

DECLARATION OF PERFORMANCE (DoP)

Lattix® 4412 Passive Safety Mast

0402-CPR-SC0444-12 EN12899-1:2007 Lattix® 4412, Lattix® 4412FR

Performance under vehicle impact (passive safety):
According to EN12767:2019 100-NE-C-S-SE-MD-0

Product name

Lattix® 4412 (Variants: Lattix® 4412FR)

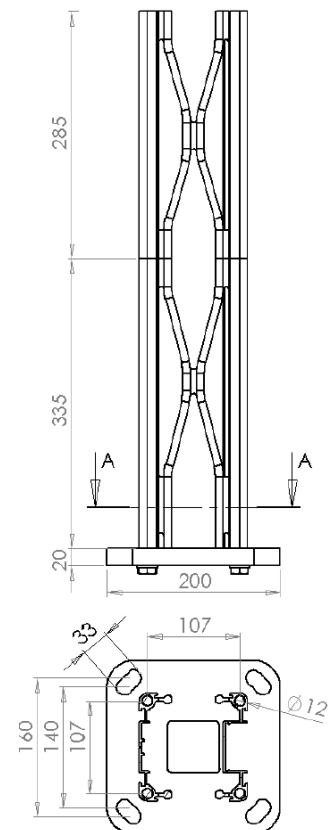
Product specifications

The Lattix® 4412 mast system can be used as mast for sign support, other information and surveillance equipment or other applications. The mast is delivered as a complete assembly including mast, base plate and top plate.

The mast is tested and approved according to:

- EN 12899-1:2007, Fixed, vertical road traffic signs
- EN 12767:2019, Passive Safety of support of structures for road equipment

Lattix® 4412 mast system			
Standard length [mm]	Art. Nr.	Standard length [mm]	Art. Nr.
620	JU201721	4090	JU201705
905	JU201722	4375	JU201712
1190	JU201723	4660	JU201706
1475	JU201724	4945	JU201713
1760	JU201725	5230	JU201714
2045	JU201701	5515	JU201715
2330	JU201702	5800	JU201716
2615	JU201709	6085	JU201717
2950	JU201703	6370	JU201718
3235	JU201710	6655	JU201719
3520	JU201704	6940	JU201720
3805	JU201711		
Maximum length is 6940 mm. Length tolerances according to EN 755-9			



Full-scale impact crash tests and simulations have been performed according to EN 12767 at a speed of 35 km/h and 100 km/h with at least 1,5 m from the ground to bottom of sign.

Referring to EN 12767:2019 the untested reduced minimum height of the lower edge of the sign should not be lower than 2,0 m due to the risk of the penetration of the windscreen of an impacting car, but lower installations may be used when evaluated.

The Lattix® 4412 mast system is approved both as single and multi-legged support. For multi-legged supports the distance between the inside of each of the legs must not be less than 1,6 m. All performance presumes sufficient foundation.

Material / Surface treatment

Mast: EN-AW 6063 T66

Resistance to corrosion: Aluminum, class SP 2

Bolts: A4-100

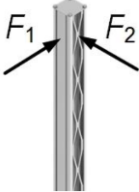
Base plate: S355J2+N, Hot dip galvanized steel according to EN ISO 1461, 200mm x 200mm x 20mm.

The Lattix® 4412 mast system can be powder-coated, anodized and chromed. All classes of corrosion resistance can be provided by various surface treatment.

Data / Weight

	Mast side width [mm]	Section shape [mm], (square-cut)	Mast weight [kg/m]	Base plate weight [kg]	Bolt pattern, foundation [mm]	Foundation thread/nuts
Lattix 4412	125	125 x 125	4,8	Ca. 3,9	150 x 150	M16
Lattix 4412FR				Ca. 13,3	200 x 200	

Capacity

Product Lattix® 4412, Lattix 4412, Lattix 4412FR (The properties are dependent on the load application side, see sketch to the right)		Maximum bending moment, M_u [kNm] *)	Stiffness for bending, EI [kNm ²]	Shear capacity, F_U [kN]	Maximum torsion moment, T_u [kNm] *)	Stiffness for torsion, G_t [kNm ²]	Stiffness for torsion, G_t [kNm/(deg/m)]
Load applied to massive walls, F1		16	251	7,82	1,4	18	0,32
Load applied to lattice walls, F2		13	208	6,34	1,4	18	0,32

*) The moments do not take into account the partial material factor γ_m . EN 12899-1 gives a γ_m for aluminum of 1,15.

Assembly and accessories

The Lattix® 4412 mast is delivered fully-assembled with top plate and accordant base plate if not specified differently.

The Lattix® element masts can be delivered with accessories kits:

- top plates,
- base plates,
- foundations,
- sign clamps,
- cable covers,
- brackets for tunnel,
- connector plates
- etc.

For assembly information, please ask for the assembly guide.

Maintenance

No maintenance required.

CE marking and system of assessment

- CE marked according to EN 12899-1:2007 in compliance with Regulation 305/2011/EU.
- Performance under vehicle impact (passive safety) according to EN12767:2019, 100-NE-C-S-SE-MD-0
- Notified body no. 0402.



The CE label gives all important information on data and capacity. Within the production process the masts are marked for traceability.

Referrals

- Data sheet
- Installation guide
- EC Certificate of conformity No. 0402-CPR-SC0444-12

Approval by the manufacturer

A handwritten signature in blue ink, appearing to read 'Gunnar Bendigtsen', written over a horizontal line.

Gunnar Bendigtsen
Managing Director

A handwritten signature in blue ink, appearing to read 'Tore Tøndevold', written over a horizontal line.

Tore Tøndevold
Technical Director

Långed, Sweden, November, 2022