

**Leading manufacturer
of geosynthetics**

Making the world stronger!

2018



STEKLONIT JSC is the leading Russian manufacturer of geosynthetic materials.

The company comprises two production sites:

- The factory in Ufa has been operating since 1961
 - The plant territory is 8.2 hectares including open warehouses. Manufacturing workshops occupy an area of 2.7 hectares
 - Staff of the plant consists of more than 500 highly-skilled workers, more than 100 technical and engineering employees, mid-level managers and senior managers
- factory in the city of Tver, has been operating since 1965
 - The plant territory is 27 hectares including warehouses
 - Staff consists of more than 200 people

ISO-9001 quality management system is implemented at the both factories. The goods are tested by in-house certified laboratories.

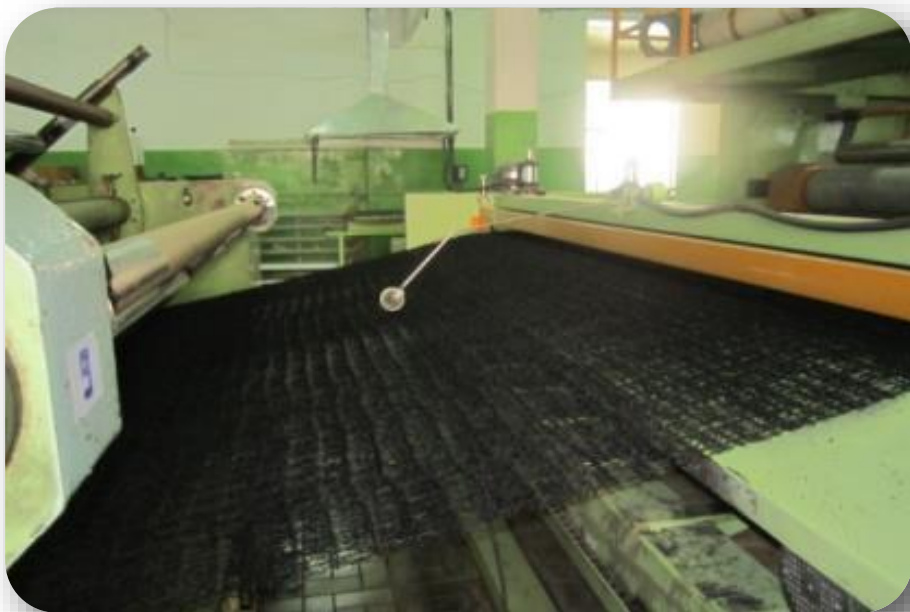


STEKLONIT: HIGH EXPERTISE LEVEL BASED ON A HALF-CENTURY EXPERIENCE!

ANNUAL CAPACITIES

>8 mln m

More than **8 000 000** square meters of anti-erosion geomats



ANNUAL CAPACITIES

>40 mln m

More than **40 000 000** square of geogrids





NOTIFIED BODY No. 1488
INSTYTUT TECHNIKI BUDOWLANEJ
CERTIFICATION DEPARTMENT
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PCA
POLSKA
KOMISJA
AK 620

CERTIFICATE OF CONFORMITY
OF THE FACTORY PRODUCTION CONTROL
1488-CPR-0500/Z

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Geomats GP 20/10 EXTRAMAT, GP 30/20 EXTRAMAT, GP 30/15 EXTRAMAT, GP 30/30 EXTRAMAT, GP 40/20 EXTRAMAT, GP 40/40 EXTRAMAT, GP 50/25 EXTRAMAT, GP 50/50 EXTRAMAT, GP 60/30 EXTRAMAT, GP 60/60 EXTRAMAT, GP 90/45 EXTRAMAT, GP 90/90 EXTRAMAT
GGP 20/10 EXTRAMAT, GGP 20/20 EXTRAMAT, GGP 30/15 EXTRAMAT, GGP 30/30 EXTRAMAT, GGP 40/20 EXTRAMAT, GGP 40/40 EXTRAMAT, GGP 50/25 EXTRAMAT, GGP 50/50 EXTRAMAT, GGP 60/30 EXTRAMAT, GGP 60/60 EXTRAMAT, GGP 90/45 EXTRAMAT, GGP 90/90 EXTRAMAT

placed on the market under the name or trade mark of

JSC „STEKLONIT”
15 Tramvaynaya str.
Ufa, Bashkortostan, 450027,
Russian Federation

and produced in the manufacturing plant

JSC „STEKLONIT”
15 Tramvaynaya str.
Ufa, Bashkortostan, 450027,
Russian Federation

