

No. B.V-7/2013-14-C (QRs)-(9) 9647
भारत सरकार/Government of India
गृह मंत्रालय/Ministry of Home Affairs
पुलिस आधुनिकीकरण प्रभाग /Police Modernization Division
संभरण-I डेस्क /Prov.I Desk

26, Man Singh Road, Jaisalmer House,
New Delhi, the 21 November, 2014

To,

The DsG: AR (through LOAR), BSF, CISF, CRPF, ITBP, SSB, NSG & BPR&D.

Subject: QRs and Trial Directives of Triangular latticed Aerial Mast (G.I.).

The undersigned is directed to refer to the subject mentioned above and to say that the QRs and Trial Directive in respect of Triangular latticed Aerial Mast (G.I.) as per Annex-I and Annex-II respectively have been approved by the competent authority in MHA.

2. Henceforth, all the CAPFs should procure the above item required by them strictly as per the laid down QRs.
3. Concerned CAPF will be accountable for correctness of QRs.

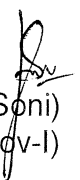
Yours faithfully,


(P. K. Srivastava)
Under Secretary to the Govt. of India

Encl: As above.

Copy forwarded for necessary action to:

SO (IT), MHA - with the request to host the QRs and Trial Directives of Triangular latticed Aerial Mast (G.I.) on official website of MHA (under the page of Organizational Set up, Police Modernization Division-Communication Eqpts.). Soft copy is being sent through email also.


(R. K. Soni)
Section officer (Prov-I)

Copy to: Director (Procurement), MHA



21/11/2014

QRs/ SPECIFICATIONS OF TRIANGULAR LATTICED AERIAL MAST (G.I.)

Sl. No.	PARAMETERS	DESIRED SPECIFICATION FOR 80 Feet	DESIRED SPECIFICATION FOR 60 Feet
1	a) Total Height of Latticed Mast	80 Feet	60 Feet
	b) Number of Sections	08	06
	c) Height of One section	10 Feet	10 feet
	d) Vertical Member	M.S.Rod of 16 mm dia \pm 5%	M.S.Rod of 16 mm dia \pm 5%
	e) Bracing	M.S.Rod of 7 mm dia \pm 5%	M.S.Rod of 7 mm dia \pm 5%
	f) Joint	Each section should have coupling/joining arrangement with an angle iron of 40 mm x 40 mm x 6 mm (\pm 5%) size at each end.	Each section should have coupling/joining arrangement with an angle iron of 40 mm x 40 mm x 6 mm (\pm 5%) size at each end.
2	Top Plate	M.S Plate of 5 mm \pm 5% thickness having arrangement for Installation of vertical and horizontal antenna.	M.S Plate of 5 mm \pm 5% thickness having arrangement for Installation of vertical and horizontal antenna.
3	Base Plate	Hot dip Galvanized MS Plate of size 450 x 450x 6 mm (\pm 5%) with Hinge arrangement for erection and putting down.	Hot dip Galvanized MS Plate of size 450 x 450x 6 mm (\pm 5%) with Hinge arrangement for erection and putting down.
4	Base spike	G.I of 450 mm x 16 mm dia \pm 5% (4 Nos)	G.I of 450 mm x 16 mm dia \pm 5% (4 Nos)
5	Guy ropes stainless steel	3 No. 6 mm Diameter \pm 5% steel GI Guy ropes at height of 20 Ft, 40 Ft, 60 Ft and 80 Ft., Total 12 Nos. Total length of guy ropes should be 320 Mtr.	3 No. 6 mm Diameter \pm 5% steel GI Guy ropes at height of 20 Ft, 40 Ft and 60 Ft i.e. total 09 Nos. Total length of guy ropes should be 240 Mtr.
6	Guy anchor	3 No. stakes/guy anchors of T-iron angle of size 50 mm x 50mm x 6 mm and 900 mm (\pm 5%) long having Arrangement for fitment of 4 Nos. D Shackles.	3 No. stakes/guy anchors of T-iron angle of size 50 mm x 50mm x 6 mm and 900 mm (\pm 5%) long having Arrangement for fitment of 3 Nos. D Shackles.
7	Straining Screws	12 No. of size 5/8" x 12" \pm 5%	9 No. of size 5/8" x 12" \pm 5%
8	D Shackles	12 No. of size 3/8" \pm 5%	9 No. of size 3/8" \pm 5%
9	Thimbles	24 Nos.	18 Nos.
10	Bulldog Clamp	48 No of 1/4" size	36 No of 1/4" size
11	Nuts & Bolts	As on reqd. Basis.	As on reqd. Basis.
12	Base plate, Nails (base spike), Pegs, guy tensioner & clamps etc should be made of hot dip Galvanized and of specification described above.		

