TELESCOPIC/TILT-OVER TOWERS

VERSATOWER SERIES STANDARD AND HEAVY RANGE 7-36m

- **Section Lengths 20' and 40'**
- **Large range of Standard Accessories**
- **Special units engineered to customers requirements**

A range of interchangeable, telescopic tilt-over towers in static and mobile models for lighting, telecommunications, airport approach lights, security (cctv), meteorological sensors, environment monitoring, etc.

The Versatower System is unique in the field of telescopic towers. From its inception to the present day a continuous research and development programme has produced a range of over 50 models, available at highly competitive prices to cover a wide range of applications.

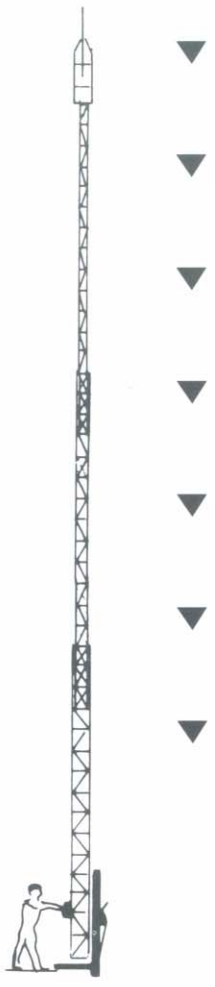
The basic structure has a high strength/low weight/low surface area ratio. The low weight factor enables the towers to be easily erected by two men. The tilt-over facility (luffing) enables all maintenance on lamps, aerials, instruments, cameras, etc. to be carried out at ground level.

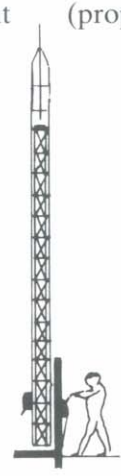
All major structural components are hot dip galvanised (zinc) after manufacture. Both Standard and Heavy Duty series are free standing (unguyed) up to 18m. Above this level, all units (with exception of the model T85) are guyed and our list prices include guying equipment where appropiate. However, for conditions of severe exposure, guy sets are available as optional extras for towers up to 18m and the T85 model.

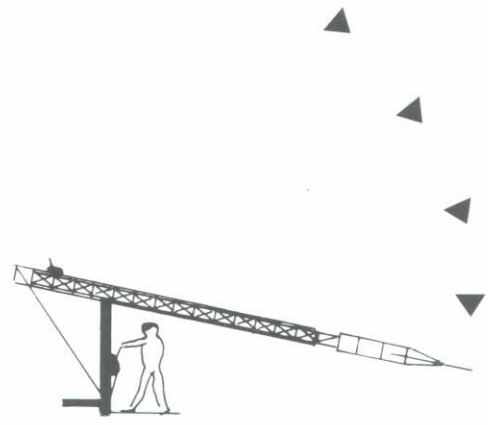
Detailed specifications are available for each model, giving maximum head loads and wind speeds.

Our technical staff are available to advise on specific applications. The vital statistics required for evaluation are:

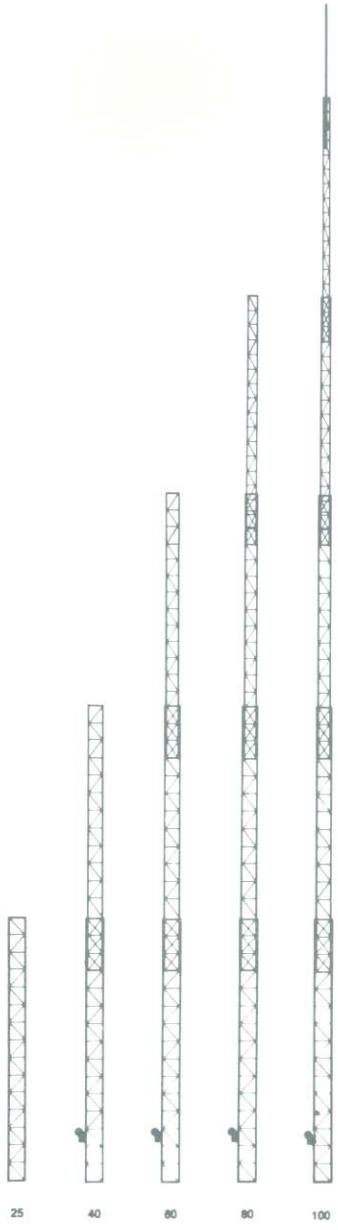
Head load (weight and surface area)
Location (maximum exposure wind speed)
Height (proposed working height of array)







