**SCOPE 90 ЛИ**

**Sofia, 31.10.2024**

**STROYMONTAZH EAD,**

**ROAD CONSTRUCTION LABORATORY**

**Management** address**:**

7200 Razgrad, 2D Dobrudzha Str.

Laboratory addresses**:**

7242 Lipnik, Razgrad Region, Tetradzhialan Area, Asphalt Base of Stroymontazh EAD,

**To perform testing of:**

| **Type of the scope:** *Flexible* | | | |
| --- | --- | --- | --- |
| **№** | **Tested products** | **Type of test / characteristic** | **Testing methods**  **(standard / validated method)** |
| 1 | 2 | 3 | 4 |
| 1. | Rock materials for:  - bituminous mixtures and pavements for roads, airport runways and  other transport surfaces (1);  - unbound and hydraulically bound mixtures for use in construction equipment  and road construction (2);  - auxiliary materials for concrete (3)  - sand (4)  - mineral flour (5) | 1.1. Grain metric structure. | БДС EN 933-1 (1), (2), (3), (4), (5) |
| 1.2. Fine fraction content | БДС EN 933-1 (1), (2), (3) |
| 1.3. Flat grains index | БДС EN 933-3 (1), (2), (3) |
| 1.4. Shape coefficient | БДС EN 933-4 (1), (2), (3) |
| 1.5. Sand equivalent | БДС EN 933-8 (1), (2), (3), (4) |
| 1.6. Crushing resistivity - Los Angeles coefficient | БДС EN 1097-2 (1), (2), (3) |
| 1.7. Crushing resistance at static load | БДС EN 206 /NA Appendix NA.Q (3) |
| 1.8. Water content | БДС EN 1097-5 (1), (2), (3), (4), (5) |
| * 1. Grain density: * pa - apparent particle density, * prd - dried particle density, * pssd - density in a   water-saturated superficial dry state.  Water absorption | БДС EN 1097-6 (1), (2), (3), (4)  (Wire Basket Method)  (Pycnometer Method) |
| 1.10. Mass loss at Magnesium Sulphate testing | БДС EN 1367-2 (1), (2), (3), (4) |
| 1.11. Maximum volumetric mass density of skeleton and optimum water content. | БДС EN 13286-2 (2)  БДС 17146 (2)  Shapes of A and B Proctor |
| 2. | Bitumen and bituminous binders. | 2.1. Penetration | БДС EN 1426 |
| 2.2. Softening temperature. | БДС EN 1427 |
| 3. | Asphalt  mixtures | 3.1. Soluble binder content | БДС EN 12697-1  (Centrifuge Method of uninterruptible power supply) |
| 3.2. Particle-size distribution | БДС EN I2697-2/A1 |
| 3.3. Maximum density | БДС EN 12697-5 |
| 3.4. Volumetric density | БДС EN 12697-6  A, B and D Procedure |
| 3.5. Air filled pores content | БДС EN 12697-8 |
| 3.6. Marshall Test. Resistance | БДС EN 12697-34 |
| 3.7. Marshall Test.  Arbitrary plasticity. | БДС EN 12697-34 |
| 4. | Laid and compacted asphalt layers | 4.1. Volumetric density | БДС EN 12697-6  A, B and D Procedure |
| 4.2. Degree of compaction | БДС EN 12697-9:2004(1) |
| 4.3. Asphalt layer thickness. | БДС EN 12697-36  (Destructive method) |
| 4.4. Irregularities on pavement surface | БДС EN 13036-7 |
| 5. | Construction  soils and road structures | 5.1. Water content | БДС EN 1097-5 |
| 5.2. Volumetric density | БДС EN ISO 17892-2 (Core tube Method) |
| 5.3. Density of soil at place by substituting sand. | AASHTO T 191 |
| 5.4. Maximum density of skeleton and optimum water content. | БДС EN 13286-2  БДС 17146  Shapes of A and B Proctor |
| 5.5. Packing coefficient | БДС 17146  AASHTO T 191 |
| 5.6. Circular plate load:   * Elastic modulus * Modules of deformation * Deformation modules ratio E2/E1 | БДС 15130 |
| 6. | Concrete mixtures | 6.1. Subsidence | БДС EN 12350-2 |
| 7. | Hardened concrete | 7.1. Compressive strength of test bodies | БДС EN 12390-3 |

(1) *Repealed but not replaced standard with regard to the testing method.*

**To perform sampling of:**

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| --- | --- | --- |
| **Type of the scope:** *Flexible* | | |
| **№** | **Product** | **Sampling methods**  **(standard/validated method)** |
| **1** | **2** | **3** |
| 1. | Rock materials for:   * bituminous mixtures and pavements for roads, airport runways and other transport surfaces, * unbound and hydraulically bound mixtures for use in construction equipment and road construction, * auxiliary materials for concrete, * sand, * mineral flour. | БДС EN 932-1  БДС EN 13286-1 |
| 2. | Bitumen and bituminous binders | БДС EN 58 |
| 3. | Asphalt mixtures | БДС EN 12697-27 |
| 4. | Laid and compacted asphalt layers | БДС EN 12697-27 |
| 5. | Construction soils and road structures | БДС EN 932-1  БДС EN 13286-1 |

***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.*