

DECLARATION OF PERFORMANCE (DoP)

Lattix® 4420 Passive Safety Mast

0402-CPR-SC0444-12 EN12899-1:2007 Lattix® 4420, Lattix® 4420 FR

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

Product name

Lattix® 4420 (Variants: Lattix® 4420FR)

Product specifications

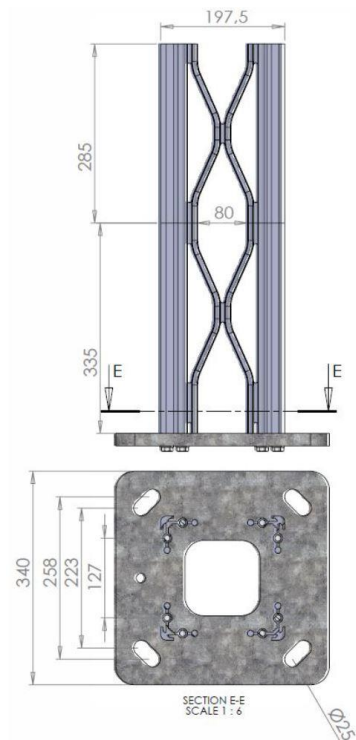
The Lattix® 4420 mast system can be used as mast for sign support, other information and surveillance equipment or other applications. The mast is delivered as a complete assembly including mast, base plate and top plate.

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® Mast 4420			
Standard length [mm]	Art. Nr.	Standard length [mm]	Art. Nr.
2330	JU200724	5800	JU200737
2615	JU200725	6085	JU200733
2950	JU200726	6370	JU200738
3235	JU200727	6655	JU200739
3520	JU200728	6940	JU200763
3805	JU200729	7225	JU200764
4090	JU200730	7510	JU200765
4375	JU200734	7795	JU200766
4660	JU200731	8080	JU200767
4945	JU200735	8365	JU200768
5230	JU200732	8650	JU200769
5515	JU200736		

Maximum length is 8650 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® 4420 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, 340mm x 340mm x 20mm.

The Lattix® 4420 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 4420	197,5	197,5x197,5	7,6	Ca. 15,5	258 x 258	M20
Lattix 4420FR				Ca. 13,5	200 x 200	

Capacity

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, GI_t [kNm ²]	Stiffness for torsion, GI_t [kNm/(deg/m)]
40	728	20	4,5	71	1,24

*) The moments and shear capacity 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® 4420 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-B-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



Gunnar Bendigtsen
Managing Director



Tore Tøndevold
Technical Director

Långed, Sweden, November, 2022