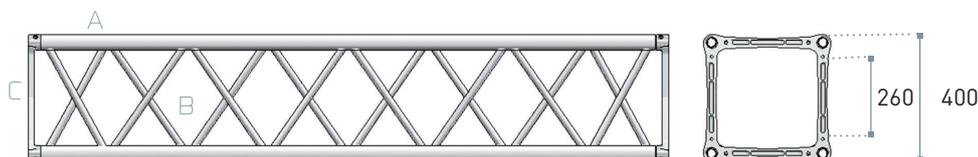


QH40SA ANTI-TORSION

Square section heavy duty aluminium truss twist-resistant version with 40 cm long sides. It replaces the old Heavy Duty series QD40S and QD40SA. It is characterized by the introduction of $\varnothing 48 \times 3$ mm chords and $\varnothing 20 \times 2$ mm diagonals on all the faces. This truss constitutes Varitower 3-40.



Chords A:
extruded tube $\varnothing 48 \times 3$ mm EN AW 6082 6

Diagonals B: extruded tube $\varnothing 22 \times 2$ mm EN AW 6082 T6

Ends C: aluminium casting plate EN AC 42200 T6

Connection systems

QXFC: quick-fit kit

QXSM10: bolt connection kit

LINEAR ELEMENTS

code	cm	kg
QH40SA010	40x40x10	4,4
QH40SA025	40x40x25	5,6
QH40SA050	40x40x50	7,6
QH40SA100	40x40x100	11,3
QH40SA150	40x40x150	14,9
QH40SA200	40x40x200	18,6
QH40SA250	40x40x250	22,3
QH40SA300	40x40x300	26
QH40SA350	40x40x350	29,6
QH40SA400	40x40x400	33,3

CORNERS AND FITTINGS

code	cm	kg
QH40SAACSC	40x14.4x40	7,1
QH40SAL2045	100x100x29	11,6
QH40SAL2060	100x100x29	17,3
QH40SAL2090	50x50x29	12,6
QH40SAL2120	50x50x29	9,2
QH40SAL2135	50x50x29	9,2
QH40SAL3	50x50x50	9,5
QH40SAT3	50x50x29	14,8
QH40SAT4	50x50x50	17,3
QH40SAX4	50x50x29	20,1
QH40SAX5	50x50x50	19,9
QH40SAX6	50x50x50	27,9





QH40SA

LOAD TABLE / SPIGOT CONNECTION

SPAN m	UNIF. DISTRIBUTED LOAD			CENTRE POINT LOAD			THIRD POINT LOAD			QUARTER POINT LOAD			FIFTH POINT LOAD		
	point load kg/m	full load kg	central deflection mm	point load kg	full load kg	central deflection mm	point load kg	full load kg	central deflection mm	point load kg	full load kg	central deflection mm	point load kg	full load kg	central deflection mm
1	3650	3650	0	3650	3650	0	1825	3650	0	1217	3650	0	913	3650	0
2	1822	3644	1	2822	2822	1	1736	3471	1	1215	3644	1	911	3644	1
3	1213	3638	4	2180	2180	3	1408	2815	4	1093	3279	4	907	3627	4
4	908	3631	8	1767	1767	7	1176	2353	7	936	2809	8	767	3066	9
5	693	3467	16	1480	1480	11	1006	2013	12	816	2447	14	637	2549	14
6	486	2919	23	1270	1270	16	877	1754	19	691	2073	20	544	2176	21
7	359	2515	31	1110	1110	22	775	1550	26	597	1790	28	474	1894	29
8	276	2206	41	984	984	30	693	1386	35	524	1572	37	418	1674	38
9	218	1960	52	881	881	38	625	1251	46	466	1399	47	374	1496	48
10	176	1761	65	797	797	48	569	1138	58	419	1257	59	338	1350	60
11	145	1590	79	725	725	58	521	1041	71	380	1139	72	307	1228	74
12	120	1445	94	664	664	70	479	958	85	347	1040	86	281	1123	88
13	102	1322	110	612	612	83	443	885	101	318	954	101	258	1033	104
14	87	1215	128	565	565	97	411	821	118	293	879	118	239	954	122
15	75	1122	146	524	524	112	382	765	137	271	814	135	221	885	140
16	65	1039	167	488	488	129	357	714	157	252	755	155	206	823	160
17	57	965	188	455	455	146	334	668	178	234	703	175	192	767	181
18	50	899	211	425	425	165	313	626	201	219	656	197	179	717	204

CANTILEVER LOAD TABLE / SPIGOT CONNECTION

SPAN m	UNIFORMLY DISTRIBUTED LOAD			CENTRE POINT LOAD	
	q am.- kg/m	q am.- kg	defl.- mm	F am. - kg	defl.- mm
1	1822	1822	1	1408	1
2	700	1400	4	880	6
3	358	1074	10	632	16
4	216	862	19	489	29
5	143	714	32	395	46
6	101	605	47	329	68

AXIAL LOAD TABLE

H m	N am. Kg
3	9697
6	7444
9	4316
12	2519

Load table has been prepared in accordance with UNI ENV 1999-1-1 (Eurocode 9). When calculating the allowable loads it is assumed that the load is suspended from the bottom chord and the truss is supported from the top chord at each end.

