

# Výskumný ústav dopravný,

Forschungsinstitut für Verkehrswesen, AG Transport Research Institute, J.S.Co. Veľký Diel 3323, 010 08 ŽILINA



Autorizovaná osoba SKTC-125, Autorizovaná osoba SK05, Notifikovaný orgán 1358 Authorized Body SKTC-125, Authorized Body SK05, Notified Body 1358

## AMENDMENT No. 1

to

# THE REPORT ON ASSESSMENT OF PERFORMANCE OF CONSTRUCTION PRODUCT

## No. 1358/13/0011/0516/CC

in compliance with the Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9. March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC.

drawn up for reason of extension of time of validity of the certificate No. 1358-CPR-0107 based on positive results from the natural weathering test.

Products:

1. ORALITE® 5930 Prismatic Construction Grade

Types: ORALITE® 5930 - 010 (white) ORALITE® 5930 - 020 (yellow)

2. ORALITE® 5930 Prismatic Construction Grade + ORALITE® 5051 Transparent Film

Types: ORALITE® 5930 - 010 (white) + ORALITE® 5051 - 035 (orange) ORALITE® 5930 - 010 (white) + ORALITE® 5051 - 030 (red) ORALITE® 5930 - 010 (white) + ORALITE® 5051 - 060 (green)

**Application No.:** 

1358/15/0011/0516/CC

Manufacturer:

ORAFOL Europe GmbH, Orafolstraße 2, 16515 Oranienburg, Germany

Place of production: ORAFOL Europe GmbH, Orafolstraße 2, 16515 Oranienburg, Germany

Applicant:

ORAFOL Europe GmbH, Orafolstraße 2, 16515 Oranienburg, Germany

ID No.: -

VAT Id. No.: DE 138 704 469

Represented by:

Dr. Holger Loclair, General Manager

Authorized representative for substantive negotiation: Dr. Bernd Görig, Quality and

**Environmental Management Director** 

Notifikovaná osoba č. 1358

Number of pages: 5 Number of annexes: 0 Number of copies: 2 Copy number:

**Distribution list:** 

copy No. 1 - Manufacturer (in English language)

copy No. 2 - NO 1358, VÚD, a.s. (in Slovak and English language)

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Amendment No.1 to report on assessment of performance of construction product No. 1358/13/0011/0516/CC

The amendment No. 1 to Report on assessment of performance of construction product No.1358/13/0011/0516/CC is drawn up by Notified Body 1358, Výskumný ústav dopravný a. s. (hereinafter "NB") based on the manufacturer's application of 8 September 2015.

The report on assessment of performance of construction product is valid only with the amendment No. 1 to Report on assessment of performance of construction product.

The NB based on the manufacturer's application on extension of time of validity of the certificate No. 1358-CPR-0107 based on positive results from the natural weathering test, which were demonstrated with Test report No. 57/15 issued by Testing Laboratory of Coating Substance and Road Signs, VÚD, a.s. Žilina and based on assessment of the results will:

- draw up the Amendment No.1 to Report on assessment of performance of construction product No.1358/13/0011/0516/CC,
- withdraw the certificate of constancy of performance No. 1358 CPR 0107 of 30 August 2015, identification No. 052786,
- issue a new certificate of constancy of performance with unlimited validity.

The NB changes and adds to the original Report on assessment of performance of construction product No.1358/13/0011/0516/CC in sections and items of the report, as follows:

section 1 BASIC DATA

- without changes

section 2 GENERAL DATA

in item 2.1 Application

- at the end of paragraph add text:

The manufacturer, ORAFOL Europe GmbH, Orafolstraße 2, 16515 Oranienburg, Germany submitted on 08.09.2015 the Manufacturer's application on extension of time of validity of the certificate No. 1358-CPR-0107 based on positive results from the natural weathering test of the sheeting ORALITE <sup>®</sup> 5930 Prismatic Construction Grade.

item 2.2 Contract

- without changes

*in item* 2.3 Initial type testing, samples

- at the end of paragraph add text:

Test report No. 57/15, issued by TL CSandRS, VÚD, a.s., on 26.08.2015.



