COMMUNICATION

Type: Universal mast - type LS

GENERAL OUTLINE:
A welded self-supporting universal tower for light loads reaching a maximum height of 30m. The tower is ideally suited for use with flooflights and smaller systems for telecommunication,

DESIGN:
Welded standard triangular 7,5m galvanized sections. Round steel in main legs and diagonals. The sections are connected with use of flanges and high tensile quality 8.8 bolts. Section 1 can be delivered in 3 standard versions or in any other version on request.

ENVIRONMENTALLY FRIENDLY:
The tower`s slim rounded surfaces make it visually unobtrusive. The tower can also be delivered in a powder-coated version

TRANSPORT:
The sections can be stacked in layers, on a truck or in stock, for maximum cost efficiency.

MOUNTING:
Easy mounting with a mobile crane of a helicopter. Either parts of the tower , or the hole tower including all its equipment, can be assambled on the ground before it is erected. When assembling horizontally, the tower must be supported at a sufficient number of points on level ground, and with all its bolts kept loose until all parts have been assembled. The lifting slings are to be attached at the top or 1/3 from the top.

ACCESSORIES:
To be delivered with a number of standard additional equipment, such as, fixtures for light, antenna fixtures for all type of antennas, templates, anti-climb device and anti-fall systems.

QA-DOCUMENTATION:
Documentation, with responds to the specific needs and wishes of a customer, can be provided, such as calculations of strength and material, welding and hot-dip galvanizing documentation.

FOUNDATION:
Standard foundations are designed for normal soil conditions. For particular soil conditions, specific foundations can be designed.

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UTILISATION AREA:

Lighting for quay structures, sports grounds, ndustrial areas, crossroads, roundabouts, car parks, etc.

Smaller installations for tele communication

Common antenna systems for radio and TV

MATERIAL:
Steel quality:….NS-EN 10025-93
Steel grade:main structure-S 355 J0
Steel grade:accessories-S 235 JR G2
Bolts and Nuts: ISO 898-1/2 quality 8.8
Foundation bolts: ISO 898-1/2 quality 8.8

«PRODUCT SUMMARY»

- Standardised sections / max flexibility
- Attracts little attention in the field of view
- A product in a series of universial towers with standard equipment.
- A wide range of utilisation areas.

HOT DIP GALVANIZING:
Standard according to NS-EN ISO 1461. If other requirements, the LS tower can be galvanized according to other international standard.

LOAD CAPACITY:
The table below shows the equivalent top area capacity as designed according to Eurocode 3 and the wind load according to NS 3479 and NS 3479-Al. The equivalent top area(AC) is the total calculated area including all equipment—such as cables and antennas—multiplied by its own shapefactor(Cf) multiplied by the ratio of the height of the equipment(Hant) divided by the total height of the tower(Htot)

EQUIVALENT TOP AREA:

Table for LS:				**C x A (m2)**					
Type of mast	Height (m)	Sections	Weight (kg)	22 m/s	24 m/s	26 m/s	28 m/s	Max sway (deg)	Foundation
LS 800-4	30,0	1+2+3+4	777	1,03	0,78	0,38	0,00	1,46	F800
LS 800-4A	27,0	1A+2+3+4	741	1,99	1,36	0,86	0,47	1,31	F800
LS 800-4B	25,5	1B+2+3+4	724	2,35	1,67	1,14	0,72	1,12	F800
LS 800-3	22,5	2+3+4	683	3,20	2,40	1,78	1,29	0,94	F800
LS 650-3	22,5	1+2+3	470	1,14	0,88	0,68	0,48	1,14	F650
LS 650-3A	19,5	1A+2+3	434	2,33	1,83	1,4	1,02	1,03	F650
LS 650-3B	18,0	1B+2+3	417	2,94	2,28	1,75	1,34	0,94	F650
LS 800-2	15,0	3+4	534	6,96	5,63	4,60	3,78	0,48	F800
LS 650-2	15,0	2+3	376	4,18	3,34	2,65	2,15	0,71	F650
LS 500-2	15,0	1+2	243	1,33	1,04	0,82	0,64	0,74	F500
LS 500-2A	12,0	1A+2	207	2,81	2,24	1,80	1,45	0,64	F500
LS 500-2B	10,5	1B+2	190	3,55	2,88	2,35	1,94	0,54	F500
LS 350-1	7,5	1	94	1,75	1,40	1,13	0,93	0,28	F350

Designed acc. to Norwegian Standard NS 3491-4, wind load.
The towers is placed in terrain category 2, Flat field.
Sway is designed with 70% of full wind speed.

