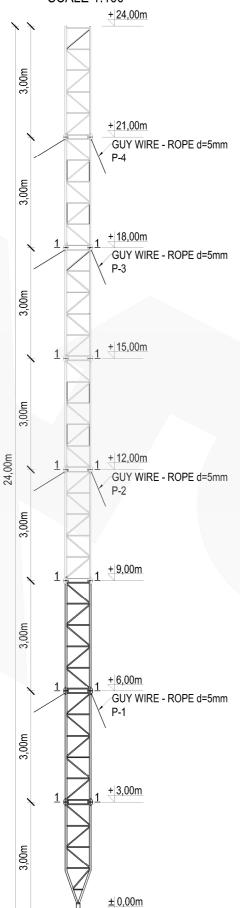
# **RETIS**CONSTRUCTION

## ASSEMBLY DRAWING

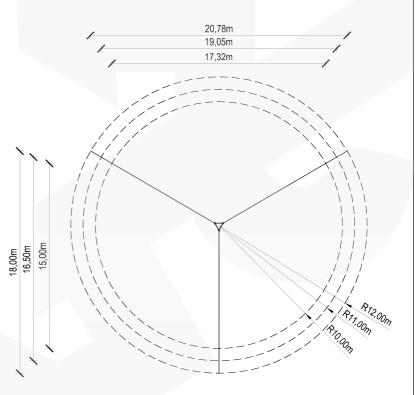
**SCALE 1:100** 



## TYPICAL MAST M650F/H24

### **GUY WIRES RANGE**

**SCALE 1:300** 



#### NOTES:

- 1. Typical mast construction M650F/H24
- 2. Aluminum alloy: EN AW-6005A T6
- 3. Connections: fillet welded with TIG (GTAW) argon methode by the requirements of ISO 3834-2
- 4. Results may vary depending on local geometry and mast foundation
- Characteristic wind speed: V<sub>k</sub>=22m/s
- Terrain category: II
- Reliability class: II Ice density: 700kg/m<sup>3</sup>
- 9. Ice thickness: 2,0cm
- 10. Equipment total weight limit on the mast: 100kg
- 11. Equipment area on the mast:
  - S=1,5m<sup>2</sup> at the top of the mast
- 12. Calculations made for anchorages in distances:
  - L=10,0m; 11,0m or 12,0m
- 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 Rm=1770MPa T6x7 by EN 12385
- 17. Initial tension of guy wires: from 8% to 15% of rated breaking strength of the guy

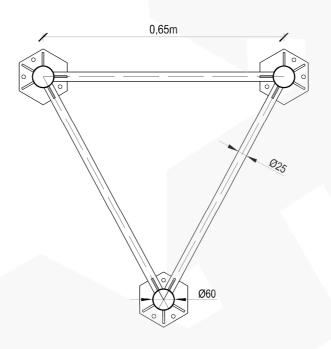
Manufacturer:	RETIS WWW.RETIS.PL WWW.MASZTY-RETIS.PL				
Investment: SERIES OF ALUMINUM LATTICE MASTS - TYPE- 650F					
Drawing title: TYPICAL MAST M650F/H24 - ASSEMBLY DRAWING + GUY WIRES RANGE					
Date: 02.2013	Phase: typical pro	ject Project No.: RETIS M650F	Revision:		
Industry: construction	Project No.: RETIS_	Project No.: RETIS_KK_M650F_H24_01			

## TYPICAL MAST M650F/H24



## **SECTION 1-1**

**SCALE 1:10** 



#### Maximum reactions for the anchorages:

[kN]	Base	Guys
	F <sub>x</sub> =0,95	F <sub>x</sub> =9,97
L=10,0	$F_{v} = 0.87$	F <sub>v</sub> =12,94
	F <sub>z</sub> =36,93	F <sub>z</sub> =18,34
	F <sub>x</sub> =0,99	F <sub>x</sub> =10,11
L=11,0	F <sub>v</sub> =0,92	F <sub>v</sub> =13,22
	F <sub>z</sub> =34,40	F <sub>z</sub> =16,92
	F <sub>x</sub> =1,03	F <sub>x</sub> =10,32
L=12,0	F <sub>v</sub> =0,97	F <sub>v</sub> =13,50
	F <sub>z</sub> =32,43	F <sub>z</sub> =15,74

Maximum forces in guy wire ropes for distances:

[kN]	P-1	P-2	P-3	P-4
L=10,0	4,66	4,71	6,58	7,82
L=11,0	4,74	4,44	6,16	7,47
L=12,0	4,81	4,26	5,81	7,16

#### NOTES:

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Manufacturer:	RETIS www.retis.pl.www.maszty-retis.pl					
Investment: SERIES OF ALUMINUM LATTICE MASTS - TYPE- 650F						
Drawing title:  TYPICAL MAST M650F/H24 - SECTION + FORCES						
Date: 02.2013		Phase: typical project	Project No.: RETIS M650F	Revision:		
Industry: construction	on	Project No.: RETIS_KK_M650F_H24_02				