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standards

EN 13249:2000, EN 13250:2000, EN 13251:2000, EN 13252:2000, EN 13253:2000, EN 13254:2000, EN 13255:2000
with changes and amendments
EN 13249:2000/A1:2005, EN 13250:2000/A1:2005, EN 13251:2000/A1:2005, EN 13252:2000/A1:2005, EN 13253:2000/A1:2005, EN 13254:2000/A1:2005, EN 13255:2000/A1:2005, EN 13255:2000/AC:2003

under system 2+ are applied and that the factory production control is assessed to be in conformity with the applicable requirements.

This certificate was first issued on 15.06.2016 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods, nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body.

HEAD
of the Certification Department
K. Hatowska
Katarzyna Hatowska, M.Sc. Eng.

ACTING DIRECTOR
of Instytut Techniki Budowlanej
Robert Gerylo
Robert Gerylo, PhD

Warsaw, 16.08.2017

NOTIFIED BODY No. 1488
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CERTIFICATE OF CONFORMITY
OF THE FACTORY PRODUCTION CONTROL
1488-CPR-0447/Z

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Geomat MTA 15-150 (300) EXTRAMAT, Geomat MTA 15-250 (300) EXTRAMAT, Geomat MTA 15-350 (300) EXTRAMAT, Geomat MTA 15-450 (300) EXTRAMAT, Geomat MTA 15-550 (300) EXTRAMAT, Geomat MTA 15-630 (300) EXTRAMAT, Geomat MTAD 1-15 (300) EXTRAMAT, Geomat MTAD 2-15 (300) EXTRAMAT, Geomat MTS 15-550 (300) EXTRAMAT

placed on the market under the name or trade mark of

JSC „STEKLONIT”
15 Tramvaynaya str.
Ufa, Bashkortostan, 450027,
Russian Federation

and produced in the manufacturing plant

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with changes and amendments
EN 13249:2000/A1:2005, EN 13250:2000/A1:2005, EN 13251:2000/A1:2005, EN 13252:2000/A1:2005, EN 13253:2000/A1:2005, EN 13254:2000/A1:2005, EN 13255:2000/A1:2005, EN 13255:2000/AC:2003

under system 2+ are applied and that the factory production control is assessed to be in conformity with the applicable requirements.

This certificate was first issued on 16.08.2016 (updated on 25.10.2017) and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods, nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body.

HEAD
of the Certification Department
K. Hatowska
Katarzyna Hatowska, M.Sc. Eng.

DEPUTY DIRECTOR
of Instytut Techniki Budowlanej
Anna Panek
Anna Panek, M.Sc. Eng.

Warsaw, 25.10.2017

№ 1488-CPR-0447/Z

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CERTIFICATE OF CONFORMITY
OF THE FACTORY PRODUCTION CONTROL
1488-CPR-0446/Z

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Geogrid SPP 30/30 POLISET, Geogrid PS 50/50 POLISET, Geogrid PS 65/65 POLISET, Geogrid PS 100/100 POLISET

placed on the market under the name or trade mark of

JSC „STEKLONIT”
15 Tramvaynaya str.
Ufa, Bashkortostan, 450027,
Russia

and produced in the manufacturing plant

JSC „STEKLONIT”
15 Tramvaynaya str.
Ufa, Bashkortostan, 450027,
Russia

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standards

EN 13249:2000, EN 13250:2000, EN 13251:2000
with changes and amendments
EN 13249:2000/A1:2005, EN 13250:2000/A1:2005, EN 13251:2000/A1:2005

under system 2+ are applied and that the factory production control is assessed to be in conformity with the applicable requirements.

This certificate was first issued on 15.06.2016 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods, nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body.

HEAD
of the Certification Department
K. Hatowska
Katarzyna Hatowska, M.Sc. Eng.

