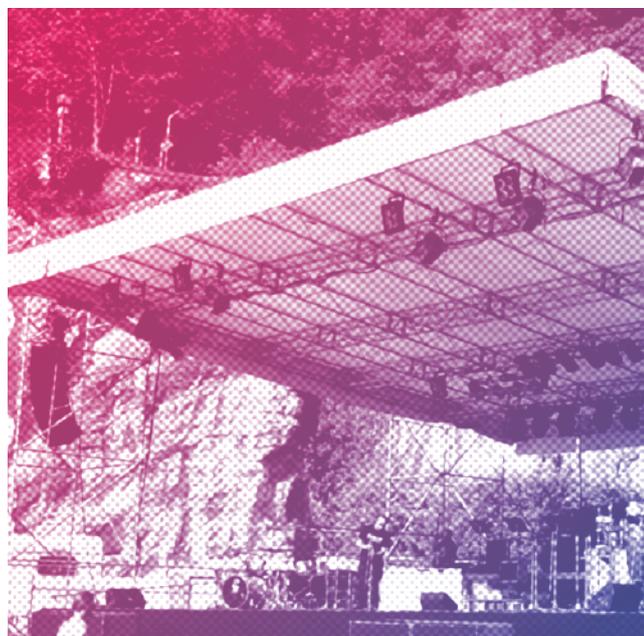


# QH40SA

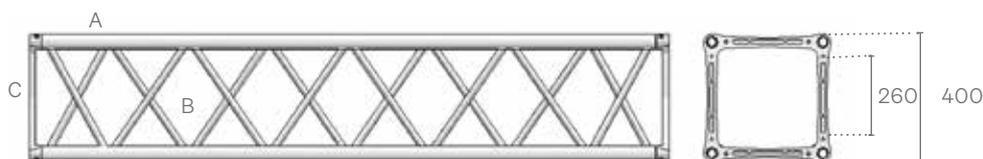
Anti-torsion



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 T6

**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
QU4OADP010	40 x 40 x 10	4.4
QH40SA025	40 x 40 x 25	5.6
QH40SA050	40 x 40 x 50	7.6
QH40SA100	40 x 40 x 100	11.3
QH40SA150	40 x 40 x 150	14.9
QH40SA200	40 x 40 x 200	18.6
QH40SA250	40 x 40 x 250	22.3
QH40SA300	40 x 40 x 300	26
QH40SA350	40 x 40 x 350	29.6
QH40SA400	40 x 40 x 400	33.3

## Corners and fittings

code	cm	kg
FU40K4	40 x 40 x 5	4.7
QU40K8	40 x 40 x 40	12.6
QH40SAACSC	40 x 14.4 x 40	7.1
QH40SAL2045	150 x 150 x 40	11.6
QH40SAL2060	100 x 100 x 40	17.3
QH40SAL2090	50 x 50 x 40	12.6
QH40SAL2120	50 x 50 x 40	9.2
QH40SAL2135	50 x 50 x 40	9.2
QH40SAL3	50 x 50 x 50	9.5
QH40SAT3	100 x 50 x 40	14.8
QH40SAT4	100 x 50 x 50	17.3
QH40SAX4	100 x 100 x 40	20.1
QH40SAX5	100 x 100 x 50	19.9
QH40SAX6	100 x 100 x 100	27.9



### Load table / Spigot connection

SPAN	Unif. distributed load			Centre point load			Third point load			Quarter point load			Fifth point load		
	Point load	Full load	Central deflection	Point load	Full load	Central deflection	Point load	Full load	Central deflection	Point load	Full load	Central deflection	Point load	Full load	Central deflection
m	kg/m	kg	mm	kg	kg	mm	kg	kg	mm	kg	kg	mm	kg	kg	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	Unif. distributed load			Centre point load	
	kg/m	kg	mm	kg	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

SPAN	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.

## 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 accessories



**QXFC**  
Quick connection set  
for Q Series



**QXSM10**  
Bolt connection set  
for 30 - 40 series



**QUKFC**  
4 special steel half spigots with  
screws for Heavy Duty Dado

## Accessories



**QH40SAACSC**  
ST 40 cm. square  
Clamp module  
Towerlift/Varitower



**QU40ADP010**  
Universal Adapter  
29 cm. square  
Length 10 cm



**CO40**  
Bar hook for 40 cm truss



**FP40**  
Universal 40 cm truss floor  
plate (40 x 40 cm)



**FP30M**  
Universal 40 cm truss large  
floor plate (50 x 50 cm)



**CL2D50**  
Transport clip. Plastic casting  
for truss stacking.  
Fits 48 - 51 mm tube



**TZ40K01**  
Assembly tool for half-spigot  
in 40 cm side trusses with  
Heavy Duty Dado



**TZ40C01**  
Assembly tool for half-spigot  
in 40 cm side trusses with  
Light Duty Dado



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



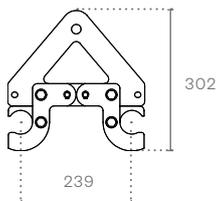
**QU3040H050**  
30-40 Special Truss L=050  
with hoist support



**CS029-40**  
Ceiling support for 30-40  
truss series – silver



**CBT3040**  
2 points Bridle Hook for  
29/40 cm. truss



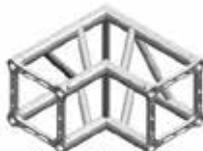
## Dados, Corners & fittings



**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



**QH30SAX6**  
HD 29 cm. square  
6 way cross



**Q40SL2ADJ**  
Adjustable 2 way corner

## Heavy duty Dado



**FU40K4**  
DADO 6 way flat corner  
(4 nodules) K4 is the HD  
DADO version for square  
and flat section structures



**QU40K8**  
Dado 6 way box corner  
(8 nodules) K8 is the HD DADO  
version for square section  
structures