South Midlands Communications Ltd.
SM House, School Close, Chandlers Ford Industrial Estate, Eastleigh, Hampshire SO53 4BY



VERSATOWER MAST & BASE OPTIONS

MAST UNITS

Mast Units
Triangular in section and fabricated from tube complete with pulley brackets for telescopic gear.

Standard (13M20) Series
This series was designed in 1967 in accordance with BS449 and CP3 Chapter V: amendment 1 in force at that time. With the advent of CP3 Chapter V: Part 2 in 1972 the tower now complies with requirements for 0.44m² of array at 39 m/sec (85 mph) in areas of maximum exposure in the UK.

Heavy Duty (16M20) Series
This series was introduced following the 1972 revised code and is designed to carry head loads of up to 56 kg (125 lb) in wind speeds of up to 52 m/sec (117 mph) depending on the surface area of the array and exposure conditions.

All Towers are supplied complete with manual winches (12 vDC, 110 vAC and 240 vAC electric winch options available) and all necessary operating ropes. Guy sets can be supplied for all towers, and are supplied as standard on units over 18m in height.

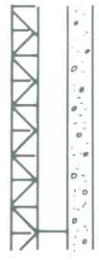
BASE UNITS

Standard post.
3.65m long. 1.82m fixed into the ground. Assuming a soil bearing pressure of 1 ton/ft² no concrete required provided the hole is correctly backfilled.

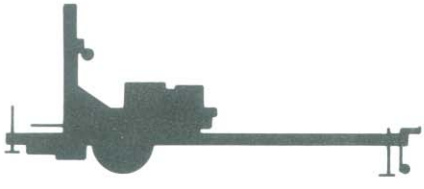
Baseplated post
1.82m long and requires a block of concrete the size of which will depend upon the series selected and the local soil conditions.

Socket post
3.65m long and is used in conjunction with the socket (S6) enabling the post to be easily re-located.

Fixed base
Factory fitted to the FB series of non tilt-over towers and requires a concrete base of similar proportions to the BP6 baseplated post.



Wall mountings
Allows mast to be erected against the side of building. Suitable for towers up to 18m high.



Mobile chasis
Supplied complete with road lights, jockey wheel and over run brakes. Closed dimensions for towing are 2.28m wide x 5.88m long. Maximum extended dimensions (with tower fully erected): 5.93m wide x 7.7m long.

VERSATOWER HEAD UNITS ELECTRIC WINCHES AND SPECIAL SERIES TOWERS

HEAD UNITS AND WINCHES

H2 Head Unit
Fitted with twin guide tubes with clamp screws which will admit a standard scaffold tube. Use when rotation of the array is not required.

H2/R Head Unit
Terminates in a flat plate drilled to take a stay bearing (GS/065) for use with antenna rotators.

Lamp Brackets
Suitable for mounting 2.4 or 6 floodlight projectors. The cross arms are rotable to give a multi-directional spread of light.

CCTV Camera platform
The triangluar lattice mast terminates in a flat plate with a tubular upstand and top plate drilled to receive pan and tilt gear. The tubular upstand provides clearance for camera when in extreme tilt mode.

Electric winches
Model 102A (110 volt). Suitable for standard series towers up to 18m.

Model ED35 (240 volt)
Heavy duty winch suitable for all other models in the Versatower range.