MANAGING DIRECTOR
of Instytut Techniki Budowlanej
Marcin M. Kruk
Marcin M. Kruk, PhD

Warsaw, 15.08.2016

№ 1488-CPR-0446/Z

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CERTIFICATE OF CONFORMITY
OF THE FACTORY PRODUCTION CONTROL
1488-CPR-0448/Z

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the construction product

Geogrid SSNP 50/50 HIGHWAY, Geogrid SSNP 75/75 HIGHWAY, Geogrid SSNP 100/100 HIGHWAY, Geogrid PS 50/50 HIGHWAY

placed on the market under the name or trade mark of

JSC „STEKLONIT”
15 Tramvaynaya str.
Ufa, Bashkortostan, 450027, Russia

and produced in the manufacturing plant

JSC „STEKLONIT”
15 Tramvaynaya str.
Ufa, Bashkortostan, 450027, Russia

This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the standard

EN 15381:2008

under system 2+ are applied and that the factory production control is assessed to be in conformity with the applicable requirements.

This certificate was first issued on 15.06.2016 and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods, nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body.

HEAD
of the Certification Department
K. Hatowska
Katarzyna Hatowska, M.Sc. Eng.

MANAGING DIRECTOR
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Marcin M. Kruk
Marcin M. Kruk, PhD

Warsaw, 15.06.2016

№ 1488-CPR-0448/Z

№ 1488-CPR-0500/Z

EXTRAMAT

ANTI-EROSION

GEOMATS



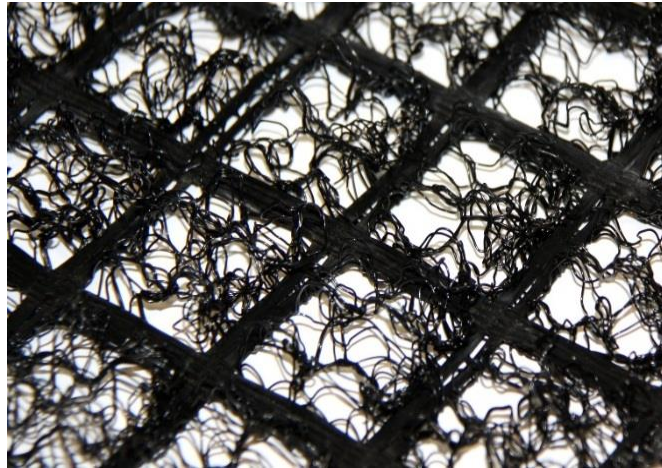
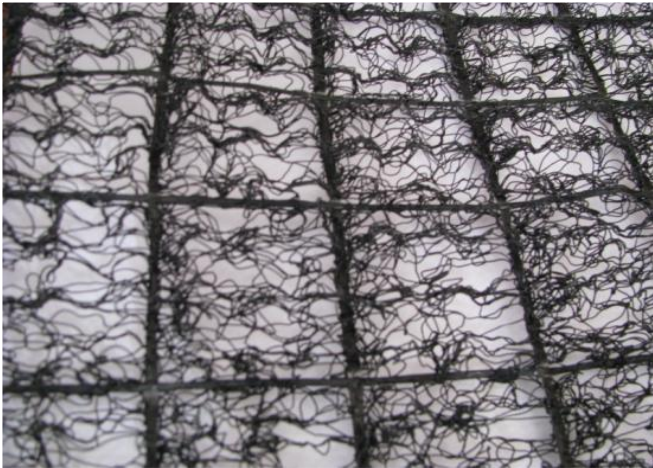
Three-dimensional geomats (3D mats) are used to create persistent vegetative cover against water erosion or wind erosion of earthwork structures:

- slopes, banked earth, water courses, drain ditches
- bridge abutments
- landslide-prone slopes of ravines
- beds of occasionally flowing streams



Geomats are produced of polypropylene by extrusion being simultaneously thermally bonded with a layer of reinforcing geosynthetic material: geogrid, non-woven fabric or without any backing.

