



MILLARD TOWERS LTD.

FRANGIBLE AWOS TOWER



Millard Towers manufactures a complete line of Frangible Meteorology Towers. The design utilizes Millard's unique lattice structure that is both strong and frangible. Towers are fully compliant with ICAO Doc 9157: Part 6, Frangibility and are designed specifically to meet the performance requirements of sensitive measurement equipment. Towers are made from high-grade Aluminum Alloy and is suitable for the most extreme environmental conditions with high wind, ice, UV and saltwater exposure. rigid, yet yielding if accidentally impacted.

Millard's standard 10m AWOS design is available with Fixed Base, Tilt Base, and Arm Hinge servicing options. More robust versions designed to support larger equipment in more demanding environments are also available in the form of Heavy and Super Duty offerings. Since we design and manufacture everything in-house, custom designs are always an option whether it's perennially in demand, or a one-off.

In addition to towers, Millard also provide a complete line of accessories and mounts to ensure simple and safe installation and maintenance. A complete structural package nicely compliments the highly technical meteorology industry and provides end users with a seamless solution.



KEEPING THE WORLD ON COURSE SINCE 1951

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2021-04

CONSTRUCTION.

SECTIONS, PLATES, ACCESSORIES (ASTM): 6000 Series Aluminum
 HARDWARE (ASTM): ECO GUARD Grade 5 Steel
 POWDER COATING (AAMA): Banded alternating orange-white
 RECYCLABLE (LEED): Made from 75% recycled Aluminum
 WARRANTY: 10 Years

PERFORMANCE.

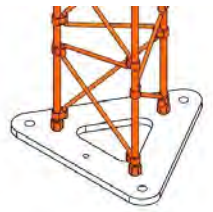
FRANGIBILITY: ICAO Doc 9157 & FAA AC 150 / 5345-45
 WIND LOAD w/ NO ICE: 180km/h (250km/h) Gust*
 WIND LOAD w/ 12mm ICE: 140km/h (195km/h) Gust*
 WIND LOAD w/ 25mm ICE: 115km/h (160km/h) Gust*
 TYPICAL LIFESPAN: 25 Years
 * Assumes 0.2m² of equipment mounted at top. Heavy Duty in brackets.

STANDARD DESIGNS

Custom heights, loads, mounts, and finishes are available.

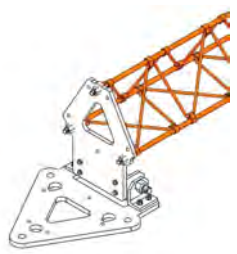
PART NO	HEIGHT	SERVICING	STRENGTH	BASE	MOUNT	FINISH
TFMA-0900-FR01	10m	Fixed Base	Regular Duty	13S	2" NPT (60mm OD)	Orange-White (x7)
TFMA-0900-FH01	10m	Fixed Base	Heavy Duty	13S	2" NPT (60mm OD)	Orange-White (x7)
TFMA-0900-TR01	10m	Tilt Base	Regular Duty	13S	2" NPT (60mm OD)	Orange-White (x7)
TFMA-0900-TH01	10m	Tilt Base	Heavy Duty	13S	2" NPT (60mm OD)	Orange-White (x7)
TFMA-0900-AR01	10m	Arm Hinge*	Regular Duty	13S	2" NPT (60mm OD)	Orange-White (x7)
TFMA-0900-AH01	10m	Arm Hinge*	Heavy Duty	13S	2" NPT (60mm OD)	Orange-White (x7)

* Requires Removable Winch to operate. Minimum one required per site.



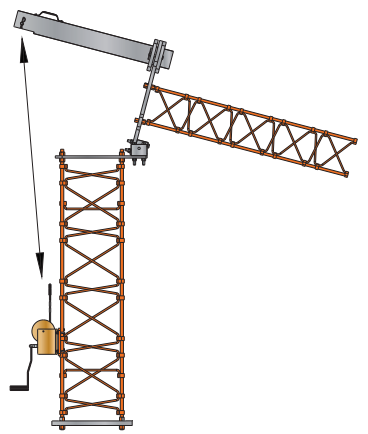
FIXED BASE

Fixed Base designs must be maintained from the ground if it can be reached, or by a portable ladder. However, designs are light enough to be installed by hand without the use of a crane.



TILT BASE

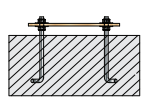
Tilt Base designs are assembled and maintained along the ground and raised manually by hand. Operation should be performed by 2-3 people.



ARM HINGE

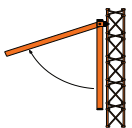
Arm Hinges utilize a Tilt Tube and Wormgear Winch for mechanical raising and lowering of the tower. Maintenance can be safely performed by a single technician.

FOUNDATION KIT



- CNC cut wood template
 - HD galvanized anchors
 - Tilt Base and Center Hinge
- 13S: AAF-13S0-0000

TILT STAND



- Supports pole during maintenance
 - Mounts to top section and pivots
 - Powder coated orange
- 7T-9T: ATA-TT00-0007-G

OBSTRUCTION LIGHT



- L-810 Red LED, 32cd
 - Powder coated orange mount
- Available in the following options:
 ELECTRICAL: 120-240VAC, 12-24VDC
 LAMPS: Single, Double
 INFRARED: Regular, NVG Compliant
 MOUNT: 30cm, 60cm

REMOVABLE WINCH



- Required for all Arm Hinges
 - Wormgear winch + tilt tube
 - Stainless steel aircraft cable
- ALL: ATA-WN00-0006

CABINET MOUNT



- Aluminum strut (x2 per set)
 - Powder coated orange
 - Includes hardware
- 45cm: AMT-1616-1801-G

CROSSARM



- Aluminum
 - Powder coated orange
 - Includes mounts
- 1.50m: AMB-0000-0103-G

LIGHTNING PROTECTION KIT



- Passive system
 - Includes air terminal, down conductor, ground rod, mounts
- 10m: AAL-0900-0002