)	3498	(1587)	0,34	(8.7)	2623	(1190)	0,44	(11.1)	1749	(793)	0,41	(10.3)
20	(6.1)	277	(411)	5530	(2508)	0,67	(16.9)	2765	(1254)	0,54	(13.6)	2074	(941)	0,68	(17.3)	1383	(627)	0,63	(16.1)
24	(7.32)	189	(282)	4541	(2060)	0,96	(24.4)	2270	(1030)	0,78	(19.7)	1703	(772)	0,98	(24.9)	1135	(515)	0,91	(23.2)
30	(9.14)	118	(175)	3532	(1602)	1,50	(38.1)	1766	(801)	1,22	(31)	1325	(601)	1,53	(38.9)	883	(401)	1,43	(36.3)
32	(9.75)	102	(152)	3276	(1486)	1,71	(43.3)	1638	(743)	1,39	(35.4)	1228	(557)	1,74	(44.2)	819	(371)	1,63	(41.3)
40	(12.19)	62	(93)	2487	(1128)	2,66	(67.7)	1244	(564)	2,20	(55.9)	933	(423)	2,72	(69)	622	(282)	2,55	(64.7)
48	(14.63)	40	(60)	1937	(879)	3,84	(97.5)	969	(439)	3,21	(81.6)	726	(329)	3,91	(99.2)	484	(220)	3,68	(93.5)
50	(15.24)	36	(54)	1823	(827)	4,16	(105.8)	912	(414)	3,50	(88.9)	684	(310)	4,24	(107.6)	456	(207)	4,00	(101.5)

Load per applied point

NOTES

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MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø5/8" / Spigots

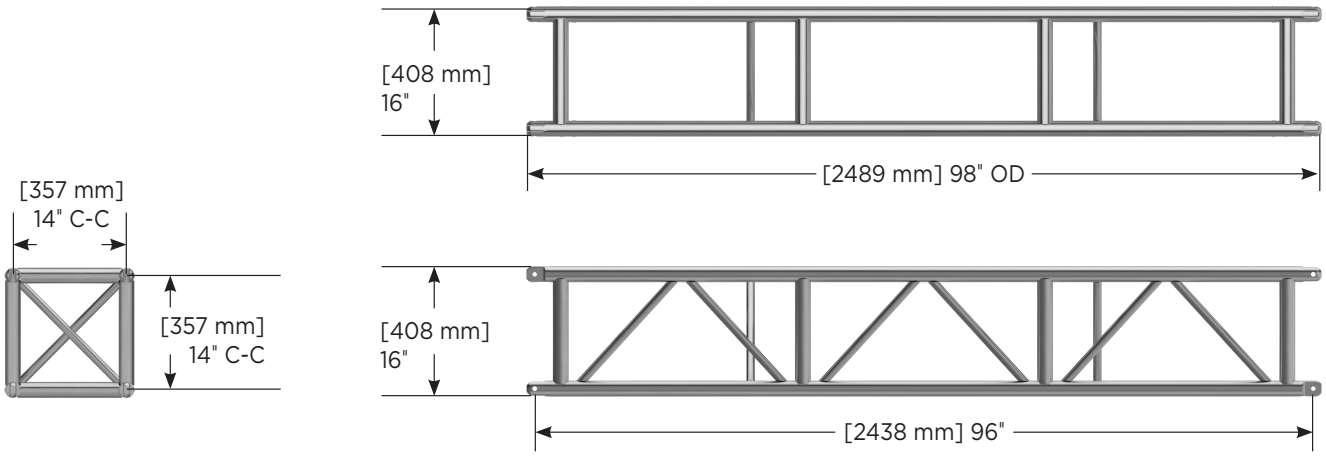


MATERIAL

Truss: 6061-T6

Spigots: 6061-T6

Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.125"

MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
38	(17)	TIP-	1616	-048	F.2_125	<- 48" ->	TIP-	1616	-048	F.9_145	38	(17)
43	(20)	TIP-	1616	-060	F.2_125	<- 60" ->	TIP-	1616	-060	F.9_145	43	(20)
60	(27)	TIP-	1616	-096	F.2_125	<- 96" ->	TIP-	1616	-096	F.9_145	60	(27)
72	(33)	TIP-	1616	-120	F.2_125	<- 120" ->	TIP-	1616	-120	F.9_145	72	(33)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

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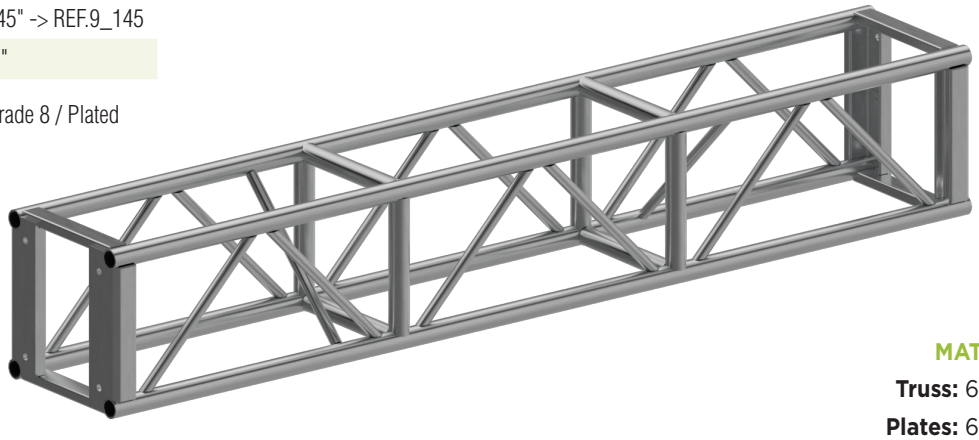
ALLOWABLE LOAD TABLE

Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	834	(1240)	6668	(3025)	0,05	(1.3)	5641	(2559)	0,07	(1.8)	3346	(1518)	0,07	(1.8)	2231	(1012)	0,06	(1.7)
10	(3.05)	663	(987)	6630	(3007)	0,10	(2.5)	4499	(2041)	0,11	(2.7)	3333	(1512)	0,14	(3.5)	2222	(1008)	0,13	(3.2)
16	(4.88)	347	(516)	5551	(2518)	0,35	(8.8)	2776	(1259)	0,28	(7.1)	2082	(944)	0,35	(9)	1388	(629)	0,33	(8.3)
20	(6.1)	219	(326)	4387	(1990)	0,54	(13.7)	2194	(995)	0,44	(11.1)	1645	(746)	0,55	(14)	1097	(497)	0,51	(13)
24	(7.32)	150	(223)	3601	(1634)	0,78	(19.7)	1801	(817)	0,63	(16)	1350	(613)	0,79	(20.2)	900	(408)	0,74	(18.8)
30	(9.14)	93	(139)	2801	(1270)	1,21	(30.8)	1400	(635)	0,99	(25.1)	1050	(476)	1,24	(31.5)	700	(318)	1,16	(29.4)
32	(9.75)	81	(121)	2597	(1178)	1,38	(35.1)	1298	(589)	1,13	(28.7)	974	(442)	1,41	(35.8)	649	(294)	1,32	(33.5)
40	(12.19)	49	(73)	1970	(894)	2,16	(54.8)	985	(447)	1,78	(45.3)	739	(335)	2,20	(55.9)	492	(223)	2,06	(52.4)
48	(14.63)	32	(48)	1532	(695)	3,11	(78.9)	766	(348)	2,60	(66.1)	575	(261)	3,16	(80.4)	383	(174)	2,98	(75.7)
50	(15.24)	29	(43)	1442	(654)	3,37	(85.7)	721	(327)	2,84	(72.1)	541	(245)	3,43	(87.2)	360	(163)	3,24	(82.3)
								Load per applied point											

NOTES

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- Trusses must be loaded uniformly on both sides of their longitudinal axis.
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MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Bolts Ø5/8" Grade 8 / Plated

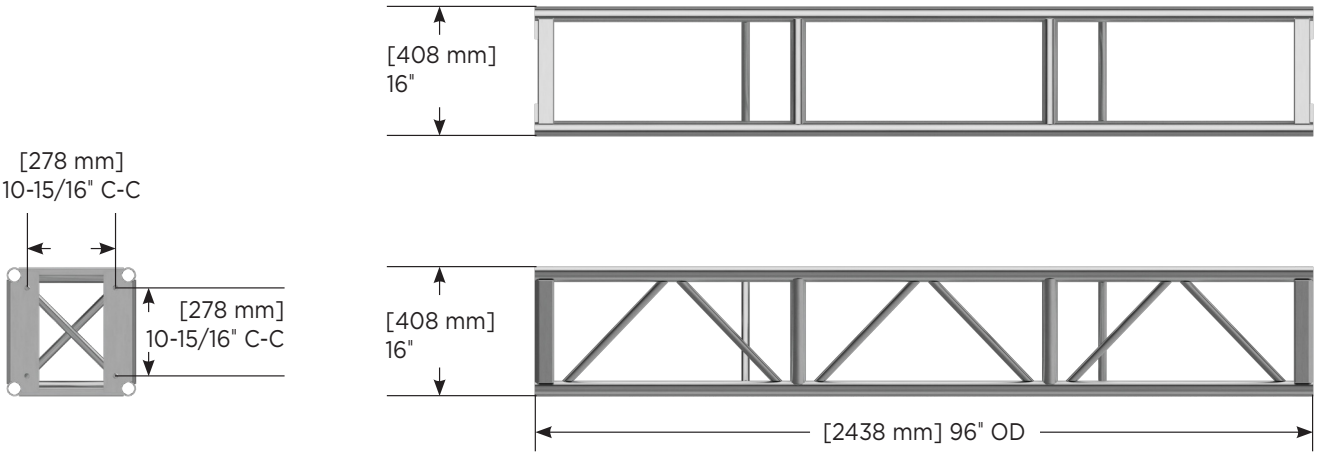


MATERIAL

Truss: 6061-T6

Plates: 6061-T6

Bolts: Ø5/8" Grade 8



MAIN CHORDS 2.0" OD x 0.125"

MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References	LENGTH*	Item References	Weight lbs	Weight (kg)
37	(17)	TIP-1616-048-P.2_125	<- 48" ->	TIP-1616-048-P.9_145	37	(17)
42	(19)	TIP-1616-060-P.2_125	<- 60" ->	TIP-1616-060-P.9_145	42	(19)
58	(26)	TIP-1616-096-P.2_125	<- 96" ->	TIP-1616-096-P.9_145	58	(26)
71	(32)	TIP-1616-120-P.2_125	<- 120" ->	TIP-1616-120-P.9_145	71	(32)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

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ALLOWABLE LOAD TABLE

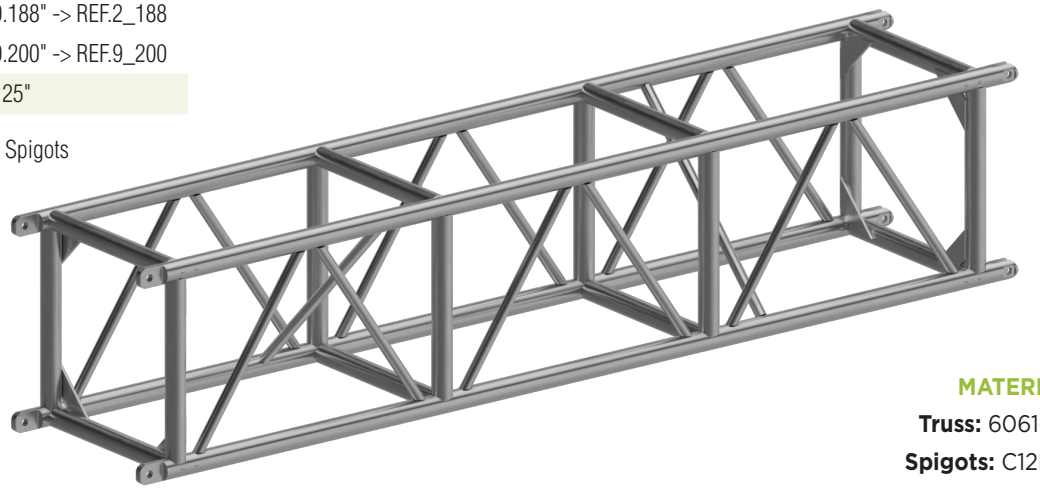
Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	414	(615)	3308	(1501)	0,03	(0.7)	3333	(1512)	0,04	(1)	1668	(756)	0,04	(0.9)	1112	(504)	0,03	(0.8)
10	(3.05)	330	(490)	3295	(1495)	0,05	(1.3)	3326	(1508)	0,08	(2.1)	1665	(755)	0,07	(1.8)	1110	(504)	0,06	(1.6)
16	(4.88)	203	(302)	3245	(1472)	0,21	(5.2)	2953	(1339)	0,30	(7.5)	1654	(750)	0,28	(7.2)	1102	(500)	0,26	(6.7)
20	(6.1)	160	(238)	3201	(1452)	0,40	(10.2)	2336	(1060)	0,47	(11.8)	1641	(744)	0,55	(14.1)	1094	(496)	0,52	(13.1)
24	(7.32)	131	(194)	3137	(1423)	0,69	(17.4)	1920	(871)	0,67	(17.1)	1440	(653)	0,85	(21.6)	960	(435)	0,79	(20.1)
30	(9.14)	100	(149)	2994	(1358)	1,30	(33)	1497	(679)	1,06	(26.8)	1123	(509)	1,33	(33.7)	748	(339)	1,24	(31.4)
32	(9.75)	87	(129)	2778	(1260)	1,48	(37.5)	1389	(630)	1,20	(30.6)	1042	(473)	1,51	(38.3)	695	(315)	1,41	(35.8)
40	(12.19)	53	(79)	2118	(961)	2,31	(58.6)	1059	(480)	1,90	(48.3)	794	(360)	2,35	(59.8)	529	(240)	2,21	(56.1)
48	(14.63)	35	(51)	1658	(752)	3,32	(84.4)	829	(376)	2,77	(70.5)	622	(282)	3,38	(86)	415	(188)	3,19	(80.9)
50	(15.24)	31	(47)	1563	(709)	3,61	(91.6)	782	(355)	3,02	(76.7)	586	(266)	3,67	(93.3)	391	(177)	3,46	(87.9)

Load per applied point

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 chords 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**.

MAIN CHORDS	2.0" OD x 0.188" -> REF.2_188 1.9" OD x 0.200" -> REF.9_200
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø3/4" / Spigots

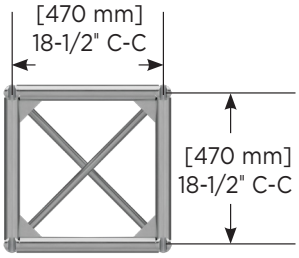


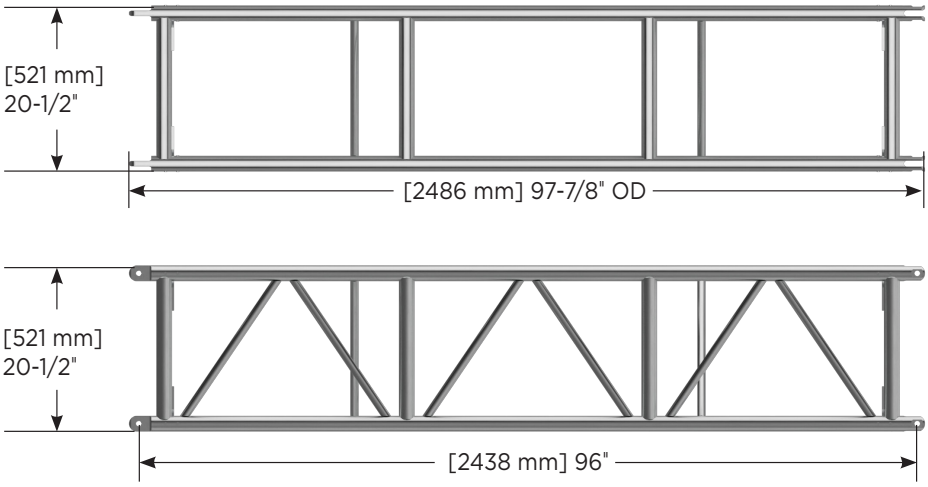
MATERIAL

Truss: 6061-T6

Spigots: C12L14

Pin: Stressproof 1144





MAIN CHORDS 2.0" OD x 0.188"

MAIN CHORDS 1.9" OD x 0.200"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
58	(26)	TIP-	2020	-048	F.2_188	<- 48" ->	TIP-	2020	-048	F.9_200	58	(26)
66	(30)	TIP-	2020	-060	F.2_188	<- 60" ->	TIP-	2020	-060	F.9_200	66	(30)
89	(40)	TIP-	2020	-096	F.2_188	<- 96" ->	TIP-	2020	-096	F.9_200	89	(40)
100	(45)	TIP-	2020	-120	F.2_188	<- 120" ->	TIP-	2020	-120	F.9_200	100	(45)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

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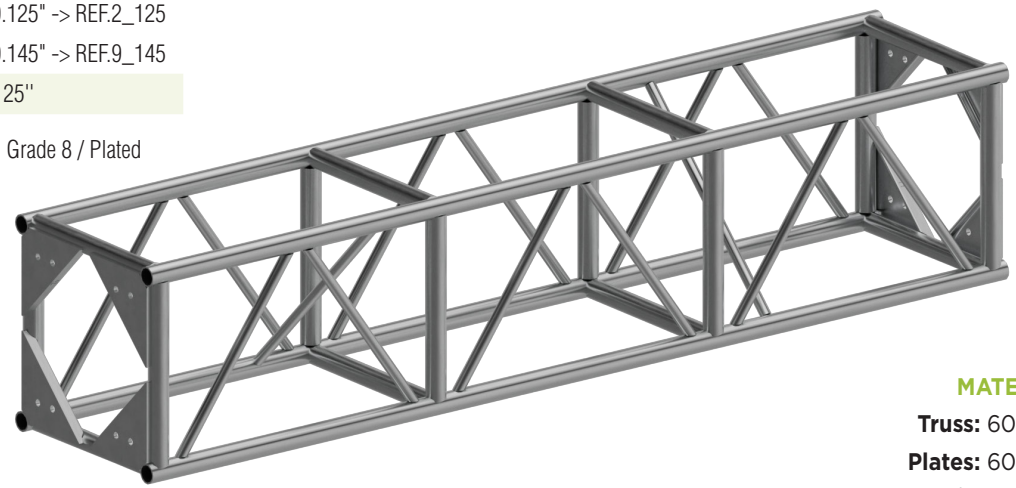
ALLOWABLE LOAD TABLE

Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	911	(1356)	7289	(3306)	0,02	(0.6)	7289	(3306)	0,04	(0.9)	3654	(1657)	0,03	(0.8)	2436	(1105)	0,03	(0.7)
10	(3.05)	645	(960)	6452	(2927)	0,04	(1)	6452	(2926)	0,06	(1.6)	3239	(1469)	0,05	(1.4)	2160	(980)	0,05	(1.3)
16	(4.88)	396	(589)	6329	(2871)	0,16	(4)	5521	(2504)	0,22	(5.6)	3198	(1450)	0,22	(5.5)	2132	(967)	0,20	(5.1)
20	(6.1)	311	(463)	6217	(2820)	0,31	(7.8)	4377	(1985)	0,34	(8.7)	3160	(1433)	0,42	(10.7)	2106	(955)	0,39	(9.9)
24	(7.32)	253	(377)	6083	(2759)	0,52	(13.3)	3606	(1636)	0,50	(12.6)	2705	(1227)	0,63	(16)	1803	(818)	0,59	(14.9)
30	(9.14)	188	(280)	5650	(2563)	0,96	(24.4)	2825	(1281)	0,78	(19.8)	2119	(961)	0,98	(24.9)	1413	(641)	0,92	(23.3)
32	(9.75)	164	(244)	5254	(2383)	1,09	(27.8)	2627	(1192)	0,89	(22.6)	1970	(894)	1,12	(28.4)	1313	(596)	1,04	(26.5)
40	(12.19)	101	(150)	4043	(1834)	1,71	(43.4)	2021	(917)	1,40	(35.6)	1516	(688)	1,74	(44.3)	1011	(458)	1,63	(41.4)
48	(14.63)	67	(99)	3206	(1454)	2,46	(62.5)	1603	(727)	2,04	(51.8)	1202	(545)	2,51	(63.7)	802	(364)	2,36	(59.8)
50	(15.24)	61	(90)	3034	(1376)	2,67	(67.8)	1517	(688)	2,22	(56.4)	1138	(516)	2,72	(69.1)	759	(344)	2,56	(64.9)
								Load per applied point											

NOTES

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- Data are valid only for static loads and span, with two support points (one at each end).
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MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	1'' OD x 0.125''
CONNECTION STYLE	Bolts Ø5/8" Grade 8 / Plated

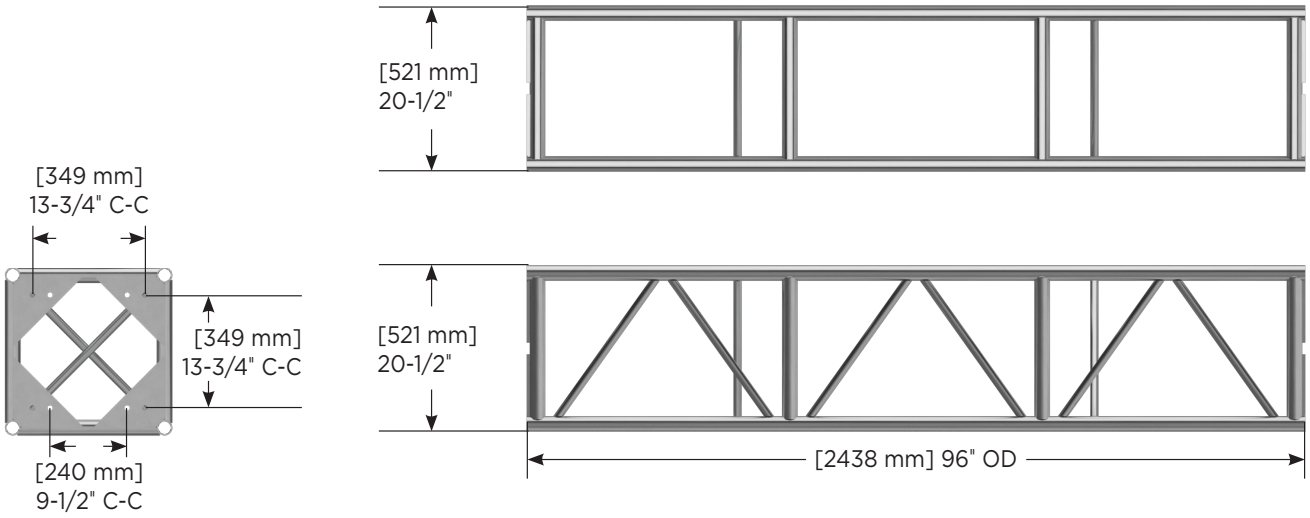


MATERIAL

Truss: 6061-T6

Plates: 6061-T6

Bolts: Ø5/8" Grade 8



MAIN CHORDS 2.0" OD x 0.125"

MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References	LENGTH*	Item References	Weight lbs	Weight (kg)
46	(21)	TIP-2020-048-P.2_125	<- 48" ->	TIP-2020-048-P.9_145	46	(21)
52	(24)	TIP-2020-060-P.2_125	<- 60" ->	TIP-2020-060-P.9_145	52	(24)
70	(32)	TIP-2020-096-P.2_125	<- 96" ->	TIP-2020-096-P.9_145	70	(32)
78	(35)	TIP-2020-120-P.2_125	<- 120" ->	TIP-2020-120-P.9_145	78	(35)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

MANUFACTURED BY CERTIFIED WELDERS

ALLOWABLE LOAD TABLE

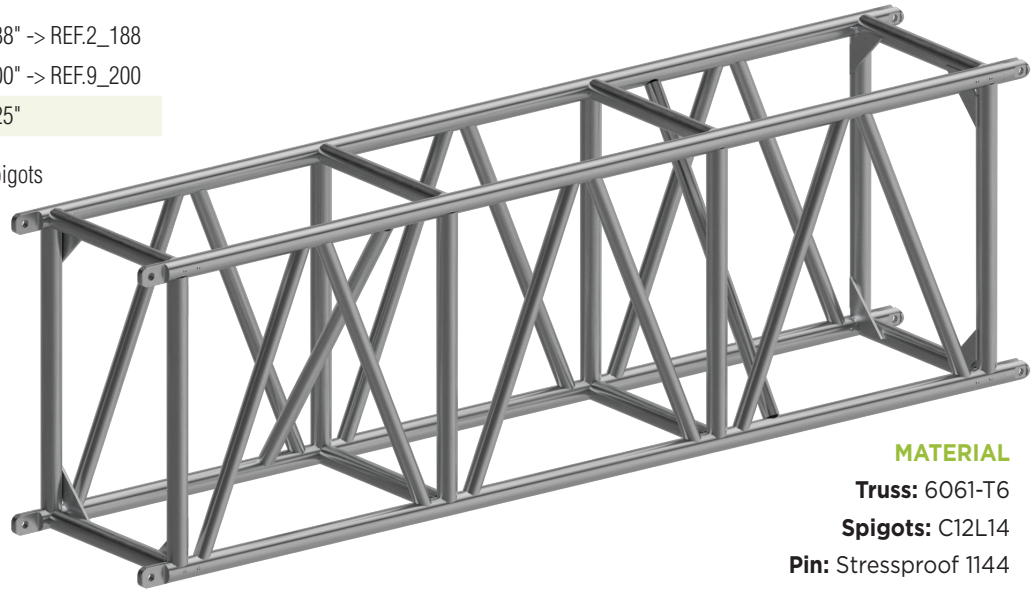
Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	451	(671)	3608	(1636)	0,02	(0.4)	3640	(1651)	0,03	(0.7)	1821	(826)	0,02	(0.6)	1214	(551)	0,02	(0.5)
10	(3.05)	312	(465)	3122	(1416)	0,03	(0.7)	3156	(1432)	0,04	(1.1)	1580	(717)	0,04	(1)	1053	(478)	0,04	(0.9)
16	(4.88)	192	(286)	3074	(1394)	0,11	(2.9)	3125	(1418)	0,18	(4.6)	1570	(712)	0,16	(3.9)	1047	(475)	0,14	(3.7)
20	(6.1)	152	(226)	3035	(1377)	0,22	(5.6)	3082	(1398)	0,35	(8.9)	1561	(708)	0,30	(7.7)	1041	(472)	0,28	(7.2)
24	(7.32)	125	(185)	2989	(1356)	0,38	(9.6)	2536	(1150)	0,51	(12.8)	1548	(702)	0,52	(13.3)	1032	(468)	0,49	(12.4)
30	(9.14)	96	(144)	2895	(1313)	0,73	(18.5)	1982	(899)	0,79	(20.2)	1486	(674)	1,00	(25.3)	991	(449)	0,93	(23.7)
32	(9.75)	89	(133)	2856	(1296)	0,88	(22.4)	1841	(835)	0,91	(23)	1381	(626)	1,13	(28.8)	921	(418)	1,06	(26.9)
40	(12.19)	67	(100)	2683	(1217)	1,66	(42.2)	1410	(640)	1,43	(36.3)	1058	(480)	1,77	(45)	705	(320)	1,66	(42.2)
48	(14.63)	46	(69)	2222	(1008)	2,50	(63.6)	1111	(504)	2,08	(52.9)	833	(378)	2,55	(64.7)	556	(252)	2,40	(60.9)
50	(15.24)	42	(62)	2099	(952)	2,71	(69)	1050	(476)	2,27	(57.5)	787	(357)	2,76	(70.2)	525	(238)	2,60	(66.1)

Load per applied point

NOTES

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MAIN CHORDS	2.0" OD x 0.188" -> REF.2_188 1.9" OD x 0.200" -> REF.9_200
DIAGONALS	1.5" OD x 0.125"
CONNECTION STYLE	Pin Ø3/4" / Spigots

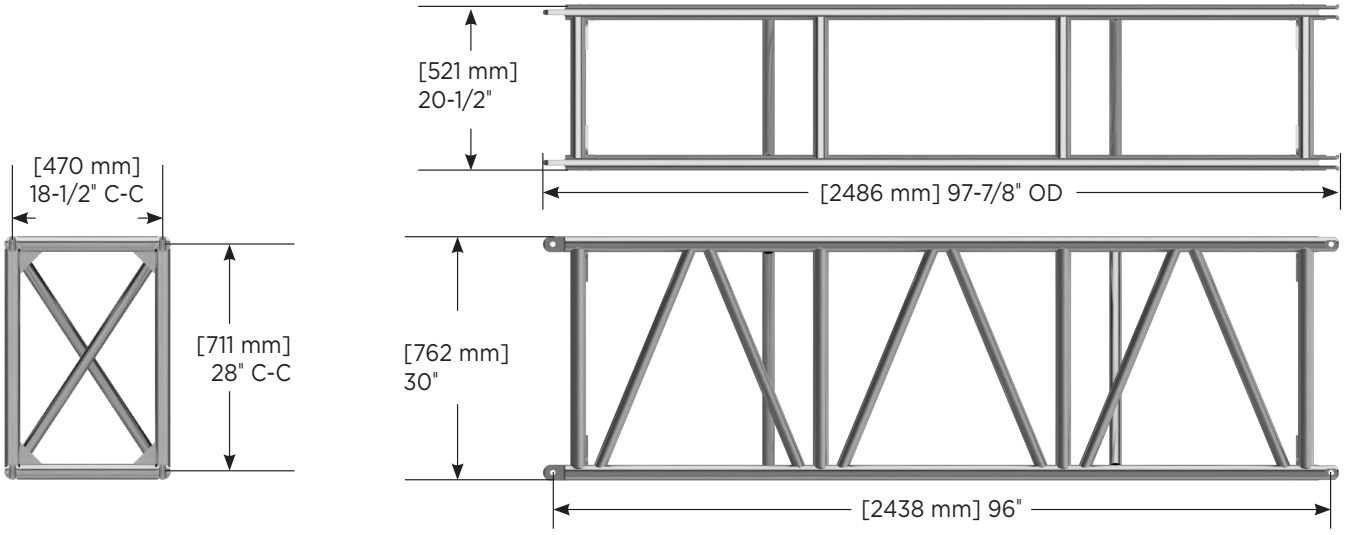


MATERIAL

Truss: 6061-T6

Spigots: C12L14

Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.188"

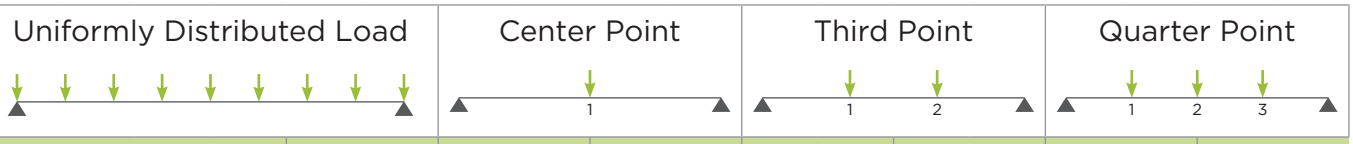
MAIN CHORDS 1.9" OD x 0.200"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
65	(29)	TIP-	3020	-048	F.2_188	<- 48" ->	TIP-	3020	-048	F.9_200	65	(29)
79	(36)	TIP-	3020	-060	F.2_188	<- 60" ->	TIP-	3020	-060	F.9_200	79	(36)
104	(47)	TIP-	3020	-096	F.2_188	<- 96" ->	TIP-	3020	-096	F.9_200	104	(47)
115	(52)	TIP-	3020	-120	F.2_188	<- 120" ->	TIP-	3020	-120	F.9_200	115	(52)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

MANUFACTURED BY CERTIFIED WELDERS

ALLOWABLE LOAD TABLE

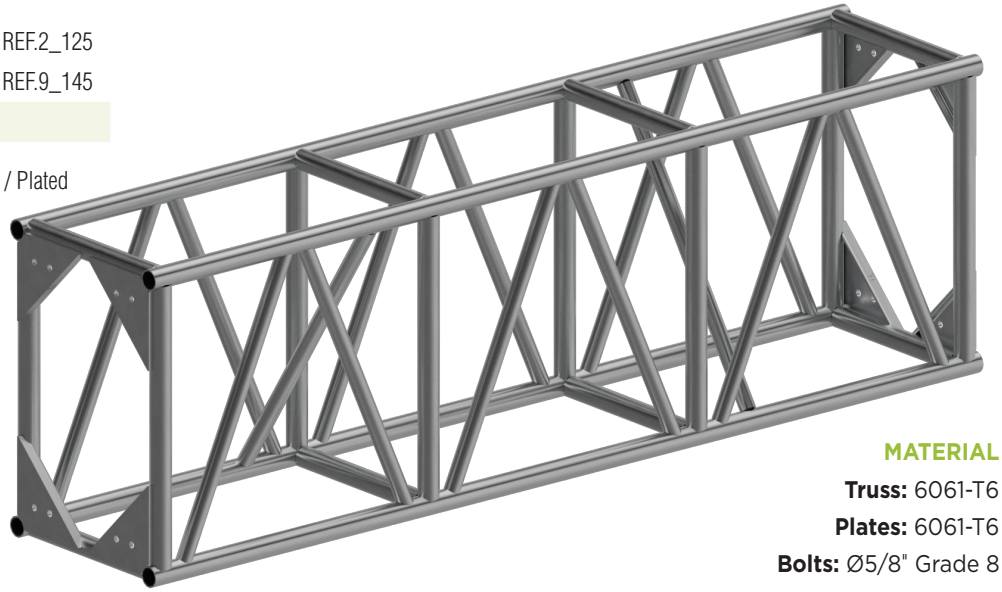


Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	1560	(2322)	12480	(5661)	0,02	(0.4)	12480	(5661)	0,03	(0.7)	6253	(2836)	0,02	(0.6)	4169	(1891)	0,02	(0.5)
10	(3.05)	1150	(1711)	11497	(5215)	0,03	(0.8)	11497	(5215)	0,05	(1.2)	5767	(2616)	0,04	(1)	3845	(1744)	0,04	(1)
16	(4.88)	708	(1053)	11326	(5138)	0,12	(3.1)	8386	(3804)	0,15	(3.7)	5709	(2590)	0,17	(4.3)	3806	(1726)	0,16	(4)
20	(6.1)	559	(831)	11171	(5067)	0,24	(6)	6662	(3022)	0,23	(5.8)	4996	(2266)	0,29	(7.3)	3331	(1511)	0,27	(6.8)
24	(7.32)	458	(681)	10984	(4982)	0,41	(10.3)	5504	(2496)	0,33	(8.3)	4128	(1872)	0,42	(10.6)	2752	(1248)	0,39	(9.8)
30	(9.14)	289	(430)	8665	(3931)	0,64	(16.2)	4333	(1965)	0,51	(13.1)	3250	(1474)	0,65	(16.5)	2166	(983)	0,61	(15.4)
32	(9.75)	252	(375)	8073	(3662)	0,72	(18.4)	4037	(1831)	0,59	(14.9)	3027	(1373)	0,74	(18.8)	2018	(915)	0,69	(17.5)
40	(12.19)	157	(233)	6271	(2844)	1,13	(28.7)	3136	(1422)	0,92	(23.4)	2352	(1067)	1,16	(29.3)	1568	(711)	1,08	(27.4)
48	(14.63)	105	(156)	5035	(2284)	1,63	(41.4)	2517	(1142)	1,34	(34)	1888	(856)	1,66	(42.2)	1259	(571)	1,56	(39.6)
50	(15.24)	96	(142)	4782	(2169)	1,77	(44.9)	2391	(1085)	1,46	(37)	1793	(813)	1,80	(45.8)	1196	(542)	1,69	(42.9)
								Load per applied point											

NOTES

- Capacities shown in this table are valid for structures manufactured after January 2020.
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- Trusses are hung from the top chords 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**.

MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	1.5" OD x 0.125"
CONNECTION STYLE	Bolts Ø5/8" Grade 8 / Plated

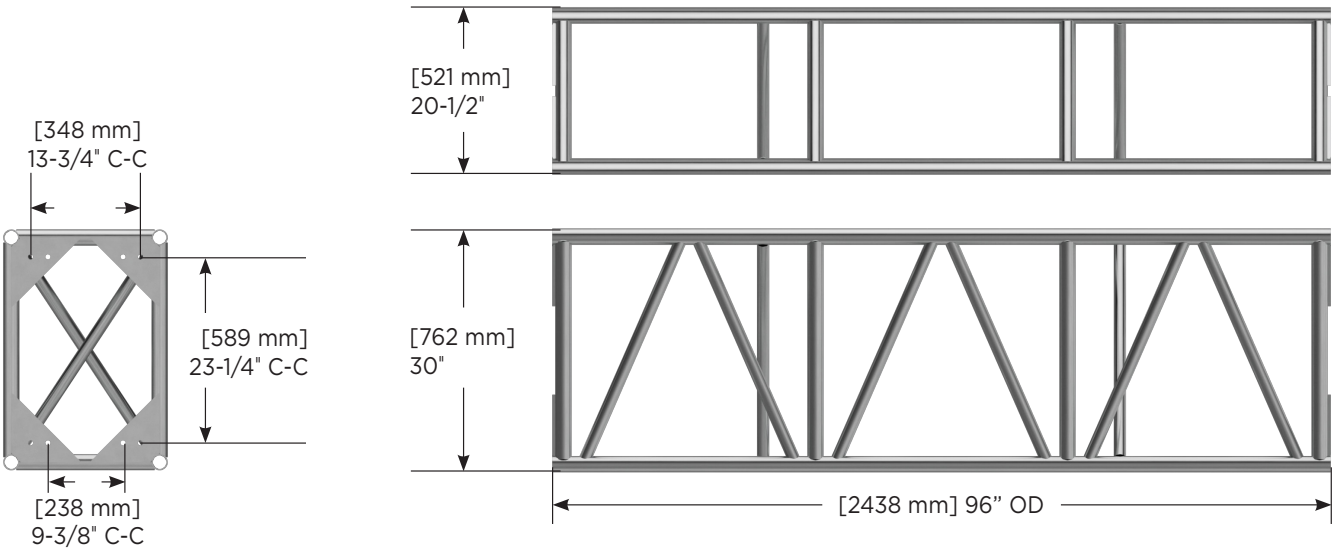


MATERIAL

Truss: 6061-T6

Plates: 6061-T6

Bolts: Ø5/8" Grade 8



MAIN CHORDS 2.0" OD x 0.125"

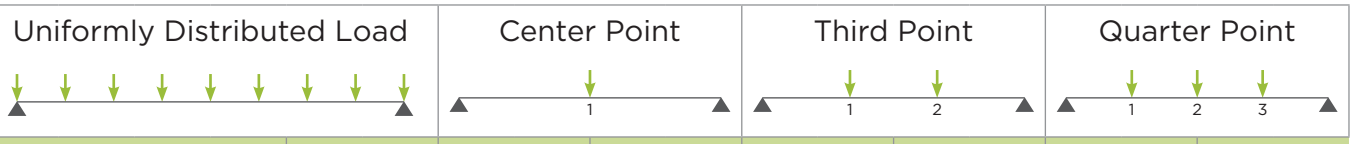
MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
52	(24)	TIP-	3020	-048	P.2_125	<- 48" ->	TIP-	3020	-048	P.9_145	52	(24)
64	(29)	TIP-	3020	-060	P.2_125	<- 60" ->	TIP-	3020	-060	P.9_145	64	(29)
87	(39)	TIP-	3020	-096	P.2_125	<- 96" ->	TIP-	3020	-096	P.9_145	87	(39)
95	(43)	TIP-	3020	-120	P.2_125	<- 120" ->	TIP-	3020	-120	P.9_145	95	(43)

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MANUFACTURED BY CERTIFIED WELDERS

ALLOWABLE LOAD TABLE



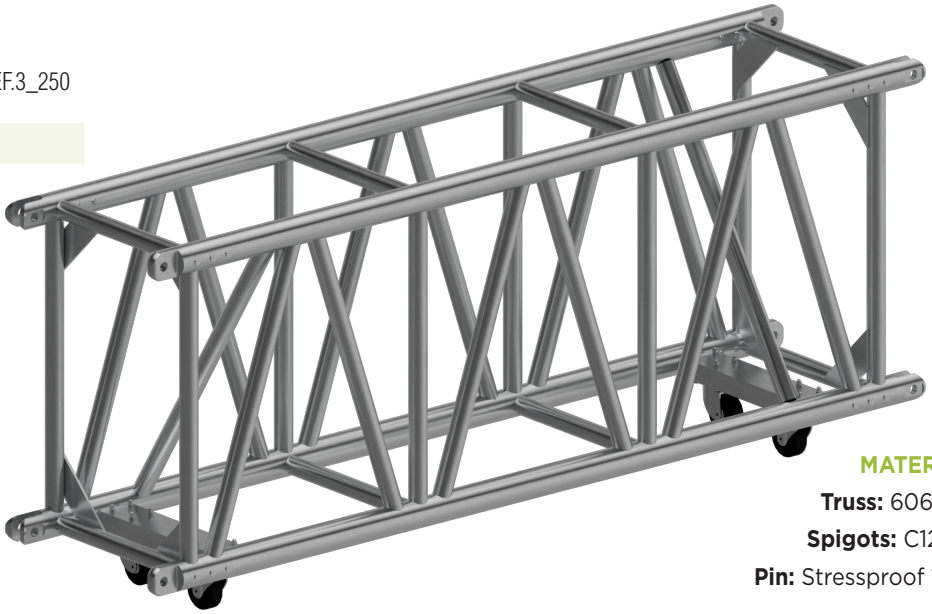
Span Length		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	787	(1171)	6294	(2855)	0,01	(0.3)	6365	(2887)	0,02	(0.5)	3183	(1444)	0,02	(0.4)	2122	(963)	0,02	(0.4)
10	(3.05)	581	(864)	5809	(2635)	0,02	(0.6)	5890	(2672)	0,04	(0.9)	2947	(1337)	0,03	(0.8)	1965	(891)	0,03	(0.7)
16	(4.88)	357	(532)	5717	(2593)	0,09	(2.3)	5323	(2414)	0,13	(3.4)	2929	(1329)	0,13	(3.2)	1953	(886)	0,12	(3)
20	(6.1)	282	(420)	5648	(2562)	0,18	(4.5)	4672	(2119)	0,23	(5.9)	2862	(1298)	0,24	(6.2)	1908	(865)	0,23	(5.7)
24	(7.32)	232	(345)	5571	(2527)	0,30	(7.7)	3867	(1754)	0,34	(8.5)	2613	(1185)	0,39	(9.8)	1742	(790)	0,36	(9.1)
30	(9.14)	177	(263)	5299	(2404)	0,57	(14.6)	3035	(1377)	0,53	(13.4)	2274	(1031)	0,67	(16.9)	1516	(688)	0,62	(15.8)
32	(9.75)	160	(237)	5106	(2316)	0,67	(17.1)	2824	(1281)	0,60	(15.3)	2118	(961)	0,76	(19.2)	1412	(641)	0,71	(18)
40	(12.19)	109	(162)	4363	(1979)	1,16	(29.4)	2181	(989)	0,95	(24.1)	1636	(742)	1,18	(30)	1091	(495)	1,11	(28.1)
48	(14.63)	72	(108)	3476	(1577)	1,67	(42.4)	1738	(788)	1,38	(35)	1304	(591)	1,70	(43.2)	869	(394)	1,60	(40.6)
50	(15.24)	66	(98)	3295	(1494)	1,81	(46)	1647	(747)	1,50	(38.1)	1235	(560)	1,85	(46.9)	824	(374)	1,73	(44)

Load per applied point

NOTES

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MAIN CHORDS	3.0" OD x 0.250" -> REF.3_250
DIAGONALS	1.9" OD x 0.200"
CONNECTION STYLE	Pin Ø1" / Spigots

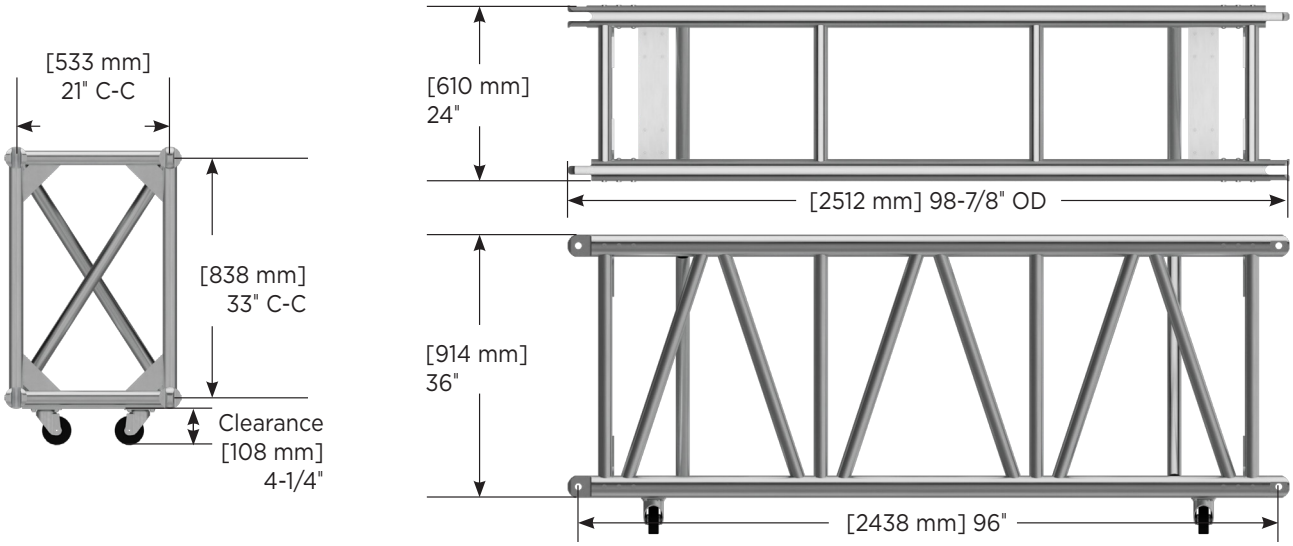


MATERIAL

Truss: 6061-T6

Spigots: C12L14

Pin: Stressproof 1144



MAIN CHORDS
3.0" OD x 0.250"

Weight lbs	Weight (kg)	Item References				LENGTH*
104	(47)	TIP-	3624	-048	F.3_250	<- 48" ->
115	(52)	TIP-	3624	-060	F.3_250	<- 60" ->
208	(94)	TIP-	3624	-096	F.3_250	<- 96" ->
230	(104)	TIP-	3624	-120	F.3_250	<- 120" ->

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

MANUFACTURED BY CERTIFIED WELDERS

ALLOWABLE LOAD TABLE

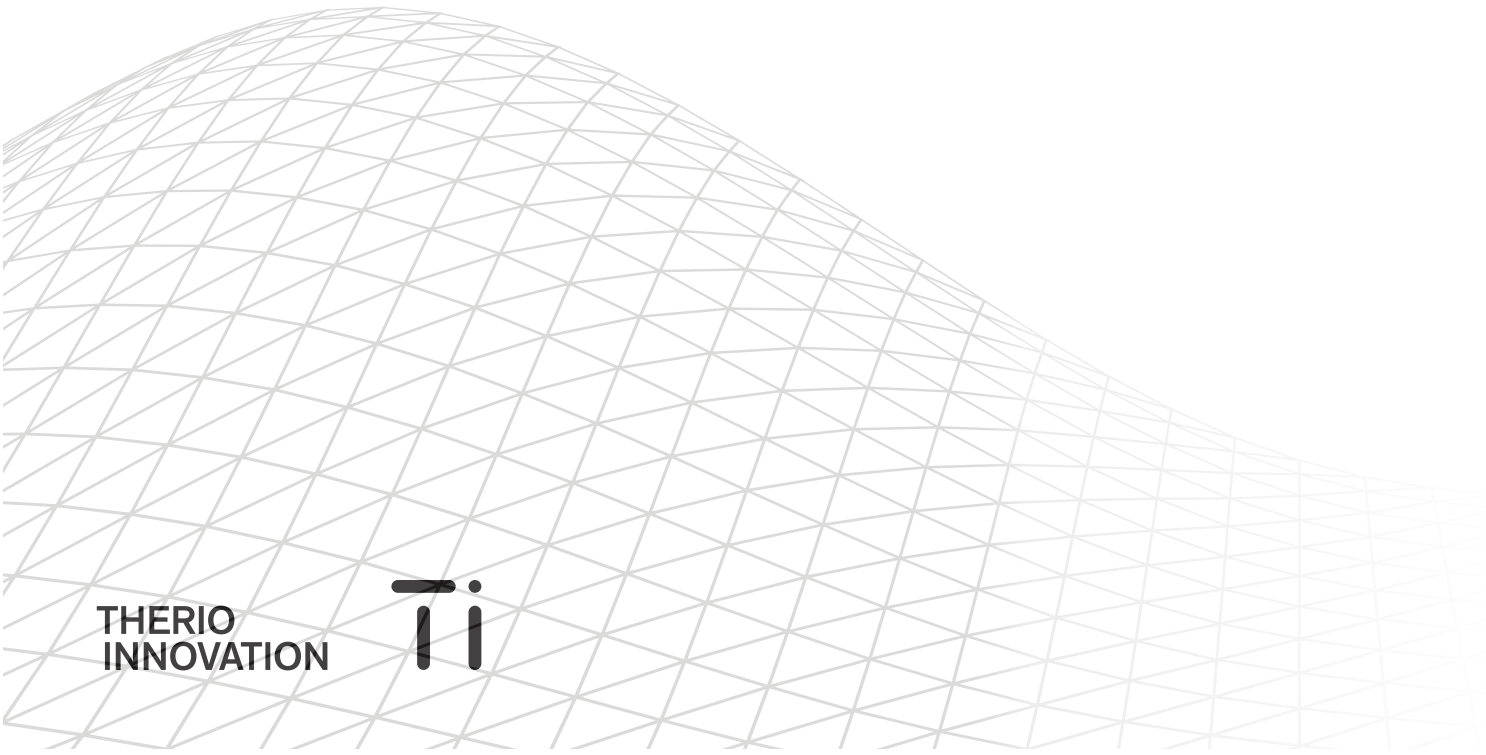
Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	3454	(5140)	27633	(12534)	0,01	(0.3)	27633	(12534)	0,02	(0.5)	13831	(6274)	0,02	(0.5)	9221	(4182)	0,02	(0.4)
10	(3.05)	2628	(3910)	26276	(11919)	0,02	(0.6)	26276	(11919)	0,04	(1)	13159	(5969)	0,03	(0.8)	8773	(3979)	0,03	(0.8)
16	(4.88)	1630	(2425)	26077	(11828)	0,10	(2.6)	26077	(11828)	0,16	(4.1)	13093	(5939)	0,14	(3.5)	8728	(3959)	0,13	(3.2)
20	(6.1)	1295	(1927)	25894	(11745)	0,20	(5)	25894	(11745)	0,31	(7.9)	13031	(5911)	0,27	(6.8)	8687	(3941)	0,25	(6.3)
24	(7.32)	1070	(1592)	25673	(11645)	0,34	(8.5)	21866	(9918)	0,46	(11.6)	12956	(5877)	0,46	(11.7)	8637	(3918)	0,43	(10.9)
30	(9.14)	842	(1254)	25269	(11462)	0,65	(16.5)	17352	(7871)	0,71	(18.1)	12818	(5814)	0,89	(22.7)	8546	(3876)	0,83	(21.1)
32	(9.75)	785	(1168)	25117	(11393)	0,79	(20)	16217	(7356)	0,81	(20.6)	12163	(5517)	1,03	(26.2)	8109	(3678)	0,96	(24.4)
40	(12.19)	610	(909)	24420	(11077)	1,51	(38.3)	12787	(5800)	1,27	(32.3)	9590	(4350)	1,61	(40.9)	6393	(2900)	1,50	(38.1)
48	(14.63)	436	(649)	20930	(9494)	2,27	(57.7)	10465	(4747)	1,84	(46.8)	7849	(3560)	2,32	(58.9)	5233	(2373)	2,16	(54.9)
50	(15.24)	400	(595)	19991	(9068)	2,46	(62.6)	9996	(4534)	2,00	(50.8)	7497	(3400)	2,51	(63.9)	4998	(2267)	2,35	(59.6)
56	(17.07)	313	(466)	17554	(7963)	3,09	(78.5)	8777	(3981)	2,52	(64)	6583	(2986)	3,15	(80.1)	4389	(1991)	2,95	(74.9)
60	(18.29)	270	(401)	16183	(7341)	3,55	(90.1)	8092	(3670)	2,90	(73.7)	6069	(2753)	3,62	(91.9)	4046	(1835)	3,38	(86)
64	(19.51)	234	(348)	14971	(6791)	4,04	(102.5)	7485	(3395)	3,31	(84)	5614	(2546)	4,12	(104.5)	3743	(1698)	3,85	(97.9)
70	(21.34)	191	(285)	13389	(6073)	4,83	(122.6)	6694	(3037)	3,98	(101)	5021	(2277)	4,92	(125)	3347	(1518)	4,62	(117.2)
72	(21.95)	179	(267)	12915	(5858)	5,11	(129.7)	6457	(2929)	4,22	(107.1)	4843	(2197)	5,21	(132.2)	3229	(1464)	4,88	(124.1)
80	(24.38)	140	(209)	11228	(5093)	6,31	(160.2)	5614	(2547)	5,24	(133.1)	4211	(1910)	6,42	(163.2)	2807	(1273)	6,04	(153.4)

Load per applied point

NOTES

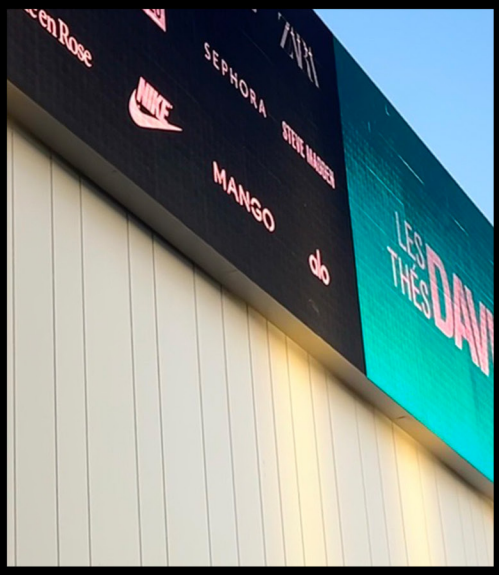
- Capacities shown in this table are valid for structures manufactured after January 2020.
- Trusses must be loaded uniformly on both sides of their longitudinal axis.
- Loads must be applied to or as close as possible to the nodes of the trusses.
- Deflection of truss is theoretical and based solely 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 chords 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**.

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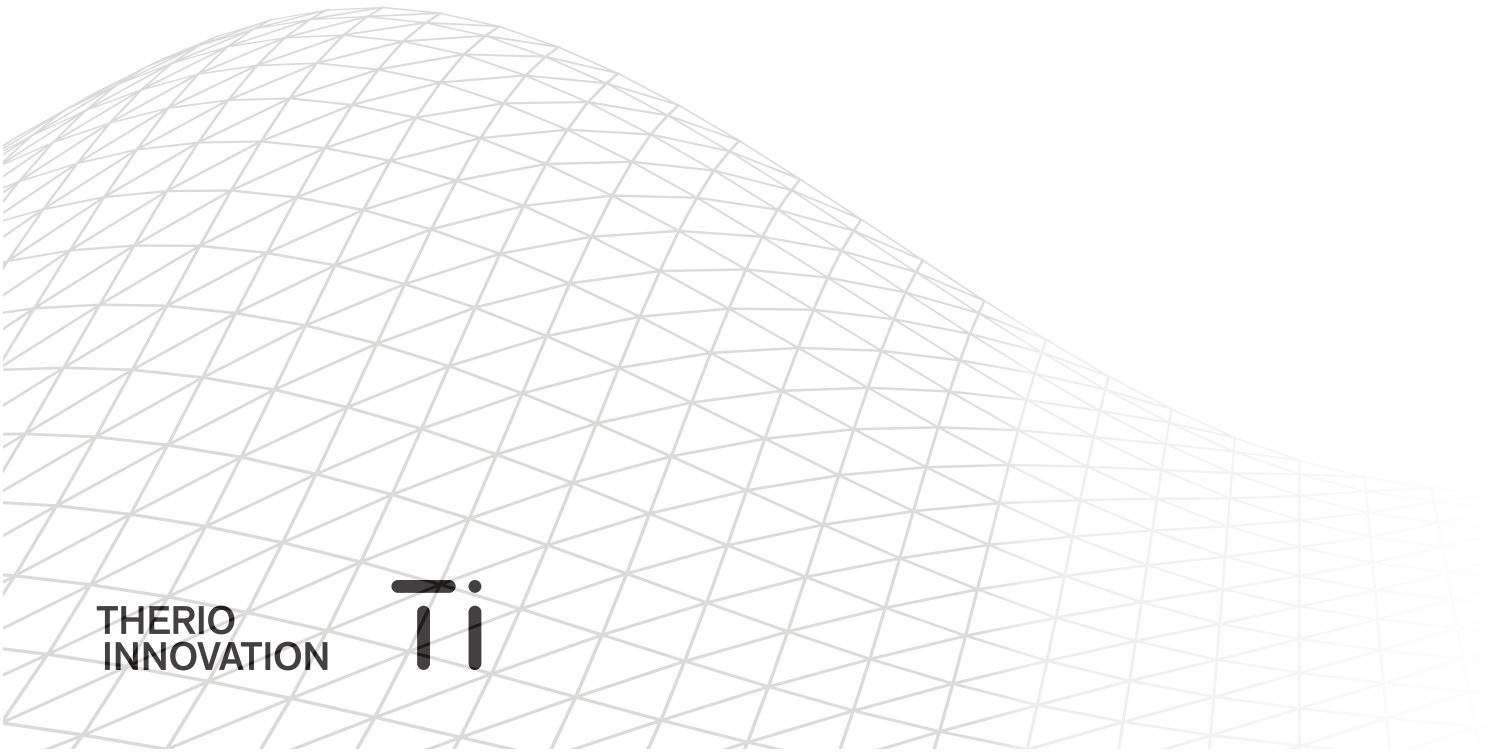
TI SECTORS

TOURING | FILM | EXPERIENCES IMMERSIVE | THEATER, ETC.



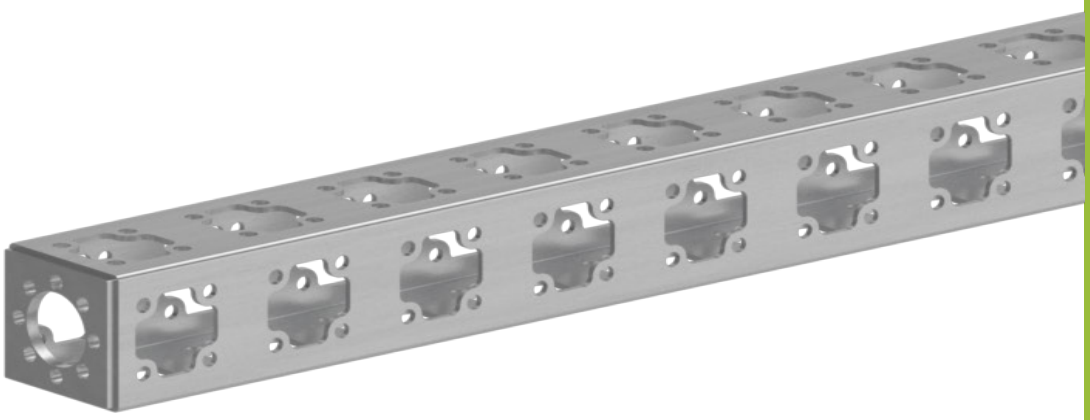


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MECATRUSS



MODULAR STRUCTURE

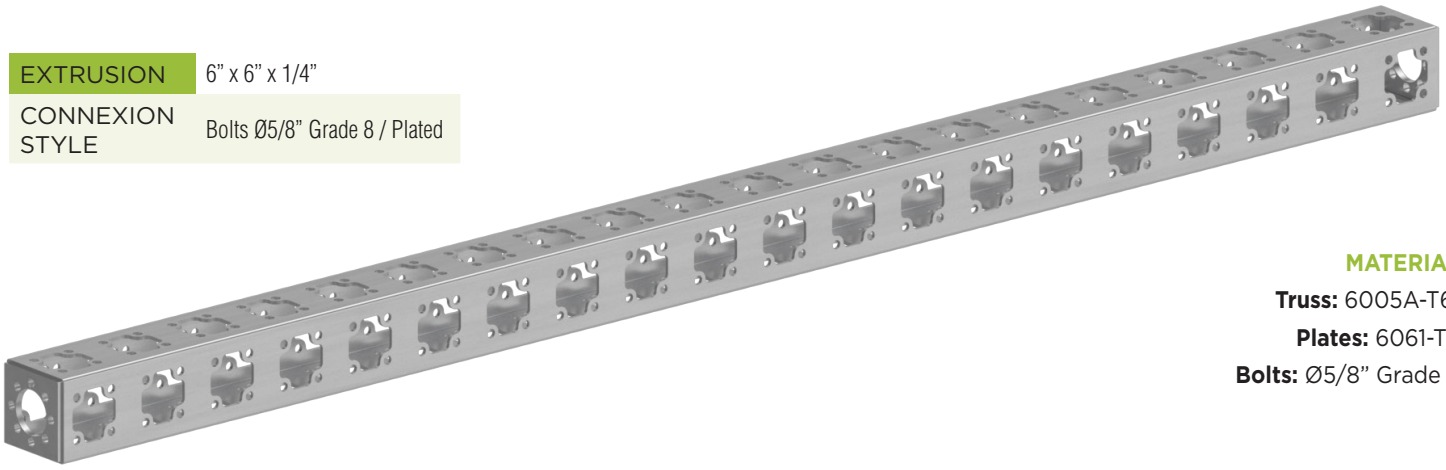
Like a Lego block: build any type of structure, simple or complex.
Compatible with major manufacturers. Available in standard or custom sizes.

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V02 | 09-2023

EXTRUSION	6" x 6" x 1/4"
CONNEXION STYLE	Bolts Ø5/8" Grade 8 / Plated

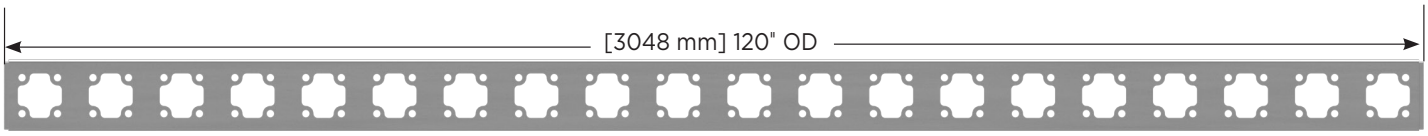


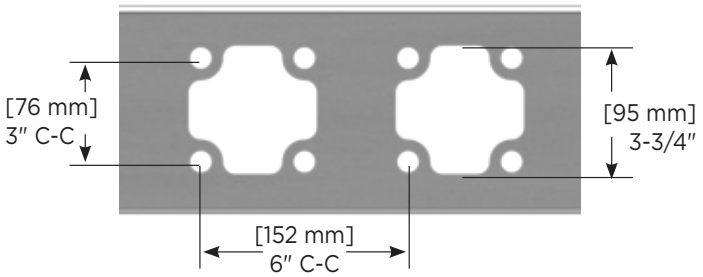
MATERIAL

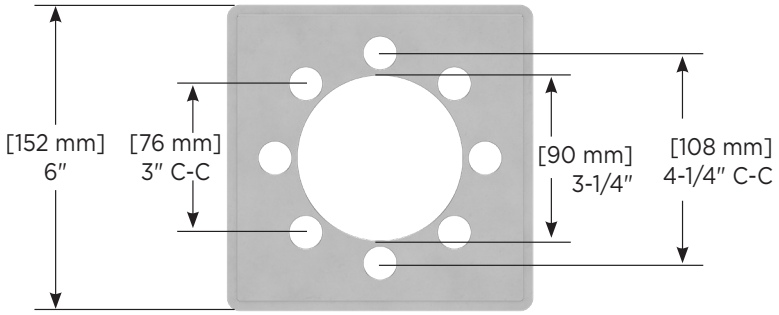
Truss: 6005A-T61

Plates: 6061-T6

Bolts: Ø5/8" Grade 8







DIMENSIONS

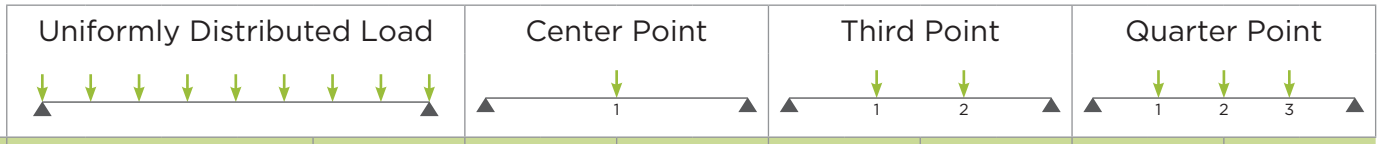
Weight lbs	Weight (kg)	Items References				LENGTH*
19	(9)	TIM-	0606	<- 48" ->	P	<- 48" ->
24	(11)	TIM-	0606	<- 60" ->	P	<- 60" ->
37	(17)	TIM-	0606	<- 96" ->	P	<- 96" ->
46	(21)	TIM-	0606	<- 120" ->	P	<- 120" ->

*Other lengths available: 12, 24, 36, 72, 84 and 108 in. | Custom lengths available upon request.

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ALLOWABLE LOAD TABLE



Span Length		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	785	(1168)	6279	(2848)	0,52	(13.2)	3191	(1447)	0,42	(10.7)	2399	(1088)	0,54	(13.7)	1602	(727)	0,50	(12.8)
10	(3.05)	504	(750)	5042	(2287)	0,82	(20.7)	2547	(1155)	0,66	(16.8)	1914	(868)	0,84	(21.4)	1277	(579)	0,79	(19.9)
16	(4.88)	195	(290)	3122	(1416)	2,10	(53.5)	1568	(711)	1,70	(43.2)	1176	(534)	2,16	(54.9)	785	(356)	2,01	(51.1)
20	(6.1)	123	(183)	2462	(1117)	3,30	(83.7)	1234	(560)	2,67	(67.9)	926	(420)	3,38	(85.7)	618	(280)	3,15	(80)
24	(7.32)	84	(125)	2012	(913)	4,75	(120.7)	1008	(457)	3,87	(98.2)	756	(343)	4,86	(123.4)	504	(229)	4,54	(115.3)
30	(9.14)	52	(77)	1549	(703)	7,43	(188.7)	775	(352)	6,10	(154.9)	582	(264)	7,59	(192.7)	388	(176)	7,10	(180.5)
32	(9.75)	45	(67)	1430	(649)	8,45	(214.7)	716	(325)	6,96	(176.8)	537	(244)	8,63	(219.2)	358	(162)	8,09	(205.5)
40	(12.19)	27	(40)	1062	(482)	13,22	(335.7)	532	(241)	11,05	(280.6)	399	(181)	13,47	(342.1)	266	(121)	12,68	(322.1)
								Load per applied point											

THE CAPACITY CHART IS FOR 4x 5/8" GRADE 8 BOLTS ON EACH END PLATE

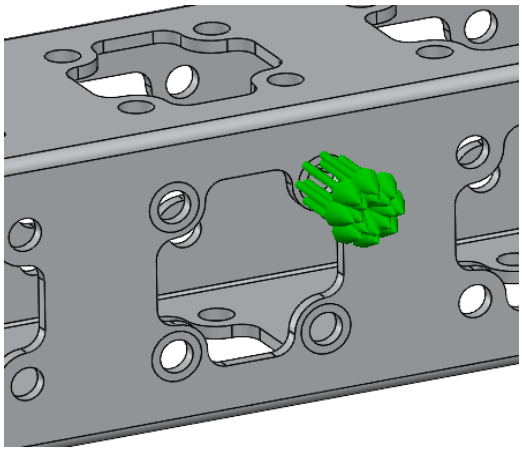
RECOMMENDED TORQUE VALUES
Temporary installation: 80-100 ft-lb
Permanent installation: 130-150 ft-lb

MECATRUSS 6"X6" ALUMINUM TRUSS (unbraced length) **COLUMN LOAD CAPACITY**	
10' (3.05 m)	10691 lbs (4849 kg)
20' (6.09 m)	6363 lbs (2886 kg)
30' (9.14 m)	3439 lbs (1560 kg)

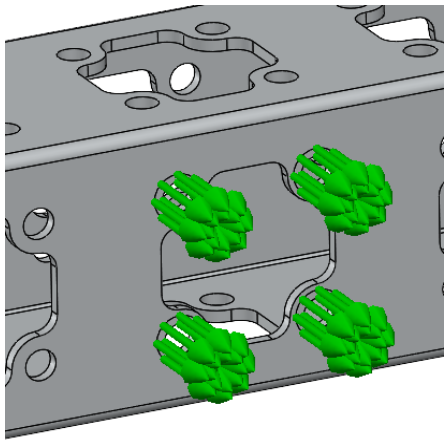
All columns are pinned top and bottom and use an effective length factor of K=1.0.
All capacities assume that no other shear, flexure, or torsional forces are applied to the column.

HANGING CAPACITY MECATRUSS 6"X6"	
ONE HOLE LOAD CAPACITY	**FOUR HOLES LOAD CAPACITY**
850 lbs (386 kg)	2300 lbs (1043 kg)

Never exceed the load capacity of the truss.



One hole



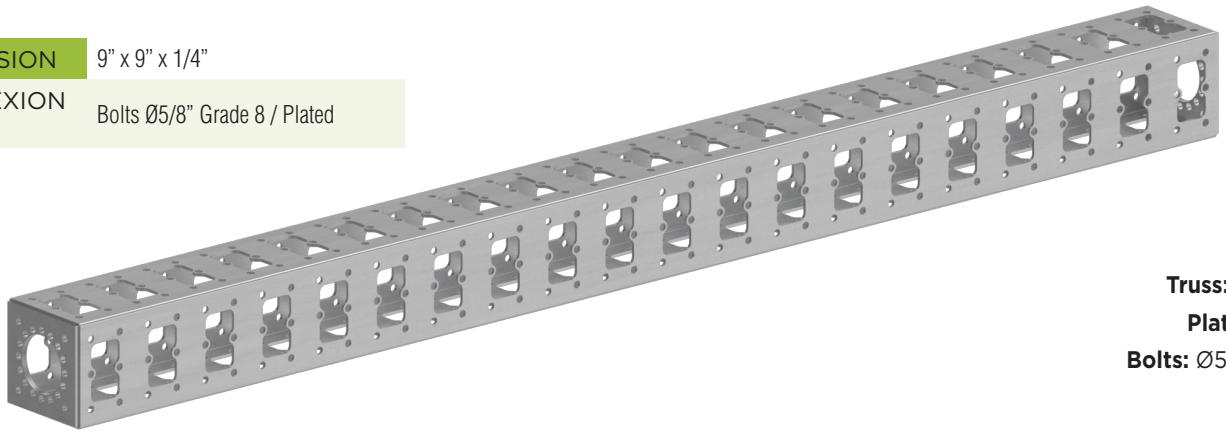
Four holes

NOTES

- Capacities shown in this table are valid for trusses manufactured after January 2022.
- Trusses must be loaded uniformly across their width.
- 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 bolts.
- Data are valid for indoor use 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**.

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EXTRUSION	9” x 9” x 1/4”
CONNEXION STYLE	Bolts Ø5/8” Grade 8 / Plated

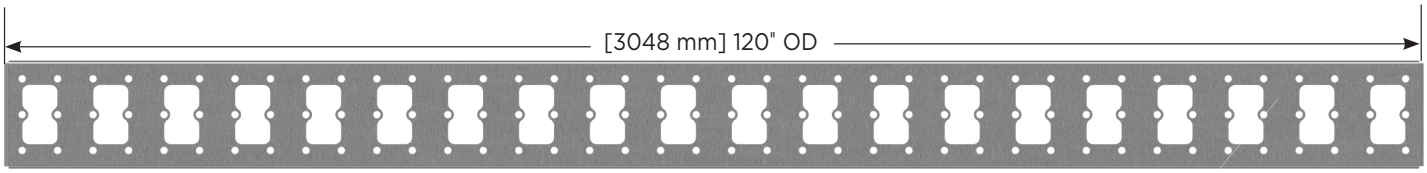


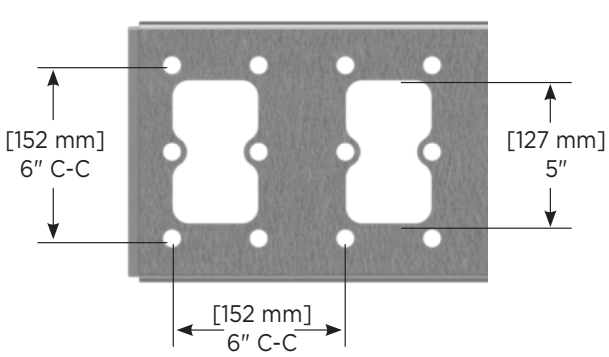
MATERIAL

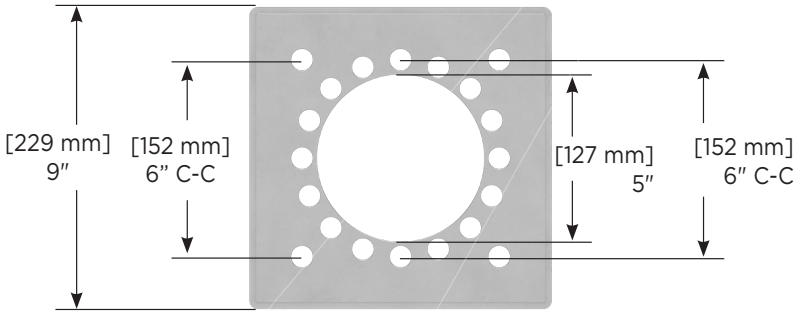
Truss: 6005A-T61

Plates: 6061-T6

Bolts: Ø5/8” Grade 8







DIMENSIONS

Weight lbs	Weight (kg)	Items References				LENGTH*
32	(15)	TIM-	0909	<- 48” ->	P	<- 48” ->
39	(18)	TIM-	0909	<- 60” ->	P	<- 60” ->
61	(28)	TIM-	0909	<- 96” ->	P	<- 96” ->
75	(34)	TIM-	0909	<- 120” ->	P	<- 120” ->

*Other lengths available: 12, 24, 36, 72, 84 and 108 in. | Custom lengths available upon request.

