Appendix 2.1 – technical description

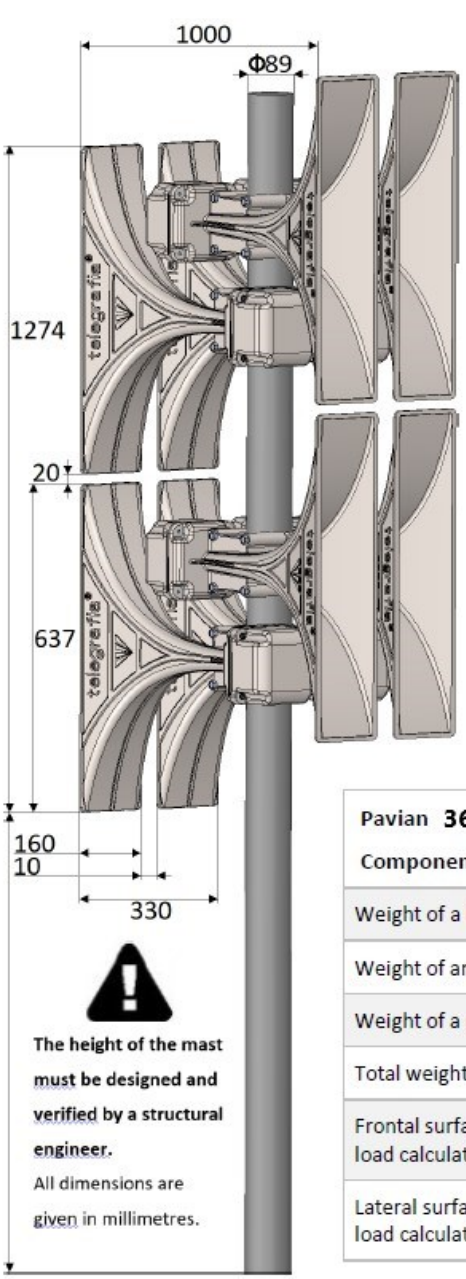
The tenderer must fill in the two columns on the right.

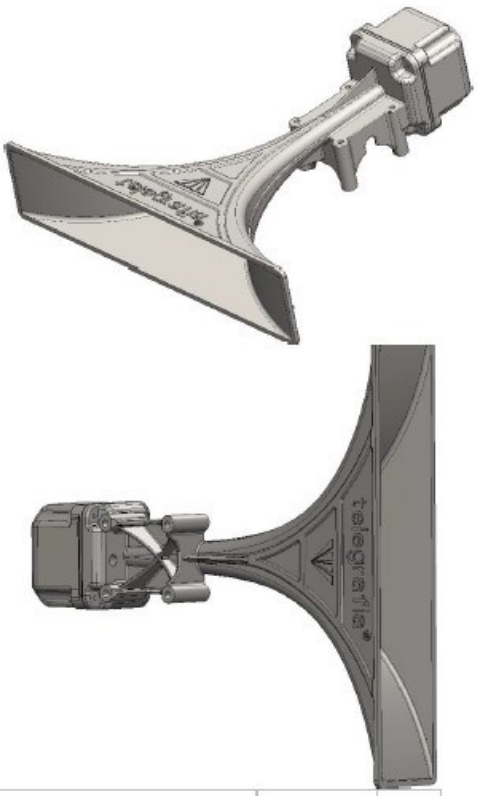
Requirement Nr	Requirement description	Does the offer meet the requirement? YES/NO	Reference to the documentation of the offered product, on the basis of which the fulfillment of the requirement can be verified
1.	We need a non-penetrating rooftop mast to install emergency sirens on the roof of buildings with flat roofs. Required for this is round tube with a diameter of 88.9mm, wall thickness of 4mm. Pipe length 5m.		
2.	The pipe must be able to be installed vertically on a flat roof without damaging the roof covering.		
3.	The strength calculations of the non-penetrating rooftop mast must correspond to the maximum weight and wind load of the siren set according to standard EVS-EN 1991-1-4 (see data below the table).		
4.	It must be possible to run the pipe vertically even if the roof slope is 10 degrees.		
5.	The non-penetrating rooftop mast must have 4 support points for the roof.		
6.	The fixing pipe and support beams must be hot-dip galvanized steel. The structure connecting the support points and supporting the vertical tube can be hot-dip galvanized steel or aluminum alloy 6061.		
7.	The construction of the support point must be made of weatherproof composite plastic plate with dimensions of at least 1200x1200mm or 1300x1300mm. The side part of the roof covering with cushioning to distribute the entire pressure of the structure on the roof.		
8.	The construction of the support point must be made of		

	concrete counterweight. One counterweight weighing at least 50 kg.		
9.	The construction of the support surface must consist of four support points, which must be located on the plane so that the distance between the centers of adjacent support points is 2000-2100 mm (to ensure sufficient storm resistance).		
10.	The support points must be connected to a suitable metal structure that also supports the vertical pipe.		
11.	It must be possible to attach support beams to the support points, which ensure that the vertical pipe stays on the roof without additional support pullers. (The goal here is not to damage the roofing material in any way).		
12.	Steel grade: S355J2 according to standard EN 10025-2.		
13.	Manufacturing according to standard EN 1090-2:2018		
14.	Performance class: EXC2		
15.	Weld quality class: C according to standard EN ISO 5817:2014		
16.	Shape tolerances of welded structures according to EN ISO 13920 class B and F		
17.	Hot dip galvanizing according to EN ISO 1461		
18.	Environmental class: C3 according to the EN ISO 12944-2 standard, the expected life of corrosion protection of the products is 20 years		
19.	Welding inspection method: 100% visual inspection (VT) according to EN ISO 17637		

Data regarding the siren set.

3.3 Loudspeaker Horn Dimensions





The height of the mast must be designed and verified by a structural engineer.
All dimensions are given in millimetres.

Pavian **3600W** Component Parameters	Units	Pcs.
Weight of a horn	9 Kg	24
Weight of an installation kit per horn	0.6 Kg	12
Weight of a protection net per horn		
Total weight (w/o a mast)	230,4 kg	1
Frontal surface area of a horn for wind load calculations	900 cm²	*
Lateral surface area of a horn for wind load calculations	1024 cm²	*