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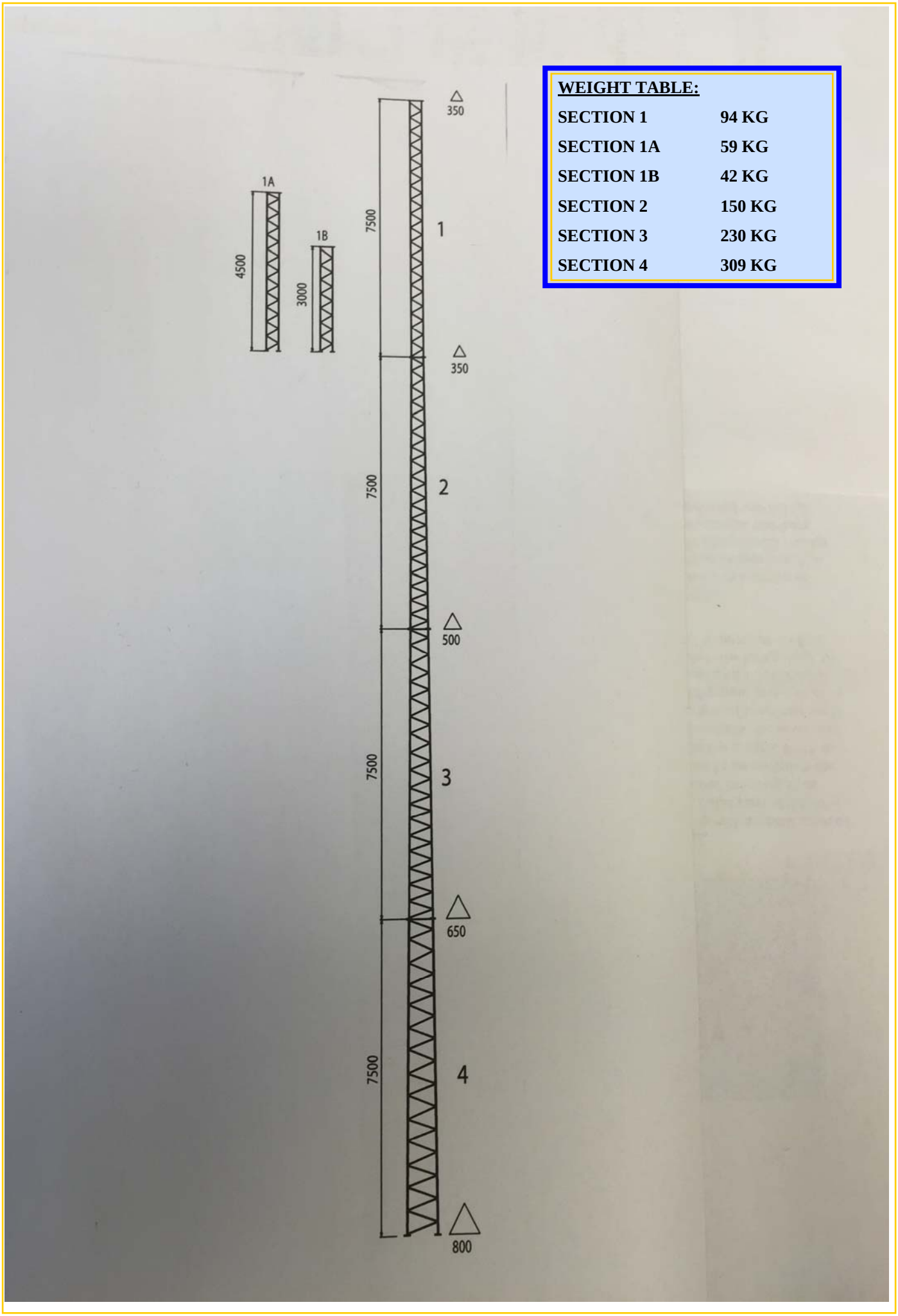

WEIGHT TABLE:

SECTION 1	**94 KG**
SECTION 1A	**59 KG**
SECTION 1B	**42 KG**
SECTION 2	**150 KG**
SECTION 3	**230 KG**
SECTION 4	**309 KG**

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