



**TECHNICKÝ A ZKUŠEBNÍ ÚSTAV STAVEBNÍ PRAHA, s.p.**  
**Technical and Test Institute for Construction Prague, S0E**

Akreditovaná zkušební laboratoř, Autorizovaná osoba, Notifikovaná osoba, Oznamovaný subjekt, Subjekt pro technické posuzování, Certifikační orgán, Inspekční orgán • Accredited Testing Laboratory, Authorized Body, Notified Body, Technical Assessment Body, Certification Body, Inspection Body • Prosecká 811/76a, 190 00 Praha 9 - Prosek, Czech Republic

Notified Body 1020

## **CERTIFICATE OF CONSTANCY OF PERFORMANCE**

**No. 1020 – CPR – 090-041130**

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:

### **FIXED VERTICAL ROAD TRAFFIC SIGNS**

variant : Delineator post

type : Smart Flexbollard 8, Smart Flexbollard 11

Functional class

**D3**

Wind load

**WL1, WL2**

placed on the market under the name or trade mark of

### **CV Plás, Indústria de Plásticos e Derivados Lda**

Identification No.: PT 514104090

Address: Travessa da Trindade N° 16 5° Andar C/D, Lisboa, PORTUGAL

and produced in the manufacturing plant(s):

**CODE FORMAT CV1 and CV2**

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

**EN 12899-3:2007**

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 27 April 2018 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

The stamp of the Notified Body 1020

Prague, 27 April 2018

Ing. Jiří Studnička

Deputy Manager of the Notified Body







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**Notified Body 1020**

**Branch 0900 – Technical Engineering Services**

# REPORT

**on the outcome of the assessment and verification of constancy  
of performance of the product**

according to the Regulation (EU) 305/2011 of the European Parliament and of the Council of 9 March 2011  
(the Construction Products Regulation or CPR), Art. 1.2 of the Annex V

**No. 090-041129**

Trade name:

## **FIXED VERTICAL ROAD TRAFFIC SIGNS**

variant: Delineator post

type: Smart Flexbollard 8, Smart Flexbollard 11

Manufacturer:

### **CV Plás, Indústria de Plásticos e Derivados Lda**

Identification No.:	PT 514104090
Address:	Travessa da Trindade N° 16 5° Andar C/D, Lisboa, PORTUGAL
Manufacturer:	CV Plás, Indústria de Plásticos e Derivados Lda
Address:	Travessa da Trindade N° 16 5° Andar C/D, Lisboa, PORTUGAL
Production plant:	Code format CV1, CV2
Order:	Z090170586

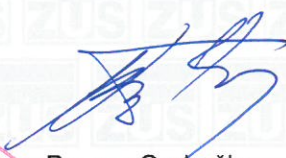
Number of report pages including title-page: 6

Number of Annexes: 0

Stamp of the Notified Body 1020

Prague, 27 April 2018



  
**Roman Ondruška**  
Head Assessor

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Bank: KB Praha 1 Czech Republic, account No.: 1501-931/0100, ID No.: 000 15679, Tax No.: CZ00015679

## 1. General

### 1.1 Information about the manufacturer

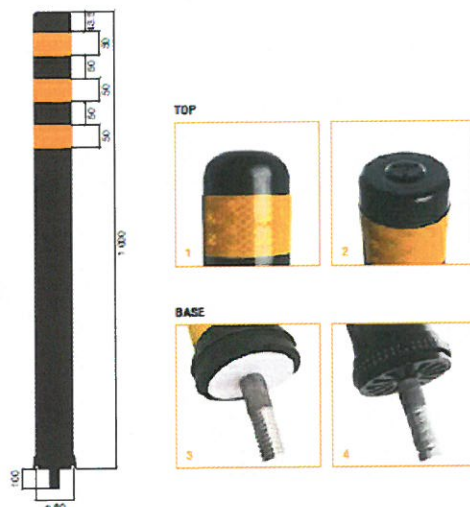
- Manufacturer: **CV Plás, Indústria de Plásticos e Derivados Lda**  
Travessa da Trindade N° 16 5° Andar C/D, Lisboa, PORTUGAL
- Production plant: Code format CV1, CV2

### 1.2 Information about the product and its intended use

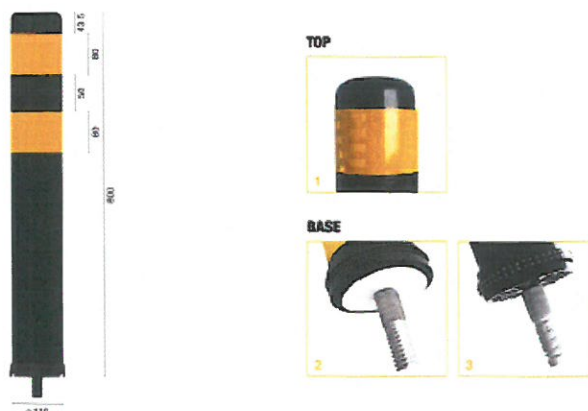
**Delineator post** is a product for directing vehicles and pedestrians. It is installed where the danger of car accidents is high and drivers' extra focus is needed, to support road traffic signs. The Delineator Post spatially divides traffic flows from both directions and catches drivers' eyes to warn them of dangerous areas.