ALLOWABLE LOAD TABLE

Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	1489	(2216)	11912	(5403)	0,23	(5.9)	6329	(2871)	0,20	(5)	4792	(2174)	0,25	(6.5)	3217	(1459)	0,24	(6.1)
10	(3.05)	977	(1454)	9768	(4431)	0,37	(9.5)	5086	(2307)	0,31	(7.9)	3838	(1741)	0,40	(10.2)	2570	(1166)	0,37	(9.5)
16	(4.88)	389	(578)	6218	(2820)	0,99	(25.1)	3160	(1434)	0,81	(20.5)	2376	(1078)	1,03	(26.1)	1587	(720)	0,96	(24.4)
20	(6.1)	247	(368)	4946	(2244)	1,56	(39.5)	2500	(1134)	1,27	(32.2)	1878	(852)	1,61	(40.8)	1253	(569)	1,50	(38.1)
24	(7.32)	170	(252)	4072	(1847)	2,25	(57.1)	2051	(930)	1,84	(46.6)	1540	(699)	2,32	(58.8)	1028	(466)	2,16	(54.9)
30	(9.14)	106	(157)	3168	(1437)	3,53	(89.6)	1592	(722)	2,89	(73.5)	1195	(542)	3,62	(91.9)	797	(362)	3,38	(86)
32	(9.75)	92	(137)	2936	(1332)	4,02	(102)	1474	(669)	3,30	(83.8)	1107	(502)	4,12	(104.6)	738	(335)	3,85	(97.9)
40	(12.19)	55	(83)	2219	(1007)	6,29	(159.7)	1113	(505)	5,22	(132.7)	835	(379)	6,43	(163.2)	557	(253)	6,04	(153.4)
48	(14.63)	36	(53)	1714	(778)	9,07	(230.3)	859	(390)	7,64	(194.1)	644	(292)	9,24	(234.8)	430	(195)	8,72	(221.6)
50	(15.24)	32	(48)	1609	(730)	9,84	(249.9)	806	(366)	8,33	(211.5)	605	(274)	10,03	(254.6)	403	(183)	9,48	(240.7)
								Load per applied point											

THE CAPACITY CHART IS FOR 4x 5/8" GRADE 8 BOLTS ON EACH END PLATE

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

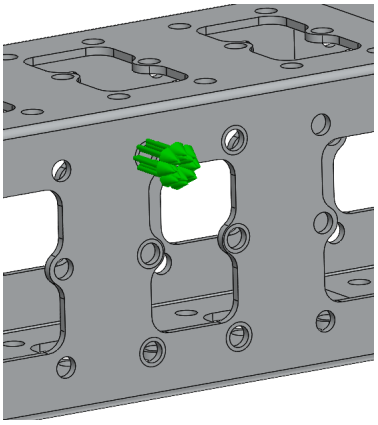
MECATRUSS 9"X9" ALUMINUM TRUSS (unbraced length) **COLUMN LOAD CAPACITY**	
10' (3.05 m)	22279 lbs (10106 kg)
20' (6.09 m)	17603 lbs (7985 kg)
30' (9.14 m)	11964 lbs (5427 kg)

All columns are pinned top and bottom and use an effective length factor of K=1.0.
All capacities assume that no other shear, flexure, or torsional forces are applied to the column.

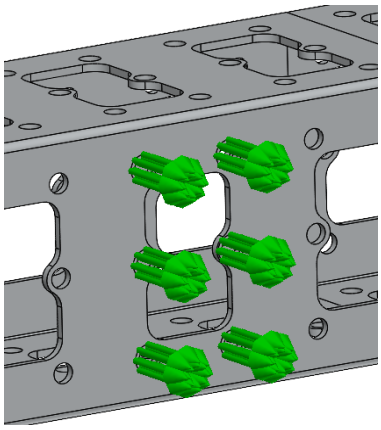
MANUFACTURED BY CERTIFIED WELDERS

HANGING CAPACITY MECATRUSS 9''X9''	
ONE HOLE LOAD CAPACITY	**SIX HOLES LOAD CAPACITY**
400 lbs (181 kg)	1500 lbs (680 kg)

Never exceed the load capacity of the truss.



One hole

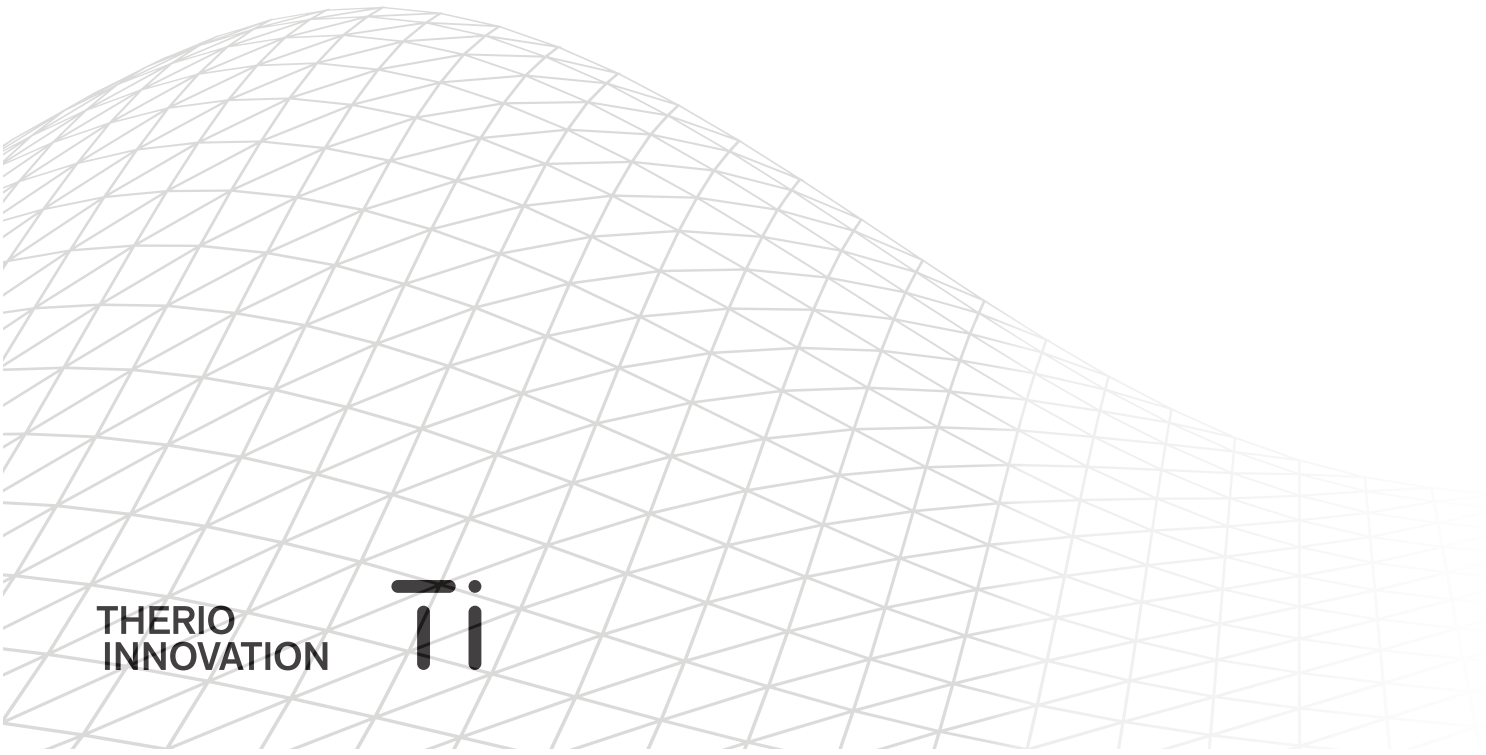


Six holes

NOTES

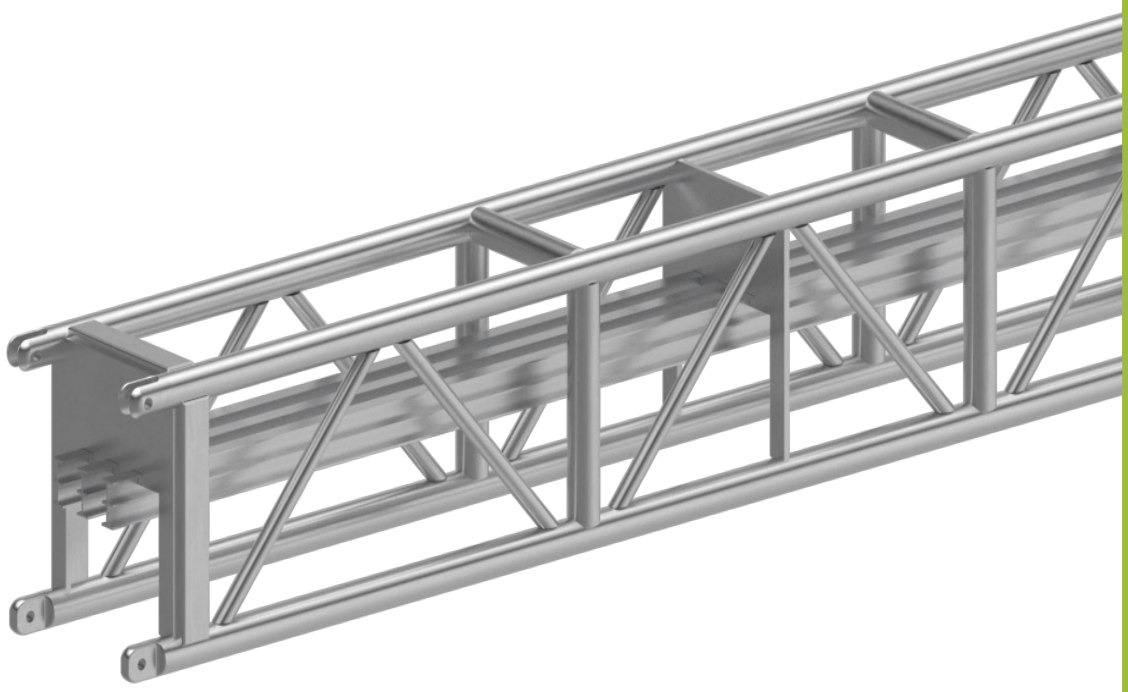
- Capacities shown in this table are valid for trusses manufactured after January 2022.
- Trusses must be loaded uniformly on width.
- Deflection of truss is theoretical and based solely on their rigidity. It therefore does not take into account the possible movement between the truss sections due to the tolerance of the bolts.
- Data are valid for indoor use 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**.

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RAIL TRUSS



DESIGNED WITH 3 TRACKS TO MOVE CURTAINS OR SCENIC ELEMENTS WITH EASE.

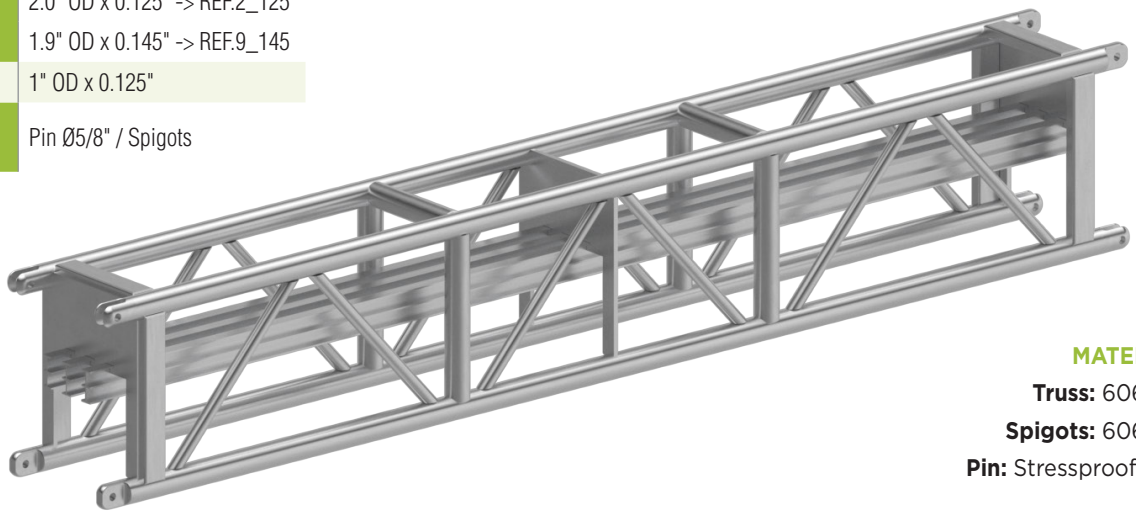
Spigot connections ensure fast and efficient installation.
Ideal for dynamic stage setups and quick scene changes

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V02 | 09-2023

MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø5/8" / Spigots

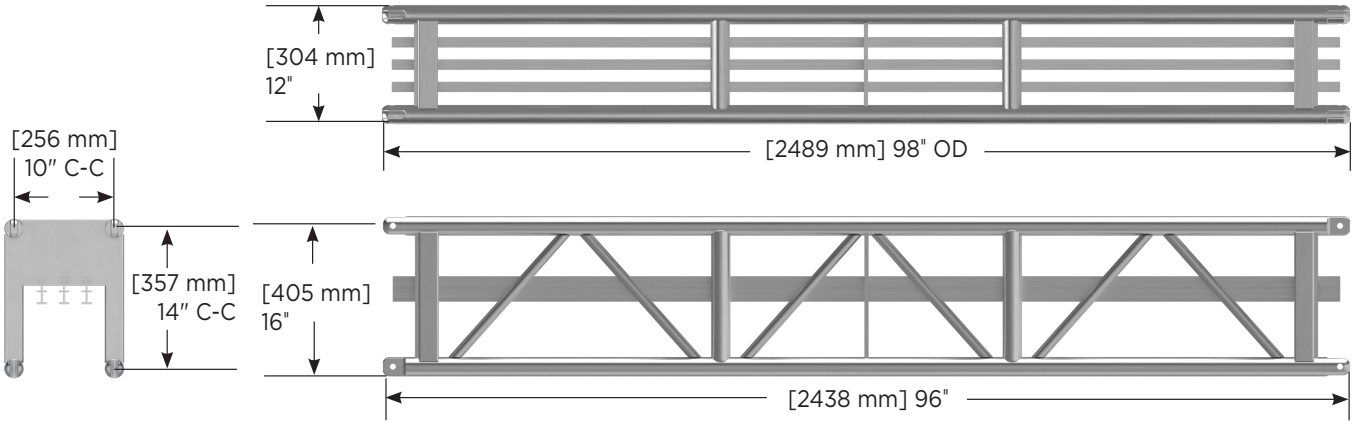


MATERIAL

Truss: 6061-T6

Spigots: 6061-T6

Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.125"

MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References	LENGTH*	Item References	Weight lbs	Weight (kg)
41	(19)	TICR-1612-048-F.2_125	<- 48" ->	TICR-1612-048-F.9_145	41	(19)
48	(22)	TICR-1612-060-F.2_125	<- 60" ->	TICR-1612-060-F.9_145	48	(22)
68	(31)	TICR-1612-096-F.2_125	<- 96" ->	TICR-1612-096-F.9_145	68	(31)
82	(37)	TICR-1612-120-F.2_125	<- 120" ->	TICR-1612-120-F.9_145	82	(37)

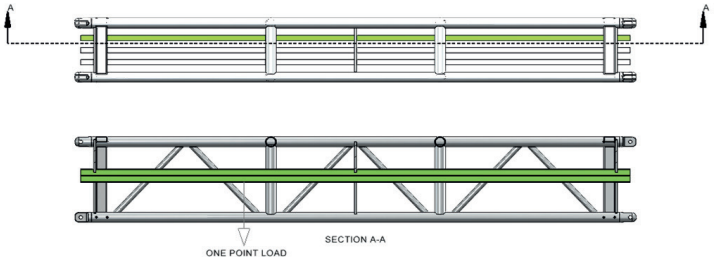
*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

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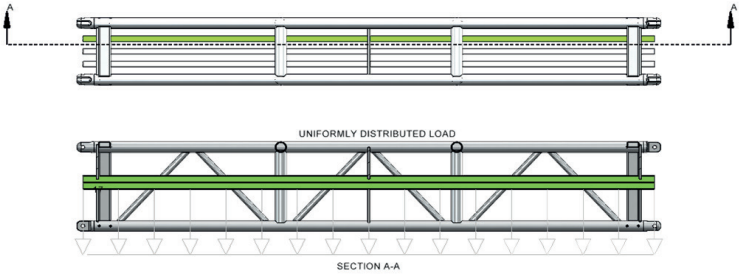
ALLOWABLE LOAD TABLE (TRUSS)

Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	900	(1340)	7203	(3267)	0,05	(1.3)	5637	(2557)	0,06	(1.6)	3615	(1640)	0,07	(1.8)	2410	(1093)	0,06	(1.6)
10	(3.05)	676	(1006)	6759	(3066)	0,09	(2.4)	4494	(2038)	0,10	(2.5)	3371	(1529)	0,13	(3.2)	2247	(1019)	0,12	(3)
16	(4.88)	346	(515)	5535	(2511)	0,32	(8.1)	2768	(1255)	0,26	(6.5)	2076	(942)	0,33	(8.3)	1384	(628)	0,30	(7.7)
20	(6.1)	218	(325)	4368	(1981)	0,50	(12.6)	2184	(991)	0,40	(10.2)	1638	(743)	0,51	(12.9)	1092	(495)	0,47	(12)
24	(7.32)	149	(222)	3578	(1623)	0,72	(18.2)	1789	(811)	0,58	(14.8)	1342	(609)	0,73	(18.6)	894	(406)	0,68	(17.3)
30	(9.14)	92	(137)	2771	(1257)	1,12	(28.4)	1386	(628)	0,91	(23.2)	1039	(471)	1,14	(29)	693	(314)	1,07	(27.1)
32	(9.75)	80	(119)	2565	(1164)	1,27	(32.4)	1283	(582)	1,04	(26.5)	962	(436)	1,30	(33)	641	(291)	1,22	(30.9)
40	(12.19)	48	(72)	1931	(876)	1,99	(50.5)	965	(438)	1,65	(41.9)	724	(328)	2,03	(51.5)	483	(219)	1,91	(48.4)
48	(14.63)	31	(46)	1485	(674)	2,87	(72.8)	743	(337)	2,42	(61.4)	557	(253)	2,92	(74.1)	371	(168)	2,75	(69.9)
50	(15.24)	28	(41)	1393	(632)	3,11	(79)	696	(316)	2,63	(66.9)	522	(237)	3,16	(80.3)	348	(158)	2,99	(76)

Load per applied point



The maximum point load on one (1) rail is 390lb.



The maximum uniformly distributed load on one (1) rail is define in the allowable load table (rail).

ALLOWABLE LOAD TABLE (RAIL)

Span length		Load capacity per rail			
ft	(m)	lb/ft	(kg/m)	lb	(kg)
8	(2.44)	100	(149)	800	(46)
10	(3.05)	100	(149)	1000	(46)
16	(4.88)	100	(149)	1600	(46)
20	(6.1)	73	(109)	1453	(33)
24	(7.32)	50	(75)	1200	(23)
30	(9.15)	31	(46)	920	(14)
32	(9.76)	27	(40)	853	(13)
40	(12.2)	16	(24)	640	(8)
48	(14.64)	10	(16)	496	(5)
50	(15.24)	9	(14)	450	(5)

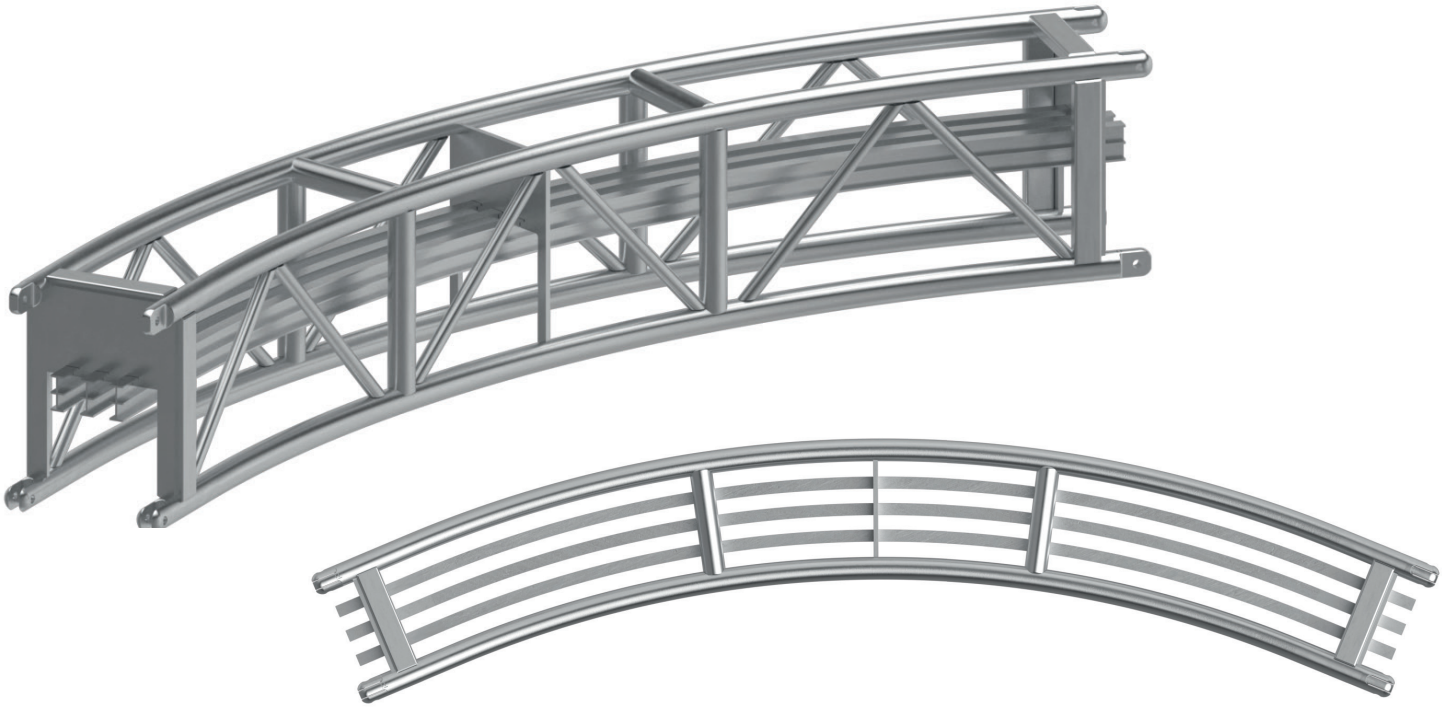
Total truss load must not exceed the allowable load of the truss.

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 chords 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**.

CURVED OPTION AVAILABLE:

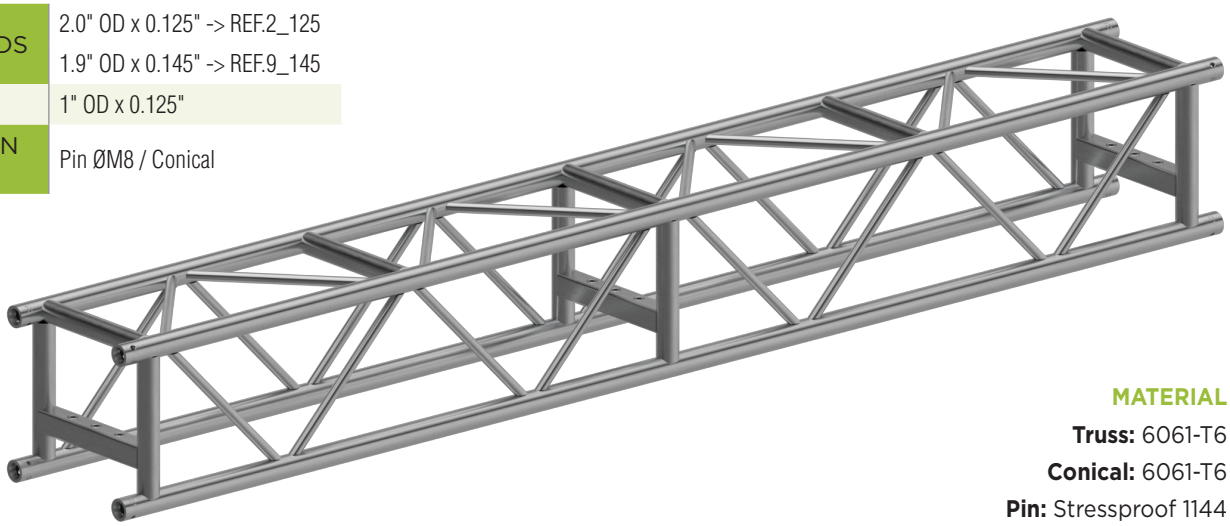
TICRC-1612-F.2_125



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MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin ØM8 / Conical

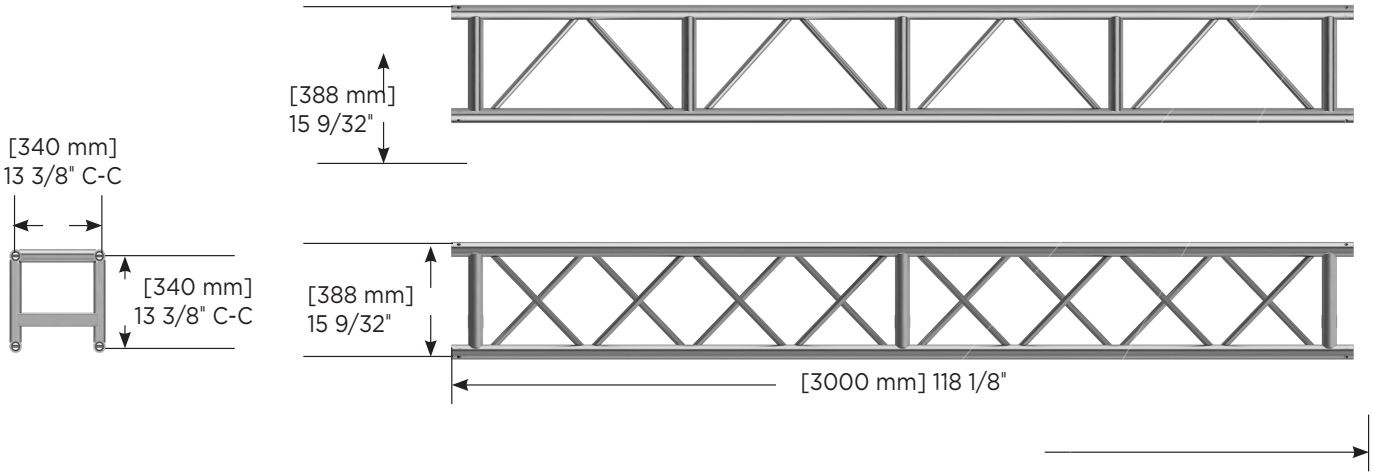


MATERIAL

Truss: 6061-T6

Conical: 6061-T6

Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.125"

MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
23	(10)	TIR-	M4040	-050	C.2_125	<- 0.50 m ->	TIR-	M4040	-050	C.9_145	23	(10)
31	(14)	TIR-	M4040	-100	C.2_125	<- 1.00 m ->	TIR-	M4040	-100	C.9_145	31	(14)
50	(23)	TIR-	M4040	-200	C.2_125	<- 2.00 m ->	TIR-	M4040	-200	C.9_145	50	(23)
68	(31)	TIR-	M4040	-300	C.2_125	<- 3.00 m ->	TIR-	M4040	-300	C.9_145	68	(31)

*Other lengths available: 0.25, 1.50 and 2.50m. | Custom lengths available upon request.

ALLOWABLE LOAD TABLE

	Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
																		
Span Length		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
9,8	(3)	196	(292)	1931	(876)	0,03	(0.7)	4362	(1979)	0,10	(2.6)	3177	(1441)	0,13	(3.2)	2118	(961)	0,12	(3)
13	(4)	146	(217)	1910	(866)	0,07	(1.7)	3257	(1477)	0,18	(4.6)	2443	(1108)	0,23	(5.8)	1628	(739)	0,21	(5.4)
16	(5)	316	(470)	5181	(2350)	0,35	(8.9)	2590	(1175)	0,28	(7.2)	1943	(881)	0,36	(9.1)	1295	(587)	0,33	(8.5)
20	(6)	218	(324)	4286	(1944)	0,51	(12.9)	2143	(972)	0,41	(10.3)	1607	(729)	0,52	(13.1)	1072	(486)	0,48	(12.2)
23	(7)	159	(236)	3643	(1652)	0,69	(17.5)	1821	(826)	0,56	(14.1)	1366	(620)	0,70	(17.9)	911	(413)	0,66	(16.6)
26	(8)	120	(179)	3156	(1432)	0,90	(22.8)	1578	(716)	0,73	(18.5)	1183	(537)	0,92	(23.3)	789	(358)	0,86	(21.8)
30	(9)	94	(140)	2774	(1258)	1,14	(28.9)	1387	(629)	0,92	(23.4)	1040	(472)	1,16	(29.5)	693	(315)	1,08	(27.5)
33	(10)	75	(112)	2464	(1118)	1,41	(35.7)	1232	(559)	1,14	(29)	924	(419)	1,43	(36.4)	616	(279)	1,34	(34)
36	(11)	61	(91)	2208	(1002)	1,70	(43.2)	1104	(501)	1,39	(35.2)	828	(376)	1,74	(44.1)	552	(250)	1,62	(41.2)
39	(12)	51	(75)	1992	(904)	2,02	(51.4)	996	(452)	1,66	(42.1)	747	(339)	2,06	(52.4)	498	(226)	1,93	(49.1)
43	(13)	42	(63)	1806	(819)	2,38	(60.3)	903	(410)	1,95	(49.6)	677	(307)	2,42	(61.5)	452	(205)	2,27	(57.6)
46	(14)	36	(53)	1645	(746)	2,75	(70)	822	(373)	2,27	(57.7)	617	(280)	2,81	(71.3)	411	(187)	2,63	(66.9)
49	(15)	31	(45)	1503	(682)	3,16	(80.3)	751	(341)	2,62	(66.6)	564	(256)	3,22	(81.8)	376	(170)	3,03	(76.9)
52	(16)	26	(39)	1376	(624)	3,60	(91.4)	688	(312)	3	(76.1)	516	(234)	3,66	(93.1)	344	(156)	3,45	(87.6)
56	(17)	23	(34)	1263	(573)	4,06	(103.2)	631	(286)	3,4	(86.3)	474	(215)	4,14	(105)	316	(143)	3,90	(99)
59	(18)	20	(29)	1160	(526)	4,55	(115.7)	580	(263)	3,83	(97.3)	435	(197)	4,63	(117.7)	290	(132)	4,37	(111.1)

Load per applied point

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 chords 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**.

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THE TRUSS FOR CARRYING LIGHTS

Compatible with major manufacturers.
Optimized for lighting setups.
Available with all connection systems.

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V02 | 09-2023

MAIN CHORDS	2.0" OD x 0.188" -> REF.2_188 1.9" OD x 0.200" -> REF.9_200
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø3/4" / Spigots

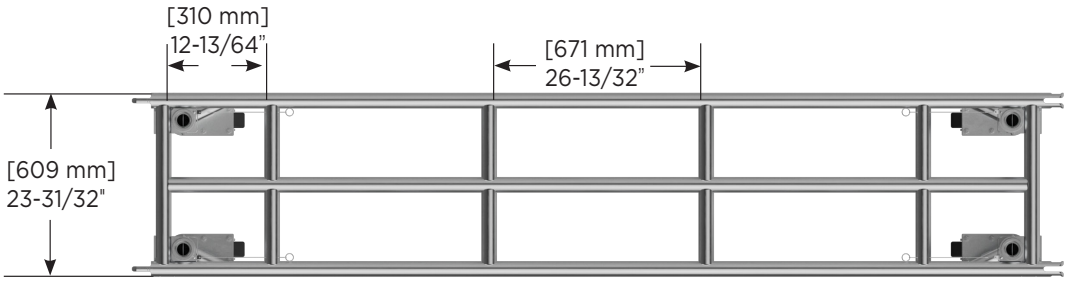


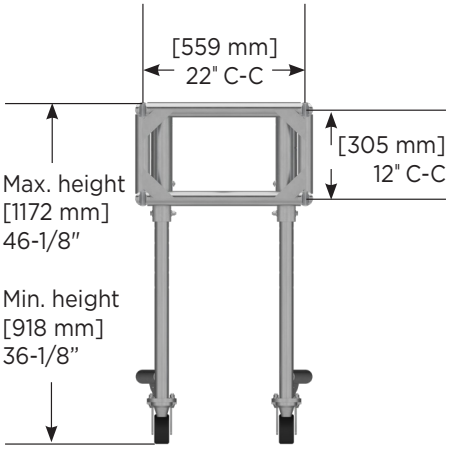
MATERIAL

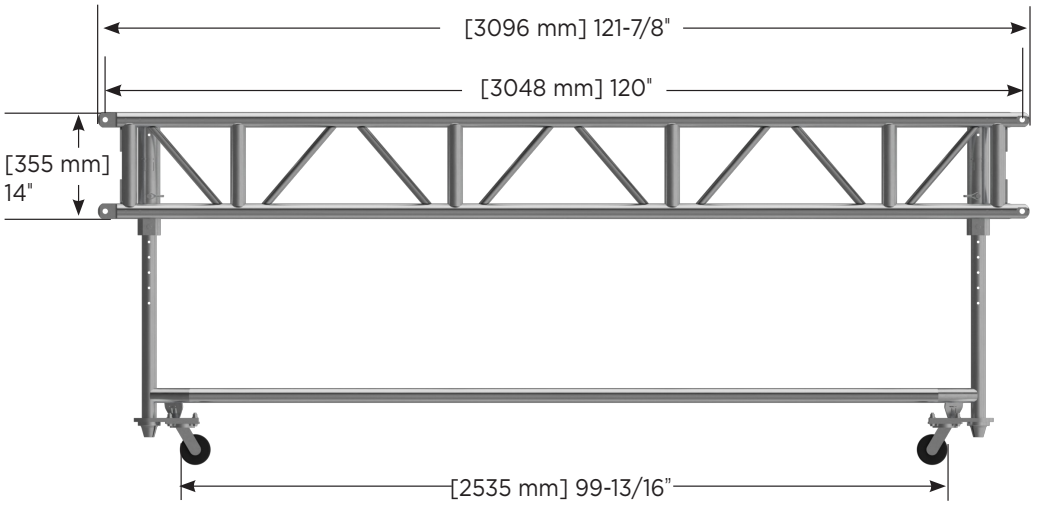
Truss: 6061-T6

Spigots: C12L14

Pin: Stressproof 1144







MANUFACTURED BY CERTIFIED WELDERS

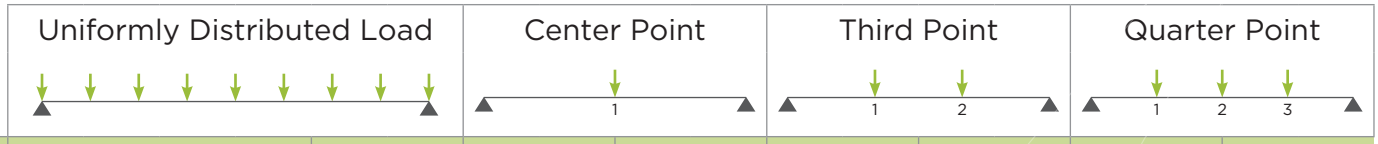
MAIN CHORDS 2.0" OD x 0.188"

MAIN CHORDS 1.9" OD x 0.200"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
70	(32)	TIPR-	1424	-048	F.2_188	<- 48" ->	TIPR-	1424	-048	F.9_200	70	(32)
88	(40)	TIPR-	1424	-060	F.2_188	<- 60" ->	TIPR-	1424	-060	F.9_200	88	(40)
140	(64)	TIPR-	1424	-096	F.2_188	<- 96" ->	TIPR-	1424	-096	F.9_200	140	(64)
175	(79)	TIPR-	1424	-120	F.2_188	<- 120" ->	TIPR-	1424	-120	F.9_200	175	(79)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

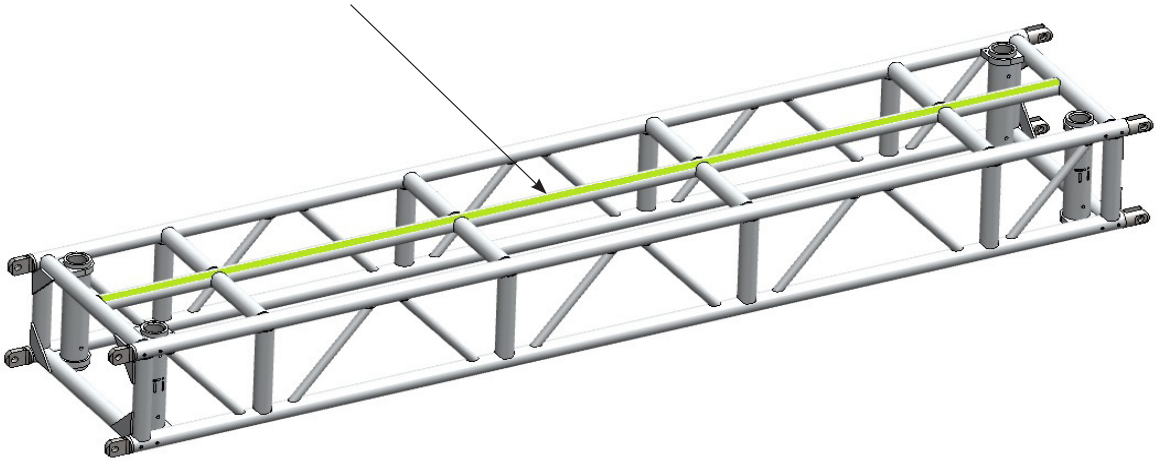
ALLOWABLE LOAD TABLE



Span Length		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	758	(1128)	6064	(2751)	0,01	(0.3)	6064	(2751)	0,02	(0.5)	3052	(1384)	0,02	(0.5)	2034	(923)	0,02	(0.4)
10	(3.05)	600	(893)	5998	(2721)	0,03	(0.7)	5719	(2594)	0,04	(1)	3029	(1374)	0,04	(0.9)	2019	(916)	0,03	(0.8)
16	(4.88)	358	(532)	5723	(2596)	0,10	(2.6)	3489	(1583)	0,10	(2.6)	2617	(1187)	0,13	(3.3)	1745	(791)	0,12	(3)
20	(6.1)	273	(406)	5457	(2475)	0,20	(5)	2728	(1238)	0,16	(4)	2046	(928)	0,20	(5.1)	1364	(619)	0,19	(4.8)
24	(7.32)	184	(274)	4419	(2004)	0,28	(7.2)	2210	(1002)	0,23	(5.9)	1657	(752)	0,29	(7.3)	1105	(501)	0,27	(6.9)
30	(9.14)	112	(166)	3346	(1518)	0,44	(11.2)	1673	(759)	0,37	(9.3)	1255	(569)	0,45	(11.4)	837	(379)	0,42	(10.7)
32	(9.75)	96	(143)	3069	(1392)	0,50	(12.8)	1535	(696)	0,42	(10.6)	1151	(522)	0,51	(13)	767	(348)	0,48	(12.2)
40	(12.19)	55	(82)	2203	(999)	0,79	(19.9)	1102	(500)	0,67	(16.9)	826	(375)	0,80	(20.3)	551	(250)	0,76	(19.2)
48	(14.63)	33	(49)	1580	(716)	1,13	(28.7)	790	(358)	0,98	(25)	592	(269)	1,15	(29.1)	395	(179)	1,09	(27.8)
50	(15.24)	29	(43)	1448	(657)	1,23	(31.2)	724	(328)	1,07	(27.3)	543	(246)	1,24	(31.6)	362	(164)	1,19	(30.2)
56	(17.07)	20	(29)	1094	(496)	1,54	(39.1)	547	(248)	1,38	(35)	410	(186)	1,56	(39.5)	273	(124)	1,50	(38.1)
60	(18.29)	15	(22)	886	(402)	1,77	(44.9)	443	(201)	1,60	(40.8)	332	(151)	1,78	(45.3)	221	(100)	1,73	(43.8)

Load per applied point

The maximum point load on the top middle chord is 495 lb.
The maximum uniformly distributed load on the top middle chord is 192 lb/ft.
The total truss load must not exceed the allowable of the load table.

