



ORDER

№ A 140

Sofia, 29.03.2023

Pursuant to Art. 10, para. 1, item 3, art. 30, para. 1 of the Law on National Accreditation of Conformity Assessment Bodies, item 7 of the BAS QR 2 Accreditation Procedure, in connection with an open procedure, reg. №. 232/270 ЛИ/РО/03.10.2022, assessment report reg. № 232/270 ЛИ/10/10/В/05.12.2022 and Statement of the Accreditation Commission reg. № 232/270 ЛИ/РО/6/В/02.03.2023, I hereby

EXTEND THE SCOPE OF ACCREDITATION

**of Groma Hold Ltd.
Construction testing laboratory**

Management address:

2709 Belo Pole, Production Plant of Groma Hold Ltd.

Laboratory addresses:

STATIONARY OFFICE (Office 1): 2709 Belo Pole, Poleto Location,
Production Plant of Groma Hold Ltd.

MOBILE OFFICE (Office 2): 3100 Mezdra, 92A Hristo Botev Str.

I. STATIONARY OFFICE (Office 1):

2709 Belo Pole, Poleto Location, Production Plant of Groma Hold Ltd.

To perform testing of:

Type of scope: <i>flexible</i>				
№	Tested products	Type of test / characteristic		Testing methods (standard / validated methods)
1	2	3		4
1.	Aggregates	1.1.	Particle size distribution	БДС EN 933-1
		1.2.	Fines content	БДС EN 933-1
		1.3.	Percentage of: - totally crushed particles; - crushed particles; - totally rounded particles;	БДС EN 933-5

Type of scope: flexible

№	Tested products	Type of test / characteristic		Testing methods (standard / validated methods)
1	2	3		4
		1.4.	Overall flakiness index	БДС EN 933-3
		1.5.	Shape index	БДС EN 933-4
		1.6.	Sand equivalent	БДС EN 933-8+A1
		1.7.	Methylene blue value	БДС EN 933-9
		1.8.	Coefficient – Micro Deval	БДС EN 1097-1
		1.9.	Coefficient – Los Angeles	БДС EN 1097-2
		1.10.	Resistance to fragmentation	БДС EN 206+A2/NA, annex NA.Q
		1.11.	Mass loss during cyclic freezing - thawing	БДС EN 1367-1
		1.12.	Magnesium sulfate value	БДС EN 1367-2
		1.13.	Loose bulk density. Percentage of voids.	БДС EN 1097-3
		1.14.	Particle density - apparent particle density; - oven-dried particle density; - saturated and surface-dried article density - pre-dried particle density; - particle density saturated to constant mass	БДС EN 1097-6 clause 7, 8, 9 Annex A - clause A.3, A.4 Annex B
		1.15.	Water absorption	БДС EN 1097-6 clause 7, 8, 9 Annex B
		1.16.	Degree of bitumen coverage (Affinity between aggregate and bitumen)	БДС EN 12697-11, Boiling water stripping method
		1.17.	California bearing ratio /CBR/	БДС EN 13286-47
		1.18.	Maximum density of the skeleton. Optimum water content	БДС EN 13286-2
		1.19.	Water content	БДС EN 1097-5
		1.20.	Plastic limit. Plasticity index.	AASHTO T 90 Ordinance № ПД-02-20-2, SG № 79/2018 • Annex № 16 to article 160, item 3* БДС EN ISO 17892-12
		1.21.	Liquid limit	AASHTO T89 Ordinance № ПД-02-20-2, SG № 79/2018 • Annex № 15 to article 160, item 3* БДС EN ISO 17892-12, Casagrande method
		1.22.	Presence of humus	БДС EN 1744-1+A1

