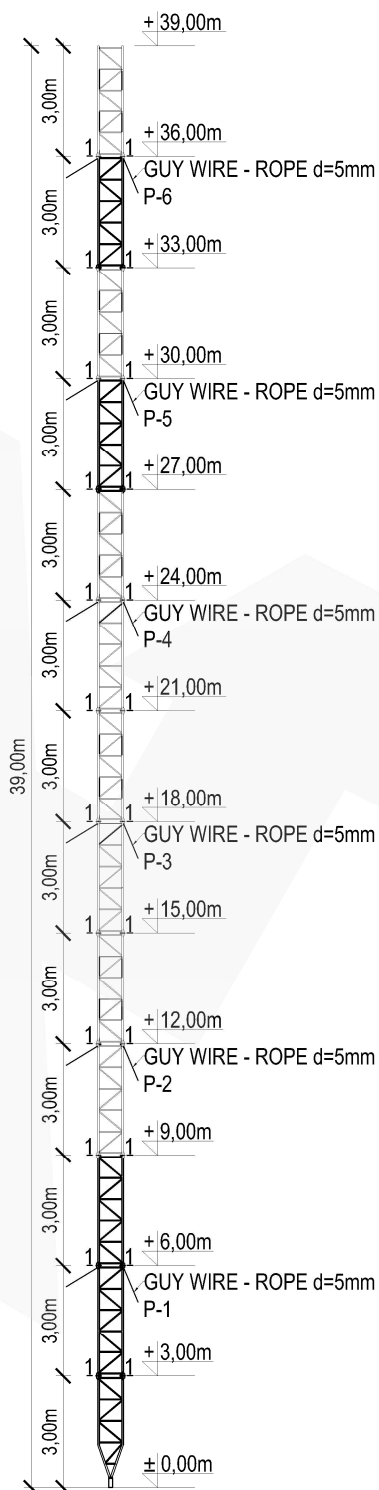




RETIS
CONSTRUCTION

ASSEMBLY DRAWING

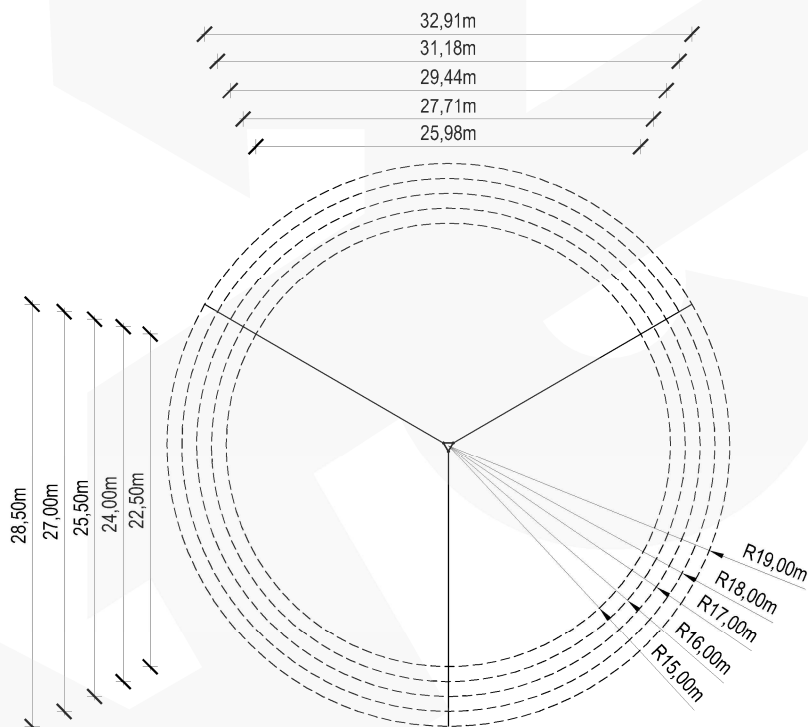
SCALE 1:200



TYPICAL MAST M650F/H39

GUY WIRES RANGE

SCALE 1:500



NOTES :