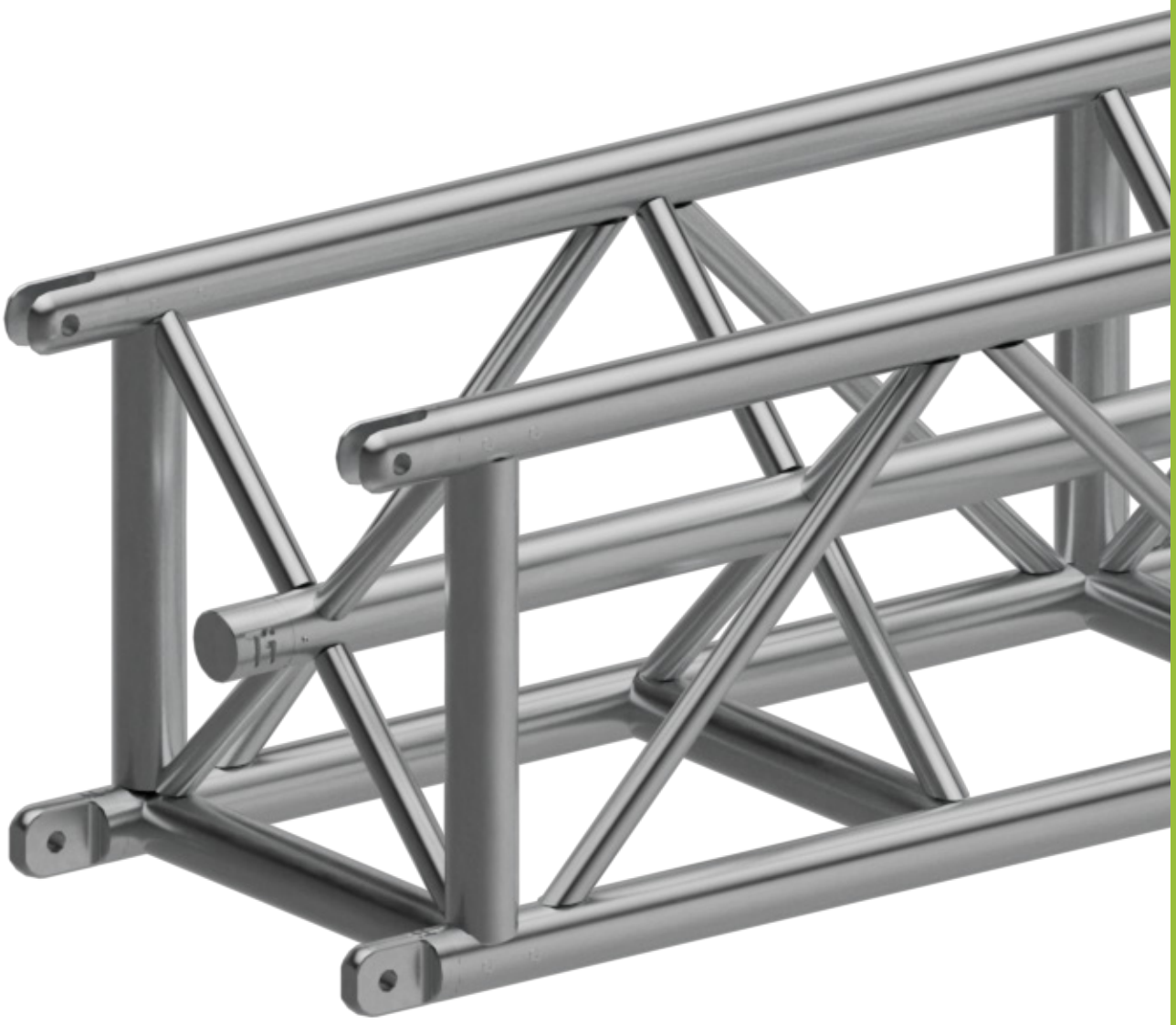


NOTES

- Capacities shown in this table are valid for structures manufactured after January 2022.
- 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 chords 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**.

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V TRUSS

SPIGOTS CONNECTION AND MULTIPLE APPLICATIONS FOR THE V SHAPE

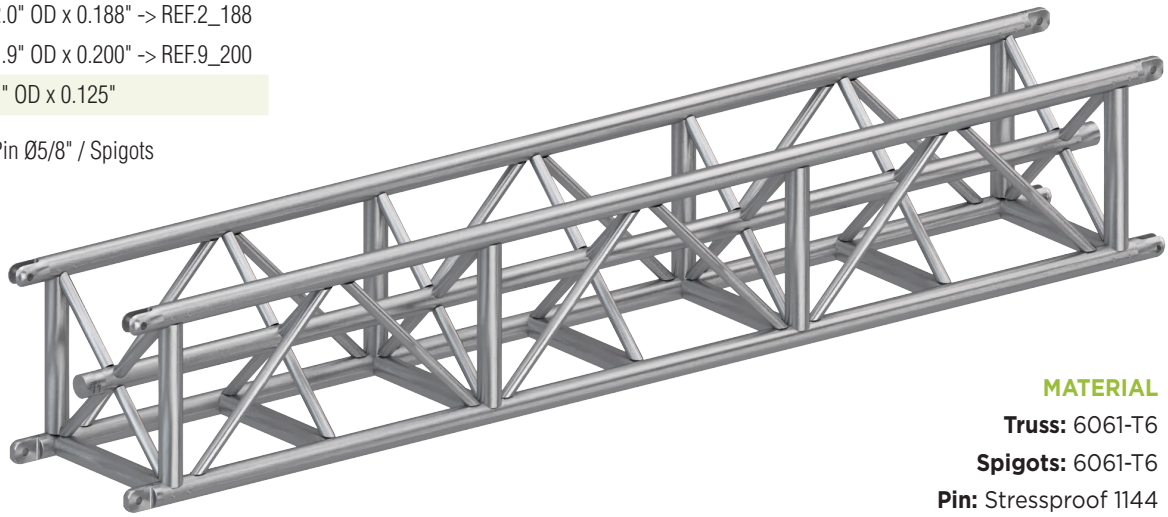
Perfect for cable management.
Can have a lot of cables on top and still be able to hang lights under.
Can be flipped upside-down to hang a video wall or curtain track on the middle chord.

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V02 | 09-2023

MAIN CHORDS	2.0" OD x 0.188" -> REF.2_188 1.9" OD x 0.200" -> REF.9_200
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø5/8" / Spigots

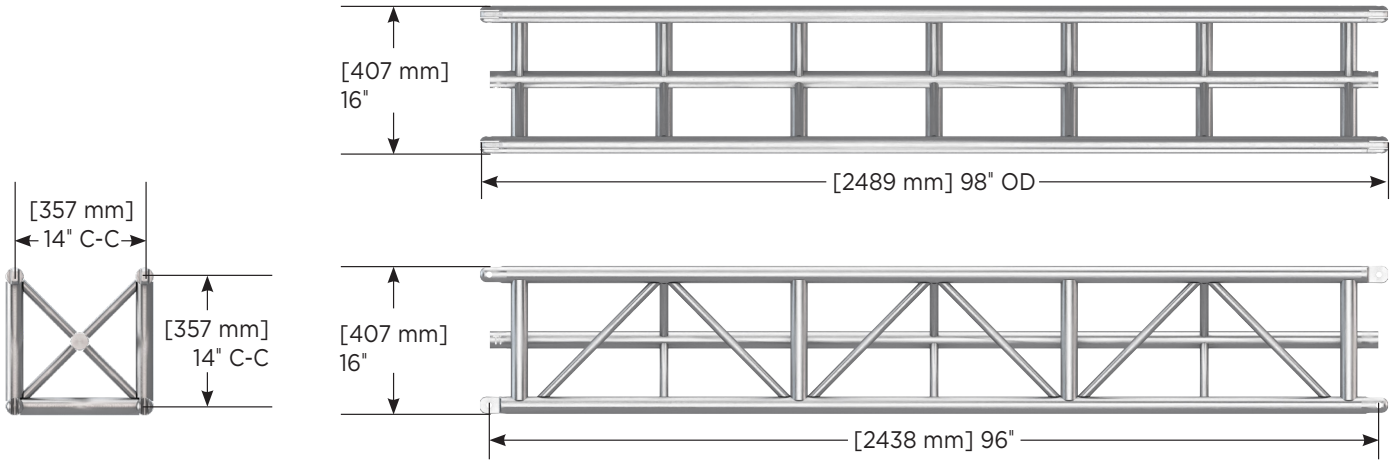


MATERIAL

Truss: 6061-T6

Spigots: 6061-T6

Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.188"

MAIN CHORDS 1.9" OD x 0.200"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
53	(24)	TIV-	1616	-048	F.2_188	<- 48" ->	TIV-	1616	-048	F.9_200	53	(24)
60	(27)	TIV-	1616	-060	F.2_188	<- 60" ->	TIV-	1616	-060	F.9_200	60	(27)
83	(38)	TIV-	1616	-096	F.2_188	<- 96" ->	TIV-	1616	-096	F.9_200	83	(38)
107	(49)	TIV-	1616	-120	F.2_188	<- 120" ->	TIV-	1616	-120	F.9_200	107	(49)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths are available upon request.

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ALLOWABLE LOAD TABLE

Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	835	(1243)	6680	(3030)	0,04	(0.9)	6680	(3030)	0,06	(1.4)	3351	(1520)	0,05	(1.2)	2234	(1013)	0,04	(1.1)
10	(3.05)	664	(988)	6642	(3013)	0,07	(1.8)	6642	(3013)	0,11	(2.8)	3338	(1514)	0,09	(2.4)	2226	(1009)	0,09	(2.2)
16	(4.88)	405	(602)	6474	(2937)	0,28	(7.1)	4181	(1896)	0,29	(7.3)	3136	(1422)	0,37	(9.3)	2090	(948)	0,34	(8.6)
20	(6.1)	317	(471)	6333	(2873)	0,54	(13.6)	3307	(1500)	0,45	(11.5)	2480	(1125)	0,57	(14.5)	1654	(750)	0,53	(13.5)
24	(7.32)	226	(337)	5435	(2465)	0,81	(20.5)	2718	(1233)	0,65	(16.5)	2038	(925)	0,82	(20.9)	1359	(616)	0,77	(19.5)
30	(9.14)	141	(210)	4236	(1921)	1,26	(32)	2118	(961)	1,02	(26)	1588	(720)	1,28	(32.6)	1059	(480)	1,20	(30.5)
32	(9.75)	123	(183)	3931	(1783)	1,43	(36.4)	1965	(891)	1,17	(29.7)	1474	(669)	1,46	(37.1)	983	(446)	1,37	(34.7)
40	(12.19)	75	(111)	2994	(1358)	2,24	(56.8)	1497	(679)	1,84	(46.8)	1123	(509)	2,28	(57.9)	749	(340)	2,14	(54.3)
48	(14.63)	49	(73)	2343	(1063)	3,22	(81.8)	1171	(531)	2,69	(68.3)	878	(398)	3,28	(83.3)	586	(266)	3,09	(78.5)
50	(15.24)	44	(66)	2208	(1002)	3,50	(88.8)	1104	(501)	2,93	(74.4)	828	(376)	3,56	(90.4)	552	(250)	3,35	(85.2)
								Load per applied point											

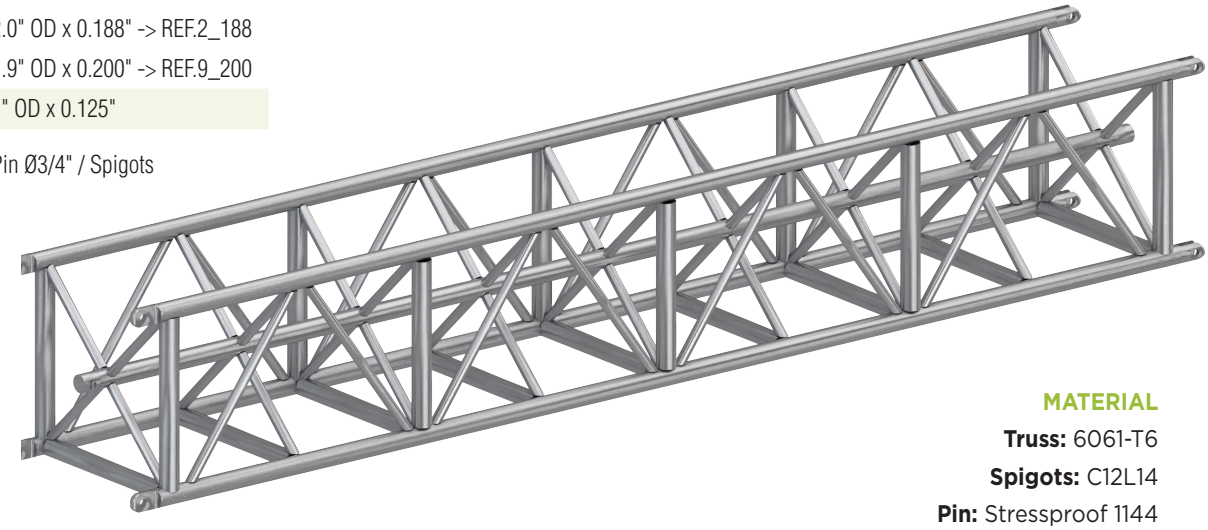
NOTES

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- Loads must be applied to or as close as possible to the nodes of the trusses.
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- Data are valid for indoor use only.
- Trusses are hung from the top chords 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**.

V TRUSS SERIES

TIV-2020-F.2_188 **HEAVY DUTY**

MAIN CHORDS	2.0" OD x 0.188" -> REF.2_188 1.9" OD x 0.200" -> REF.9_200
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø3/4" / Spigots

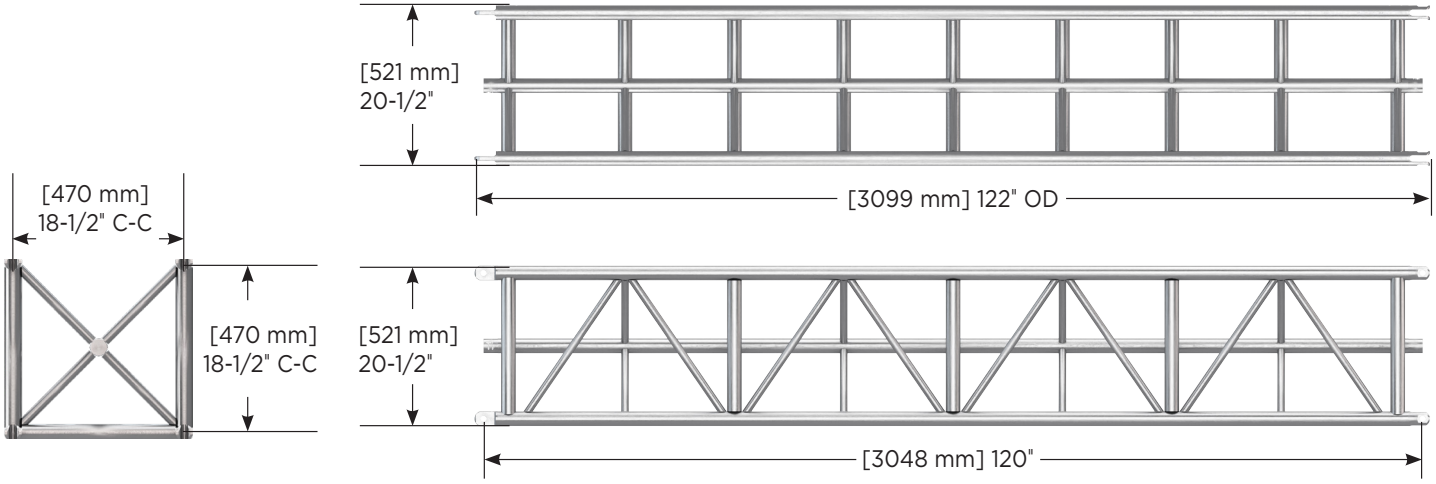


MATERIAL

Truss: 6061-T6

Spigots: C12L14

Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.188"

MAIN CHORDS 1.9" OD x 0.200"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
60	(27)	TIV-	2020	-048	F.2_188	<- 48" ->	TIV-	2020	-048	F.9_200	60	(27)
76	(34)	TIV-	2020	-060	F.2_188	<- 60" ->	TIV-	2020	-060	F.9_200	76	(34)
105	(48)	TIV-	2020	-096	F.2_188	<- 96" ->	TIV-	2020	-096	F.9_200	105	(48)
128	(58)	TIV-	2020	-120	F.2_188	<- 120" ->	TIV-	2020	-120	F.9_200	128	(58)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

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ALLOWABLE LOAD TABLE

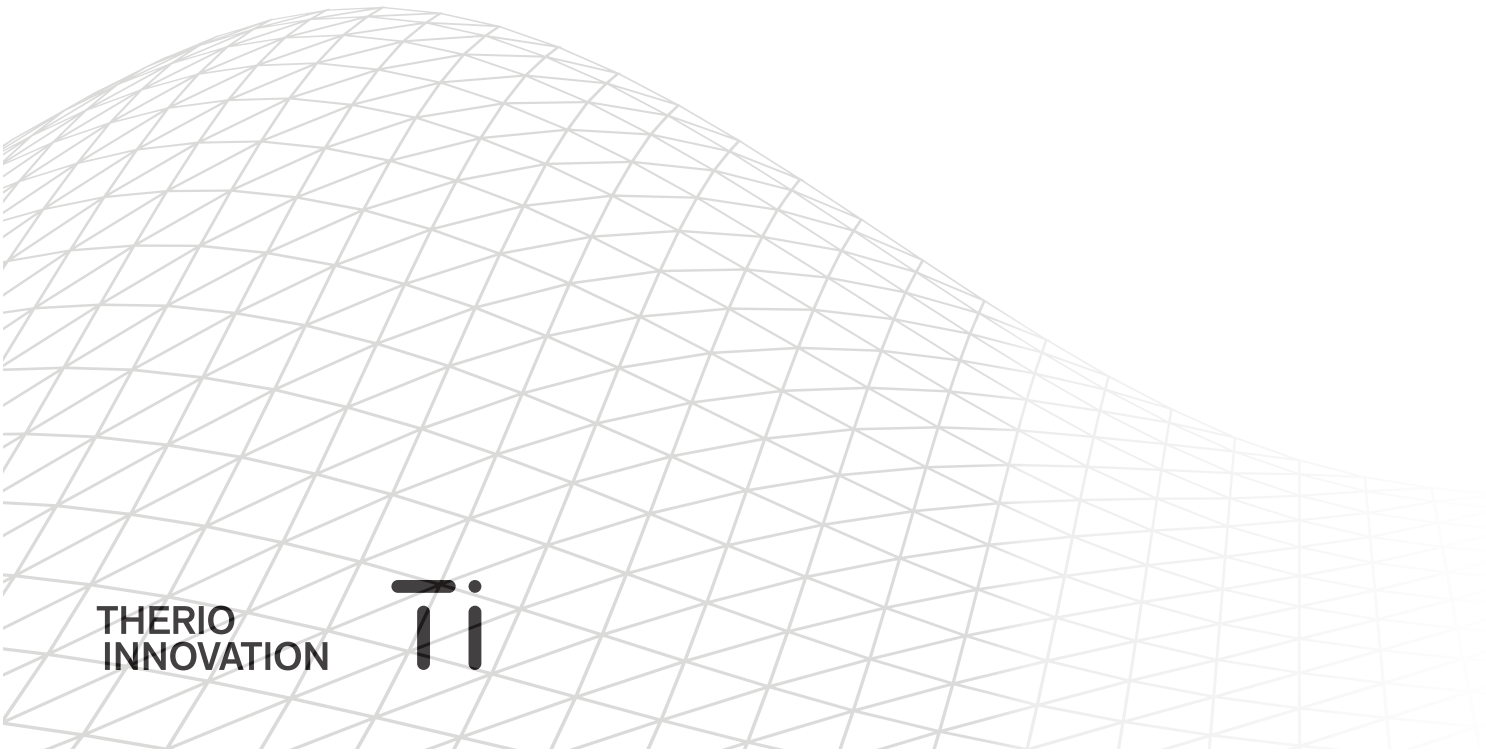
Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	911	(1356)	7288	(3306)	0,02	(0.6)	7288	(3306)	0,04	(0.9)	3655	(1658)	0,03	(0.8)	2437	(1105)	0,03	(0.7)
10	(3.05)	725	(1079)	7249	(3288)	0,04	(1.1)	7249	(3288)	0,07	(1.8)	3642	(1652)	0,06	(1.5)	2428	(1101)	0,06	(1.4)
16	(4.88)	443	(659)	7086	(3214)	0,18	(4.5)	5504	(2497)	0,22	(5.6)	3587	(1627)	0,24	(6.2)	2391	(1085)	0,23	(5.7)
20	(6.1)	347	(516)	6937	(3146)	0,34	(8.7)	4356	(1976)	0,34	(8.7)	3267	(1482)	0,44	(11.1)	2178	(988)	0,41	(10.3)
24	(7.32)	282	(419)	6760	(3066)	0,58	(14.8)	3582	(1625)	0,50	(12.6)	2686	(1218)	0,63	(15.9)	1791	(812)	0,58	(14.9)
30	(9.14)	186	(277)	5588	(2535)	0,96	(24.4)	2794	(1267)	0,78	(19.8)	2096	(951)	0,98	(24.9)	1397	(634)	0,92	(23.2)
32	(9.75)	162	(241)	5188	(2353)	1,09	(27.7)	2594	(1177)	0,89	(22.6)	1945	(882)	1,11	(28.3)	1297	(588)	1,04	(26.5)
40	(12.19)	99	(147)	3960	(1796)	1,71	(43.3)	1980	(898)	1,41	(35.7)	1485	(674)	1,74	(44.2)	990	(449)	1,63	(41.4)
48	(14.63)	65	(96)	3107	(1409)	2,46	(62.4)	1554	(705)	2,05	(52.1)	1165	(529)	2,50	(63.6)	777	(352)	2,36	(59.8)
50	(15.24)	59	(87)	2931	(1330)	2,67	(67.7)	1466	(665)	2,23	(56.7)	1099	(499)	2,72	(69)	733	(332)	2,56	(65)

Load per applied point

NOTES

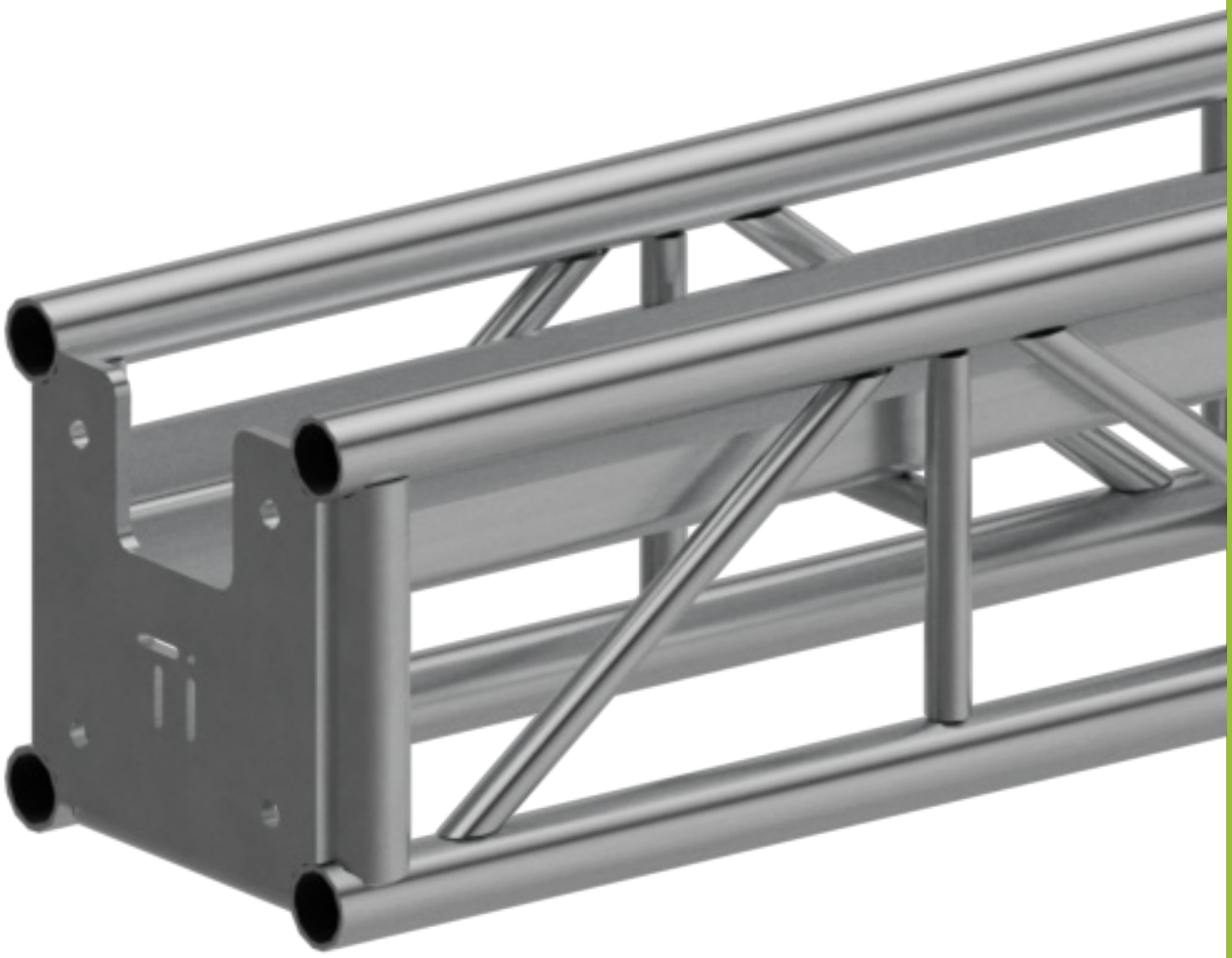
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- Data are valid only for static loads and span, with two support points (one at each end).
  - If dynamic loads or more attachment points are needed, contact **Therio Innovation**.

CREATION
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THERIO
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CABLE TRAY



PERFECT FOR LOW CEILINGS

Perfect for cable management.
No need to strap cables on top.
Can hang lights under the truss.

THERIO
INNOVATION

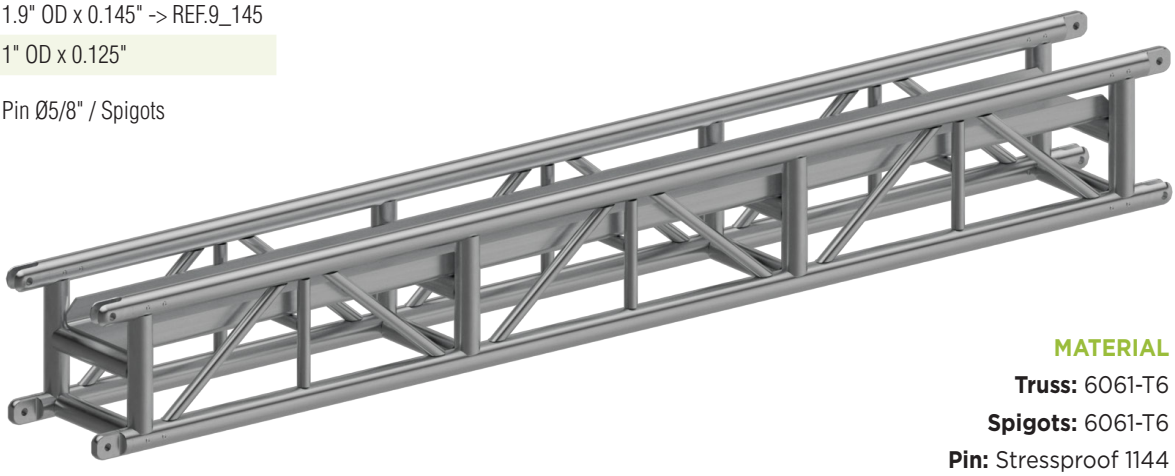
514 400.3336 | 1 888 366.2336
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V02 | 09-2023

CABLE TRAY SERIES

TICT-1212-F.2_125-U **LIGHT DUTY**

MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Pin Ø5/8" / Spigots

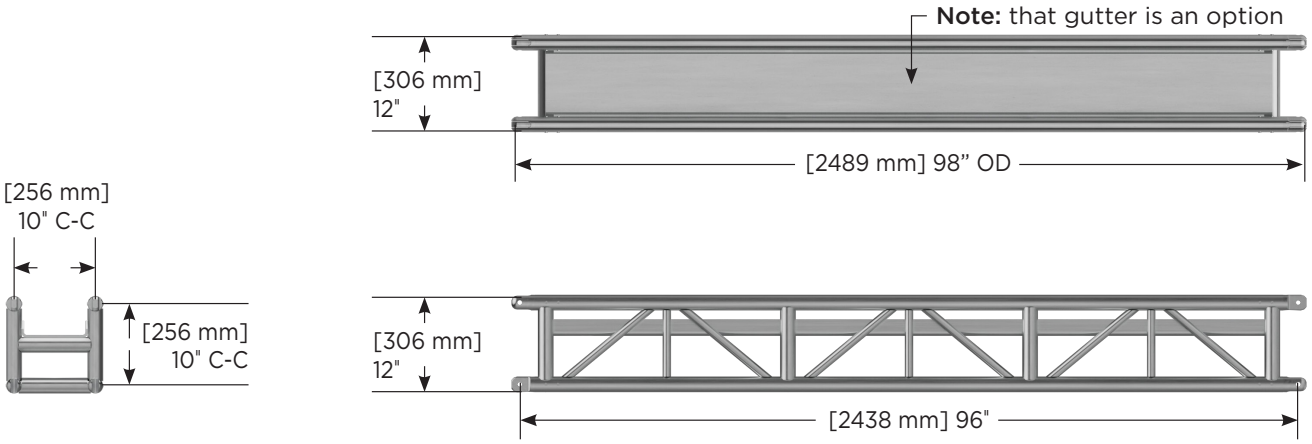


MATERIAL

Truss: 6061-T6

Spigots: 6061-T6

Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.125"

MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
47	(21)	TICT-	1212	-048	F.2_125-U	<- 48" ->	TICT-	1212	-048	F.9_145-U	47	(21)
55	(25)	TICT-	1212	-060	F.2_125-U	<- 60" ->	TICT-	1212	-060	F.9_145-U	55	(25)
79	(36)	TICT-	1212	-096	F.2_125-U	<- 96" ->	TICT-	1212	-096	F.9_145-U	79	(36)
101	(46)	TICT-	1212	-120	F.2_125-U	<- 120" ->	TICT-	1212	-120	F.9_145-U	101	(46)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

MANUFACTURED BY CERTIFIED WELDERS

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ALLOWABLE LOAD TABLE

Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	678	(1009)	5424	(2460)	0,08	(2.1)	4018	(1822)	0,10	(2.4)	2729	(1238)	0,11	(2.8)	1820	(825)	0,10	(2.6)
10	(3.05)	536	(798)	5364	(2433)	0,16	(4)	3196	(1450)	0,15	(3.8)	2397	(1087)	0,19	(4.9)	1598	(725)	0,18	(4.5)
16	(4.88)	244	(363)	3899	(1768)	0,48	(12.2)	1949	(884)	0,39	(9.8)	1462	(663)	0,49	(12.4)	975	(442)	0,46	(11.6)
20	(6.1)	152	(227)	3047	(1382)	0,75	(19)	1524	(691)	0,61	(15.4)	1143	(518)	0,76	(19.4)	762	(346)	0,71	(18.1)
24	(7.32)	103	(153)	2467	(1119)	1,08	(27.4)	1233	(559)	0,88	(22.4)	925	(420)	1,10	(27.9)	617	(280)	1,03	(26.1)
30	(9.14)	62	(93)	1866	(847)	1,68	(42.7)	933	(423)	1,39	(35.4)	700	(317)	1,71	(43.6)	467	(212)	1,61	(40.9)
32	(9.75)	53	(80)	1711	(776)	1,91	(48.6)	856	(388)	1,59	(40.4)	642	(291)	1,95	(49.5)	428	(194)	1,83	(46.6)
40	(12.19)	31	(46)	1226	(556)	2,99	(76)	613	(278)	2,54	(64.5)	460	(209)	3,04	(77.3)	307	(139)	2,88	(73.1)

Load per applied point

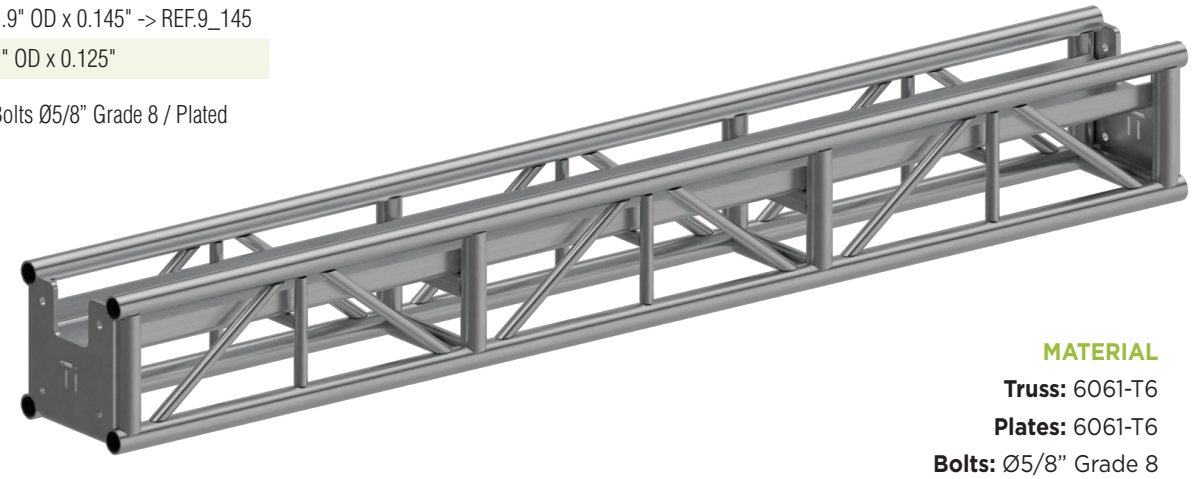
NOTES

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- Trusses are hung from the top chords 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.**

CABLE TRAY SERIES

TICT-1212-P.2_125-U **LIGHT DUTY**

MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	1" OD x 0.125"
CONNECTION STYLE	Bolts Ø5/8" Grade 8 / Plated

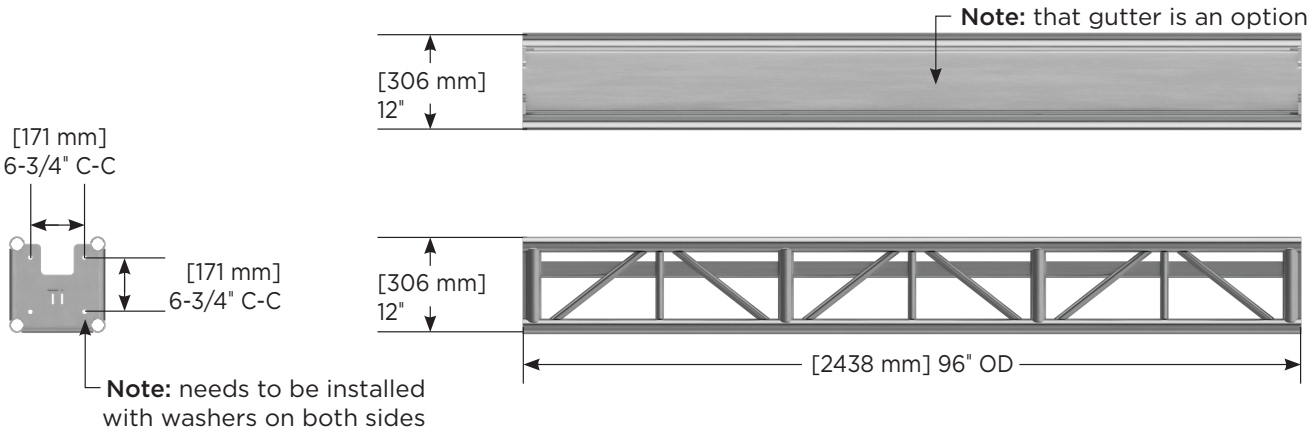


MATERIAL

Truss: 6061-T6

Plates: 6061-T6

Bolts: Ø5/8" Grade 8



MAIN CHORDS 2.0" OD x 0.125"

MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
43	(20)	TICT-	1212	-048	P.2_125-U	<- 48" ->	TICT-	1212	-048	P.9_145-U	43	(20)
50	(23)	TICT-	1212	-060	P.2_125-U	<- 60" ->	TICT-	1212	-060	P.9_145-U	50	(23)
76	(34)	TICT-	1212	-096	P.2_125-U	<- 96" ->	TICT-	1212	-096	P.9_145-U	76	(34)
94	(43)	TICT-	1212	-120	P.2_125-U	<- 120" ->	TICT-	1212	-120	P.9_145-U	94	(43)

*Other lengths available: 24, 36, 72 and 84 in. | Custom lengths available upon request.