Type of scope: flexible				
No	Tested products	Type of test / characteristic		Testing methods (standard / validated methods)
1	2	3		4
		1.23.	Percentage of lightweight particles	БДС EN 1744-1+A1
		1.24.	Deformation module	Ordinance 55, art. 47
2.	Filler	2.1.	Particle size distribution	БДС EN 933-1
		2.2.	Methylene blue value	БДС EN 933-9+A1
		2.3.	Water content	БДС EN 1097-5
		2.4.	Loose bulk density	БДС EN 1097-3
		2.5.	Voids	БДС EN 1097-4
		2.6.	Particle density	БДС EN 1097-7
3.	Bituminous mixtures	3.1.	Particle size distribution	БДС EN 12697-2+A1
		3.2.	Soluble binder content	БДС EN 12697-1
		3.3.	Bulk density	БДС EN 12697-6
		3.4.	Indirect tensile strength	БДС EN 12697-23
		3.5.	Indirect tensile strength ratio	БДС EN 12697-12, method A
		3.6.	Dimensions of asphalt test specimen	БДС EN 12697-29
		3.7.	Maximum density	БДС EN 12697-5
		3.8.	Air voids content	БДС EN 12697-8
		3.9.	Stability	БДС EN 12697-34
		3.10.	Flow	БДС EN 12697-34
		3.11.	Binder drainage	БДС EN 12697-18, Beaker method
		3.12.	Temperature	БДС EN 12697-13
		3.13.	Voids content in the mineral aggregate	БДС EN 12697-8
		3.14.	Percentage of voids in the mineral aggregate filled with binder	БДС EN 12697-8
4.	Bitumens	4.1.	Penetration	БДС EN 1426
		4.2.	Softening point	БДС EN 1427
		4.3.	Elastic recovery	БДС EN 13398
		4.4.	Flash point	БДС EN ISO 2592
		4.5.	Resistance to hardening RTFOT method: - retained penetration at 25 °C - change in softening point - change in mass	БДС EN 12607-1
		4.6.	Fraass breaking point	БДС EN 12593
		4.7.	Storage stability -difference in the softening point of top and	БДС EN 13399

Type of scope: flexible				
No	Tested products	Type of test / characteristic		Testing methods (standard / validated methods)
1	2	3		4
			bottom layer.	
		4.8.	Density	БДС EN 15326+A1
		4.9.	Solubility	БДС EN 12592
		4.10.	Deformation energy by the force ductility method	БДС EN 13589
5.	Fresh concretes	5.1.	Slump	БДС EN 12350-2
		5.2.	Slump – Vebe test	БДС EN 12350-3
		5.3.	Density	БДС EN 12350-6
6.	Concrete	6.1.	Compressive strength	БДС EN 12390-3 БДС EN 12504-1
		6.2.	Flexural strength	БДС EN 12390-5
		6.3.	Tensile splitting strength	БДС EN 12390-6
		6.4.	Density	БДС EN 12390-7
		6.5.	Depth of penetration of water under pressure	БДС EN 12390-8
		6.6.	Resistance to frost during direct freezing and thawing: - Relative loss of mass; - Relative loss of strength;	БДС EN 206+A2/NA, annex NA.0
		6.7.	Rebound number	БДС EN 12504-2
7.	Cement	7.1.	Strength	БДС EN 196-1
		7.2.	Setting time	БДС EN 196-3
		7.3.	Soundness	БДС EN 196-3
		7.4.	Standard consistency	БДС EN 196-3
8.	Construction soils	8.1.	Particle size distribution	AASHTO T 88 БДС EN 933-1
		8.2.	Fines content	БДС EN 933-1
		8.3.	Plastic limit. Plasticity index.	БДС EN ISO 17892-12 AASHTO T90 Ordinance № ПД-02-20-2, SG № 79/2018 • Annex № 16 to article 160, item 3*
		8.4.	Liquid limit	БДС EN ISO 17892-12 - Casagrande method AASHTO T89 Ordinance № ПД-02-20-2, SG № 79/2018 • Annex № 15 to article 160, item 3*
		8.5.	Maximum density of the skeleton. Optimum water content	БДС 17146 БДС EN 13286-2