Delineator posts are made from the polyurethane, fitted with retro-reflective foil and fixed on the road by glue, drilling hole with depth 100 mm in surface and insert chemical glue.

**Smart Flexbollard 8** – different height and color, installed on the road by drilling 24 mm hole in surface.



**Smart Flexbollard 11** – different height and color, installed on the road by drilling 32 mm hole in surface.





### 1.3 List of documentation provided by the manufacturer to the assessment and verification of constancy of performance (AVCP)

- application for performance of activity of notified body – AVCP system1
- Drawings of the elements
- Description of product
- Product catalogue
- Inspection certificate
- CE handbook
- CE declaration of microprismatic retroreflective sheeting – 3M High Intensity Prismatic 3300 (Declared Performance by 13/0304, 17/0465)

### 1.4 List of the other documentation used during the product AVCP

- None

### 1.5 Technical specification relating to the AVCP

- EN 12899-3:2007 Fixed, vertical road traffic signs - Part 3: Delineator posts and retroreflectors

### 1.6 Information about previous AVCP

The producer did not demonstrate any previous product certification.

## 2 Product Assessment

### 2.1 Technical requirements

The product was assessed under EN 12899-3:2007 Fixed, vertical road traffic signs - Part 3: Delineator posts and retroreflectors, with respect to the following monitored properties:

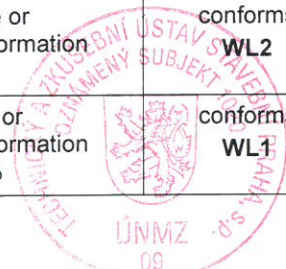
- Resistance to horizontal load
- Functional properties during vehicle impact
- Resistance to impact
- Visual characteristic
- Durability

### 2.2 List of the Test Reports:

- Protocol on ITT testing Nr. 090-041231, issued test lab TZUS Praha s.p., branch TIS on 24 April 2018
- Protocol on ITT testing Nr. 090-040778, issued test lab TZUS Praha s.p., branch TIS on 16 April 2018

### 2.3 Evaluation of the results of the product tests and assessment

Monitored property	Test Protocol	Test procedure	Test result	Required / declared level	Evaluation
1	2	3	4	5	6
Resistance to horizontal load					
– Static requirements	2.2	EN 12899-3:2007 art. 6.4.1.1	Test report 090-041231 090-041778	R: No damage or permanent deformation more than 5%	conforms WL2
			Test report 090-041231	R: No damage or permanent deformation more than 15%	conforms WL1



Performance under vehicle impact (passive safety)					
Dynamic impact resistance (material requirements)	2.2	EN 12899-3:2007 art. 6.4.1.2	Test report 090-041231 090-041778	R: post class D1 and D2 no damage and class D3 must return to the upright position	conforms D3
Dynamic impact resistance (functional requirements)		EN 12899-3:2007 art. 6.4.1.3	Test report 090-041231 090-041778	R: post class D1 may not be applicable, D2 shall be applicable and class D3 shall be applicable and must return to the upright position	conforms D3
Dynamic impact resistance (passive Safety)		EN 12899-3:2007 art. 6.4.1.4		NPD	
Visual characteristic					
Daytime chromaticity and luminosity factor	1.3	EN 12899-3:2007 art. 6.3.1	Assessment, product declaration	R: trichromatic coordinates and luminosity factor – value by tab. 1	conforms
Durability					
Resistance to corrosion	1.3	EN 12899-3:2007 art. 6.4.1.5	Assessment, product declaration	R: condition in article 6.4.1.5	conforms
UV Resistance	1.3	EN 12899-3:2007 art. 6.4.1.6	Assessment, product declaration	R: reflective factor – value by tab. 3, 4, 5	conforms
Hazardous substances		EN 12899-3:2007 art. 10		NPD	

**Evaluation conclusion: the product confirms to and complies with the declared purpose.**

### 3 Factory Production Control Assessment

The product assessment was performed in manufacturer CV Plás, Indústria de Plásticos e Derivados Lda, Travessa da Trindade N° 16 5° Andar C/D, Lisboa, PORTUGAL and manufacturing plant CV1 and CV2 on 17 April 2018.

#### 3.1 Requirement of the technical specification regarding Factory Production Control:

The requirements on the production management system are stipulated in EN 12899-3:2007 Fixed, vertical road traffic signs - Part 3: Delineator posts and retroreflectors

#### 3.2 Evaluation of the Factory Production Control assessment results:

- The technical documentation of the producer CV Plás, Indústria de Plásticos e Derivados Lda contains a description of the production management system in the internal document Technological Guideline for Delineator post.
- The production management system complies with the technical documentation and ensures that the marketed products conform to the technical specifications, and is assessed as conforming

### 4 Conclusion

- The sample of product fulfils the requirements of the technical specification.
- The FPC is in accordance with the harmonised technical specification and ensures that the declared performances are achieved.
- Findings and conclusions mentioned in this Report are valid providing the conditions under which FPC assessment was carried out remain unchanged (e.g. technical regulations, technical specifications, production technology, incoming raw and manufacturing equipment).



- In compliance with provision of the CPR Art. 1.2, Annex V Surveillance Reports containing FPC assessment and evaluation have to be complementary to the technical documentation.

## 5 Annexes

The documents are not part of this Protocol and are kept by the author.

Prepared by: Roman Ondruška

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