

**Note:**

- Values stated in Specifications are for bracket only, tower structure to be checked for additional loading before installation
- All items finish hot dip galvanized
- All fasteners M16 Grade 8.8 HDG.
- All fasteners to be torqued 170Nm (±10%)
- Weight of bracket incl. fasteners = 78kg.

**Specifications**

Design Criteria	
SANS 10160(Wind load)	SANS 10162(Structural)
Safe work load	
Dead weight	A 300kg
Lateral loading (Front)	B 1000kg
Lateral loading (Side) Depend tower	C 750kg
Lateral loading (Back)	D 1000kg
Torque (On tubing)	E 2500Nm

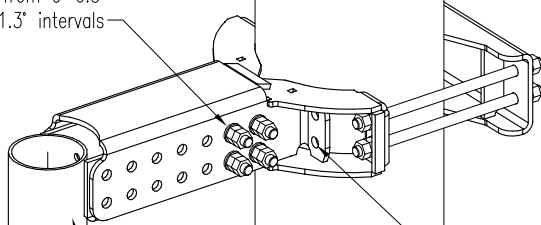
**Parts list**

Qty/Description	Part number
1x 2M Pole	GR112/140/01-00
2x Top pole sliding clamp	GR112/140/02-00
2x Saddle	GR112/140/03-00

**Fastners list**

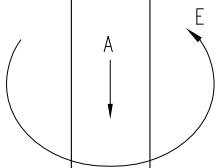
Description	Qty
M16X60 HDG Setscrew	16
M16x330 Threaded rod	8
M16 Hex nut	64
M16 Flat washer	48

Adjustability to accommodate various angles of tower legs, from 0-6.5° @1.3° intervals



Mounting point for earth spike

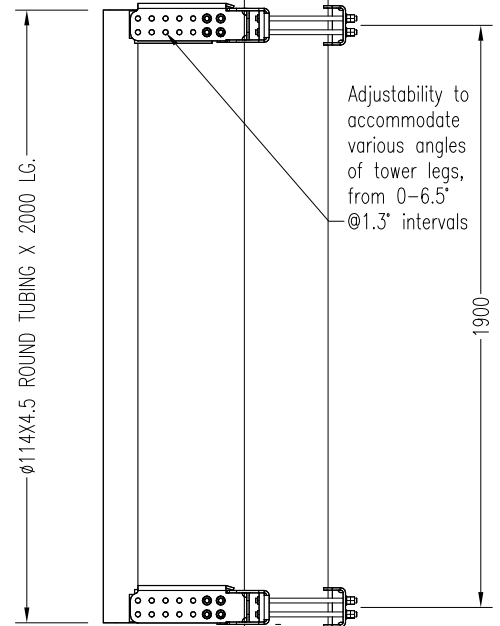
When clamping smaller than, Ø127 tubing and 130 angle, use threaded rods through inner set of holes to reduce bending moment on bracket.



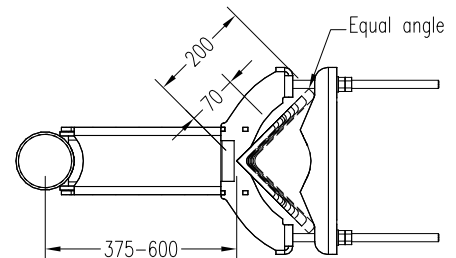
B  
D

Install brackets as close as possible to bracing on legs to reduce bending moment on structure

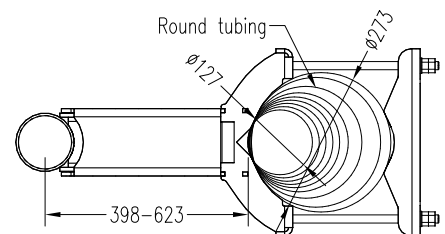
ISOMETRIC VIEW (Typical installation)



SIDE VIEW



TOP VIEW Clamped to angle iron (Tower removed for clarity)



TOP VIEW Clamped to round tubing (Tower removed for clarity)



**Graffo** Innovative wireless infrastructure solutions

Tel: +27 (0)21 905-0010

Fax: +27 (0)21 905-0020

Web: www.graffo.co.za

**HHD Microwave dish bracket, 2m Ø114**  
Part no. : GR112-140-00-00A  
ZA PAT. APP. 2011/02655