

In compliance with Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Road restraint systems - Part 5: Product requirements and evaluation of conformity for vehicle restraint systems

Safety barriers for use in vehicle restraint system in circulation areas, with specification and performance as specified on page 2-3 in this certificate.

Product name: Z E

placed on the market under the name or trademark of

AB Varmförzinkning

Box 144

SE-333 23 Smålandsstenar, Sweden

and produced in the manufacturing plant

same as above

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in annex ZA of the standards

EN 1317-5:2007+A2:2012 and EN 1317-5:2007+A2:2012/AC:2012

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

constancy of performance of the construction product.

This certificate was first issued on 2011-02-01 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

Issued by notified body 0402

The validity of this certificate can be verified on our website.

Lennart Aronsson
Product Certification Manager

Martin Tillander
Project Manager

Certificate 0402-CPR-SC0090-11 | issue 3 | 2017-10-09

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7P07036



Accredited by ISO/IEC 17065
Certifying
ISO/IEC 17065

Performance and specification

Classification according to EN 1317-5:2007+A2:2012/AC:2012 (EN 1317-2:2010)

Product	Containment level	Impact severity level	Normalized working width, class [m]	Normalized dynamic deflection, [m]	Normalized vehicle intrusion class [m]
Ellips Z E1* CC 2 m	N2	A	W5 (1.6)	1.5	-
Ellips Z E2* CC 2m	N2	A	W3 (1.1)	0.9	-
Ellips Z E2* CC 3m	N2	A	W3 (1.0)	1.0	-
Ellips Z E2* CC 4m	N2	A	W5 (1.6)	1.5	-
Ellips Z E2 CC 5m	N2	A	W5 (1.6)	1.5	-
Ellips Z E2* CC 6m	N2	A	W5 (1.6)	1.5	-
Ellips Z E3* CC 4 m	N2	B	W3 (1.1)	0.9	-
Ellips Z E3* CC 4m	H1	B	W5 (1.7)	1.5	VI6 (1.9)
Ellips Z E3* CC 4 m	L1	B	W5 (1.7)	1.5	VI6 (1.9)

*ITT

Classification according to EN 1317-5:2007+A2:2012/AC:2012

Product	Durability	Resistance to snow removal class
Ellips Z E1	Hot dip galvanized, acc. to EN ISO 1461	Class 1 - Yield strength $R_{eh} \leq 530$ MPa Class 3 - Yield strength $R_{eh} > 530$ MPa
Ellips Z E2	Hot dip galvanized, acc. to EN ISO 1461	Class 4
Ellips Z E3	Hot dip galvanized, acc. to EN ISO 1461	Class 4



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Product description and configuration

Product	Description
Ellips Z E1	<p>Post distance: 2.0 m</p> <p>Height above road surface: 0.63 m (total), 0.55 m (centre of rail)</p> <p>Steel rail: Elliptical-shaped, 143x124x2 mm</p> <p>Steel post: Sigma shaped, length 1380 mm</p> <p>Post embedment in soil: Min 0.8 m</p>
Ellips Z E2	<p>Post distance: 2.0 m / 3.0 m / 4.0 m / 5.0 m / 6.0 m</p> <p>Height above road surface: 0.63 m (total), 0.55 m (centre of rail)</p> <p>Steel rail: Elliptical-shaped , 143x124x3 mm</p> <p>Steel post: Tube Ø 108 mm, thickness 5 mm waist 148 x 47 mm Length 877 mm</p> <p>Steel post embedment foundation tube: 0.27 m</p> <p>Embedment in soil for foundation tube: 0.55 -1.5m</p>
Ellips Z E3	<p>Post distance: 4.0 m</p> <p>Height above road surface: 0.71 m (total), 0.65 m (centre of rail)</p> <p>Steel rail: Elliptical-shaped , 143x124x3 mm,</p> <p>Steel post: Tube Ø 108 mm, thickness 5 mm waist 148 x 47 mm Length 877 mm</p> <p>Steel post embedment foundation tube: 0.27 m</p> <p>Embedment in soil for foundation tube: 0.55 -1.5m</p>



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