MTA EXTRAMAT



Polypropylene geomat with a glass/polyester impregnated geogrid backing, strength up to 100 kN/m

MTS EXTRAMAT

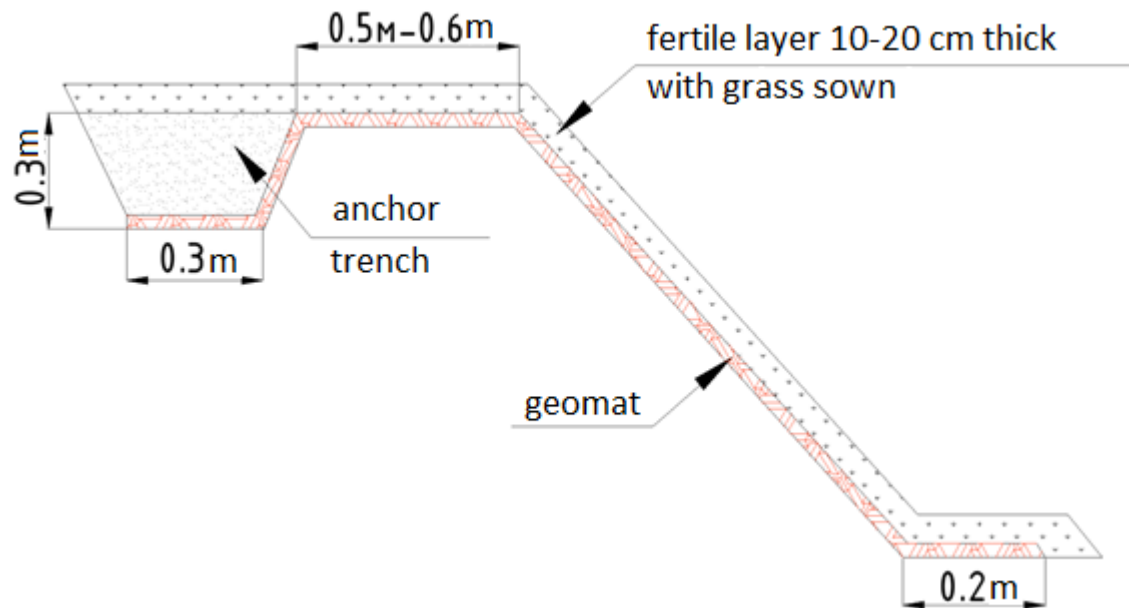


Polypropylene geomat without a backing

MTAD EXTRAMAT

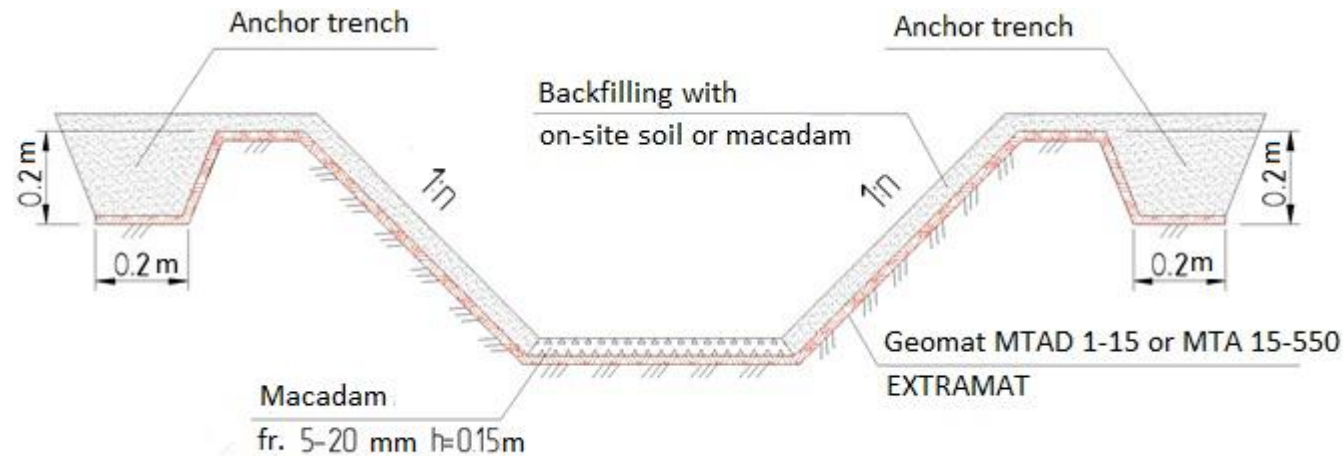


Polypropylene geomat with nonwoven fabric

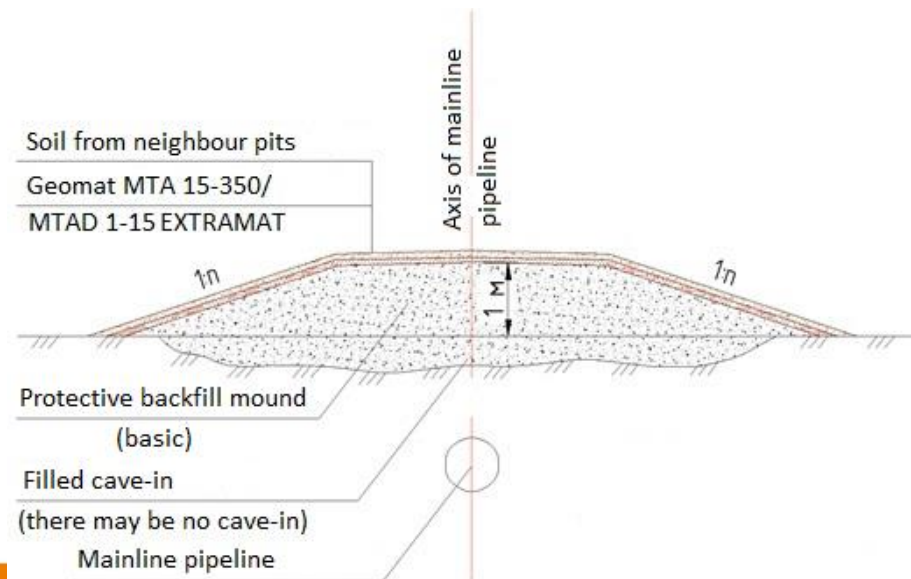


1. Laying out a face of slope
2. Arranging an anchor trench along the crest of earthwork
3. Delivering and spreading rolls
4. Casting seeds (1/3 of total amount)
5. Laying (unwinding) rolls in parallel, 0.15...0.2 m overlapped
6. Covering with vegetable soil as thick as per design
7. Casting the rest 2/3 of the seeds

Reinforcing a bed of occasionally flowing stream



Reinforcing a protective backfill mound above pipeline



1. High mounting speed

Rolls of geomat are unwound downward bladed slope surface, at that being strained and smoothed out. In most cases no additional anchoring is needed.

