SCOPE 183 ЛИ

**ROAD CONSTRUCTION COMPANY SBS AD**

**ROAD CONSTRUCTION LABORATORY**

**Management address**:

6000 Stara Zagora, 92, Hristo Botev Str.

**Laboratory address**:

6050 Hrishteni, 1 Novozagorsko Shose Str, Land Lot № 77476.507.94

**To perform testing of**:

| **Type of the scope**: *flexible* | | | |
| --- | --- | --- | --- |
| **№** | **Tested products** | **Type of test / characteristic** | **Testing methods**  **(standard / validated method)** |
| 1 | 2 | 3 | 4 |
|  | Bitumen and bituminous binders:  Paving Grade Bitumen (1)  Polymer Modified Bitumen (2) | Penetration | БДС EN 1426 (1), (2) |
| Softening point | БДС EN 1427 (1), (2) |
|  | Bituminous mixtures | Soluble binder content | БДС EN 12697-1  (Automatic extractor; Continuous flow centrifuge) |
| Particle size distribution | БДС EN 12697-2 |
| Bulk density | БДС EN 12697-6 |
| Maximum density | БДС EN 12697-5 |
| Air voids content | БДС EN 12697-8 |
| Stability | БДС EN 12697-34 |
| Flow | БДС EN 12697-34 |
| Height of a bituminous specimen | БДС EN 12697-29 |
| Diameter of a bituminous specimen | БДС EN 12697-29 |
| Reference density | БДС EN 12697-9\* |
| Degree of compaction | БДС EN 12697-9\* |
| Thickness of a bituminous pavement | БДС EN 12697-36  (Destructive Method) |
|  | Roads and airfield pavements | Surface roughness of a pavement | БДС EN 13036-7 |
|  | Aggregates (1)  Foundation soils (2)  Pavement of unbound mixtures (3) | Particle size distribution | БДС EN 933-1 (1), (2) |
| Fine fraction content | БДС EN 933-1 (1), (2) |
| Flakiness index | БДС EN 933-3 (1) |
| Shape index | БДС EN 933-4 (1) |
| Percentage of:  - broken particles;  - totally broken particles;  - totally rounded particles; | БДС EN 933-5 (1) |
| Sand equivalent | БДС EN 933-8 + А1 (1) |
| Water content | БДС EN 1097-5 (1) |
| Particle density  -specific particle density (ρa);  -oven-dried particle density (ρrd);  -saturated and surface-dried particle density (ρssd) | БДС EN 1097-6, cl. 7, cl. 8, cl. 9 (1) |
| Water absorption | БДС EN 1097-6, cl. 7, cl. 8, cl. 9 (1) |
| Magnesium sulphate value | БДС EN 1367-2 (1) |
| Maximum dry density | БДС EN 13286-2 (Proctor mould (A) Large Proctor mould (В)) (1) |
| Optimum water content | БДС EN 13286-2 (Proctor mould (A) Large Proctor mould (В)) (1) |
| California bearing ratio | БДС EN 13286-47 (1) |
| Liquid limit | Appendix № 15 to Ordinance № РД-02-20-2  for Design of Roads1) (1),(2) |
| Plastic limit | Appendix № 16 to Ordinance № РД-02-20-2  for Design of Roads2) (1),(2) |
| Plasticity index | Appendix № 16 to Ordinance № РД-02-20-2  for Design of Roads2) (1),(2) |
| Maximum dry dencity | БДС 17146 (2) |
| Optimum water content | БДС 17146 (2) |
| Dry density | Appendix № 18 to Ordinance № РД-02-20-2 for Design of Roads3) (2),(3) |
| Degree of compaction | Appendix № 18 to Ordinance № РД-02-20-2 for Design of Roads3) (2),(3) |
| Elastic modulus | БДС 15130 (2), (3) |
| Deformation modulus. Modular ratio | БДС 15130 (2), (3) |

*\*Repealed but not replaced standard with regard to the testing method.*

To perform sampling of:

|  |  |  |
| --- | --- | --- |
| **Type of scope:** *flexible* | | |
| **№** | **Tested products** | **Sampling methods**  **(standard/validated method)** |
| **1** | **2** | **3** |
| 1. | Bitumen and bituminous binders:  Paving Grade Bitumens (1)  Polymer Modified Bitumens (2) | БДС EN 58 (1), (2):  - from sampling valve;  - using weighted sampling can. |
| 2. | Bituminous mixtures | БДС EN 12697-27:  - from material, loaded in dump truck, with a shovel;  - from material, positioned around the auger of an asphalting machine, with a shovel;  - from laid or compacted material by core cutting with a drill. |
| 3. | Aggregates | БДС EN 932-1:  - from the inside of a pile, through a loading machine, with a shovel;  - from a pile of small aggregates with a shovel/spoon;  - from a pile of large aggregates with a shovel.  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.*

**References:**

1) Appendix № 15 to Art. 160, item 3 of Ordinance № РД-02-20-2/28.08.2018 for Design of Roads: Flow limit determining method;

2) Appendix № 16 to Art. 160, item 3 of Ordinance № РД-02-20-2/28.08.2018 for Design of Roads: Method for determining the plastic limit of soils and plasticity indicator of soils.

3) Appendix № 18 to Art. 168, para. 1 of Ordinance № РД-02-20-2/28.08.2018 for Design of Roads: Method for determining the bulk density of construction soils in-situ, through substitute sand.