## **RETIS**CONSTRUCTION

### **ASSEMBLY DRAWING**

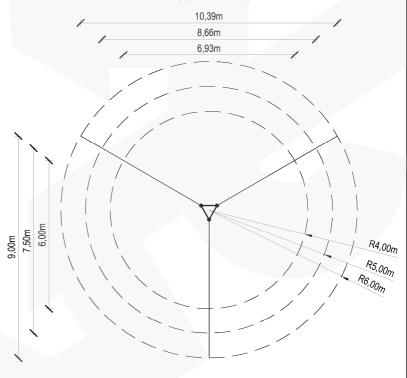
**SCALE 1:50** 

# + 12,00m + 9,00m GUY WIRE - ROPE d=5mm 3,00m + 6,00m GUY WIRE - ROPE d=5mm 3,00m + 3,00m 3,00m ± 0,00m

## TYPICAL MAST M650F/H12

#### **GUY WIRES RANGE**

**SCALE 1:150** 



#### NOTES:

- Typical mast construction M650F/H12
   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:
  - $S=1,5m^2$  at the top of the mast
- 12. Calculations made for anchorages in distances:
  - L=4,0m; 5,0m or 6,0m
- 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

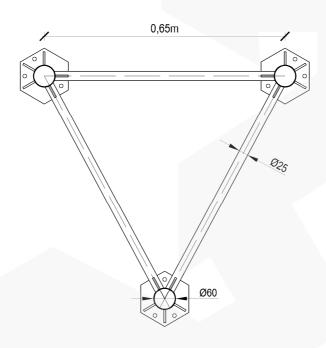
Manufacturer:	RETIS WWW.RETIS.PL WWW.MASZTY-RE	TIS.PL		
Investment:	SERIES OF ALUMINUM L	ATTICE MASTS - TYPE- 650	)F	
Drawing title: TYPIC	AL MAST M650F/H12 - ASSEN	/IBLY DRAWING + GUY WIR	ES RANGE	
Date: 02.2013	Phase: typical project	Project No.: RETIS M650F	Revision:	
Industry: construction	Project No.: RETIS_KK	Project No.: RETIS_KK_M650F_H12_01		

## TYPICAL MAST M650F/H12



### **SECTION 1-1**

**SCALE 1:10** 



#### Maximum reactions for the anchorages:

[kN]	Base	Guys
	F <sub>x</sub> =0,39	F <sub>x</sub> =5,61
L=4,0	F <sub>v</sub> =0,39	F <sub>v</sub> =5,74
· ·	F <sub>z</sub> =24,42	F <sub>z</sub> =12,93
	F <sub>x</sub> =0,36	F <sub>x</sub> =5,70
L=5.0	F <sub>v</sub> =0,38	F <sub>v</sub> =5,83
, i	F <sub>z</sub> =20,07	F <sub>z</sub> =10,40
	F <sub>x</sub> =0,37	F <sub>x</sub> =5,75
L=6.0	F <sub>v</sub> =0,40	F <sub>v</sub> =5,83
- 7,	F <sub>z</sub> =17,16	F <sub>z</sub> =8,70

#### Maximum forces in guy wire ropes for distances:

[kN]	P-1	P-2
L=4,0	7,53	7,75
L=5,0	6,13	7,00
L=6,0	5,27	6,50

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  7. Reliability class: II
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Manufacturer:	RETIS WWW.RETIS.PL WWW.MASZTY-RETIS.PL					
Investment:	SERI	ES OF ALUMINUM LAT	TICE MASTS - TYPE- 65	0F		
Drawing title:  TYPICAL MAST M650F/H12 - SECTION + FORCES						
Date: 02.2013		Phase: typical project	Project No.: RETIS M650F	Revision:		
Industry: construction		Project No.: RETIS_KK_M650F_H12_02				