[Handwritten signatures and initials]

13	Lightening Arrester & Antenna Bracket:-		
	a) Lightening arrester	4 Ft long made of copper	4 Ft long made of copper
	b) Lightening conductor	Copper wire of 8 SWG 120 Ft long	Copper wire of 8 SWG 100 Ft long
	c) Antenna bracket	Antenna bracket for installation of antenna(As per user organization requirement)	Antenna bracket for installation of antenna (As per user organization requirement)
	d) Earthing Rod	6 ft long G.I of 15 mm with copper coating of 2mm	6 ft long G.I of 15 mm with copper coating of 2mm

SPECIFICATION FOR INSTALLATION KIT FOR ERRECTION OF 60/ 80 FT LATTICED AERIAL MAST

- 1 Deric assembly :- Deric assembly should be made of hot dip galvanized MS Pipe , whose outer diameter is of 76 mm ±5%, wall thickness to be of 4mm and having total length of 25 feet split in to 3 sections of 10ft + 10 Ft + 5 ft duly flanged
- 2 Tirfor Pulling & Lifting Machine of minimum one ton capacity
- 3 Hammer Sledge of 5 Kg weight with wooden Handle.
- 4 Safety Belt of ISI/BIS Mark

Note:- The aerial installation kit should be compatible with any kind of 60/80 ft. Latticed aerial mast.

[Signature]
(M S Yadav, AC (Tech), CRPF)

[Signature]
(Gurbachan Singh, SSO (E), BPR&D)

[Signature]
(Sunil Kumar, DC (Comn), ITBP)

[Signature]
(Ravi Ranjan DC (Eqpt), BSF)

[Signature]
(Ravindra Kumar, Sqn Comdr, NSG)

[Signature]
(Virendra Agrawal, DIG(Eqpt), CRPF)

[Signature]
(Shailendra Kumar, IG (Comn), CRPF)

✓
Approved/ Not Approved

(Pranay Sahay, IPS)
DG, CRPF

[Signature]

Annex-II
~~Annex-III~~
 3

TRIAL DIRECTIVE OF 60/80 FEET TRIANGULAR LATTICED AERIAL MAST (G.I.)

Trial of Latticed Mast will be conducted by a Board of Officers in the presence of Vendor or representative of Vendor/Firms to assess actual performance of the Latticed Mast.

2. All parameter / Specifications mentioned in the QRs will be checked by board of officers by ascertaining/Verifying following checks.

Physical Checks: In this category specifications of the equipment will be checked physically as per QRs.


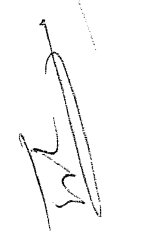
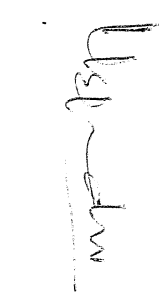
Functional Check:- The vendors will show all features/ configuration of the equipment to the board of officers during technical evaluation.

Submission of certificates :- Specification which can not be checked due to lack of testing facilities/ expertise, a certificate of test shown against each will be provided by vendor/firm during physical trial of the equipment during trial.

SL. NO.	PARAMETER	DESIRED SPECIFICATION FOR 80 Feet	DESIRED SPECIFICATION FOR 60 Feet	Trial procedure
1	a) Total Height of Latticed Mast	80 Feet	60 Feet	B.O.O will physically check.
	b) Number of Sections	08	06	B.O.O will physically check.
	c) Height of One section	10 Feet	10 Feet	Board will measure height of each section with the help of measuring tape.
	d) Vertical Member	M.S.Rod of 16 mm diameter $\pm 5\%$	M.S.Rod of 16 mm diameter $\pm 5\%$	Board will measure diameter with the help of standard measuring tools.
	e) Bracing	M.S.Rod of 7 mm diameter $\pm 5\%$	M.S.Rod of 7 mm diameter $\pm 5\%$	Board will measure diameter with the help of standard measuring tools.
	f) Joint	Each section should have coupling/joining arrangement with an angle iron of 40 mm x 40 mm x 6 mm ($\pm 5\%$) size at each end.	Each section should have coupling/joining arrangement with an angle iron of 40 mm x 40 mm x 6 mm ($\pm 5\%$) size at each end.	
2	Top Plate	M.S Plate of 5 mm $\pm 5\%$ thickness having arrangement for installation of vertical and horizontal antenna.	M.S Plate of 5 mm $\pm 5\%$ thickness having arrangement for installation of vertical and horizontal antenna.	Board will measure diameter with the help of standard measuring tools.
3	Base Plate	Hot dip Galvanized MS Plate of size 450 x 450x 6 mm ($\pm 5\%$) with Hinge arrangement for erection and putting down.	Hot dip Galvanized MS Plate of size 450 x 450x 6 mm ($\pm 5\%$) with Hinge arrangement for erection and putting down.	Board will check Base Plate Physically and measure size with the help of standard measuring tools.
4	Base spike	G.I of 450 mm x 16 mm dia $\pm 5\%$ (4 Nos)	G.I of 450 mm x 16 mm dia $\pm 5\%$ (4 Nos)	Board will checked Physically and measure size with the help of standard measuring tools.