Type of scope: flexible				
№	Tested products	Type of test / characteristic		Testing methods (standard / validated methods)
1	2	3		4
		8.6.	California bearing ratio /CBR/	БДС EN 13286-47
9.	Earth and rock embankments and foundations (base layers)	9.1.	Elastic module	БДС 15130
		9.2.	Deformation module	БДС 15130
		9.3.	Deformation modules ratio	БДС 15130
		9.4.	Bulk density of the skeleton by the sand-replacement method. Compaction degree.	Ordinance № ПД-02-20-2, SG № 79/2018 •Annex № 18*
10.	Road pavements	10.1.	Thickness of asphalt layer	БДС EN 12697-36, - Destructive method
		10.2.	Compaction degree	БДС EN 12697-9**
		10.3.	Irregularities of pavement course	БДС EN 13036-7
		10.4.	Bulk density of asphalt test specimen (core)	БДС EN 12697-6
		10.5.	Conventional reference density	БДС EN 12697-9**
11.	Concrete elements	11.1.	Dimensions	
			- paving blocks	БДС EN 1338/AC
			- paving flags	БДС EN 1339/AC
		11.2.	- kerb units	БДС EN 1340/AC
			Splitting strength	БДС EN 1338/AC
		11.3.	Water absorptions	
			- paving blocks	БДС EN 1338/AC
			- paving flags	БДС EN 1339/AC
11.4.	- kerb units	БДС EN 1340/AC		
	Bending strength - paving flags - kerb units	БДС EN 1339/AC БДС EN 1340/AC		
12.	Waterproofings	12.1.	Adhesion pull-off strength	ASTM D7234
		12.2.	Tensile strength	Technical Rules on the Design and Technology for the Construction of the Waterproofing of Reinforced Concrete Bridges of the Chief Office Roads dated 1997, Annex 1
13.	Unbound mixtures	13.1.	Particle size distribution	БДС EN 933-1
		13.2.	Fines content	БДС EN 933-1
		13.3.	Water content	БДС EN 1097-5
		13.4.	Maximum bulk density of the skeleton. Optimum water content	БДС EN 13286-2 БДС 17146

Type of scope: flexible				
№	Tested products	Type of test / characteristic		Testing methods (standard / validated methods)
1	2	3		4
		13.5.	California bearing ratio	БДС EN 13286-47
		13.6.	Magnesium sulfate value	БДС EN 1367-2
		13.7.	Plastic limit. Plasticity index.	БДС EN ISO 17892-12 AASHTO T90 Ordinance № РД-02-20-2, SG № 79/2018 • Annex № 16 to article 160, item 3*
		13.8.	Liquid limit	БДС EN ISO 17892-12 - Casagrande method AASHTO T89 Ordinance № РД-02-20-2, SG № 79/2018 • Annex № 15 to article 160, item 3*
		13.9.	Elastic module. Deformation module. Deformation modules ratio	БДС 15130
14.	Hydraulically bound mixtures	14.1.	Particle size distribution	БДС EN 933-1
		14.2.	Water content	БДС EN 1097-5
		14.3.	Maximum bulk density of the skeleton. Optimum water content	БДС EN 13286-2 БДС 17146
		14.4.	Compressive strength	БДС EN 13286-41
		14.5.	Laying time (workability period)	БДС EN 13286-45
		14.6.	California bearing ratio	БДС EN 13286-47
		14.7.	Immediate bearing index	БДС EN 13286-47
		14.8.	Linear swelling	БДС EN 13286-47
		14.9.	Bulk density of the skeleton by the sand-replacement method	Ordinance № РД-02-20-2 • Annex № 18*
		14.10.	Compaction degree	Ordinance № РД-02-20-2 • Annex № 18*

To perform sampling of:

Type of scope: flexible		
№	Product	Sampling methods (standard / validated methods)
1	2	3
1.	Aggregates	БДС EN 932-1 – sampling from stockpiles
2.	Filler	БДС EN 932-1 – sampling from stockpiles and with

Type of scope: <i>flexible</i>		
№	Product	Sampling methods (standard / validated methods)
1	2	3
		and with sampling tube (spear)
3.	Bituminous mixtures	БДС EN 12697-27 – sampling from a lorry load of material
4.	Bitumens	БДС EN 58 – sampling from the surface of road tankers
5.	Construction soils	БДС EN 932-1 – sampling from stockpiles
6.	Fresh concretes	БДС EN 12350-1
7.	Cement	БДС EN 196-7 – sampling of cement from bulk transport (after loading or before unloading)
8.	Road pavements	БДС EN 12697-27 – sampling of laid and compacted materials by coring
9.	Concrete elements	БДС EN 1338/AC
		БДС EN 1339/AC
		БДС EN 1340/AC
10.	Concrete	БДС EN 12504-1
11.	Unbound mixtures	БДС EN 932-1 – sampling from stockpiles
12.	Hydraulically bound mixtures	БДС EN 932-1 – sampling from stockpiles