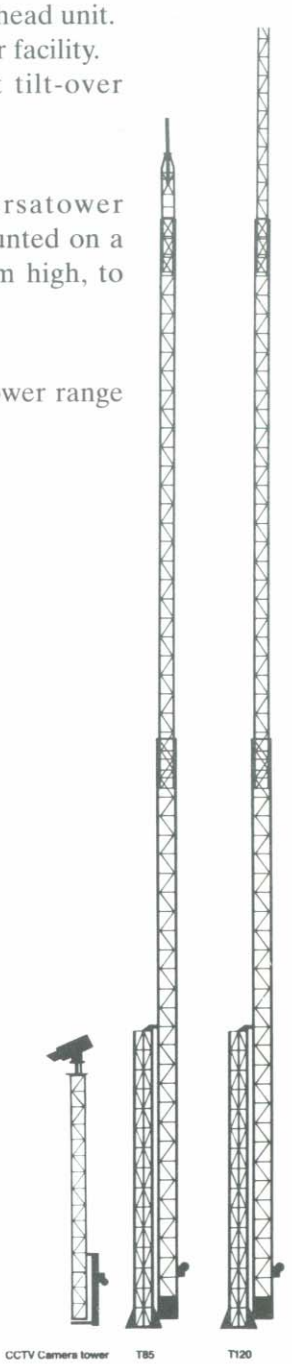
Model M3100 (12v or 24v DC)
Suitable for mobile models when power is taken from the towing vehicle battery.

"T" TOWER RANGES

CCTV Camera towers
Based on the models BP25 and FB25 with single lattice section terminating in a CCTV Camera mount, in lieu of standard detachable head unit.
BP25 - Baseplated model with tilt-over facility.
FB25 - Fixed based model without tilt-over facility.

T85 Tower
Constructed from standard Versatower components with lattice sections, mounted on a lattice ground post approximately 6m high, to produce a balanced tilt gear facility.

T120 Tower
The tallest static tower in the Versatower range which includes full guying.



VERSATOWER HEADLOAD & WIND RATINGS

NOTE: All ratings are for tubular antenna arrays. For floodlight and dish antenna ratings refer to SMC Ltd.

Maximum area of headload in square feet.
"G" denotes tower must be guyed

16M20 HEAVY DUTY SERIES

Wind Speed		Height of Mast			
mph	**kph**	**40'/12m**	**60'/18m**	**80'/24m**	**100'/30m**
60	97	46.7	25.3	13.7	G
70	113	33.2	17.5	9.2	G
80	129	24.5	12.6	6.2	G
85	137	21.3	10.7	5.2(26.9G)	26.9(G)
90	145	18.7	9.2	17.0(G)	-
100	161	14.4	6.6	9.9(G)	17.0(G)
110	177	11.2	4.8	-	-
120	193	8.7	3.1	-	9.9(G)
Max dead weight (kg)		**56**	**56**	**56**	**25**

13M20 STANDARD SERIES

Wind Speed		Height of Mast			
mph	**kph**	**25'/7.5m**	**40'/12m**	**60'/18m**	**80'/24m**
60	97	46.6	26.4	12.8	-
70	113	34.5	18.5	8.9	-
80	129	26.1	13.3	6.0	-
85	137	22.9	11.3	4.9	13.45(G)
90	145	20.2	9.6	4.1	-
100	161	15.8	7.0	2.6	8.5(G)
110	177	12.7	5.2	G	-
120	193	10.3	3.8	G	4.96(G)
Max dead weight (kg)		**56**	**56**	**56**	**25**

"T" SERIES TOWERS

Wind Speed		Height of Mast	
mph	**kph**	**85'/25.5m**	**120'/36m**
60	97	10.7	-
70	113	6.6	-
80	129	3.5	-
85	137	2.4	26.1(G)
90	145	1.5	-
100	161	G	15.6(G)
120	193	G	9.9(G)
Max dead weight (kg)		**56**	**56**

For further details of all tower specifications contact SMC Ltd

SMC reserves the right to change specifications without prior notice

DESIGNED & PRODUCED BY CONSORTIUM DESIGN & MARKETING (01703) 619522 AUGUST 1994