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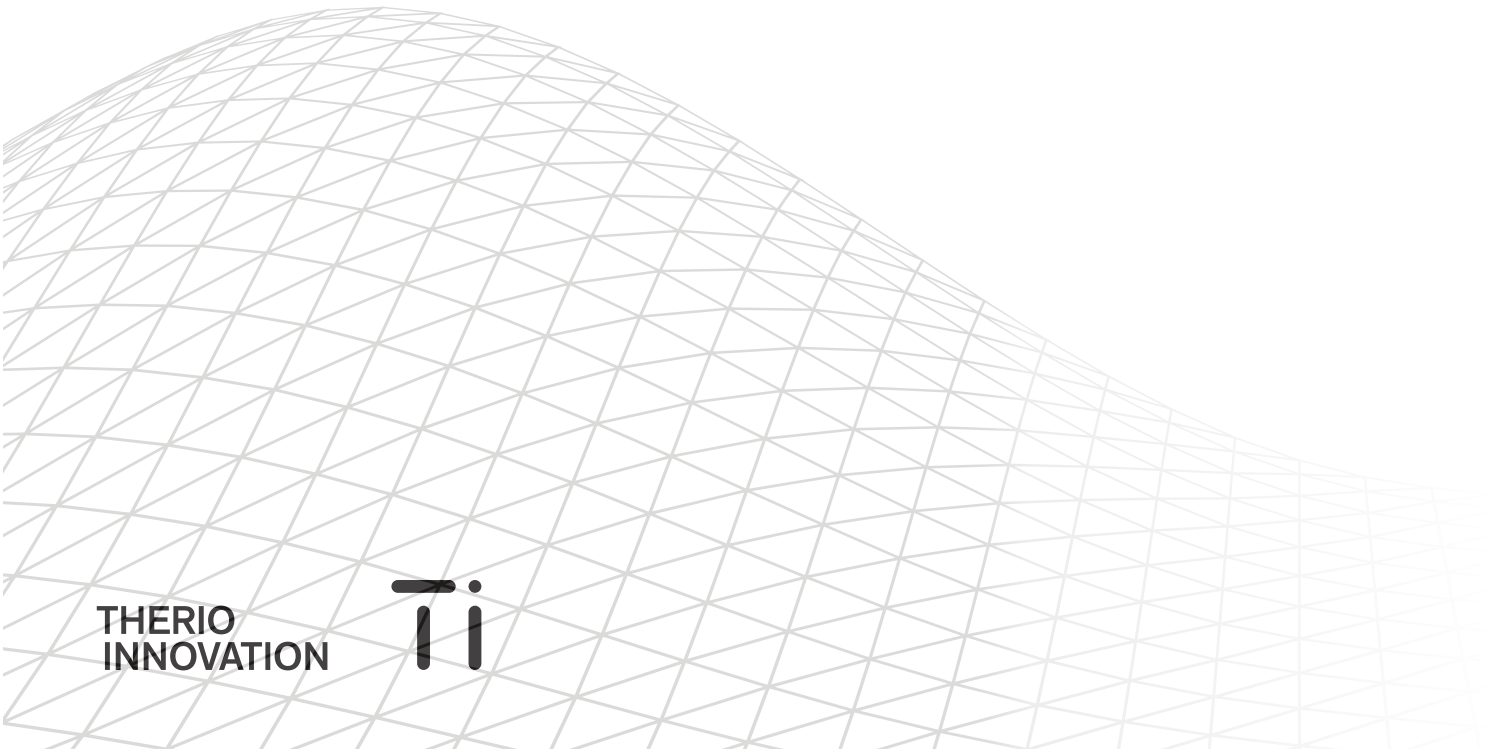
ALLOWABLE LOAD TABLE

Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
																			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	108	(161)	868	(394)	0,01	(0.4)	434	(197)	0,01	(0.3)	325	(148)	0,01	(0.4)	217	(98)	0,01	(0.3)
10	(3.05)	66	(98)	660	(299)	0,02	(0.6)	330	(150)	0,02	(0.5)	248	(112)	0,02	(0.6)	165	(75)	0,02	(0.5)
16	(4.88)	20	(30)	321	(145)	0,06	(1.4)	160	(73)	0,05	(1.2)	120	(55)	0,06	(1.4)	80	(36)	0,05	(1.4)
								Load per applied point											

NOTES

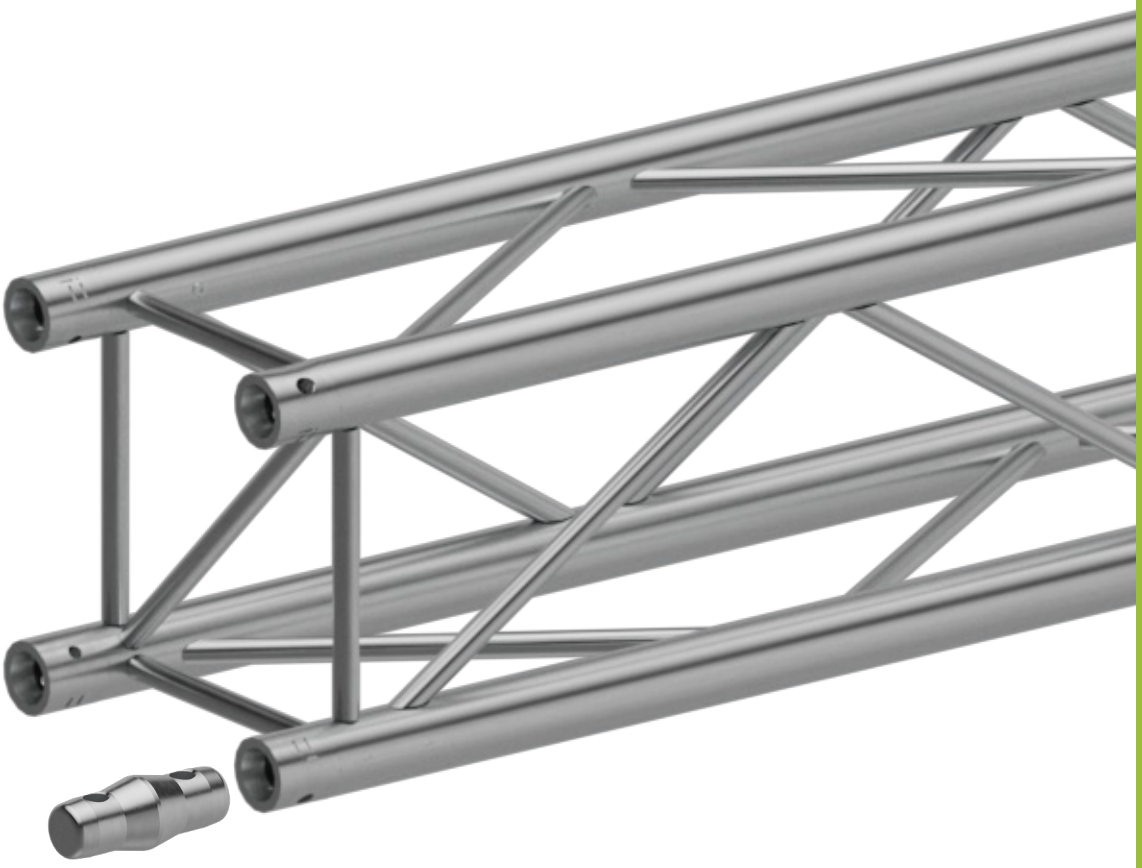
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CONICAL



CONICAL COMPONENTS FOR PRESS FIT CONNECTION

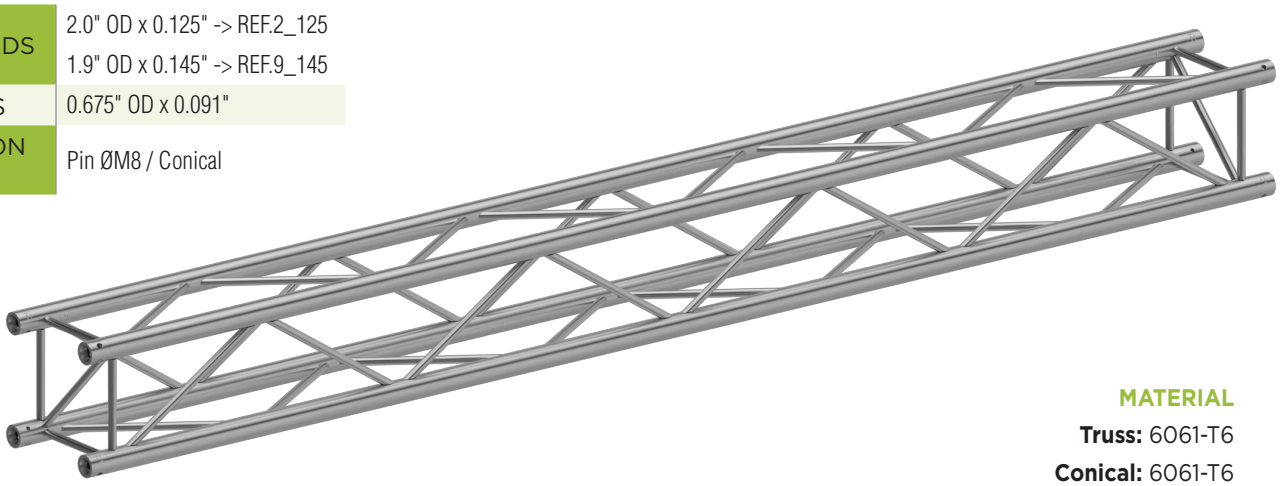
Our conical can connect with all the other players.
The truss is lighter because of smaller diagonals.
All the components are made by THERIO INNOVATION.

THERIO
INNOVATION

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info@therioinnovation.com

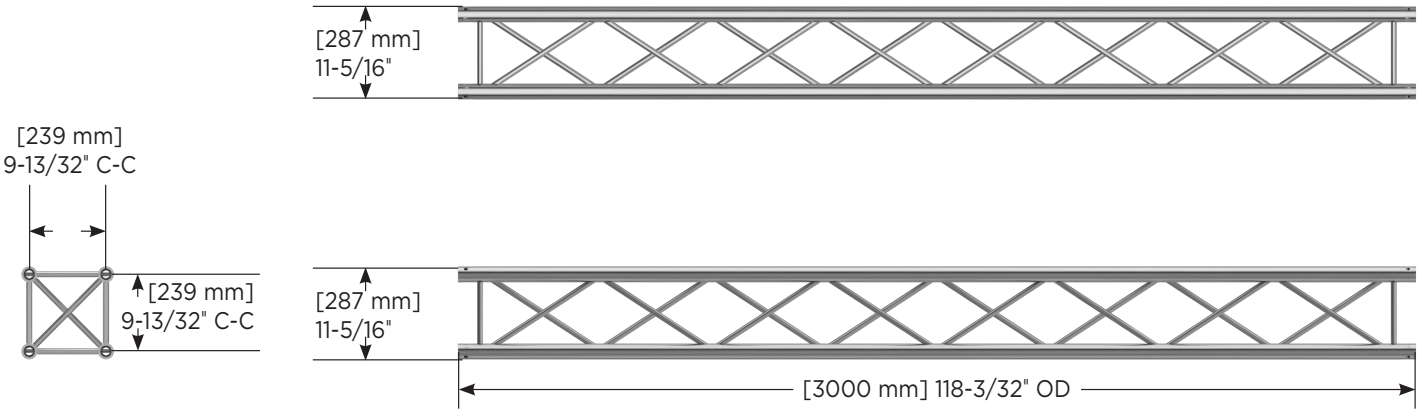
V02 | 09-2023

MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	0.675" OD x 0.091"
CONNECTION STYLE	Pin ØM8 / Conical



MATERIAL

Truss: 6061-T6
Conical: 6061-T6
Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.125"

MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
12	(5)	TII-	M3030	-050	C.2_125	<- 0.50 m ->	TII-	M3030	-050	C.9_145	12	(5)
23	(10)	TII-	M3030	-100	C.2_125	<- 1.00 m ->	TII-	M3030	-100	C.9_145	23	(10)
38	(17)	TII-	M3030	-200	C.2_125	<- 2.00 m ->	TII-	M3030	-200	C.9_145	38	(17)
53	(24)	TII-	M3030	-300	C.2_125	<- 3.00 m ->	TII-	M3030	-300	C.9_145	53	(24)

*Other lengths available: 0.25, 1.50 and 2.50m (also available in imperial). | Custom lengths available upon request.

MANUFACTURED BY CERTIFIED WELDERS

ALLOWABLE LOAD TABLE

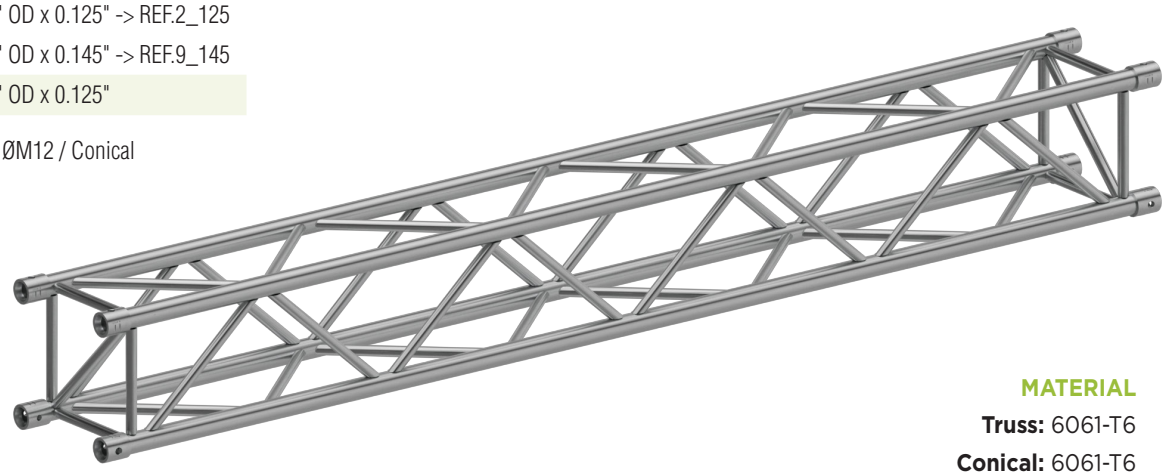
Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
9,8	(3)	75	(112)	742	(336)	0,02	(0.6)	2426	(1101)	0,11	(2.9)	1220	(554)	0,10	(2.5)	814	(369)	0,09	(2.3)
13	(4)	56	(83)	733	(332)	0,05	(1.4)	2288	(1038)	0,25	(6.5)	1209	(548)	0,23	(5.8)	806	(365)	0,21	(5.4)
16	(5)	44	(65)	722	(327)	0,11	(2.7)	1819	(825)	0,40	(10.1)	1194	(542)	0,44	(11.3)	796	(361)	0,41	(10.5)
20	(6)	36	(54)	708	(321)	0,18	(4.6)	1504	(682)	0,57	(14.6)	1128	(512)	0,73	(18.5)	752	(341)	0,68	(17.2)
23	(7)	30	(45)	693	(314)	0,29	(7.3)	1277	(579)	0,78	(19.9)	958	(435)	0,99	(25.2)	639	(290)	0,92	(23.5)
26	(8)	84	(125)	2212	(1003)	1,27	(32.2)	1106	(502)	1,03	(26.1)	829	(376)	1,30	(32.9)	553	(251)	1,21	(30.7)
30	(9)	66	(98)	1942	(881)	1,61	(40.8)	971	(440)	1,30	(33.1)	728	(330)	1,64	(41.6)	486	(220)	1,53	(38.9)
33	(10)	53	(78)	1724	(782)	1,98	(50.3)	862	(391)	1,61	(41)	646	(293)	2,02	(51.4)	431	(195)	1,89	(48)
36	(11)	43	(64)	1543	(700)	2,40	(60.9)	772	(350)	1,96	(49.7)	579	(262)	2,45	(62.2)	386	(175)	2,29	(58.1)
39	(12)	35	(53)	1390	(631)	2,85	(72.5)	695	(315)	2,34	(59.4)	521	(236)	2,91	(73.9)	348	(158)	2,73	(69.2)
43	(13)	30	(44)	1259	(571)	3,35	(85.1)	630	(286)	2,76	(70)	472	(214)	3,42	(86.8)	315	(143)	3,20	(81.3)
46	(14)	25	(37)	1145	(519)	3,88	(98.7)	572	(260)	3,21	(81.6)	429	(195)	3,96	(100.6)	286	(130)	3,72	(94.4)
49	(15)	21	(32)	1044	(474)	4,46	(113.3)	522	(237)	3,7	(94.1)	391	(178)	4,54	(115.4)	261	(118)	4,27	(108.5)
52	(16)	18	(27)	954	(433)	5,07	(128.9)	477	(216)	4,24	(107.6)	358	(162)	5,17	(131.2)	239	(108)	4,86	(123.6)
56	(17)	16	(23)	873	(396)	5,73	(145.5)	437	(198)	4,81	(122.1)	328	(149)	5,83	(148.1)	218	(99)	5,50	(139.7)
59	(18)	14	(20)	800	(363)	6,42	(163.1)	400	(182)	5,42	(137.7)	300	(136)	6,53	(165.9)	200	(91)	6,17	(156.8)
62	(19)	12	(18)	734	(333)	7,16	(181.7)	367	(166)	6,08	(154.4)	275	(125)	7,28	(184.8)	183	(83)	6,89	(174.9)
66	(20)	10	(15)	672	(305)	7,93	(201.4)	336	(152)	6,78	(172.1)	252	(114)	8,06	(204.6)	168	(76)	7,64	(194.1)

Load per applied point

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 chords 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.**

MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	0.1" OD x 0.125"
CONNECTION STYLE	Pin ØM12 / Conical

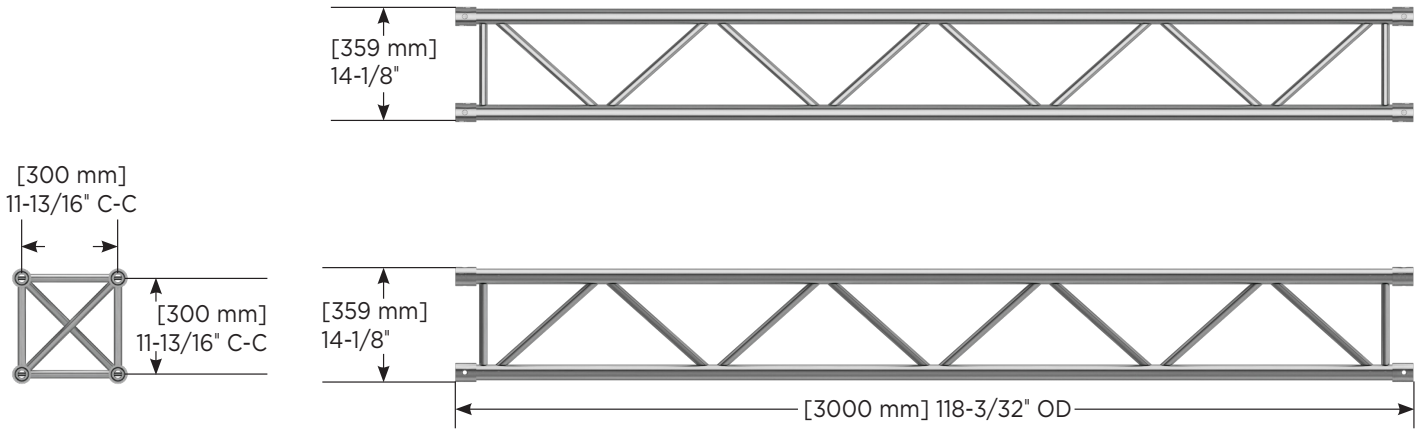


MATERIAL

Truss: 6061-T6

Conical: 6061-T6

Pin: Stressproof 1144



MAIN CHORDS 2.0" OD x 0.125"

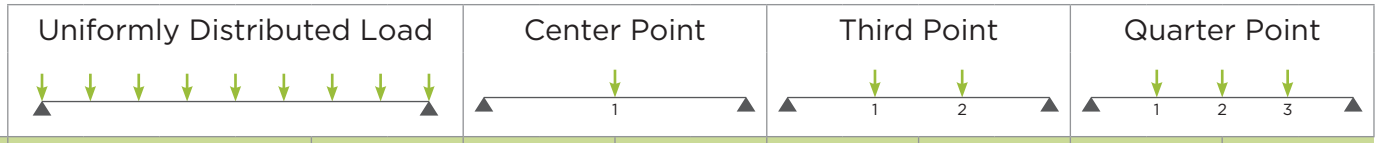
MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
19	(9)	TII-	M3636	-050	C.2_125	<- 0.50 m ->	TII-	M3636	-050	C.9_145	19	(9)
29	(13)	TII-	M3636	-100	C.2_125	<- 1.00 m ->	TII-	M3636	-100	C.9_145	29	(13)
46	(21)	TII-	M3636	-200	C.2_125	<- 2.00 m ->	TII-	M3636	-200	C.9_145	46	(21)
63	(29)	TII-	M3636	-300	C.2_125	<- 3.00 m ->	TII-	M3636	-300	C.9_145	63	(29)

*Other lengths available: 0.25, 1.50 and 2.50m | Custom lengths available upon request.

MANUFACTURED BY CERTIFIED WELDERS

ALLOWABLE LOAD TABLE



Span Length		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
9,8	(3)	183	(272)	1797	(815)	0,03	(0.9)	3848	(1745)	0,11	(2.9)	2886	(1309)	0,15	(3.7)	1924	(873)	0,14	(3.5)
13	(4)	438	(651)	5745	(2606)	0,25	(6.5)	2873	(1303)	0,20	(5.2)	2154	(977)	0,26	(6.6)	1436	(651)	0,24	(6.1)
16	(5)	278	(414)	4568	(2072)	0,40	(10.1)	2284	(1036)	0,32	(8.1)	1713	(777)	0,41	(10.3)	1142	(518)	0,38	(9.6)
20	(6)	192	(286)	3779	(1714)	0,57	(14.5)	1889	(857)	0,46	(11.7)	1417	(643)	0,58	(14.8)	945	(429)	0,54	(13.8)
23	(7)	140	(208)	3211	(1456)	0,78	(19.8)	1605	(728)	0,63	(15.9)	1204	(546)	0,80	(20.2)	803	(364)	0,74	(18.8)
26	(8)	106	(158)	2781	(1261)	1,02	(25.8)	1390	(631)	0,82	(20.9)	1043	(473)	1,04	(26.4)	695	(315)	0,97	(24.6)
30	(9)	83	(123)	2443	(1108)	1,29	(32.7)	1221	(554)	1,04	(26.5)	916	(415)	1,31	(33.4)	611	(277)	1,23	(31.1)
33	(10)	66	(98)	2169	(984)	1,59	(40.4)	1085	(492)	1,29	(32.8)	813	(369)	1,62	(41.2)	542	(246)	1,51	(38.5)
36	(11)	54	(80)	1943	(881)	1,92	(48.8)	971	(441)	1,57	(39.8)	729	(330)	1,96	(49.8)	486	(220)	1,83	(46.6)
39	(12)	44	(66)	1751	(794)	2,29	(58.1)	876	(397)	1,87	(47.6)	657	(298)	2,33	(59.3)	438	(199)	2,18	(55.5)
43	(13)	37	(55)	1587	(720)	2,69	(68.2)	794	(360)	2,21	(56.1)	595	(270)	2,74	(69.6)	397	(180)	2,57	(65.2)
46	(14)	31	(47)	1444	(655)	3,11	(79.1)	722	(328)	2,57	(65.3)	542	(246)	3,17	(80.6)	361	(164)	2,98	(75.7)
49	(15)	27	(40)	1318	(598)	3,58	(90.8)	659	(299)	2,97	(75.3)	494	(224)	3,64	(92.5)	330	(150)	3,42	(86.9)
52	(16)	23	(34)	1206	(547)	4,07	(103.3)	603	(274)	3,39	(86.1)	452	(205)	4,14	(105.2)	302	(137)	3,90	(99)
56	(17)	20	(29)	1106	(501)	4,59	(116.6)	553	(251)	3,85	(97.8)	415	(188)	4,67	(118.7)	276	(125)	4,41	(111.9)
59	(18)	17	(26)	1014	(460)	5,15	(130.8)	507	(230)	4,34	(110.2)	380	(173)	5,24	(133.1)	254	(115)	4,95	(125.6)
62	(19)	15	(22)	931	(422)	5,74	(145.7)	466	(211)	4,86	(123.5)	349	(158)	5,83	(148.2)	233	(106)	5,52	(140.2)
66	(20)	13	(19)	855	(388)	6,36	(161.4)	427	(194)	5,42	(137.7)	320	(145)	6,46	(164.1)	214	(97)	6,12	(155.5)

Load per applied point

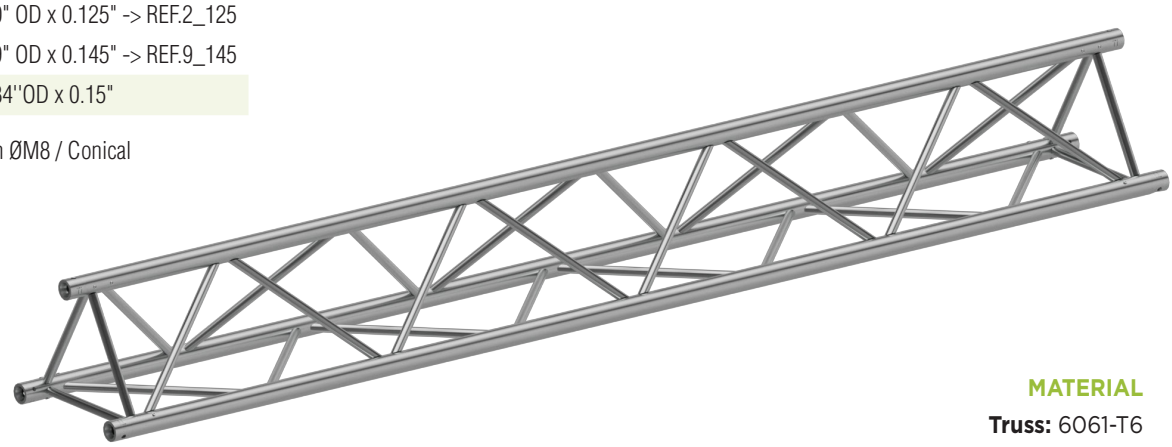
NOTES

- 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.
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- Trusses are hung from the top chords only.
- Data are valid only for static loads and span, with two support points (one at each end).
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CONICAL SERIES

TIIT-M4040-C.2_125 LIGHT DUTY

MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	0.84''OD x 0.15"
CONNECTION STYLE	Pin ØM8 / Conical

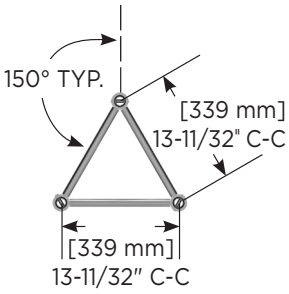


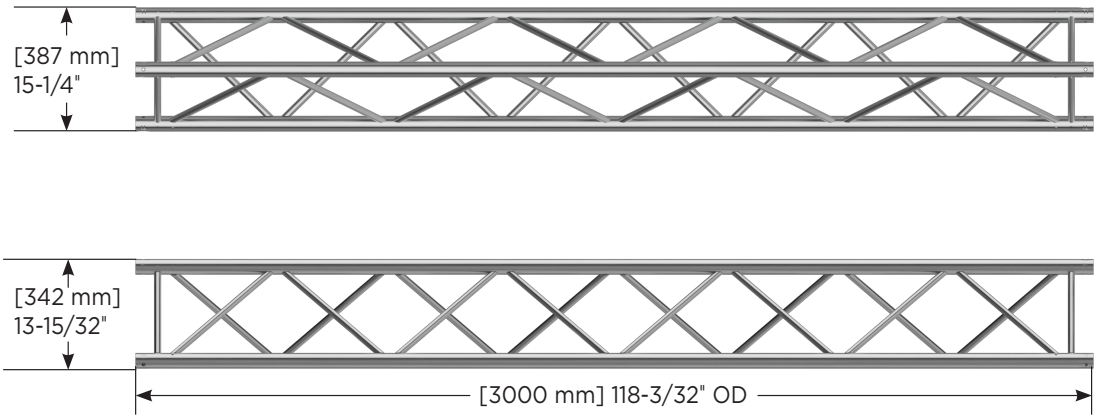
MATERIAL

Truss: 6061-T6

Conical: 6061-T6

Pin: Stressproof 1144





MAIN CHORDS 2.0" OD x 0.125"

MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
8,6	(4)	TIIT-	M4040	-050	C.2_125	<- 0.50 m ->	TIIT-	M4040	-050	C.9_145	8,6	(4)
17	(8)	TIIT-	M4040	-100	C.2_125	<- 1.00 m ->	TIIT-	M4040	-100	C.9_145	17	(8)
34	(16)	TIIT-	M4040	-200	C.2_125	<- 2.00 m ->	TIIT-	M4040	-200	C.9_145	34	(16)
47	(21)	TIIT-	M4040	-300	C.2_125	<- 3.00 m ->	TIIT-	M4040	-300	C.9_145	47	(21)

*Other lengths available: 0.25, 1.50 and 2.50m | Custom lengths available upon request.

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ALLOWABLE LOAD TABLE

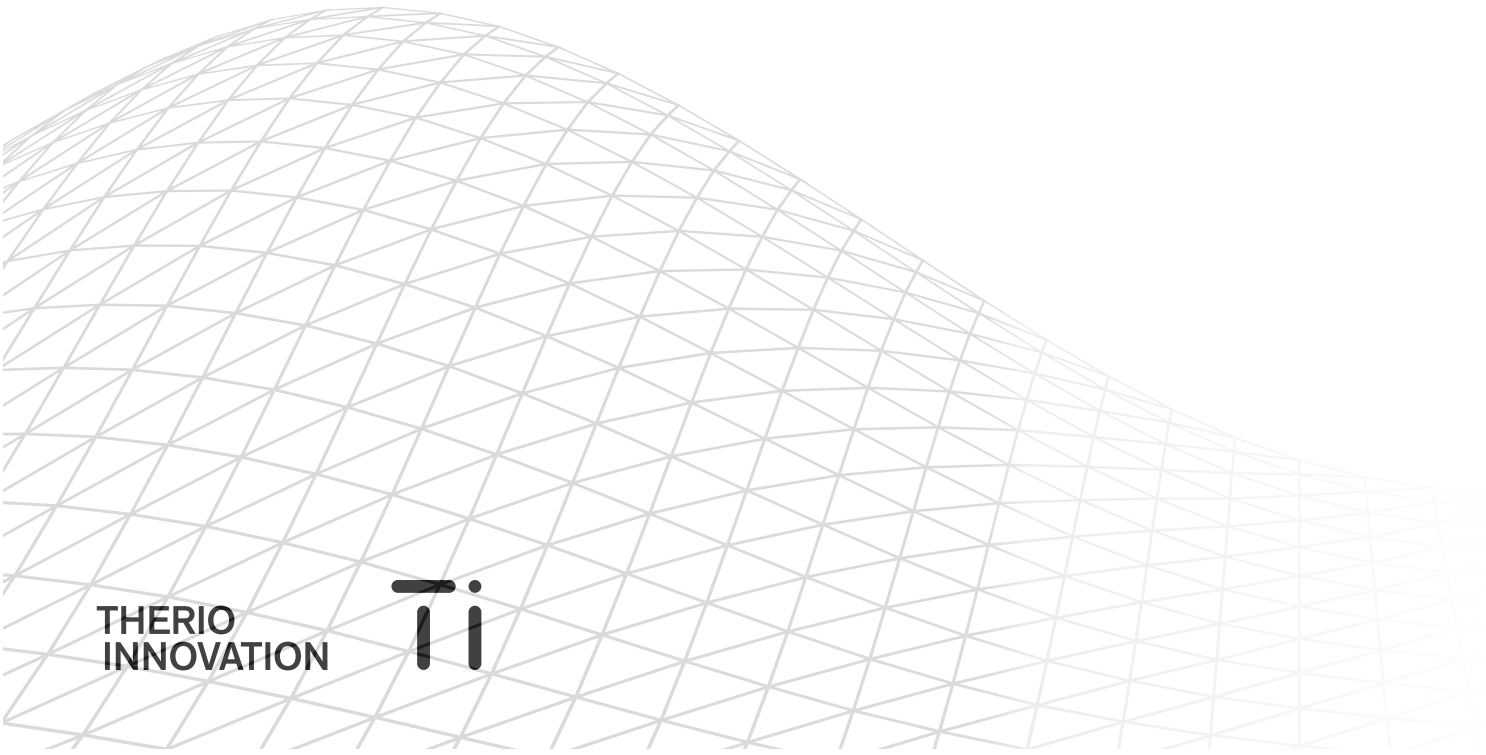
Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
9,8	(3)	198	(295)	1952	(886)	0,06	(1.5)	3772	(1711)	0,18	(4.5)	2829	(1283)	0,22	(5.7)	1886	(855)	0,21	(5.3)
13	(4)	430	(639)	5637	(2557)	0,39	(9.9)	2819	(1279)	0,31	(7.9)	2114	(959)	0,40	(10.1)	1409	(639)	0,37	(9.4)
16	(5)	274	(407)	4489	(2036)	0,61	(15.4)	2245	(1018)	0,49	(12.4)	1683	(764)	0,62	(15.8)	1122	(509)	0,58	(14.7)
20	(6)	189	(281)	3720	(1687)	0,88	(22.2)	1860	(844)	0,70	(17.9)	1395	(633)	0,89	(22.7)	930	(422)	0,83	(21.1)
23	(7)	138	(205)	3167	(1437)	1,19	(30.3)	1584	(718)	0,96	(24.4)	1188	(539)	1,22	(30.9)	792	(359)	1,13	(28.8)
26	(8)	105	(156)	2750	(1247)	1,56	(39.5)	1375	(624)	1,25	(31.9)	1031	(468)	1,59	(40.4)	687	(312)	1,48	(37.6)
30	(9)	82	(122)	2423	(1099)	1,97	(50)	1211	(549)	1,59	(40.4)	909	(412)	2,01	(51.1)	606	(275)	1,87	(47.6)
33	(10)	66	(98)	2159	(979)	2,43	(61.8)	1079	(490)	1,97	(50)	810	(367)	2,48	(63.1)	540	(245)	2,32	(58.8)
36	(11)	54	(80)	1941	(880)	2,94	(74.7)	970	(440)	2,39	(60.7)	728	(330)	3,00	(76.3)	485	(220)	2,80	(71.2)
39	(12)	45	(66)	1757	(797)	3,50	(88.9)	878	(398)	2,85	(72.4)	659	(299)	3,57	(90.8)	439	(199)	3,34	(84.8)
43	(13)	38	(56)	1600	(726)	4,11	(104.4)	800	(363)	3,36	(85.3)	600	(272)	4,19	(106.5)	400	(181)	3,92	(99.6)
46	(14)	32	(47)	1463	(664)	4,77	(121)	732	(332)	3,91	(99.2)	549	(249)	4,86	(123.5)	366	(166)	4,55	(115.6)
49	(15)	27	(41)	1344	(610)	5,47	(138.9)	672	(305)	4,5	(114.3)	504	(229)	5,58	(141.7)	336	(152)	5,23	(132.8)
52	(16)	24	(35)	1238	(561)	6,22	(158.1)	619	(281)	5,14	(130.5)	464	(211)	6,34	(161.1)	309	(140)	5,95	(151.2)
56	(17)	20	(30)	1143	(518)	7,03	(178.5)	571	(259)	5,83	(148)	428	(194)	7,16	(181.9)	286	(130)	6,73	(170.8)
59	(18)	18	(27)	1057	(479)	7,88	(200.1)	528	(240)	6,56	(166.6)	396	(180)	8,02	(203.8)	264	(120)	7,55	(191.7)
62	(19)	16	(23)	979	(444)	8,78	(222.9)	489	(222)	7,34	(186.5)	367	(167)	8,94	(227)	245	(111)	8,42	(213.8)
66	(20)	14	(21)	908	(412)	9,72	(247)	454	(206)	8,17	(207.6)	340	(154)	9,90	(251.4)	227	(103)	9,34	(237.2)