II. MOBILE OFFICE (Office 2): 3100 Mezdra, 92 A Hristo Botev Str.

To perform testing of:

Type of scope: <i>flexible</i>				
№	Tested products	Type of test / characteristic	Testing methods (standard / validated methods)	
1	2	3	4	
1.	Aggregates	1.1.	Particle size distribution	БДС EN 933-1
		1.2.	Fines content	БДС EN 933-1
		1.3.	Overall flakiness index	БДС EN 933-3
		1.4.	Shape index	БДС EN 933-4
		1.5.	Sand equivalent	БДС EN 933-8+A1
		1.6.	Particle density - apparent particle density; - oven-dried particle density; - saturated and surface-dried article density - pre-dried particle density; - particle density saturated to constant mass	БДС EN 1097-6 clause 7, 8, 9 Annex A - clause A.3, A.4 Annex B
		1.7.	Water absorption	БДС EN 1097-6 clause 7, 8, 9 Annex B
		1.8.	California bearing ratio /CBR/	БДС EN 13286-47
		1.9.	Maximum density of the skeleton. Optimum water content	БДС EN 13286-2

Type of scope: <i>flexible</i>			
№	Tested products	Type of test / characteristic	Testing methods (standard / validated methods)
1	2	3	4
		1.10. Съдържание на вода	БДС EN 1097-5
		1.11. Plastic limit. Plasticity index.	Ordinance № РД-02-20-2, SG № 79/2018 • Annex № 16 to article 160, item 3* БДС EN ISO 17892-12
		1.12. Liquid limit	Ordinance № РД-02-20-2, SG № 79/2018 • Annex № 15 to article 160, item 3* БДС EN ISO 17892-12, Casagrande method
		1.13. Deformation module	Ordinance 55, art. 47
2.	Bituminous mixtures	2.1. Particle size distribution	БДС EN 12697-2+A1
		2.2. Soluble binder content	БДС EN 12697-1
		2.3. Bulk density	БДС EN 12697-6
		2.4. Dimensions of asphalt test specimen	БДС EN 12697-29
		2.5. Maximum density	БДС EN 12697-5
		2.6. Air voids content	БДС EN 12697-8
		2.7. Stability	БДС EN 12697-34
		2.8. Flow	БДС EN 12697-34
		2.9. Temperature	БДС EN 12697-13
3.	Bitumens	3.1. Penetration	БДС EN 1426
		3.2. Softening point	БДС EN 1427
		3.3. Elastic recovery	БДС EN 13398
4.	Fresh concretes	4.1. Slump	БДС EN 12350-2
		4.2. Density	БДС EN 12350-6
5.	Construction soils	5.1. Particle size distribution	БДС EN 933-1
		5.2. Fines content	БДС EN 933-1
		5.3. Plastic limit. Plasticity index.	Ordinance № РД-02-20-2, SG № 79/2018 • Annex № 16 to article 160, item 3*
		5.4. Liquid limit	Ordinance № РД-02-20-2, SG № 79/2018 • Annex № 15 to article 160, item 3*
		5.5. Maximum density of the skeleton. Optimum water content	БДС 17146 БДС EN 13286-2

