

ASSEMBLY DRAWING SCALE 1:125

+ 27,00m 3.00m + 24,00m GUY WIRE - ROPE d=5mm 3.00m + 21,00m 3,00m + 18,00m GUY WIRE - ROPE d=5mm 3,00m + 15,00m 27,00m + 12,00m GUY WIRE - ROPE d=5mm P-2 3,00m + 9,00m 3,00m + 6,00m GUY WIRE - ROPE d=5mm 3.00m

+ 3,00m

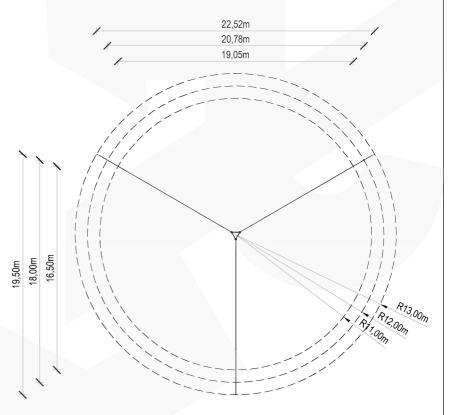
± 0,00m

3.00m

TYPICAL MAST M650F/H27

GUY WIRES RANGE

SCALE 1:300



NOTES:

- 1. Typical mast construction M650F/H27
- 2. Aluminum alloy: EN AW-6005A T6
- 3. Connections: fillet welded with TIG (GTAW) argon methode by the requirements of ISO 3834-2
- Results may vary depending on local geometry and mast foundation
- Characteristic wind speed: V_k=22m/s
- Terrain category: II
- Reliability class: II
- Ice density: 700kg/m³
- 9. Ice thickness: 2,0cm
- 10. Equipment total weight limit on the mast: 100kg
- 11. Equipment area on the mast:
 - S=1,5m² at the top of the mast
- 12. Calculations made for anchorages in distances:

L=11,0m; 12,0m or 13,0m

- 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

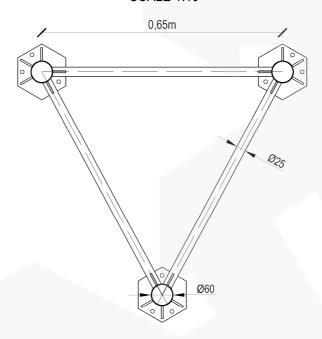
Manufacturer:	RETIS www.retis.pl www.maszty-retis.pl				
Investment:	SERIES OF ALUMINUM LAT	TICE MASTS - TYPE- 650	F		
Drawing title: TYPICA	AL MAST M650F/H27 - ASSEMB	LY DRAWING + GUY WIR	ES RANGE		
Date: 02.2013	Phase: typical project	Project No.: RETIS M650F	Revision:		
Industry: construction	Project No.: RETIS_KK_	M650F_H27_01			

TYPICAL MAST M650F/H27



SECTION 1-1

SCALE 1:10



Maximum reactions for the anchorages:

[kN]	Base	Guys
	F _x =0,70	F _x =13,16
L=11,0	F _v =0,89	F _v =14,64
	F _z =42,36	F _z =22,54
	F _x =0,78	F _x =13,38
L=12,0	F _v =0,94	F _v =14,89
	F _z =39,75	F _z =20,88
	F _x =0,85	F _x =13,58
L=13,0	F _v =0,98	F _v =15,15
	$F_z^{'}=37,50$	F _z =19,45

Maximum forces in guy wire ropes for distances:

[kN]	P-1	P-2	P-3	P-4
L=11,0	4,57	5,04	8,27	11,35
L=12,0	4,66	4,75	7,70	10,85
L=13,0	4,75	4,54	7,23	10,41

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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/H27 - SECTION + FORCES						
Date: 02.2013		Phase: typical project	Project No.: RETIS M650F	Revision:		
Industry: construction	1	Project No.: RETIS_KK_M650F_H27_02				