Load per applied point

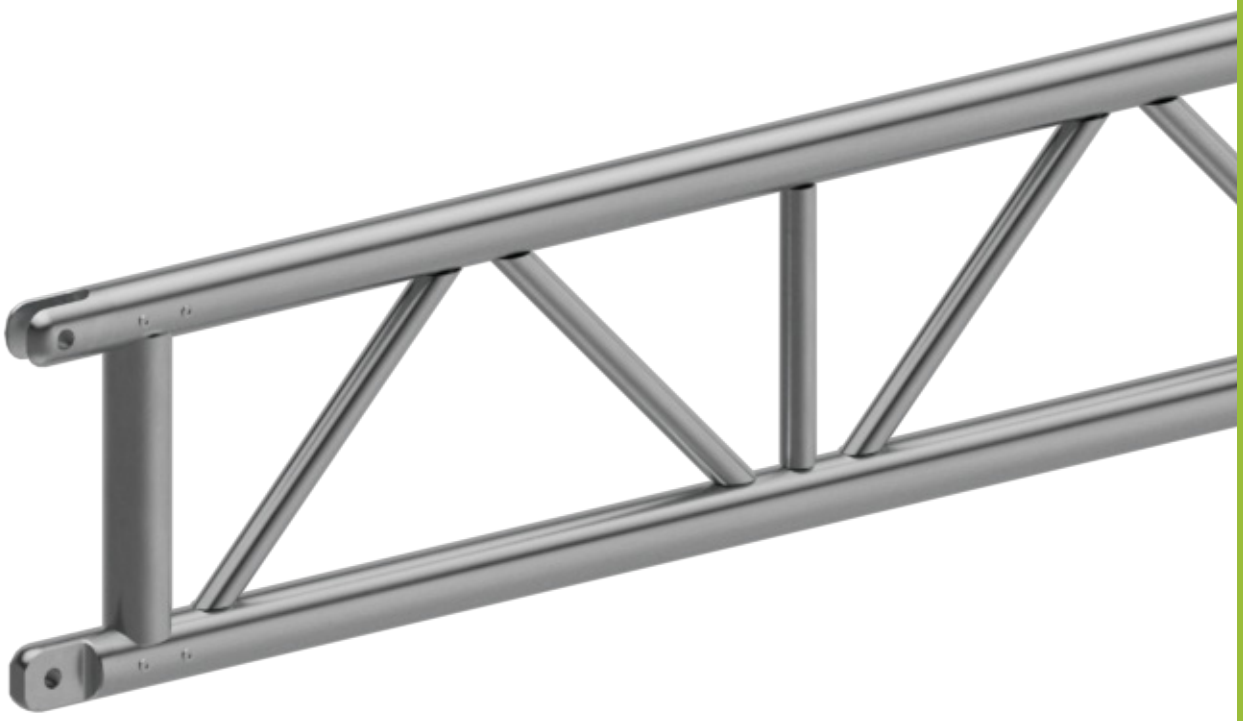
NOTES

- Capacities shown in this table are valid for structures manufactured after January 2020.
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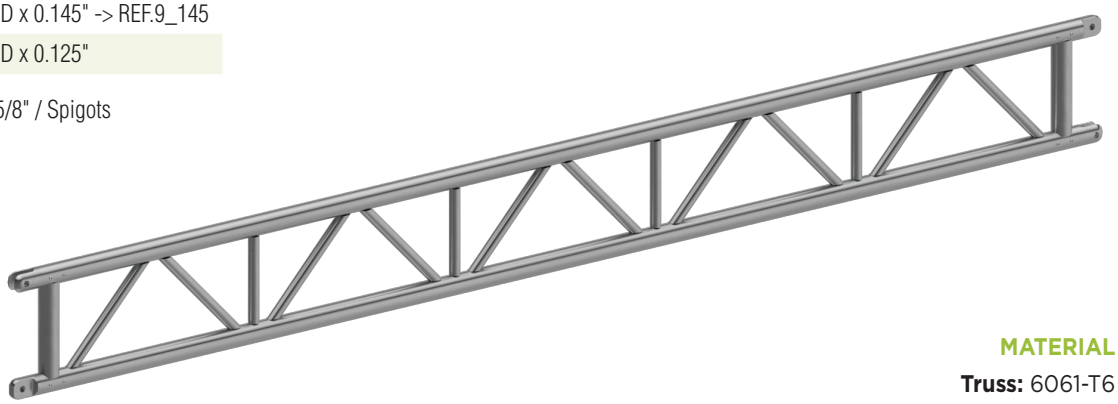
LADDER

THERIO
INNOVATION

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V02 | 09-2023

MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	0.1" OD x 0.125"
CONNECTION STYLE	Pin Ø5/8" / Spigots



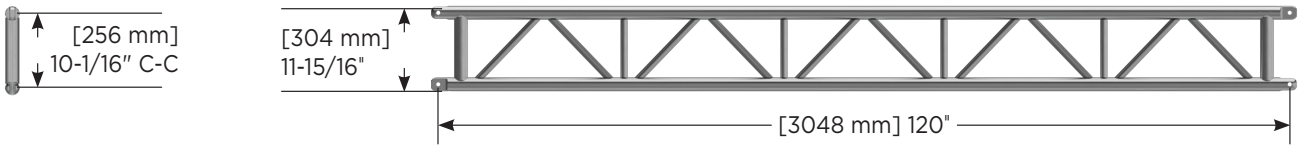
MATERIAL

Truss: 6061-T6

Spigots: 6061-T6

Pin: Stressproof 1144





MAIN CHORDS 2.0" OD x 0.125"

MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
9	(4)	TI-LA	12	-048	F.2_125	<- 48" ->	TI-LA	12	-048	F.9_145	9	(4)
17	(8)	TI-LA	12	-060	F.2_125	<- 60" ->	TI-LA	12	-060	F.9_145	17	(8)
28	(13)	TI-LA	12	-096	F.2_125	<- 96" ->	TI-LA	12	-096	F.9_145	28	(13)
33	(15)	TI-LA	12	-120	F.2_125	<- 120" ->	TI-LA	12	-120	F.9_145	33	(15)

*Also available at 24, 36, 72 and 84 in. | Custom lengths are available upon request.

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ALLOWABLE LOAD TABLE

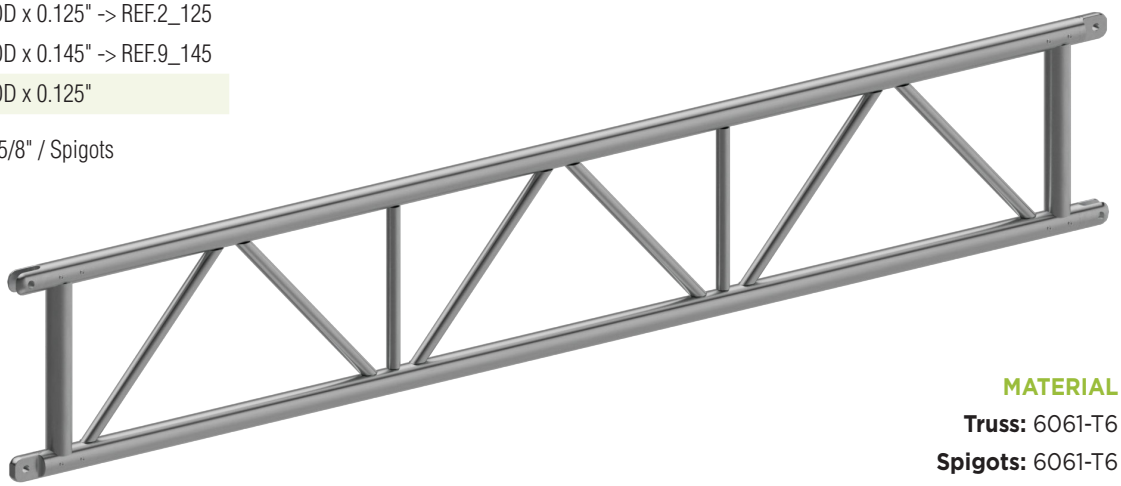
Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	941	(1401)	7532	(3416)	0,21	(5.2)	4043	(1834)	0,18	(4.5)	3033	(1376)	0,23	(5.7)	2022	(917)	0,21	(5.3)
10	(3.05)	646	(961)	6457	(2929)	0,35	(8.8)	3228	(1464)	0,28	(7)	2421	(1098)	0,35	(9)	1614	(732)	0,33	(8.3)
16	(4.88)	250	(372)	4001	(1815)	0,88	(22.4)	2001	(908)	0,71	(18)	1501	(681)	0,90	(22.9)	1000	(454)	0,84	(21.3)
20	(6.1)	159	(236)	3176	(1441)	1,38	(35.1)	1588	(720)	1,11	(28.2)	1191	(540)	1,41	(35.8)	794	(360)	1,31	(33.3)
24	(7.32)	109	(163)	2621	(1189)	1,99	(50.5)	1310	(594)	1,60	(40.7)	983	(446)	2,03	(51.6)	655	(297)	1,89	(48)
30	(9.14)	69	(102)	2059	(934)	3,11	(78.9)	1029	(467)	2,52	(63.9)	772	(350)	3,17	(80.6)	515	(233)	2,96	(75.1)
32	(9.75)	60	(89)	1917	(869)	3,53	(89.8)	958	(435)	2,87	(72.8)	719	(326)	3,61	(91.7)	479	(217)	3,37	(85.5)
40	(12.19)	37	(55)	1483	(673)	5,52	(140.3)	741	(336)	4,51	(114.6)	556	(252)	5,63	(143.1)	371	(168)	5,27	(133.9)

Load per applied point

NOTES

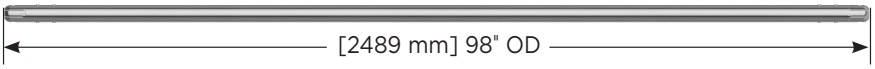
- Capacities shown in this table are valid for structures manufactured after January 2020.
- Trusses must be loaded uniformly on both sides of their longitudinal axis.
- Loads must be applied to or as close as possible to the nodes of the trusses.
- Deflection of truss is theoretical and based solely 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 chords 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**.

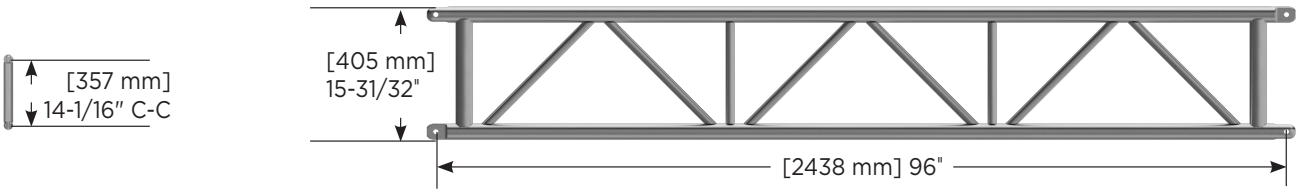
MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	0.1" OD x 0.125"
CONNECTION STYLE	Pin Ø5/8" / Spigots



MATERIAL

Truss: 6061-T6
Spigots: 6061-T6
Pin: Stressproof 1144





MAIN CHORDS 2.0" OD x 0.125"

MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
15	(7)	TI-LA	16	-048	F.2_125	<- 48" ->	TI-LA	16	-048	F.9_145	15	(7)
18	(8)	TI-LA	16	-060	F.2_125	<- 60" ->	TI-LA	16	-060	F.9_145	18	(8)
25	(12)	TI-LA	16	-096	F.2_125	<- 96" ->	TI-LA	16	-096	F.9_145	25	(12)
31	(14)	TI-LA	16	-120	F.2_125	<- 120" ->	TI-LA	16	-120	F.9_145	31	(14)

*Also available at 24, 36, 72 and 84 in. | Custom lengths are available upon request.

MANUFACTURED BY CERTIFIED WELDERS

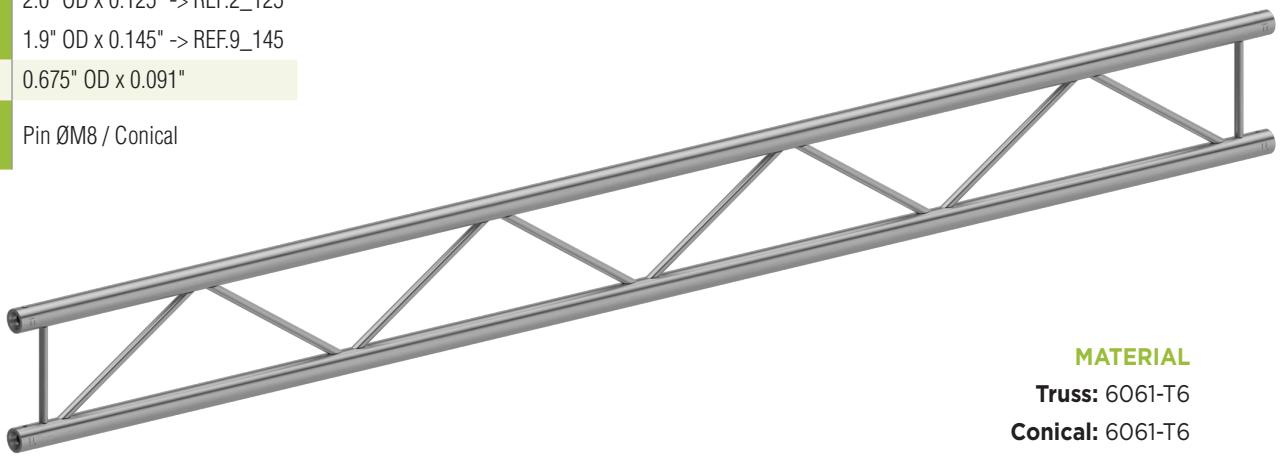
ALLOWABLE LOAD TABLE

Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
8	(2.44)	881	(1311)	7048	(3197)	0,10	(2.5)	5658	(2566)	0,13	(3.2)	3529	(1601)	0,14	(3.4)	2353	(1067)	0,13	(3.2)
10	(3.05)	703	(1046)	7030	(3189)	0,19	(4.9)	4520	(2050)	0,20	(5.1)	3390	(1538)	0,25	(6.5)	2260	(1025)	0,24	(6)
16	(4.88)	351	(523)	5620	(2549)	0,64	(16.2)	2810	(1275)	0,51	(13)	2107	(956)	0,65	(16.5)	1405	(637)	0,61	(15.4)
20	(6.1)	224	(333)	4473	(2029)	1,00	(25.3)	2236	(1014)	0,80	(20.3)	1677	(761)	1,02	(25.8)	1118	(507)	0,95	(24)
24	(7.32)	154	(230)	3704	(1680)	1,43	(36.4)	1852	(840)	1,15	(29.3)	1389	(630)	1,46	(37.2)	926	(420)	1,36	(34.6)
30	(9.14)	98	(145)	2929	(1329)	2,24	(56.9)	1465	(664)	1,81	(45.9)	1098	(498)	2,29	(58.1)	732	(332)	2,13	(54.1)
32	(9.75)	85	(127)	2734	(1240)	2,55	(64.7)	1367	(620)	2,06	(52.2)	1025	(465)	2,60	(66.1)	683	(310)	2,42	(61.6)
40	(12.19)	54	(80)	2141	(971)	3,98	(101.1)	1071	(486)	3,23	(82)	803	(364)	4,06	(103.2)	535	(243)	3,79	(96.3)
								Load per applied point											

NOTES

- Capacities shown in this table are valid for structures manufactured after January 2020.
- 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 chords 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**.

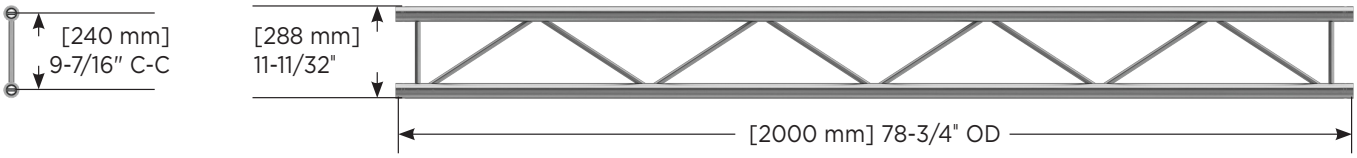
MAIN CHORDS	2.0" OD x 0.125" -> REF.2_125 1.9" OD x 0.145" -> REF.9_145
DIAGONALS	0.675" OD x 0.091"
CONNECTION STYLE	Pin ØM8 / Conical



MATERIAL

Truss: 6061-T6
Conical: 6061-T6
Pin: Stressproof 1144





MAIN CHORDS 2.0" OD x 0.125"

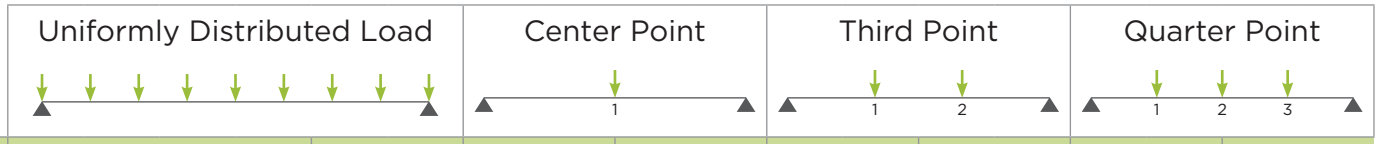
MAIN CHORDS 1.9" OD x 0.145"

Weight lbs	Weight (kg)	Item References				LENGTH*	Item References				Weight lbs	Weight (kg)
6	(3)	TI-LA-	M30	-050	C.2_125	<- 0.50 m ->	TI-LA-	M30	-050	C.9_145	6	(3)
10	(5)	TI-LA-	M30	-100	C.2_125	<- 1.00 m ->	TI-LA-	M30	-100	C.9_145	10	(5)
16	(7)	TI-LA-	M30	-200	C.2_125	<- 2.00 m ->	TI-LA-	M30	-200	C.9_145	16	(7)
24	(11)	TI-LA-	M30	-300	C.2_125	<- 3.00 m ->	TI-LA-	M30	-300	C.9_145	24	(11)

*Other lengths available: 0.25, 1.50 and 2.50m | Custom lengths available upon request.

MANUFACTURED BY CERTIFIED WELDERS

ALLOWABLE LOAD TABLE

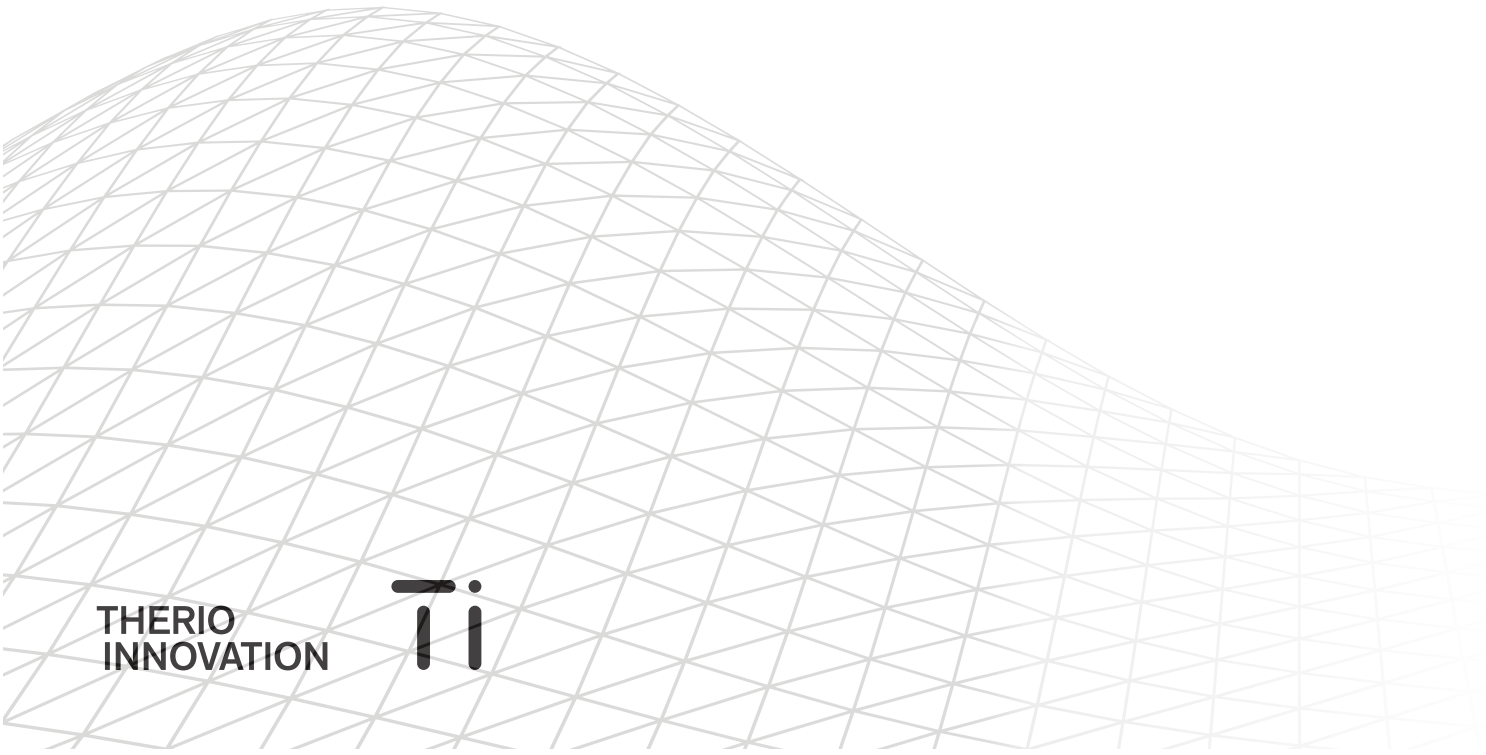


Span Length		Uniformly Distributed Load						Center Point				Third Point				Quarter Point			
		Load Capacity				Deflection		Load Capacity		Deflection		Load Capacity		Deflection		Load Capacity		Deflection	
ft	(m)	lb/ft	(kg/m)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)	lb	(kg)	in	(mm)
9,8	(3)	76	(114)	752	(341)	0,04	(1.1)	2465	(1118)	0,23	(5.8)	1236	(561)	0,19	(4.9)	824	(374)	0,18	(4.6)
13	(4)	57	(85)	749	(340)	0,10	(2.7)	2312	(1049)	0,51	(12.8)	1231	(558)	0,46	(11.7)	821	(372)	0,43	(10.8)
16	(5)	45	(67)	744	(337)	0,20	(5.2)	1844	(837)	0,79	(20.1)	1225	(555)	0,89	(22.7)	816	(370)	0,83	(21.1)
20	(6)	37	(56)	738	(335)	0,35	(9)	1532	(695)	1,14	(29)	1149	(521)	1,45	(36.9)	766	(347)	1,35	(34.3)
23	(7)	32	(47)	730	(331)	0,56	(14.2)	1308	(593)	1,55	(39.4)	981	(445)	1,98	(50.2)	654	(297)	1,84	(46.7)
26	(8)	87	(129)	2279	(1034)	2,53	(64.2)	1140	(517)	2,03	(51.6)	855	(388)	2,58	(65.6)	570	(258)	2,40	(61)
30	(9)	68	(102)	2016	(914)	3,20	(81.2)	1008	(457)	2,57	(65.4)	756	(343)	3,27	(83)	504	(229)	3,04	(77.3)
33	(10)	55	(82)	1804	(818)	3,95	(100.3)	902	(409)	3,18	(80.8)	676	(307)	4,03	(102.4)	451	(205)	3,76	(95.4)
36	(11)	45	(67)	1629	(739)	4,78	(121.3)	815	(370)	3,86	(97.9)	611	(277)	4,88	(123.9)	407	(185)	4,55	(115.5)
39	(12)	38	(56)	1483	(673)	5,68	(144.4)	742	(336)	4,60	(116.7)	556	(252)	5,81	(147.5)	371	(168)	5,41	(137.5)
43	(13)	32	(47)	1359	(616)	6,67	(169.5)	679	(308)	5,40	(137.2)	509	(231)	6,81	(173)	340	(154)	6,35	(161.4)
46	(14)	27	(41)	1251	(567)	7,74	(196.5)	626	(284)	6,28	(159.5)	469	(213)	7,90	(200.6)	313	(142)	7,37	(187.3)
49	(15)	24	(35)	1157	(525)	8,88	(225.6)	579	(262)	7,22	(183.5)	434	(197)	9,07	(230.3)	289	(131)	8,47	(215.1)
52	(16)	20	(30)	1074	(487)	10,11	(256.7)	537	(244)	8,24	(209.2)	403	(183)	10,31	(262)	269	(122)	9,64	(244.8)
56	(17)	18	(27)	1001	(454)	11,41	(289.8)	500	(227)	9,32	(236.7)	375	(170)	11,64	(295.7)	250	(113)	10,89	(276.5)
59	(18)	16	(24)	934	(424)	12,79	(324.9)	467	(212)	10,5	(266.1)	350	(159)	13,05	(331.4)	234	(106)	12,21	(310.2)
62	(19)	14	(21)	875	(397)	14,25	(362)	437	(198)	11,7	(297.2)	328	(149)	14,53	(369.2)	219	(99)	13,61	(345.8)
66	(20)	13	(19)	820	(372)	15,79	(401.1)	410	(186)	13	(330.2)	308	(140)	16,10	(408.9)	205	(93)	15,09	(383.4)
								Load per applied point											

NOTES

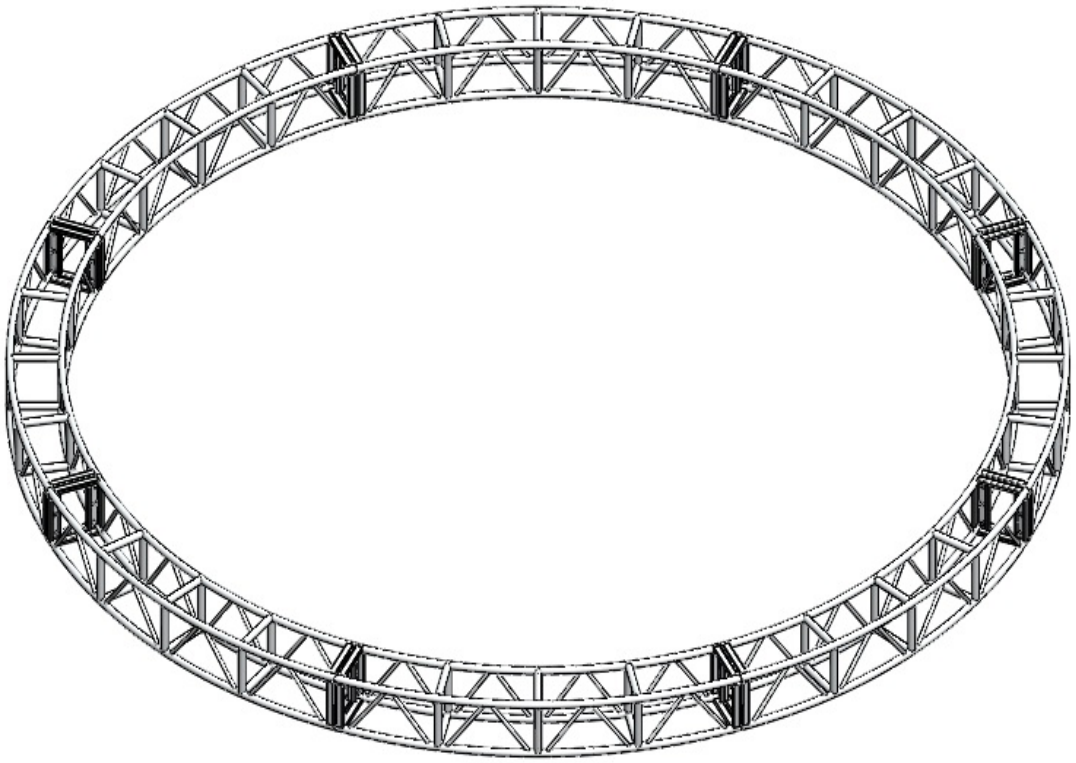
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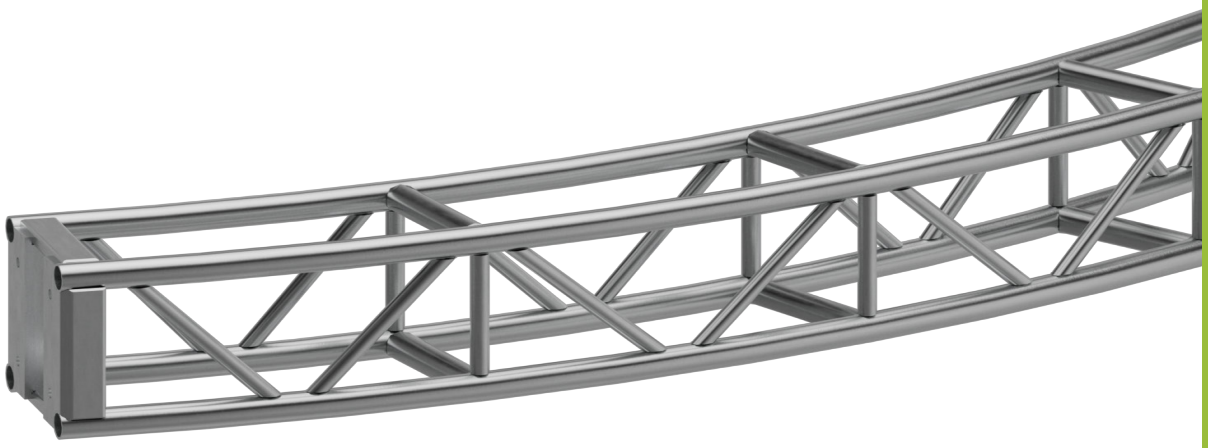
CREATION
TO REALIZATION



THERIO
INNOVATION

ROUND TRUSS





CIRCULAR 32' TRUSS ILLUSTRADED

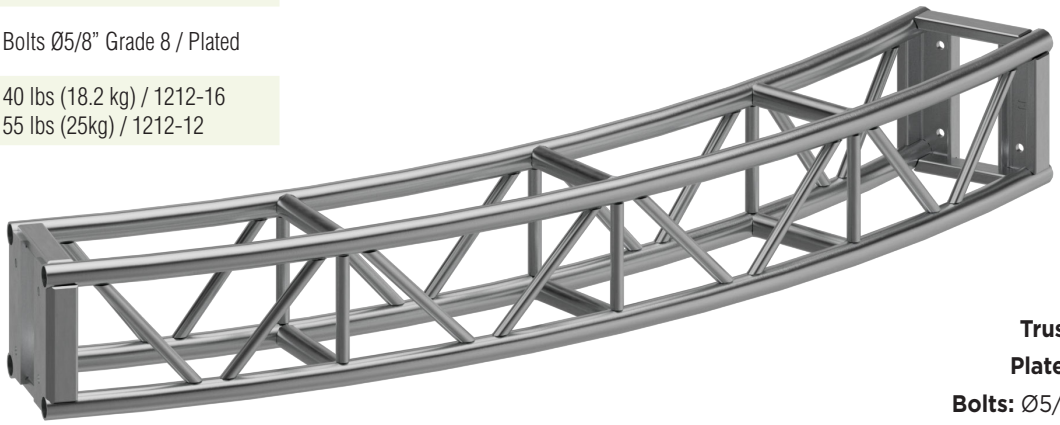
8',12',16' AND ALSO AVAILADE

THERIO
INNOVATION

514 400.3336 | 1 888 366.2336
info@therioinnovation.com

V02 | 09-2023

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	40 lbs (18.2 kg) / 1212-16 55 lbs (25kg) / 1212-12

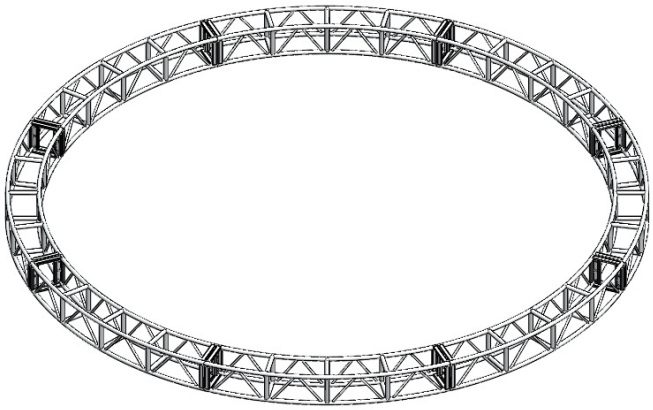


MATERIAL

Truss: 6061-T6

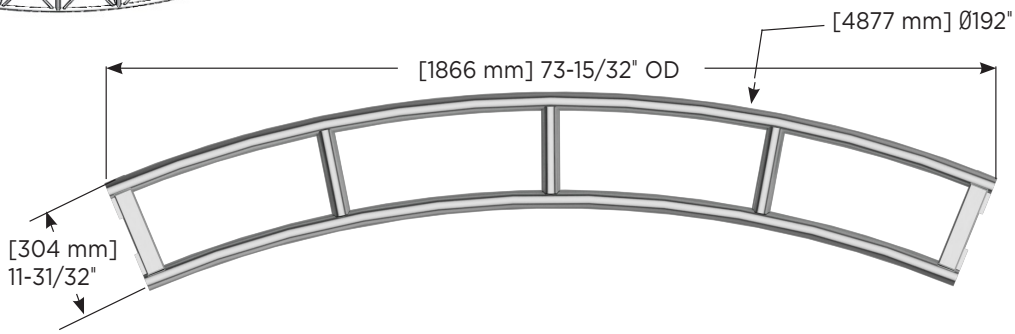
Plates: 6061-T6

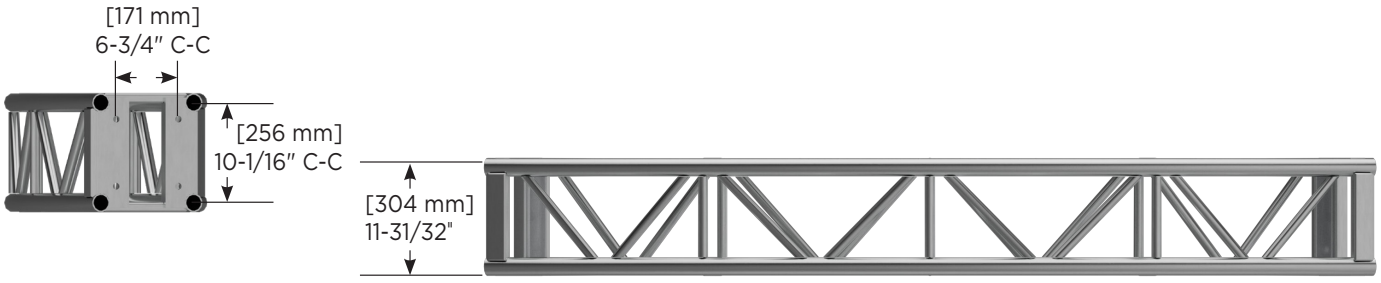
Bolts: Ø5/8" Grade 8



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

Measures: 1212-16





MANUFACTURED BY CERTIFIED WELDERS

OPTIONS AVAILABLE:

TIRS-1212-08

TIRS-1212-12

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)
4	122	(182)	4600	(2087)	0,06	(1.6)	1200	(545)	0,18	(4.6)
3	64	(95)	2400	(1089)	0,13	(3.3)	750	(341)	0,38	(9.7)

Load per applied point

TIRS-1212-16

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)
4	131	(196)	4950	(2246)	0,13	(3.4)	830	(377)	0,18	(4.6)
3	64	(95)	2400	(1089)	0,48	(12.3)	600	(273)	0,80	(20.2)

Load per applied point

TIRS-1212-24

TIRS-1212-32

TIRS-1212-40

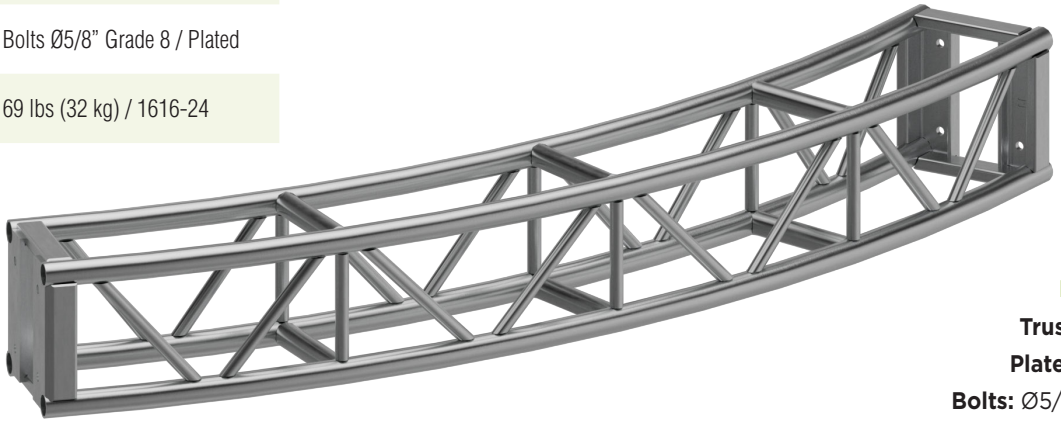
NOTES

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- 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 chords 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.