[Handwritten signatures and initials]

5	Guy ropes stainless steel	3 No. 6 mm Diameter \pm 5% steel GI Guy ropes at height of 20 Ft, 40 Ft, 60 Ft and 80 Ft., Total 12 Nos. Total length of guy ropes should be 320 Mtr.	3 No. 6 mm Diameter \pm 5% steel GI Guy ropes at height of 20 Ft, 40 Ft and 60 Ft i.e. total 09 Nos. Total length of guy ropes should be 240 Mtr.	Board will checked Physically and will measure size with the help of standard measuring tools.
6	Guy anchor	3 No. stakes/guy anchors of T-iron angle of size 50 mm x 50mm x 6 mm and 900 mm (\pm 5%) long having Arrangement for fitment of 3 No. D Shackles.	3 No. stakes/guy anchors of T-iron angle of size 50 mm x 50mm x 6 mm and 900 mm (\pm 5%) long having Arrangement for fitment of 3 No. D Shackles.	Board will check Guy anchor Physically and will measure size with the help of standard measuring tools.
7	Straining Screws	12 No. of size 5/8" x 12" \pm 5%	9 No. of size 5/8" x 12" \pm 5%	Board will check Straining Screws/ D shackles Physically and will measure size with the help of standard measuring tools.
8	D Shackles	12 No. of size 3/8" \pm 5%	9 No. of size 3/8" \pm 5%	Board will check it practically
9	Thimbles	24 Nos.	18 Nos.	Board will check it practically.
10	Bulldog Clamp	48 No of 1/4" size	36 No of 1/4" size	Board will check it practically.
11	Nuts & Bolts	As on reqd. Basis.	As on reqd. Basis.	Board will check all physically.
12	Base plate, Nails (base spike), Pegs, guy tensioner & clamps etc should be made of hot dip Galvanized and of specification described above.			
13	Lightening Arrester & Antenna Bracket:-			
	a) Lightening arrester	4 Ft long made of copper	4 Ft long made of copper	Board will check it practically and measure the size.
	b) Lightening conductor	Copper wire of 8 SWG 120 Feet long	Copper wire of 8 SWG 100 Feet long	Board will check it practically and measure the size.
	c) Antenna bracket	Antenna bracket for installation of antenna (As per user organization requirement)	Antenna bracket for installation of antenna (As per user organization requirement)	Board will check it physically.
	d) Earthing Rod	6 ft long G.I of 15 mm with copper coating of 2mm.	6 ft long G.I of 15 mm with copper coating of 2mm.	Board will check it physically as well as measure the size with the help of scale.

SPECIFICATION FOR INSTALLATION KIT FOR ERECTION OF 60/ 80 FT LATTICED AERIAL MAST

1	Deric assembly :- Deric assembly should be made of hot dip galvanized MS Pipe , whose outer diameter is of 76 mm \pm 5%, wall thickness to be of 4mm and having total length of 25 feet split in to 3 sections of 10ft + 10 Ft + 5 ft duly flanged		Board will check it practically as well as measure size with the help of scale.
2	Tirfor Pulling & Lifting Machine of minimum one ton capacity		Board will check it physically as well as vendor will provide certificate from any government authorized laboratory about machine capacity.
3	Hammer Sledge of 5 Kg weight with wooden Handle.		Board will check it physically as well as measure weight with the help of weighing machine.
4	Safety Belt of ISI/BIS Mark		Board will check it physically.

[Signature]
(M S Yadav, AC (Tech), CRPF)

[Signature]
(Gurbachan Singh, SSO (E), BPR&D)

[Signature]
(Sunil Kumar, DC (Comn), ITBP)

[Signature]
(Ravi Ranjan DC (Eqpt), BSF)

[Signature]
(Ravindra Kumar, Sqn Comdr, NSG)

[Signature]
(Virendra Agrawal, DIG(Eqpt), CRPF)

[Signature]
(Shailendra Kumar, (Comn), CRPF)

Approved/ Not Approved

[Signature]
(Pranay Sahay, IPS)
DG, CRPF