Testing Laboratory of "Institute of Roads and Bridges" at RIA
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Accreditation certificate No 197 ЛИ dated 05.01.2023, Valid until 01.04.2025
Issued by EA BAS, according to the requirements of BDS EN ISO/IEC 17025:2018

REPORT

FOR TESTING OF ROAD SIGNS AND SIGNBOARDS

No QWP X – ...144... / 01-06-2023

1. Customer identification / contact:

"Dedal" Attestation & Certification – гр. Nessebar, e-mail: office@dedal-bg net, Request No № **38/11.05.2023**, authorization letter ref. No 132 B/09.05.2023, IRB entry No 53-00-433/ 11.05.2023 г.

2. Identification of the test object:

Road signs and signboards – delineator posts type D3 UT DF 100 FLEXIBLE Delineator 1000 mm with stabil metal screws, manufactured by company **ÜSTÜN Tekstıl Baskı Tekstıl Plastık Uluslararasi Tic.A.Ş**, with laboratory numbers respectively: set No **1** – conditional № **175a, b, c;** set No **2** – cond. No **176a, b, c;** set No **3** – cond. No **177a, b, c;** and set of metal plates with applied reflective material type **R3** – cond. No **175d, 176d и 177d.**

Date of obtaining of the samples / test specimens: 11.05.2023
The sample is delivered by the customer.
Sample status note: free from damage and injury.

3. Test meyhod:

The tests have been carried out according to BDS EN 12899-3:2008/NA2020.

4. Test results:

The results for the parameters tested are presented in tabular form on pages 2 and 3 of the Report.

5. Date / time and place of testing of the objects:

The test has been carried out from May 30, 2023 to May 31, 2023 in the TESTING LABORATORY (TL) of "Institute of Roads and Bridges" (IRB) at Road Infrastructure Agency (RIA).

Person in charge and performer of the test:

(Res. Assoc. Eng. Nikolay Stoyanov - Responsible for "TRSSBRE[1]")

[1] TRSSBRE = Testing of Road Signs, Signboards and Road equipment

TEST RESULTS

No by order	Name of the test characteristic (parameter)	Unit of measure	Determination method of the characteristic, standards or other doc-s or deviations	№ of the specimen	Test results $\bar{X} \pm$ **	Value and tolerance of the characteristic (parameter); standards or more documents	Date and environmental conditions during the test
1	2	3	4	5	6	7	8
1	**Strength characteristics of the delineator posts, Deformations:**		BDS EN 12899-3:2008/NA2020	cond. No		*Classes:*	30.05.2023 23°C 41 %RH
	Wind loading, permanent deflection under load of 0,42	**kN/m²**		**175a**	**Permanent deflection < 5 %**	**WL2**	
	Wind loading, permanent deflection under load of 0,42	**kN/m²**		**175b**	**Permanent deflection < 5 %**	**WL2**	
	Wind loading, permanent deflection under load of 0,42	**kN/m²**		**175c**	**Permanent deflection < 5 %**	**WL2**	
2	**Strength characteristics of the delineator posts, Deformations:**		BDS EN 12899-3:2008/NA2020	cond. No			31.05.2023 23°C 40 %RH
	Concentrated loads: Dynamic impact resistance by 150 Nm (material requirement)	**Nm**		**176a**	**Permanent deflection 0 %**	**< 5 %**	
	Concentrated loads: Dynamic impact resistance by 150 Nm (material requirement)	**Nm**		**176b**	**Permanent deflection 0 %**	**< 5 %**	
	Concentrated loads: Dynamic impact resistance by 150 Nm (material requirement)	**Nm**		**176c**	**Permanent deflection 0 %**	**< 5 %**	
3	**Strength characteristics of the delineator posts, Deformations:**		BDS EN 12899-3:2008/NA2020	cond. No			31.05.2023 23°C 40 %RH
	Concentrated loads: Dynamic impact resistance by 300 Nm (functional requirement)	**Nm**		**177a**	**Permanent deflection 0 %**	**< 5 %**	
	Concentrated loads: Dynamic impact resistance by 300 Nm (functional requirement)	**Nm**		**177b**	**Permanent deflection 0 %**	**< 5 %**	
	Concentrated loads: Dynamic impact resistance by 300 Nm (functional requirement)	**Nm**		**177c**	**Permanent deflection 0 %**	**< 5 %**	

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Signature:

1	2	3	4	5	6	7	8
4	**Strength characteristics of retroreflector material R1 on the delineator posts. Deformations:**		BDS EN 12899-3:2008/NA2020	cond. No		*Classes:*	31.05.2023 23°C 40 %RH
	Concentrated loads: Dynamic impact resistance at Drop height DH of steel ball d 20 mm from 400 mm	**Nm**		**175d**	**No cracking or delamination outside a circle of R = 4 mm**	**DH 2**	
	Concentrated loads: Dynamic impact resistance at Drop height DH of steel ball d 20 mm from 400 mm	**Nm**		**176d**	**No cracking or delamination outside a circle of R = 4 mm**	**DH 2**	
	Concentrated loads: Dynamic impact resistance at Drop height DH of steel ball d 20 mm from 400 mm	**Nm**		**177d**	**No cracking or delamination outside a circle of c R = 4 mm**	**DH 2**	

$\bar{x}$ – average of the characteristic/s; ** - ***not applicable*** *(according the standard it is not possible to determine the extended uncertainty)*.

Note 1: The results are valid only to the samples / objects tested. Excerpts from the report may not be reproduced without the written consent of the Testing Laboratory.

Note 2: TL is not responsible for the test results of a compromised sample delivered by the customer.

Note 3: If necessary, the test report may include opinions and interpretations for specific tests only in accordance with the requirements of 7.8.7 in BDS EN ISO/ IEC 17025:2018.

Note 4: The information in this test report is provided by the customer. The laboratory shall not be liable if the information provided may affect the validity of the results.

Person in charge and performer of the test:

(Res. Assoc. Eng. Nikolay Stoyanov - Responsible for "TRSSBRE")

MANAGER OF TL:

(Res. Assoc. Eng. Veselin DIMITROV)

ИЗПИТАТЕЛНА ЛАБОРАТОРИЯ ИПМ - АПИ СОФИЯ КЪМ „ИПМ" ПРИ АПИ

END

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