Type of scope: <i>flexible</i>				
№	Tested products	Type of test / characteristic		Testing methods (standard / validated methods)
1	2	3		4
		5.6.	California bearing ratio /CBR/	БДС EN 13286-47
6.	Earth and rock embankments and foundations (base layers)	6.1.	Elastic module	БДС 15130
		6.2.	Deformation module	БДС 15130
		6.3.	Deformation modules ratio	БДС 15130
		6.4.	Bulk density of the skeleton by the sand-replacement method. Compaction degree.	Ordinance № РД-02-20-2, SG № 79/2018 • Annex № 18*
7.	Road pavements	7.1.	Thickness of asphalt layer	БДС EN 12697-36, - Destructive method
		7.2.	Compaction degree	БДС EN 12697-9**
		7.3.	Irregularities of pavement course	БДС EN 13036-7
		7.4.	Bulk density of asphalt test specimen (core)	БДС EN 12697-6
		7.5.	Conventional reference density	БДС EN 12697-9**
8.	Unbound mixtures	8.1.	Particle size distribution	БДС EN 933-1
		8.2.	Fines content	БДС EN 933-1
		8.3.	Water content	БДС EN 1097-5
		8.4.	Maximum bulk density of the skeleton. Optimum water content	БДС EN 13286-2 БДС 17146
		8.5.	California bearing ratio	БДС EN 13286-47
		8.6.	Magnesium sulfate value	БДС EN 1367-2
		8.7.	Plastic limit. Plasticity index.	БДС EN ISO 17892-12 Ordinance № РД-02-20-2, SG № 79/2018 • Annex № 16 to article 160, item 3*
		8.8.	Liquid limit	БДС EN ISO 17892-12 - Casagrande method Ordinance № РД-02-20-2, SG № 79/2018 • Annex № 15 to article 160, item 3*
		8.9.	Elastic module. Deformation module. Deformation modules ratio	БДС 15130
9.	Hydraulically bound mixtures	9.1.	Particle size distribution	БДС EN 933-1
		9.2.	Water content	БДС EN 1097-5
		9.3.	Maximum bulk density of the skeleton. Optimum water content	БДС EN 13286-2 БДС 17146
		9.4.	California bearing ratio	БДС EN 13286-47

Type of scope: flexible				
№	Tested products	Type of test / characteristic		Testing methods (standard / validated methods)
1	2	3		4
		9.5.	Immediate bearing index	БДС EN 13286-47
		9.6.	Linear swelling	БДС EN 13286-47
		9.7.	Bulk density of the skeleton by the sand-replacement method	Ordinance № ПД-02-20-2, Annex № 18*
		9.8.	Compaction degree	Ordinance № ПД-02-20-2, Annex № 18*

To perform sampling of:

Type of scope: flexible		
№	Name of product	Method of sampling (standard / validated methods)
1	2	3
1.	Aggregates	БДС EN 932-1 – sampling from stockpiles
2.	Bituminous mixtures	БДС EN 12697-27 – sampling from a lorry load of material
3.	Bitumens	БДС EN 58 – sampling from the surface of road tankers
4.	Construction soils	БДС EN 932-1 – sampling from stockpiles
5.	Fresh concretes	БДС EN 12350-1
6.	Road pavements	БДС EN 12697-27 – sampling of laid and compacted materials by coring
7.	Concrete	БДС EN 12504-1
8.	Unbound mixtures	БДС EN 932-1 – sampling from stockpiles
9.	Hydraulically bound mixtures	БДС EN 932-1 – sampling from stockpiles

Flexible scope: Implementing a new version of standards/documents or standards / documents replacing them is allowed. An updated list of standards/documents and their dated versions is provided by laboratory.

** БДС EN 12697-9:2004 is repealed but not replaced standard with regard to the testing method.

***References:**

MRDPW Ordinance № ПД-02-20-2, SG № 79/2018,

•Annex № 15 to art. 160, item 3: Method for determination of liquid limit of soils;

MRDPW Ordinance № ПД-02-20-2, SG № 79/2018,

•Annex № 16 to art. 160, item 3: Method for determination of plastic limit and plasticity index of soils;

MRDPW Ordinance № ПД-02-20-2, SG № 79/2018,

•Annex № 18 to art. 168, para. 1: Method for determining the bulk density of construction soils in situ by substitute sand.

I ORDER

To issue the certificate of accreditation reg. № 270 лИ/29.03.2023, valid until 29.07.2026, and this order as an integral part of it.

The certificate of accreditation with the enclosure to be received by the Manager / representative of the Groma Hold Ltd, the head of the Construction testing laboratory at Groma Hold Ltd, or other authorized person in the office of EA BAS.

Upon receipt of the certificate and the enclosure issued, the accredited person is obliged to return to EA BAS the originals of Accreditation Certificate № 270 ЛИ/29.07.2022, valid until 29.07.2026 and its enclosure – EA BAS order reg. № A 481/29.07.2022.

This order shall be notified to the Groma Hold Ltd, within 3 (three) days from its issuance.

Eng. Irena Borislavova

Executive Director of EA BAS