The values shown in the table are the allowable static loads that can be applied to the truss. This is the live load or the payload. The self weight of the truss has been taken into account when calculating the values in the table.

It should be noted that this are idealised loading conditions and the User shall re-analyze the truss for the loading conditions which prevail for the application being considered.

QH40SA SYSTEM

To further enhance the standard products, LITEC offers a wide range of corners, connections and accessories useful for many different applications and needs. "Quick connect" or "nult & bolt connect". End-plated trusses allow to use two different systems of connection. The quick-fit system is certainly the most wide-spread and mainly used when the structure is frequently assembled and dismantled. In case of permanent installations, on the other hand, a more economical bolt connection system may be used. Our plate is made in such a way that bolts may be completely inserted so that there are no edges or external protuberances which could damage canvases or other fabrics or which might simply be unaesthetic on certain structures.

QH40SA / CONNECTIONS



KSG
Litetruss aluminium spigot, set of 10



KCP R-spring, set of 100
KSP Steel pin, set of 10



K370
Half truss spigot + 1 steel pin + 1 R-spring (not for Dado)



KSF
Threaded pin, set of 12



KCFS
Kit for vert. connec incl. bolts, spigots and access



QXFC
Quick connection set for Q Series



QXICU
Set of 4 alum. jointed spigot for "X" and "D" truss



QXKFC
Set of 4 half spigot with M10 screws for Dado



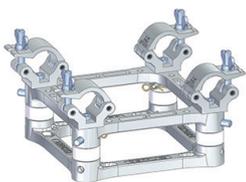
QXKFC T
Set of 4 half spigot with screw for Universal Sleeve Block



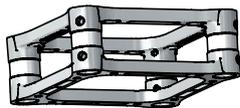
QXSM10
Bolt connection set for Q25S Series

QUKFC
Set of 4 half spigot with M12 screws for Dado

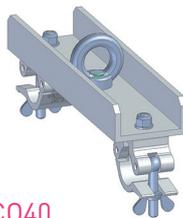
QX40SA / ACCESSORIES



QX40SAACSC
ST 40 cm. square Clamp module Towerlift/Varitower



QU40ADPO10
Universal Adapter 29 cm. square Length 10.5 cm.



CO40
Bar hook for 40 cm. truss



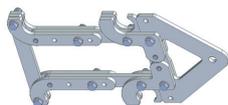
FP30M
Universal 29 cm. truss large floor plate



FP40
Universal 29 cm. truss floor plate



TZ40K01
Assembly tool for half-spigot in 40 cm. side truss



CBQ3040
4 points Bridle Hook for 29/40 cm. truss



QH40SA / CORNERS & FITTINGS



QH40SAL2045
HD 40 cm. square
2 way 45° corner



QH40SAL2060
HD 40 cm. square
2 way 60° corner



QH40SAL2090
HD 40 cm. square
2 way 90° corner



QH40SAL2120
HD 40 cm. square 2 ways
120° corner, ext. vertex



QH40SAL2135
HD 40 cm. square 2 way
135° corner, int. vertex



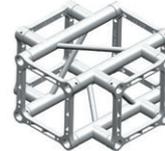
QH40SAL3
HD 40 cm. square
3 way corner



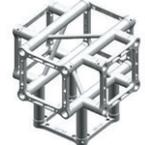
QH40SAT3
HD 40 cm. square
3 way tee



QH40SAT4
HD 40 cm. square
4 way tee



QH40SAX4
HD 40 cm. square
4 way cross



QH40SAX5
HD 40 cm. square
5 way cross



QH40SAX6
HD 40 cm. square
6 way cross

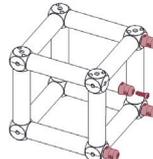
DADO SYSTEM DADO, the solution for all 90° corners and crosses. Managing corners and crosses is one of the biggest problems structure installers and hirers have to face. DADO is the answer. It is devised around a six-faced die-cast cube and may be put together in multifarious ways leaving the user complete freedom. The connection between DADO and the trusses is the quick-fit type, with special steel half spigots. Their assembly and alignment is made easy with an assembly template.



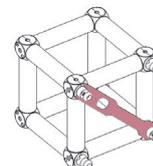
QX40K8
DADO 6 way box
corner (8 nodules)
**K8 is the DADO version
for square section
structures.**



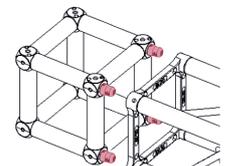
QU40K8
DADO 6 way box
corner (8 nodules)
**An even sturdier
solution to manage
corners and crosses.**



COUPLER ASSEMBLY
Before joining a truss to a Dado, the half-spigots must be inserted on the face to be connected. The spigots should be connected to a Dado with screws. Do not tighten the screws yet.



BLOCKING THE SPIGOTS
Next, using the supplied tool, tighten the screws two by two on the diagonals of the same face. Use of tool TZ30K01 (or TZ40K01 or QX40K8) is essential for maintaining the position of the spigots.



CONNECTING TO THE TRUSS Connecting Dado to a truss is straightforward and intuitive. You will need both the conical pins and safety split-pins. **NOTE:** the conical pins must be hammered hard into the connectors.