MANUFACTURED BY CERTIFIED WELDERS

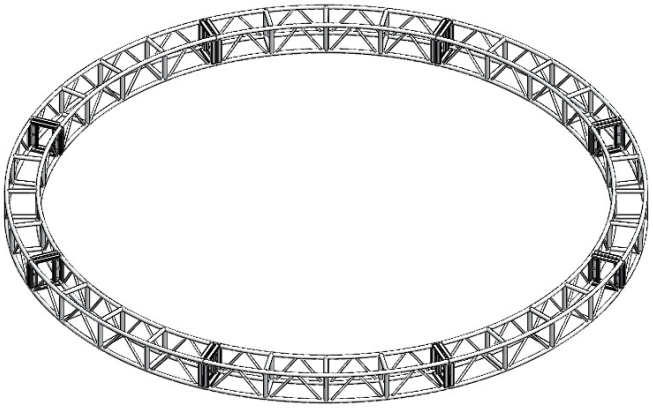
1 888 366.2336 | **info@therioinnovation.com**

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



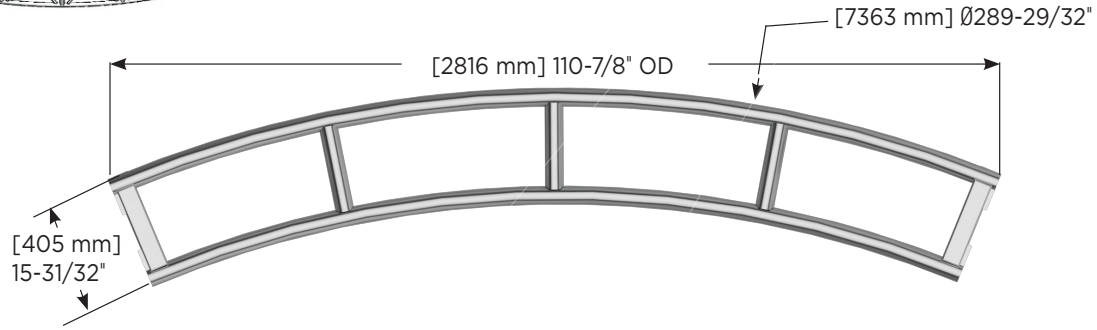
MATERIAL

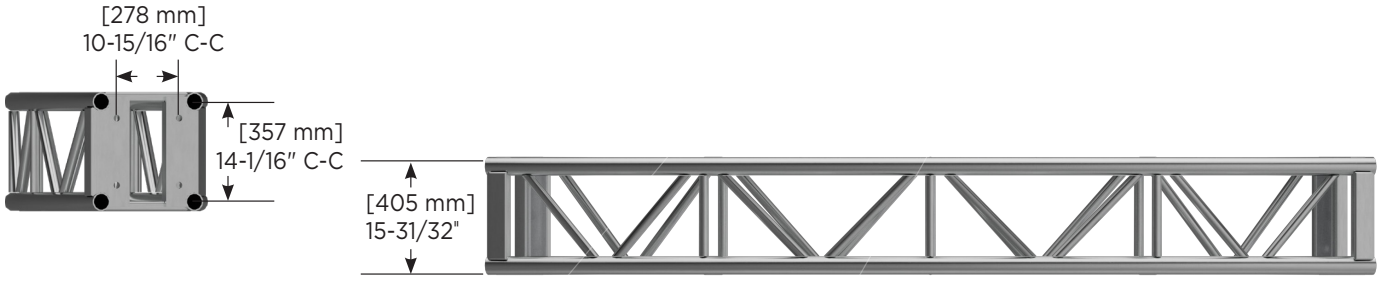
Truss: 6061-T6
Plates: 6061-T6
Bolts: Ø5/8" Grade 8



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

Measures: 1616-24





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

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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

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)

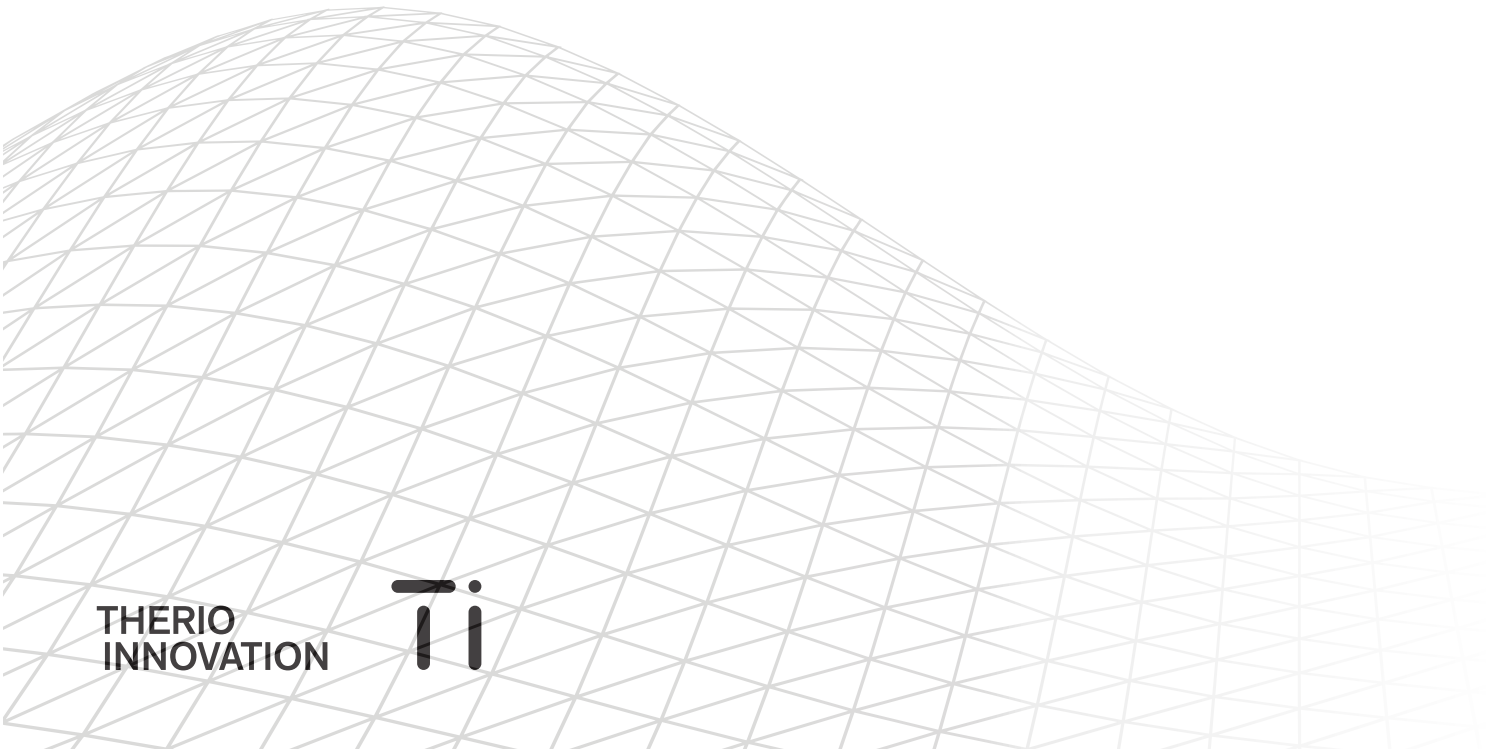
Load per applied point

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 chords 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.

CREATION
TO REALIZATION

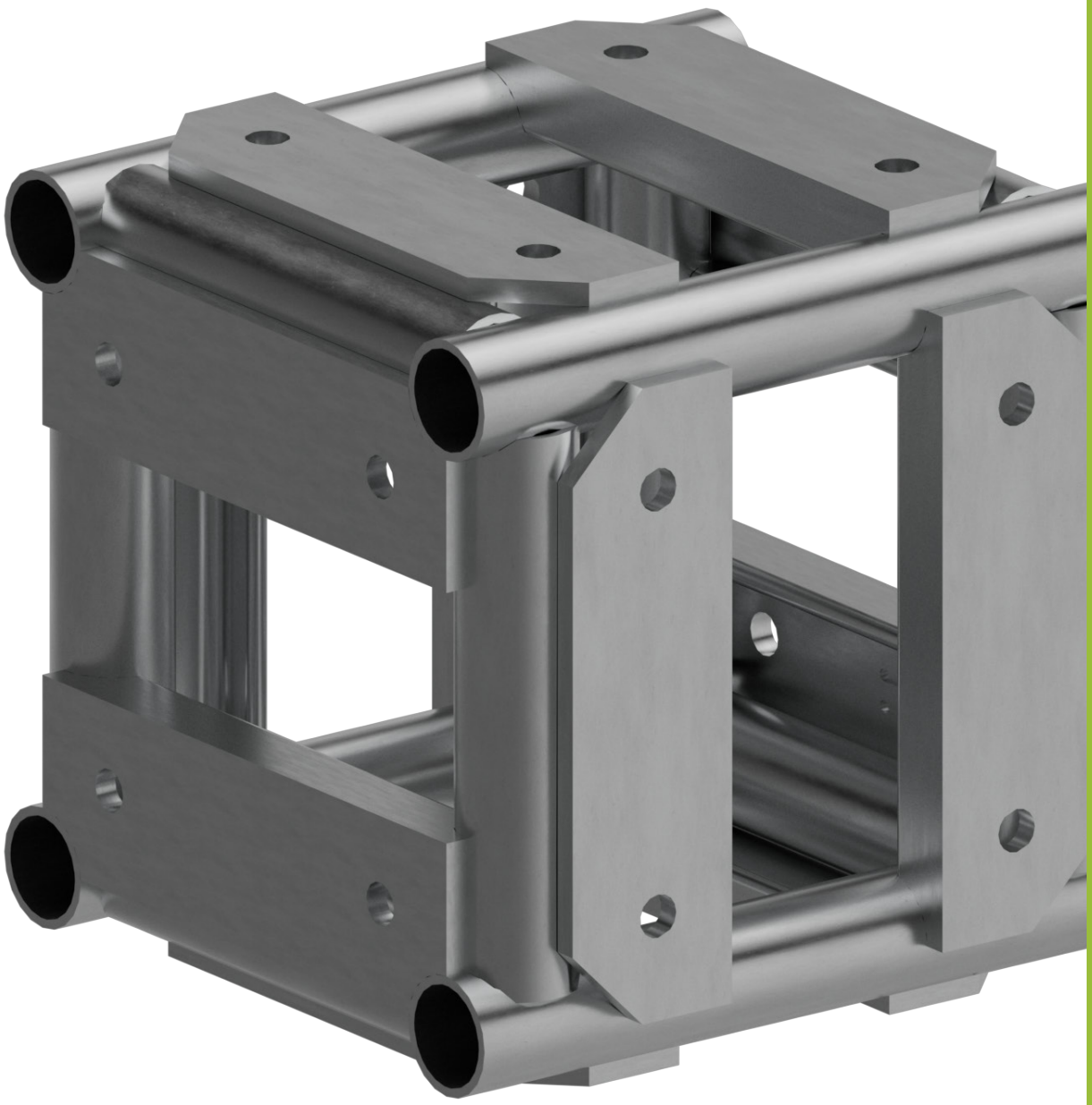


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CREATION
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ACCESSORIES



THERIO
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514 400.3336 | 1 888 366.2336
info@therioinnovation.com

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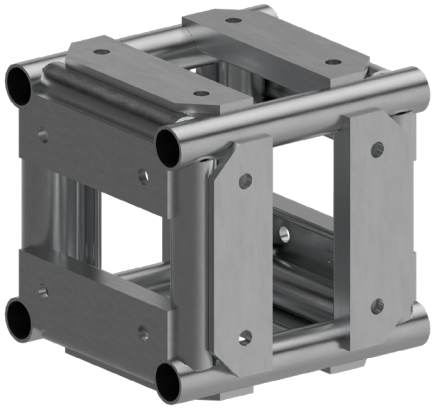
CUBE

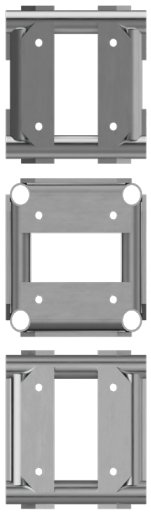
CUBE-1212-6P.9_145

DIMENSIONS	CC bolts 6 3/4" x 6 3/4"
WEIGHT	25 lbs
CONNECTION STYLE	Bolts Ø5/8" / Plated

MATERIAL

Aluminum: 6061-T6
Bolts: Ø5/8" Grade 8





Cubes can be used to make all kinds of structures in a variety of shapes.

ADAPTOR

ADAP-1212-FP.9

DIMENSIONS	CC spigots 10 1/16" x 10 1/16" CC bolts 6 3/4" x 6 3/4"
WEIGHT	8.7 lbs
CONNECTION STYLE	Pin Ø5/8" / Spigots Bolts Ø5/8" / Plated

MATERIAL

Aluminum: 6061-T6
Bolts: Ø5/8" Grade 8
Pin: Stressproof 1144





An adaptor is required to be able to use forked product with plated products.

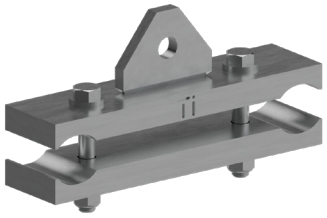
GRAPPLE

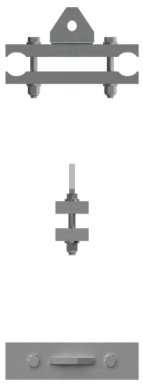
TI-GRAPPLE-012

DIMENSIONS	CC tubes 10 1/16"
WEIGHT	6.9 lbs

MATERIAL

Aluminum: 6061-T6
Bolts: Ø5/8" Grade 8





The grapple bolts onto the tubes. It is used to install a fixed point in the structure and eliminate the need for gacflex. Saves space in height.

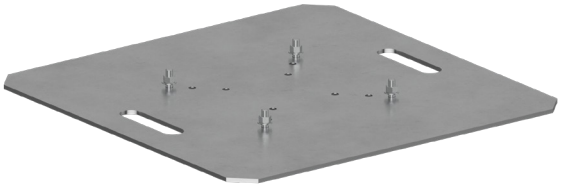
MANUFACTURED BY CERTIFIED WELDERS

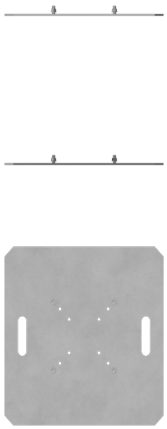
1 888 366.2336 | info@therioinnovation.com

BASE PLATE 3636 PLATED

BASE-3636-P

DIMENSIONS	36” x 36” x 3/8”
WEIGHT	138 lbs
CONNECTION STYLE	Bolts to 1212, 1616 and 2020 plated





MATERIAL

Steel: 44W
Bolts: Ø5/8” Grade 8

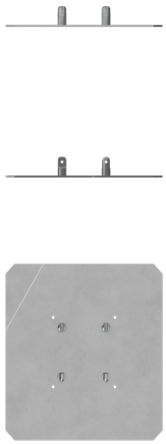
A base plate distribute the load of the truss to the floor and create a counterweight.

BASE PLATE 3636 FORKED

BASE-3636-F

DIMENSIONS	36” x 36” x 3/8”
WEIGHT	146 lbs
CONNECTION STYLE	Pin to 1212, 1616 and 2020 forked





MATERIAL

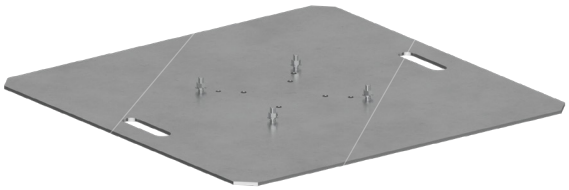
Steel: 44W
Spigots: C12L14
Pin: Stressproof 1144

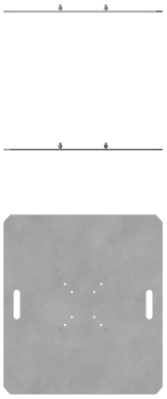
A base plate distribute the load of the truss to the floor and create a counterweight.

BASE PLATE 4848 PLATED

BASE-4848-P

DIMENSIONS	48” x 48” x 3/8”
WEIGHT	240 lbs
CONNECTION STYLE	Bolts to 1212, 1616 and 2020 plated





MATERIAL

Steel: 44W
Bolts: Ø5/8” Grade 8

A base plate distribute the load of the truss to the floor and create a counterweight.

BASE PLATE 4848 FORKED

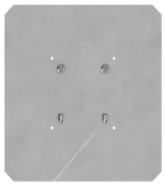
BASE-4848-F

DIMENSIONS	48" x 48" x 3/8"
WEIGHT	248 lbs
CONNECTION STYLE	Pin to 1212, 1616 and 2020 forked









MATERIAL

Steel: 44W
Spigots: C12L14
Pin: Stressproof 1144

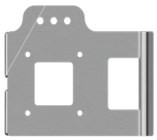
A base plate distribute the load of the truss to the floor and create a counterweight.

HINGE

HINGE-1212

DIMENSIONS	CC bolts 6 3/4" x 6 3/4"
WEIGHT	51.2 lbs
CONNECTION STYLE	Bolts Ø5/8" / Plated









MATERIAL

Steel: 50W
Bolts: Ø5/8" Grade 8

A hinge connects trusses together at a desired angle.

MANUFACTURED BY CERTIFIED WELDERS

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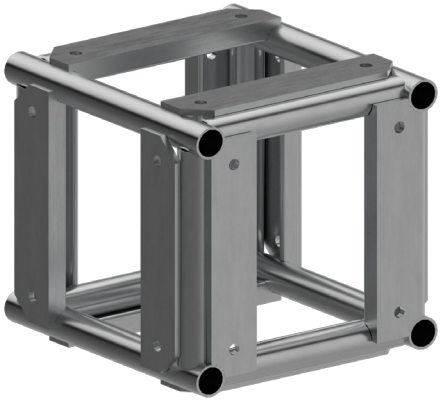
CUBE

CUBE-1616-6P.9_145

DIMENSIONS	CC bolts 10 15/16" x 10 15/16"
WEIGHT	22.5 lbs
CONNECTION STYLE	Bolts Ø5/8" / Plated

MATERIAL

Aluminum: 6061-T6
Bolts: Ø5/8" Grade 8





Cubes can be used to make all kinds of structures in a variety of shapes.

ADAPTOR

ADAP-1616-FP.9

DIMENSIONS	CC spigots 14 1/16" x 14 1/16" CC bolts 10 15/16" x 10 15/16"
WEIGHT	11 lbs
CONNECTION STYLE	Pin Ø5/8" / Spigots Bolts Ø5/8" / Plated

MATERIAL

Aluminum: 6061-T6
Bolts: Ø5/8" Grade 8
Pin: Stressproof 1144





An adaptor is required to be able to use forked product with plated products.

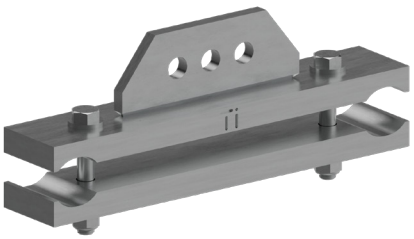
GRAPPLE

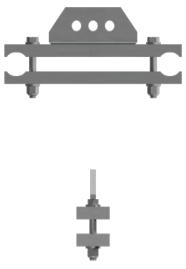
TI-GRAPPLE-016

DIMENSIONS	CC tubes 14 1/16"
WEIGHT	9.8 lbs

MATERIAL

Aluminum: 6061-T6
Bolts: Ø5/8" Grade 8





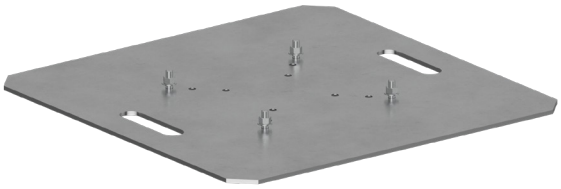
The grapple bolts onto the tubes. It is used to install a fixed point in the structure and eliminate the need for gacflex. Saves space in height.

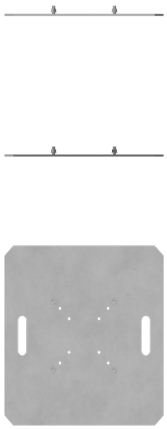


BASE PLATE 3636 PLATED

BASE-3636-P

DIMENSIONS	36" x 36" x 3/8"
WEIGHT	138 lbs
CONNECTION STYLE	Bolts to 1212, 1616 and 2020 plated





MATERIAL

Steel: 44W

Bolts: Ø5/8" Grade 8

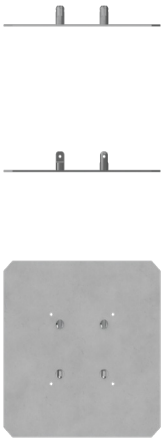
A base plate distribute the load of the truss to the floor and create a counterweight.

BASE PLATE 3636 FORKED

BASE-3636-F

DIMENSIONS	36" x 36" x 3/8"
WEIGHT	146 lbs
CONNECTION STYLE	Pin to 1212, 1616 and 2020 forked





MATERIAL

Steel: 44W

Spigots: C12L14

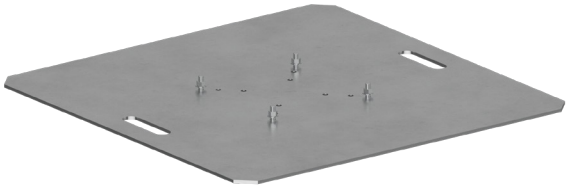
Pin: Stressproof 1144

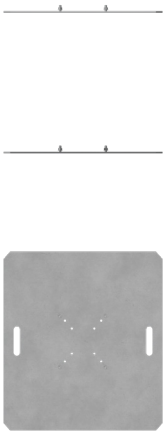
A base plate distribute the load of the truss to the floor and create a counterweight.

BASE PLATE 4848 PLATED

BASE-4848-P

DIMENSIONS	48" x 48" x 3/8"
WEIGHT	240 lbs
CONNECTION STYLE	Bolts to 1212, 1616 and 2020 plated





MATERIAL

Steel: 44W

Bolts: Ø5/8" Grade 8

A base plate distribute the load of the truss to the floor and create a counterweight.

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BASE PLATE 4848 FORKED

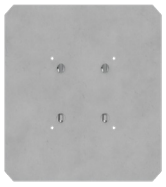
BASE-4848-F

DIMENSIONS	48" x 48" x 3/8"
WEIGHT	248 lbs
CONNECTION STYLE	Pin to 1212, 1616 and 2020 forked









MATERIAL

Steel: 44W
Spigots: C12L14
Pin: Stressproof 1144

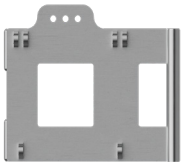
A base plate distribute the load of the truss to the floor and create a counterweight.

HINGE

HINGE-1616

DIMENSIONS	CC spigots 14 1/16" x 14 1/16"
WEIGHT	88.9 lbs
CONNECTION STYLE	Pin Ø5/8" / Spigots









MATERIAL

Steel: 50W
Pin: Stressproof 1144

A hinge connects trusses together at a desired angle.

CUBE

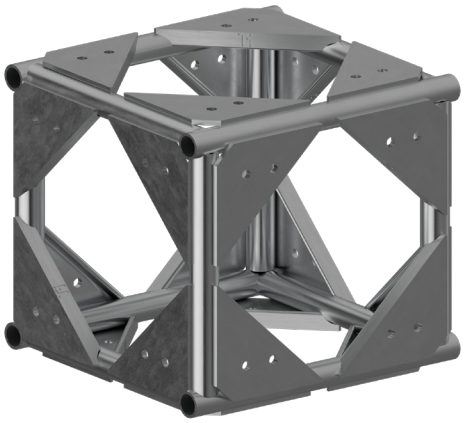
CUBE-2020-6P.9_145

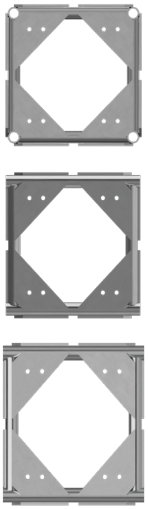
DIMENSIONS	CC bolts 13 3/4" x 13 3/4"
WEIGHT	33 lbs
CONNECTION STYLE	Bolts Ø5/8" / Plated

MATERIAL

Aluminum: 6061-T6

Bolts: Ø5/8" Grade 8





Cubes can be used to make all kinds of structures in a variety of shapes.

ADAPTOR (FEMALE)

ADAP-2020-FP.9-4F

DIMENSIONS	CC spigots 18 1/2" x 18 1/2" CC bolts 13 3/4" x 13 3/4"
WEIGHT	15 lbs
CONNECTION STYLE	Pin Ø3-4" / Spigots Bolts Ø5/8" / Plated

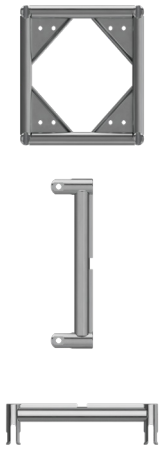
MATERIAL

Aluminum: 6061-T6

Bolts: Ø5/8" Grade 8

Pin: Stressproof 1144





An adaptor is required to be able to use forked product with plated products.

ADAPTOR (MALE)

ADAP-2020-FP.9-4M

DIMENSIONS	CC spigots 18 1/2" x 18 1/2" CC bolts 13 3/4" x 13 3/4"
WEIGHT	15 lbs
CONNECTION STYLE	Pin Ø3/4" / Spigots Bolts Ø5/8" / Plated

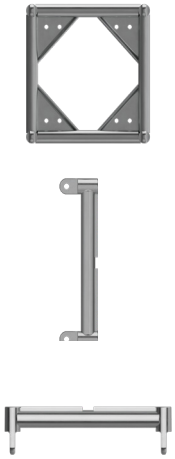
MATERIAL

Aluminum: 6061-T6

Bolts: Ø5/8" Grade 8

Pin: Stressproof 1144





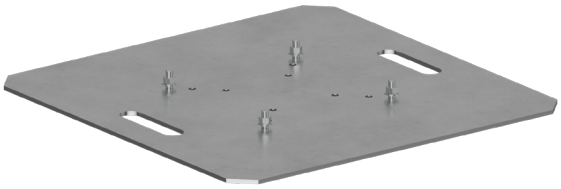
An adaptor is required to be able to use forked product with plated products.

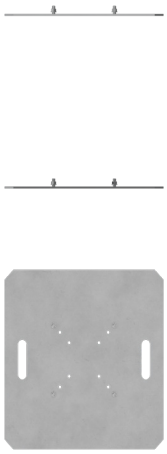
MANUFACTURED BY CERTIFIED WELDERS

BASE PLATE 3636 PLATED

BASE-3636-P

DIMENSIONS	36" x 36" x 3/8"
WEIGHT	138 lbs
CONNECTION STYLE	Bolts to 1212, 1616 and 2020 plated





MATERIAL

Steel: 44W

Bolts: Ø5/8" Grade 8

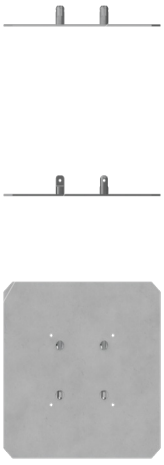
A base plate distribute the load of the truss to the floor and create a counterweight.

BASE PLATE 3636 FORKED

BASE-3636-F

DIMENSIONS	36" x 36" x 3/8"
WEIGHT	146 lbs
CONNECTION STYLE	Pin to 1212, 1616 and 2020 forked





MATERIAL

Steel: 44W

Spigots: C12L14

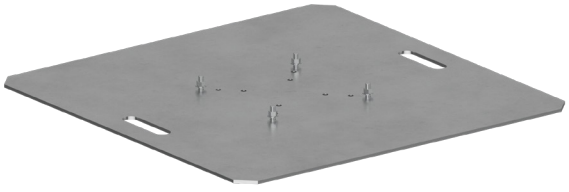
Pin: Stressproof 1144

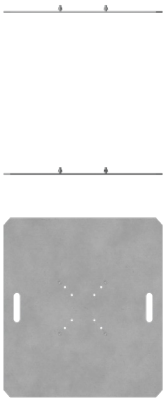
A base plate distribute the load of the truss to the floor and create a counterweight.

BASE PLATE 4848 PLATED

BASE-4848-P

DIMENSIONS	48" x 48" x 3/8"
WEIGHT	240 lbs
CONNECTION STYLE	Bolts to 1212, 1616 and 2020 plated





MATERIAL

Steel: 44W

Bolts: Ø5/8" Grade 8

A base plate distribute the load of the truss to the floor and create a counterweight.

BASE PLATE 4848 FORKED

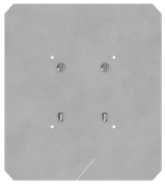
BASE-4848-F

DIMENSIONS	48" x 48" x 3/8"
WEIGHT	248 lbs
CONNECTION STYLE	Pin to 1212, 1616 and 2020 forked









MATERIAL

Steel: 44W
Spigots: C12L14
Pin: Stressproof 1144

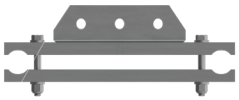
A base plate distribute the load of the truss to the floor and create a counterweight.

GRAPPLE

TI-GRAPPLE-020

DIMENSIONS	CC tubes 18 1/2"
WEIGHT	38.2 lbs









MATERIAL

Steel: 50W
Bolts: Ø5/8" Grade 8

The grapple bolts onto the tubes. It is used to install a fixed point in the structure and eliminate the need for gacflex. Saves space in height.

MANUFACTURED BY CERTIFIED WELDERS

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CUBE

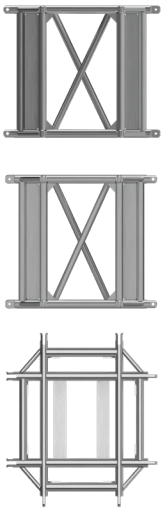
CUBE-3020-4AF.9_145

DIMENSIONS	CC 18 1/2" x 27 1/2"
WEIGHT	119 lbs
CONNECTION STYLE	Pin Ø3/4" / Spigots

MATERIAL

Aluminum: 6061-T6
Spigots: C12L14





Cubes can be used to make all kinds of structures in a variety of shapes.

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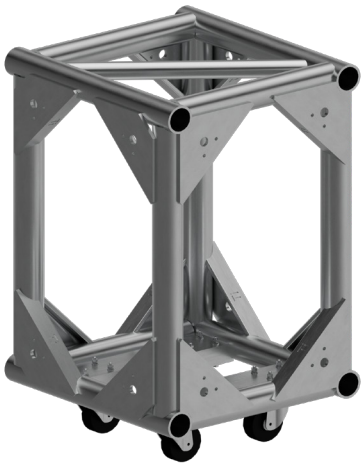
CUBE

CUBE-3624-4AP.3_250

DIMENSIONS	CC bolts 15" x 27"
WEIGHT	115.5 lbs
CONNECTION STYLE	Bolts Ø1" / Plated

MATERIAL

Aluminum: 6061-T6
Bolts: Ø1" Grade 8





Cubes can be used to make all kinds of structures in a variety of shapes.

ADAPTOR

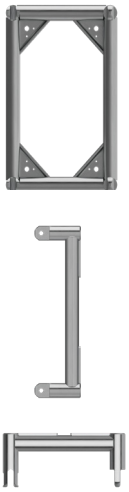
ADAP-3624-FP-2F2M

DIMENSIONS	CC spigots 21" x 33" CC bolts 15" x 27"
WEIGHT	48 lbs
CONNECTION STYLE	Pin Ø1" / Spigots Bolts Ø1" / Plated

MATERIAL

Aluminum: 6061-T6
Bolts: Ø1" Grade 8
Pin: Stressproof 1144





An adaptor is required to be able to use forked product with plated products.

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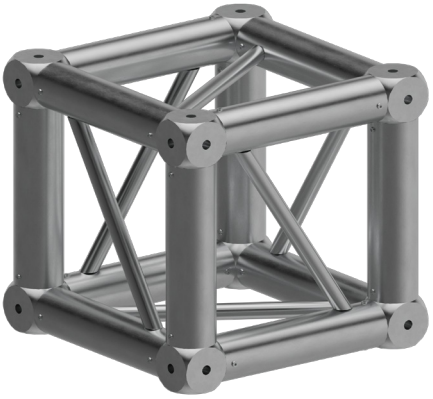
CUBE

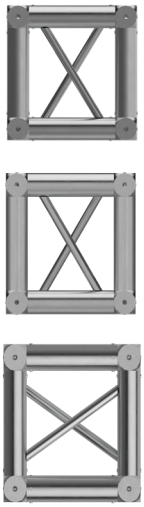
TI-CUBE-M3030-6C.9_145

DIMENSIONS	CC conical 240mm x 240mm
WEIGHT	8 lbs
CONNECTION STYLE	Conical

MATERIAL

Aluminum: 6061-T6
Conical: 6061-T6





Cubes can be used to make all kinds of structures in a variety of shapes.

ADAPTOR

TI-ADAP-M3030-C.9_145

DIMENSIONS	CC conical 240mm
WEIGHT	3 lbs
CONNECTION STYLE	Conical

MATERIAL

Aluminum: 6061-T6
Conical: 6061-T6





An adaptor is required to be able to use conical cubes with conical trusses.

BASE PLATE

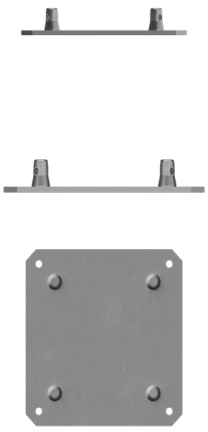
BASE-M3030-1414C

DIMENSIONS	14” x 14” x 3/8”
WEIGHT	25.3 lbs
CONNECTION STYLE	Conical

MATERIAL

Aluminum: 6061-T6
Conical: C12L14





A base plate distribute the load of the truss to the floor and create a counterweight.

CONICAL FEMALE

TI-S0001420

WEIGHT	0.54 lbs
CONNECTION STYLE	Conical

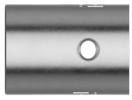
MATERIAL

Aluminum: 6061-T6









The conical female (female end) is used as an intermediary to connect conical elements together that have male ends.

CONICAL MALE

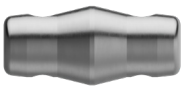
TI-S0001267

WEIGHT	0.31 lbs
CONNECTION STYLE	Conical

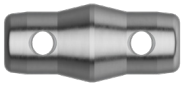
MATERIAL

Aluminum: 6061-T6









The conical male (male end) is used as an intermediary to connect conical elements together that have female ends.

CONICAL PIN

TI-S0001270

WEIGHT	0.09 lbs
CONNECTION STYLE	Conical

MATERIAL

Pin: Stressproof 1144









The conical pin is inserted through the conical junctions (male and female) to keep them connected.

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THREADED PIN

TI-S0001269

WEIGHT	0.09 lbs
CONNECTION STYLE	Conical









MATERIAL

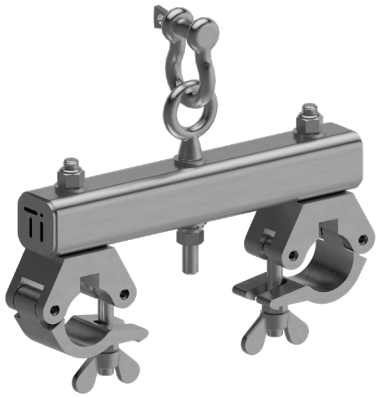
Pin: Stressproof 1144

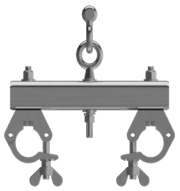
The threaded pin is inserted through the conical junctions (male and female) to fix them permanently.

LIFTING BRACKET M30

TI-LB-M30-DC.9

DIMENSIONS	CC 240mm
WEIGHT	9.13 lbs









MATERIAL

Aluminum: 6061-T6

Bolts: Ø5/8" Grade 8

The lifting bracket clamps on the tubes. It is used to install a fixed point in the structure and eliminate the need for gacflex. Saves space in height.

LIFTING BRACKET M36

TI-LB-M36-DC.9

DIMENSIONS	CC 300mm
WEIGHT	10.19 lbs









MATERIAL

Aluminum: 6061-T6

Bolts: Ø5/8" Grade 8

The lifting bracket clamps on the tubes. It is used to install a fixed point in the structure and eliminate the need for gacflex. Saves space in height.

PIN 3/4

TI-S0000155

WEIGHT	0.36 lbs
CONNECTION STYLE	Spigots





MATERIAL

Pin: Sressproof 1144

The pin 3/4 inserts into the junction of 2 forked trusses to secure them together. Used for 2020, 3020, pre-rig, 1310 and 1218 trusses.

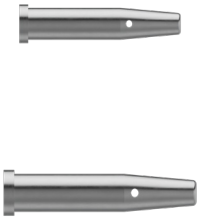


PIN 5/8

TI-S0000056

WEIGHT	0.03 lbs
CONNECTION STYLE	Spigots





MATERIAL

Pin: Sressproof 1144

The pin 5/8 inserts into the junction of 2 forked trusses to secure them together. Used for 1212 and 1616 trusses.



SPREADER BAR

SPREADER-1212-090F.9_145

DIMENSIONS	CC spigots 14 7/32“
WEIGHT	2.6 lbs
CONNECTION STYLE	Spigots









MATERIAL

Aluminum: 6061-T6

Pin: Stressproof 1144

The spreader bar can be used to make fixed angles with trusses. It can be used to make truss arches without having to use cubes.