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in item

2.4 List of the documents submitted by the producer as an annex to the Manufacturer's application on assessment of construction product

- without changes
- item
- 2.5 List of other regulations applied to assessment of performance of construction product
- without changes
- item
- 2.6 Technical specifications applied to assessment of performance of construction product
- without changes
- item
- 2.7 Information about previous assessment of performance of construction product
- without changes
- section
- 3 ASSESSMENT OF PERFORMANCE OF CONSTRUCTION PRODUCT
- item
- 3.1 Basic requirements on construction product
- without changes
- in item
- 3.2 Requirements for construction product
- delete tables 1 and 2 of the original report and replace them by new tables

Table 1: Assessment of performance of construction product

Checked characteristics	Technical specification	Required level	Level determined	Result of evaluation / Classification
Visual performance				
chromaticity coordinates	EN 12899-3 6.3.2.2 7.3.2.2 <i>Tab.</i> 2	Night-time chromaticity coordinates are tested according to 7.3.2.2, where the retroreflected radiation of retroreflectors shall have chromaticity coordinates that lie within the regions defined in Table 2.	Test report No. 64/13  Measured points of night-time chromaticity of reflectors (coordinates x, y) lie inside spectral boundary of colorimetric triangle CIE.  Measured values are in conformity with EN 12899-3, Table 2.	Pass / -

Checked characteristics	Technical specification	Required level	Level determined	Result of evaluation / Classification
Coefficient of retroreflection R <sub>A</sub>	EN 12899-3 6.3.2.3 Tab. 3, Tab. 6	The minimum initial coefficient of retroreflection R <sub>A</sub> of type R1 class 3 reflectors shall conform to Table 3 multiplied by the appropriate color factor given in Table 6, EN 12899-3.	Test report No. 64/13  Measured values of coefficient of retroreflection R <sub>A</sub> of reflectors of type R3 class 3 are more than required.	Pass / -
Durability		•		
Dynamic impact resistance	EN 12899-3 6.4.2.1 7.4.2.2	Reflectors after dynamic impact resistance test shall show no cracking or delamination.	Test report No. 64/13  Reflectors are without cracks or delamination from a substrate -, pass class DH2.	Pass / DH 2
Water resistance	EN 12899-3 6.4.2.3 7.4.2.4	Reflectors after exposure according to 7.4.2.4, shall show no water or water vapor intake on the optical parts.	Test report No. 64/13  Reflectors after the test did not show any visible signs of water ingress water and any other change in appearance compared with an untreated sample.	Pass / -
Resistance to UV radiation – reflectors (natural weathering test)	EN 12899-3 6.4.2.4 6.3.2.3 7.4.2.2	Type R1 class 3 retroreflectors shall be exposed to natural weathering for 2 years according to EN ISO 877:1996, Method A. Chromaticity coordinates of the retroreflected radiation shall be within the regions defined in EN 12899-3, Table 2. The coefficient of retroreflection shall be not less than 80 % of the values required in 6.3.2.3. After subjecting to the impact resistance test according to 7.4.2.2, there shall be no cracking or delamination outside a circle of 12 mm radius with the point of impact as centre.	Test report No. 57/15  After natural weathering test the chromaticity coordinates of the retroreflected radiation are within the regions defined in, Table 2 and the coefficient of retroreflection is not less than 80 % of the values required in 6.3.2.3.  After subjecting to the impact resistance test according to 7.4.2.2, there are no cracking or delamination outside a circle of 12 mm radius with the point of impact as centre.	Pass / -

Note: Reflectors, type R1, class 3 do not use metal parts.

Table 2: Performance of the construction products

Performance under vehicle impact - (passive safety)	):
Dynamic impact resistance	DH2
Visibility characteristics:	
Chromaticity coordinates (Night-time chromaticity)	pass
Coefficient of retroreflection RA	pass
Durability:	
Water resistance	pass
Resistance to UV radiation (natural weathering test)	pass
Dangerous substances	not released a)

Notes

a) dangerous substances – used materials in products shall not release any dangerous substances in excess of the maximum permitted levels of the relevant technical standards for materials or exceed the national regulations of Member States.



#### IMPLEMENTATION OF FACTORY PRODUCTION CONTROL in section

- at the end of paragraph add text:

The manufacturer has ensured factory production control in accordance with EN 12899-4 what demonstrated at 2<sup>nd</sup> continuous surveillance performed on 2 September 2015. Within the continuous surveillance was checked procedures to maintain declared parameters of the product. From the continuous surveillance was drawn up the Report on execution of continuous surveillance No. 1358/15/0029/02/0516/IC.

item 4.1 Continuous surveillances

- without changes

CONCLUSION section

- at the end of 2<sup>nd</sup> paragraph add text:

The NB based on carried out changes withdraws Certificate of constancy of performance No. 1358-CPR-0107 issued on 30.09.2013, identification No. 052789 and based on assessment and verification of constancy of performance of the construction product in accordance with EN 12899-3:2007, Table ZA.2 will issue to the manufacturer a new certificate of constancy of performance with unlimited validity.

5.1 Responsibility of manufacturer item

- without changes

**GENERAL PROVISIONS** section

- without changes

Issue date:

02.02.2016

Amendment No.1 to the report is valid until:

unlimited

Drawn up by: Viliam Bolo

Reviewer

The decision to grant the certificate of constancy of

performance is authorized by:

Ing. Michal Kais Head of Department of Certification, Testing and Interoperability