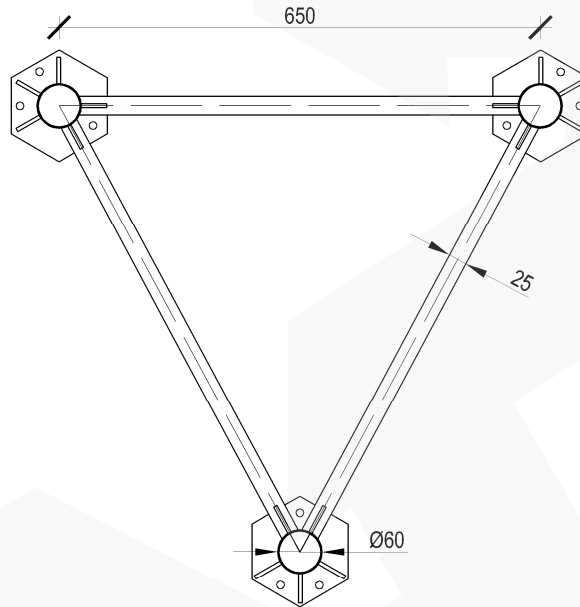
1. Typical mast construction M650F/H39
2. Aluminum alloy: EN AW-6005A T6
3. Connections: fillet welded with TIG (GTAW) argon method by the requirements of ISO 3834-2
4. Results may vary depending on local geometry and mast foundation
5. Characteristic wind speed: $V_k=22\text{m/s}$
6. Terrain category: II
7. Reliability class: II
8. Ice density: 700kg/m^3
9. Ice thickness: 2,0cm
10. Equipment total weight limit on the mast: 100kg
11. Equipment area on the mast:
- $S=1,5\text{m}^2$ at the top of the mast
12. Calculations made for anchorages in distances:
 $L=15,0\text{m}/17,0\text{m}$ or $16,0\text{m}/18,0\text{m}$ or $17,0\text{m}/19,0\text{m}$
13. Mast must be set under construction law
14. Construction on which mast will be located must be able to transfer reactions
15. Lead assembly with wind speed not more than 5m/s
16. Guy wires: steel ropes 5mm $R_m=1770\text{MPa}$ T6x7 by EN 12385
17. Initial tension of guy wires: from 8% to 15% of rated breaking strength of the guy

Manufacturer: RETIS WWW.RETIS.PL WWW.MASZTY-RETIS.PL			
Investment: SERIES OF ALUMINUM LATTICE MASTS - TYPE- 650F			
Drawing title: TYPICAL MAST M650F/H39 - ASSEMBLY DRAWING + GUY WIRES RANGE			
Date: 02.2013	Phase: typical project	Project No.: RETIS M650F	Revision: ...
Industry: construction	Project No.: RETIS_KK_M650F_H39_01		



SECTION 1-1

SCALE 1:10



Maximum reactions for the anchorages:

[m]	[kN]	Base	Guy
L=15,0/17,0		$F_x=1,01$	$F_x=11,04$
		$F_y=1,06$	$F_y=11,27$
		$F_z=56,91$	$F_z=23,42$
L=16,0/18,0		$F_x=1,05$	$F_x=11,07$
		$F_y=1,00$	$F_y=11,32$
		$F_z=54,35$	$F_z=22,18$
L=17,0/19,0		$F_x=1,08$	$F_x=11,10$
		$F_y=1,03$	$F_y=11,36$
		$F_z=52,08$	$F_z=21,06$

Maximum forces in guy wire ropes for distances:

[m]	[kN]	P-1	P-2	P-3	P-4	P-5	P-6
L=15,0/17,0		4,48	3,77	4,55	6,35	8,89	11,74
L=16,0/18,0		4,56	3,76	4,38	6,02	8,51	11,36
L=17,0/19,0		4,63	3,86	4,25	5,75	8,16	11,03

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13. Mast must be set under construction law
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Investment: SERIES OF ALUMINUM LATTICE MASTS - TYPE- 650F			
Drawing title: TYPICAL MAST M650F/H39 - SECTION + FORCES			
Date: 02.2013	Phase: typical project	Project No.: RETIS M650F	Revision: ...
Industry: construction		Project No.: RETIS_KK_M650F_H39_02	