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DOLLY

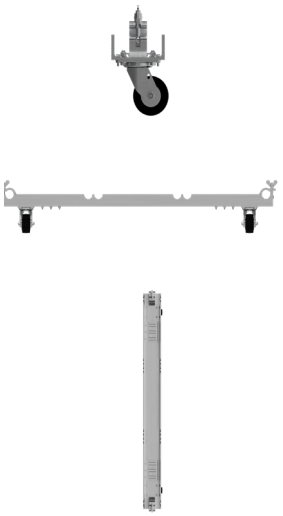
TI-DOL12-3

DIMENSIONS	On application
WEIGHT	50.3 lbs

MATERIAL

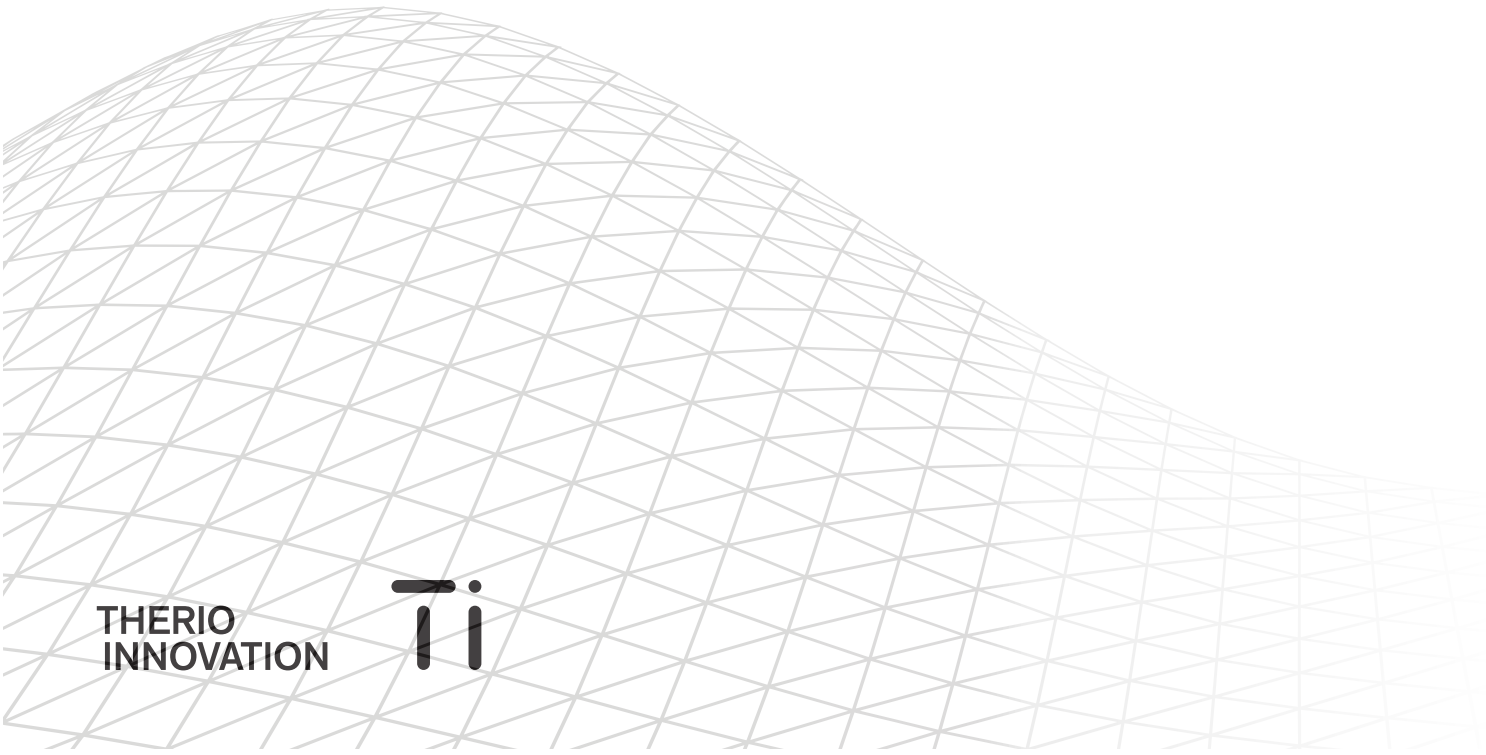
Aluminum: 6061-T6





A dolly is used to transport trusses. Several models available for different types of truss.

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SHOWLIFT

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THE LOW COST SOLUTION FOR ADJUSTABLE STAGE







Showlift during installation at Massey Hall

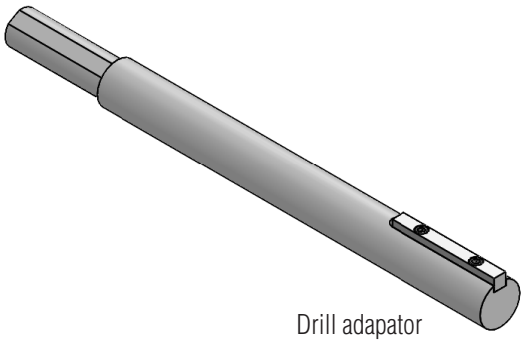
The ShowLift is a riser or staging platform with adjustable height. It can be applied in many situations where surface levels need to be changed to accommodate various events.

The ShowLift may be manufactured to meet different travel distances, sizes, shapes, and finishes because it is a fully bespoke product.

A straightforward ½" drill adaptor, a fixed speed motor with limit switches, or a motion-controlled system with predetermined settings can all be used to move the ShowLift.

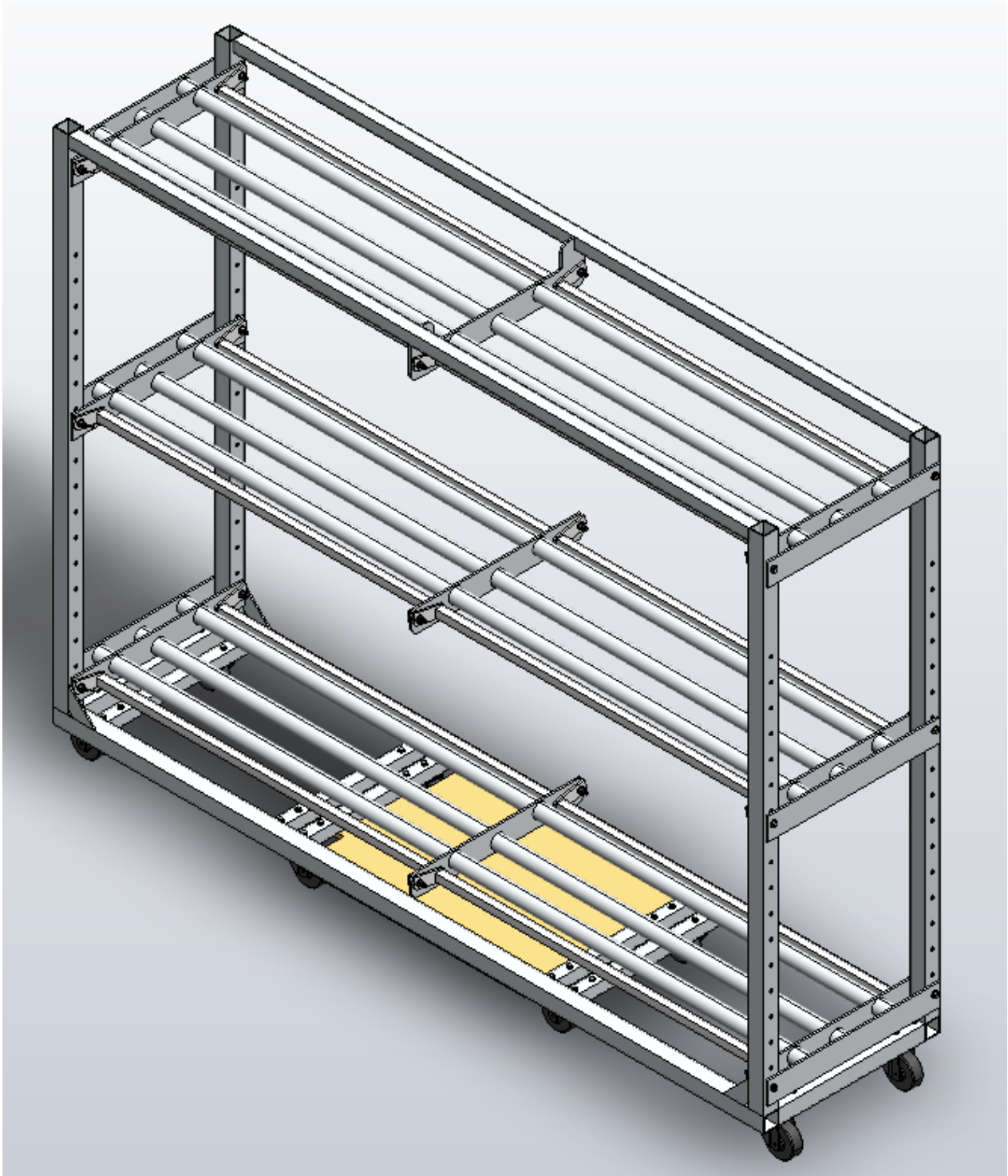
The ShowLift can withstand a static live load of up to 5 KN/m2 (104.43 psf) on the deck and a concentrated load of up to 3 KN across a surface area of 300 mm2 on the decks (675 lbs psf).

Made and designed in North America.



Drill adapator

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RACKS

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TRANSPORT SOLUTION

Designed to protect and transport equipment, our racks are specially created to enhance efficiency and speed during the setup and breakdown of events. Made from steel or aluminum, they combine strength and lightness to meet the specific needs of audiovisual and rigging applications.

We offer a wide range of transport racks and also provide custom solutions to meet the unique requirements of each client. Whether for large-scale event productions or more specialized technical services, we are committed to providing reliable, versatile, and secure equipment.





Rack dollies for transporting lighting trusses:
We also manufacture racks specifically designed for the transport of lighting trusses. These racks are made from aluminum, and their dimensions vary depending on the models of trusses to be transported. Each rack is tailored to the specific requirements of the equipment being transported to ensure secure and optimized transport. You can explore these models in our ***General Accessories*** catalogue section.

Made and designed in North America.

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CROWD BARRIERS



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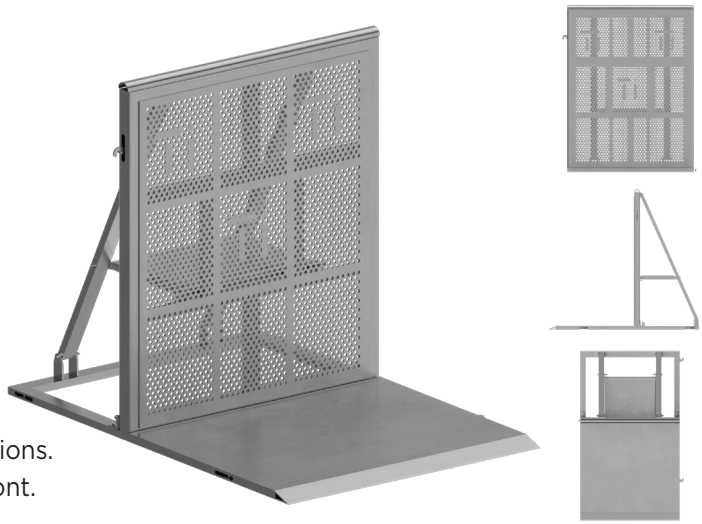
STANDARD BARRIER
TI-CB-02A0000

DIMENSIONS	1.24m (h) x 0.97m (w) x 1.33m (l)
WEIGHT	94 lbs
CONNECTION STYLE	Southco Dual Lock

MATERIAL

Aluminum: 6061-T6

Safety device to control crowds in various types of occasions.
The standard barrier is straight to follow a linear stage front.



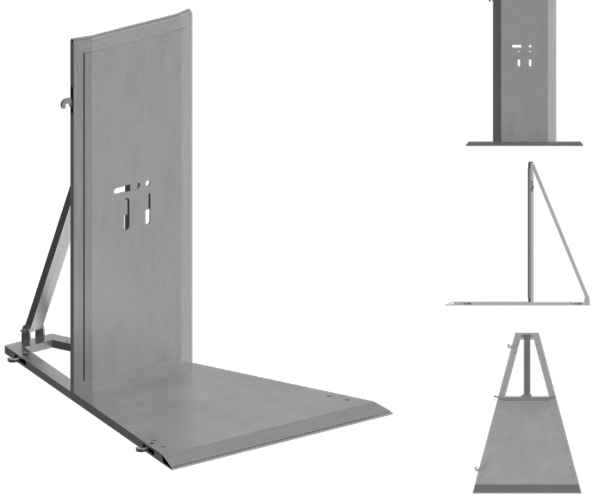
CORNER BARRIER
TI-CB-04A0100

DIMENSIONS	1.23m (h) x 0.91m (w) x 1.28m (l)
WEIGHT	50.2 lbs
CONNECTION STYLE	Southco Dual Lock

MATERIAL

Aluminum: 6061-T6

Safety device to control crowds in various types of occasions.
The corner barrier is used to create 45 and 90-degree angles.



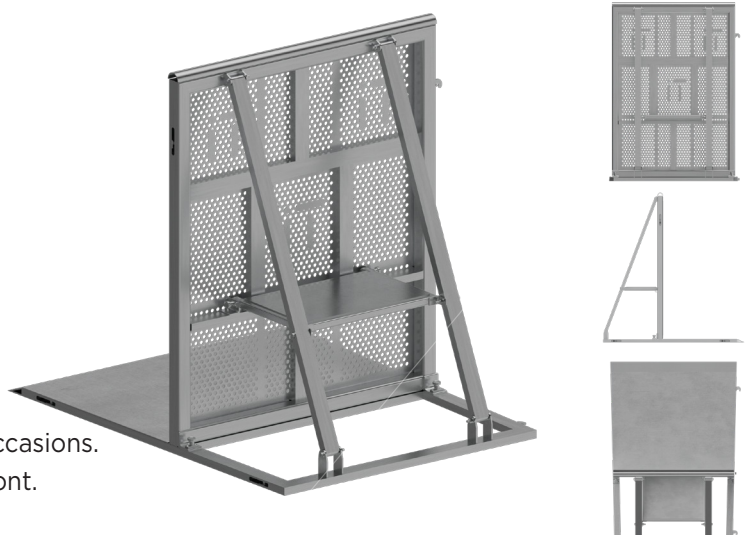
CURVED BARRIER
TI-CB-01A0000

DIMENSIONS	1.23m (h) x 1m (w) x 1.33m (l)
WEIGHT	87.6 lbs
CONNECTION STYLE	Southco Dual Lock

MATERIAL

Aluminum: 6061-T6

Safety device to control crowds in various types of occasions.
The curved barrier allows to follow a circular stage front.



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SIMPLE DOOR
TI-CB-03A0100

DIMENSIONS	1.23m (h) x 0.97m (w) x 1.33m (l)
WEIGHT	103.4 lbs
CONNECTION STYLE	Southco Dual Lock

MATERIAL
Aluminum: 6061-T6

Safety device to control crowds in various types of occasions.
The door allows you to pass from one side to the other.



DOUBLE DOOR
TI-CB-03A0200

DIMENSIONS	1.23m (h) x 0.97m (w) x 1.33m (l)
WEIGHT	198 lbs
CONNECTION STYLE	Southco Dual Lock

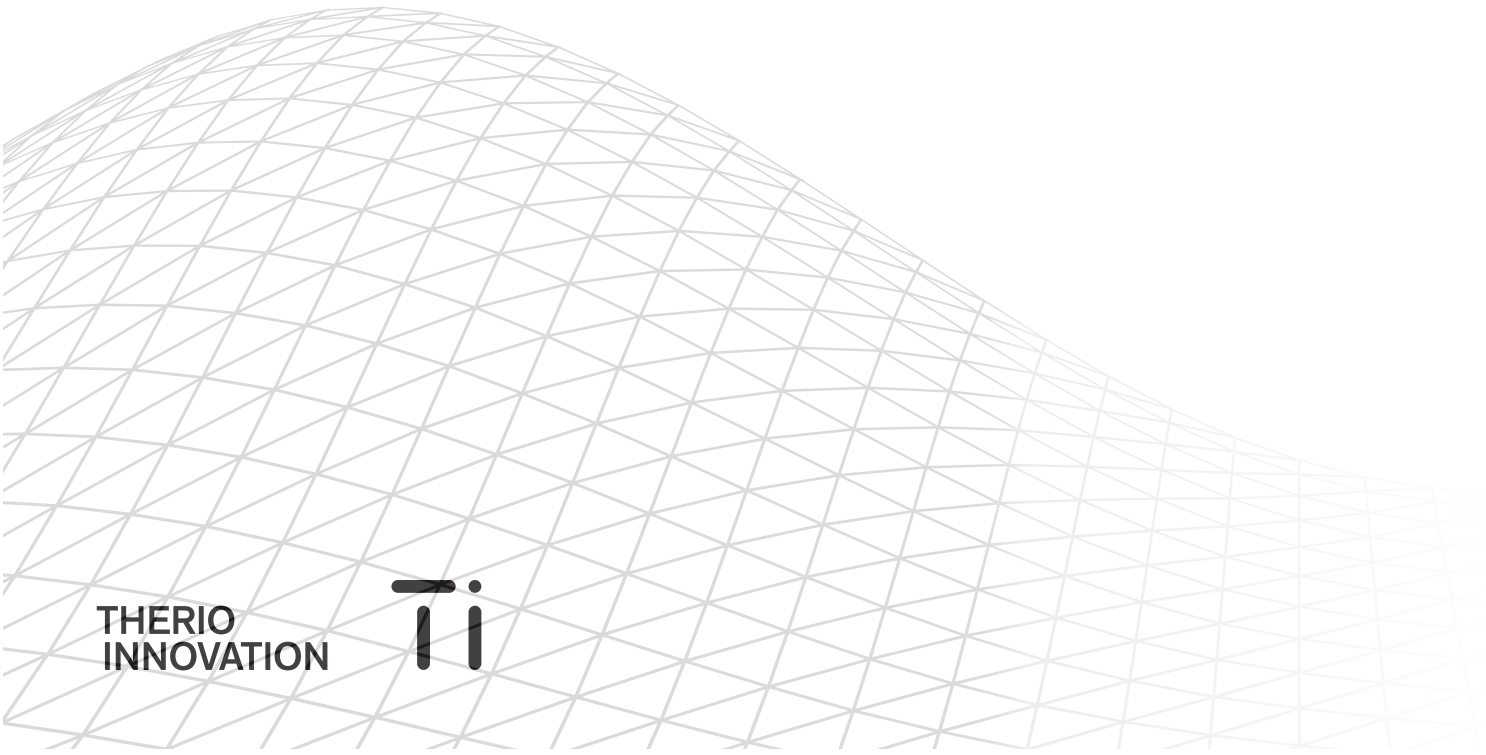
MATERIAL
Aluminum: 6061-T6

Safety device to control crowds in various types of occasions.
The double door allows wider equipment passage.





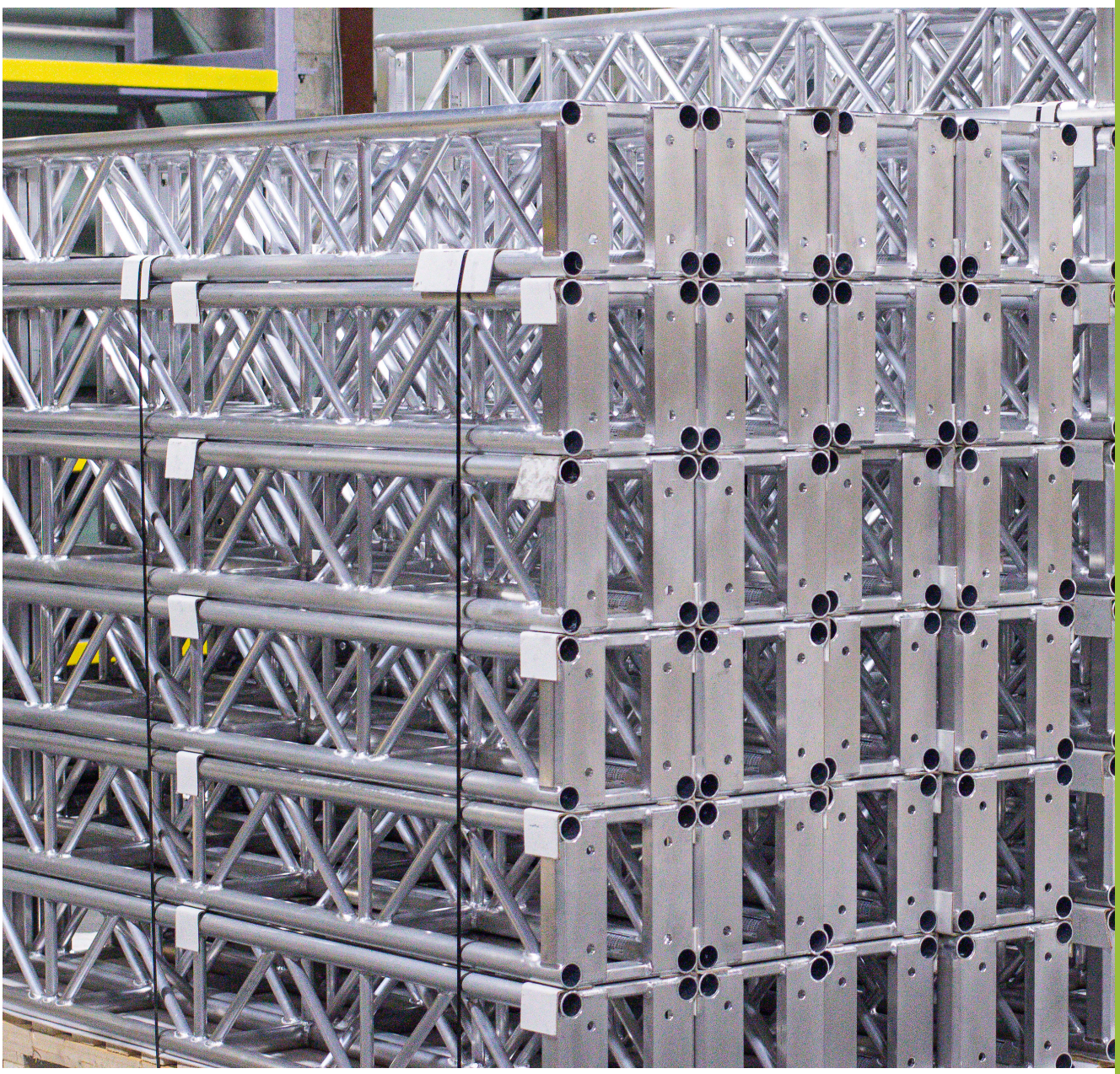
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TECHNICAL

HANDLING | ASSEMBLY | USE | FIGURES | INSTALLATION
INSPECTION | MAINTENANCE | NOMENCLATURE

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HANDLING, ASSEMBLY, AND USE OF TRUSSES

Load, unload, or move trusses with the necessary personnel to ensure that the trusses are not dragged or dropped; this may damage the ends, the structure, or cause other unseen damage.

DURING TRANSPORT

- Ensure that trusses are secured to prevent movement.
- Ensure that nothing that could cause wear or punctures rubs against the trusses.
- Ensure that nothing is loaded on top of the trusses.

LOAD DATA

- Are only valid for static loads and spans with two supporting points, one at each end.
- Are to be considered for indoor use only. If dynamic loads or more supporting points are applied, contact a structural engineer or THERIO INNOVATION.
- Are valid when the truss is used with the diagonals oriented vertically (see figures).
- Are valid when the end plates are installed vertically for the bolted trusses (see figures - note 1).
- Are valid when the pins are installed horizontally for the spigot trusses (see figures - note 2).
- Take into consideration the self-weight of the trusses and indicate how much additional weight may be safely added.
- Deflection calculations are theoretical based on the rigidity of the truss when fully loaded. Actual deflection may be slightly higher due to potential movement between truss sections caused by attachment tolerance.
- When corner blocks are used, loading capacity must be reduced by 50% when corners are loaded on two adjacent faces.

RIGGING, LOADING, AND UNLOADING

- Trusses should be assembled by competent personnel who are familiar with the use and assembly of aluminum trusses.
- Always use washers on both sides of plates for bolted trusses.
- Trusses must be hung using bottom and top chords to ensure optimal stability. Spansets must be as close as possible to the extremities (see figures - notes 3 and 4).
- Trusses must be loaded symmetrically on each side; unbalanced loads could distort the trusses (see figures - note 5).
- All loads must be applied to, or as close as possible to, node points. A node point is the diagonal and/or vertical meeting on the main chord (see figures - note 6).
- When raising or lowering trusses, hoists should run simultaneously in order to maintain the horizontal level of the trusses.
- Always unload trusses before disassembling connections.

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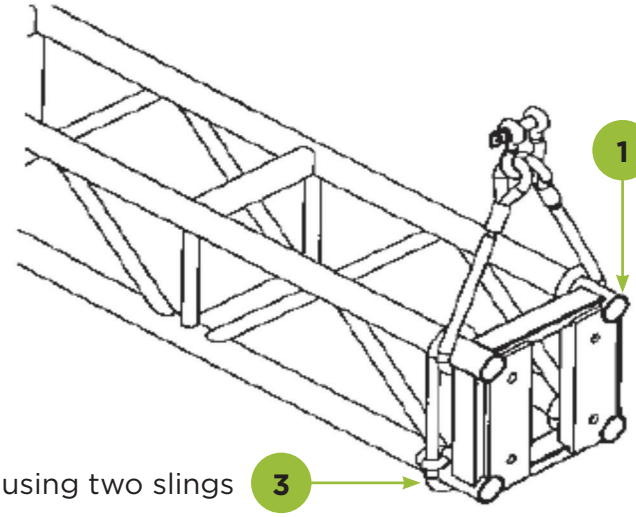
INSPECTION

- THERIO INNOVATION trusses are engineered and built to provide many years of reliable service if they are used within the recommended loading parameters and handled properly.
- To prevent undesired consequences that could occur when the manufacturer's recommendations are not respected, it is very important that all truss structures and connecting parts be inspected regularly and documented by qualified personnel to detect abnormal wear and abuse, such as:

  - Cracks in welds
  - Local permanent deformations in the structure
  - Dents or chew marks in the main chords or diagonals
  - Wear or bending in the attachment pin and spigot
  - Bending in the plates or distortion of bolt holes
  - Damage on zinc surface treatment or corrosion

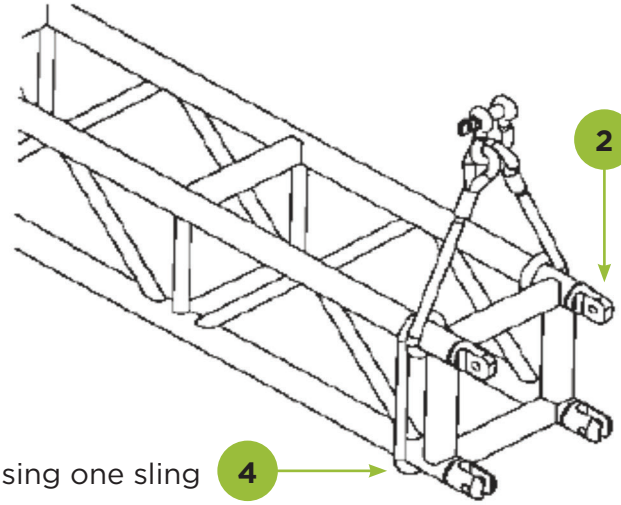
- If any of the above failures are detected, do not use the piece.
- Nuts, bolts, and washers should be replaced periodically, as regular use degrades bolt threads. Never over-torque nuts and bolts beyond manufacturer's specifications and always use Grade 8 nuts, bolts, and washers.

FIGURES - HANDLING, ASSEMBLY, AND USE OF TRUSSES



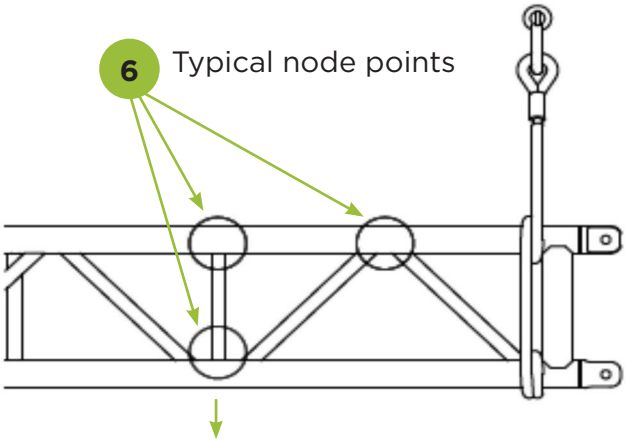
1 Plate oriented vertically

Typical hanging using two slings 3

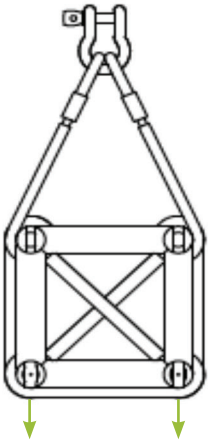


2 Pin oriented horizontally

Typical hanging using one sling 4



6 Typical node points



5 Symetrical loading

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INSPECTION AND MAINTENANCE OF TRUSSES

INSPECTION

- **Visual inspection:**

  A visual inspection of each section is required before every use. Furthermore, a complete inspection should be performed at least once a year or more often depending on the intensity and frequency of use. Every piece shall be carefully inspected by a competent person in order to guarantee its strength and safety. Inspection documentation shall be registered and kept on file. Every inspected piece shall be clearly marked and easy to identify.

- **Damage:**

  When truss sections show damage that might affect their safety, it is mandatory to discard and mark them clearly, so they are not put back into service. Damaged sections can be submitted to THERIO INNOVATION for evaluation and repair if possible. Should you have any doubts, please contact the technical department of THERIO INNOVATION.

DISCARD CRITERIA

Any truss showing the following significant visible damage or suspected of containing a damaged element, visible or not, must l be removed from service and marked accordingly.

- **In general:**

  - Absence of any identification showing manufacturer, truss type, and date of production.
  - Permanent plastic distortion by twisting, bending, torsion, or any other deformation different from its original form.
  - Welds that show cracking or discontinuity.
  - Reduction of welded area by more than 10% due to wear and tear.
  - Any holes other than those of the original design.
  - Excessive corrosion of the material reducing the tube cross section area by more than 10%.

- **Tubes (main chords and braces):**

  - All broken, twisted, cracked, or partially missing tubes.
  - Welds that show cracking or discontinuity.
  - Tubes curved over 1% of length or off the centre line by more than 0.20″ (5 mm) (see figure 1).
  - Any chord bending near the connection systems leading to difficulty securing sections together.
  - Dent or wear affecting the tube area:
    1. More than 10% of circumference when measuring up to 0.04″ (1 mm) deep (see figure 2).
    2. More than 5% of circumference when measuring up to 0.06″ (1.5 mm) (see figure 3).
    3. When measuring more than 0.06″ (1.5 mm) deep.

- Scratches, cuts, bumps, or wear on the tube surface deeper than 0.04″ (1 mm) and longer than 0.40″ (10 mm) in any direction.
- All permanent plastic distortion of the tube greater than 5% of diameter (see figure 4).

- **Connection system:**

Spigot type:

- Any distortion of metal pin holes enlarged by wear over 5% (see figure 5).
- An oval-shaped wear or stretch to the coil spring pin hole of over 10% (see figure 6).
- Scratches, cuts, or dents deeper than 0.04″ (1 mm) and longer than 0.40″ (10 mm).
- Any deformation or distortion resulting in difficulties in joining adjacent truss sections or installing the pins.

Bolted plate type:

- Any permanent deformation or bend of the connection plates.
- Any oval-shaped wear or stretch to the bolt hole of over 5%.
- Any welds that show cracking or discontinuity.
- Scratches, cuts, or dents deeper than 0.08″ (2 mm) and longer than 0.40″ (10 mm).

Steel pins and bolts:

These items are "**consumable**" and subject to wear and/or damage by hammer and wrench. These parts must be replaced on a **regular basis**. Also, these items provide a good indication of excessive loading by showing deformation, surface works, and bending. We recommend carefully inspecting trusses connected with steel pins or bolts showing any sign of damage.

All steel pins and bolts showing the following signs of damage must be removed from service:

- Surface damage: scratches, cuts, dents, and/or corrosion.
- Shape damage: reduction in diameter, bending, shear marks, thread damage, any deformation by hammering such as burrs, mushrooms, etc.

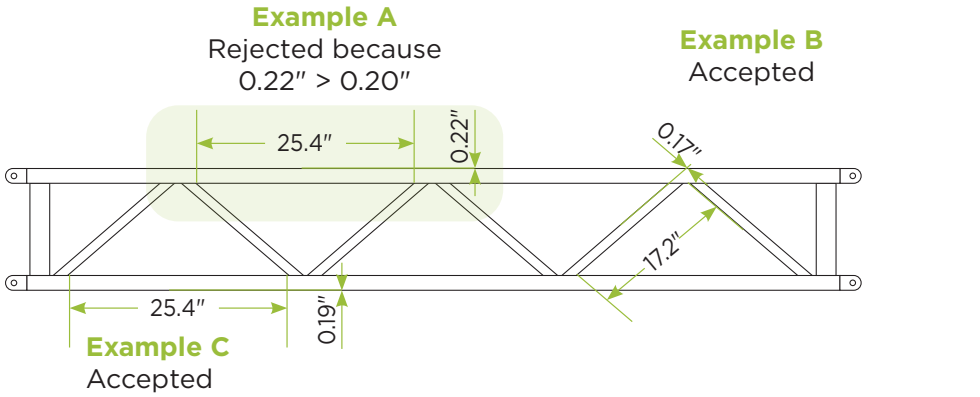
WARNING

Neglecting to regularly inspect and maintain the truss may eventually lead to the use of unsafe equipment and ultimately increase the risk of an accident resulting in material damage, injury, or even death.

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FIGURES - INSPECTION AND MAINTENANCE OF TRUSSES

FIGURE 1



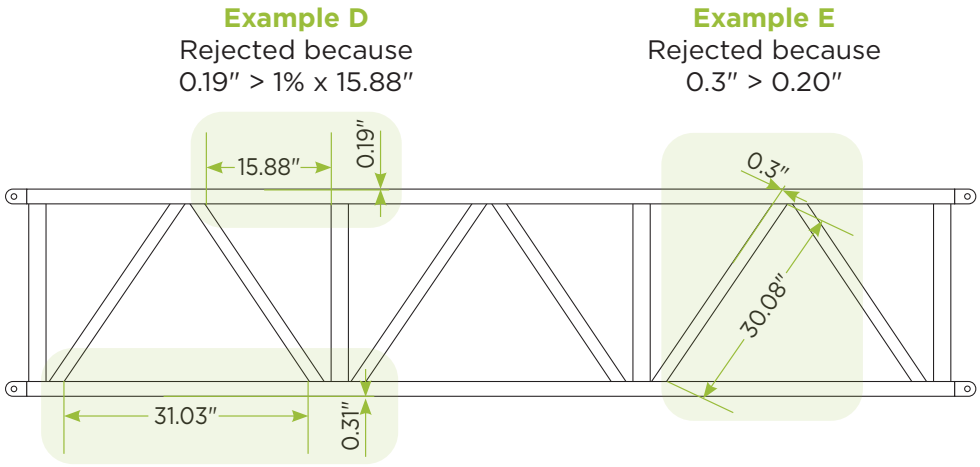


FIGURE 2

36° equals 10% of the circumference.
Can also be evaluated as the following :
L = 5/8" (16 mm) for 2" (51 mm) tube
L = 1/2" (12.5 mm) for 1-1/2" (38 mm) tube
L = 5/16" (8 mm) for 1" (25 mm) tube

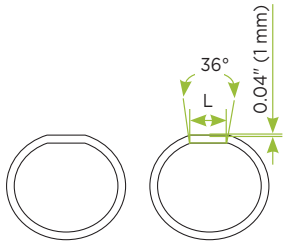


FIGURE 3

18° equals 5% of the circumference.
Can also be evaluated as the following :
L = 5/16" (8 mm) for 2" (51 mm) tube
L = 1/4" (6.5 mm) for 1-1/2" (38 mm) tube
L = 5/32" (4 mm) for 1" (25 mm) tube

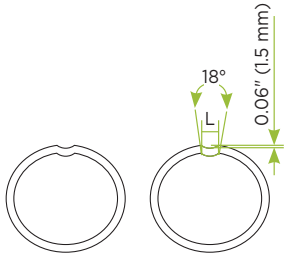


FIGURE 4

Illustration of oval-shaped maximum allowable on a typical tube of 2" (51 mm)

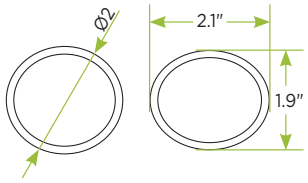


FIGURE 5

Illustration of oval-shaped maximum allowable spigot pin hole
Ex: Ø = 0.625"
Ø + 5% = 0.656"

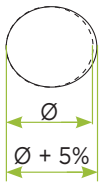
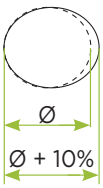


FIGURE 6

Illustration of oval-shaped maximum allowable coil spring pin hole in main chord
Ex: Ø = 0.375"
Ø + 10% = 0.4125"



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TYPICAL NOMENCLATURE

TIT-1212-120F.9_145

Wall thickness

Tube "OD"
1.9″ or 2″

Connection style
(Forked / Plated / Conical)

Length of the truss
(Imperial or metric)

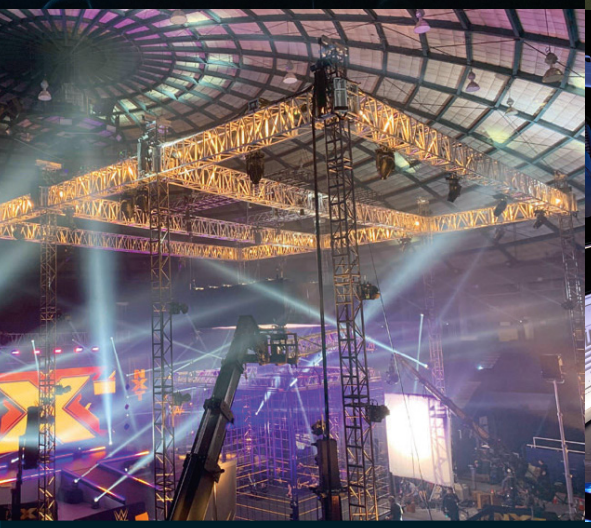
Size of the truss
(Imperial or metric / "M" before the number indicates metric)

Last letter indicates the "Series"
(Innovation, Prestance, Therio, etc.)

TI stands for → THERIO INNOVATION

CREATION
TO REALIZATION





THERIO INNOVATION

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