2. Cost

is lower than that of high-volume geogrids, height starting from 100 mm, which are regularly used in combination with non-wovens; the cost is lower than that of multilayer bio-mats with grass seeds.

3. Easy conditions of shipment and storage

Polymer geomat is highly resistant to chemically aggressive media, humidity and temperature extremes

4. Durability

Geomat reinforces surfacial area of a slope along with grass roots throughout the whole service life of a road

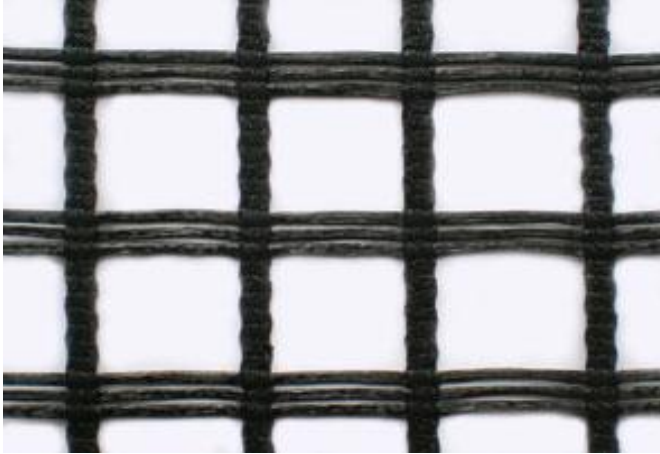
5. Great variety of versions

We manufacture geomats with various backings and physical-mechanical performance



“HIGHWAY”
**GEOGRIDS FOR
ASPHALT
REINFORCEMENT**

Flat geogrids SSNP HIGHWAY, PS HIGHWAY and GB HIGHWAY are used for reinforcing asphalt-concrete motorway pavement.



SSNP HIGHWAY is produced of stabilized **glass-fiber** raw material.

GB HIGHWAY is produced of **basalt raw material**.

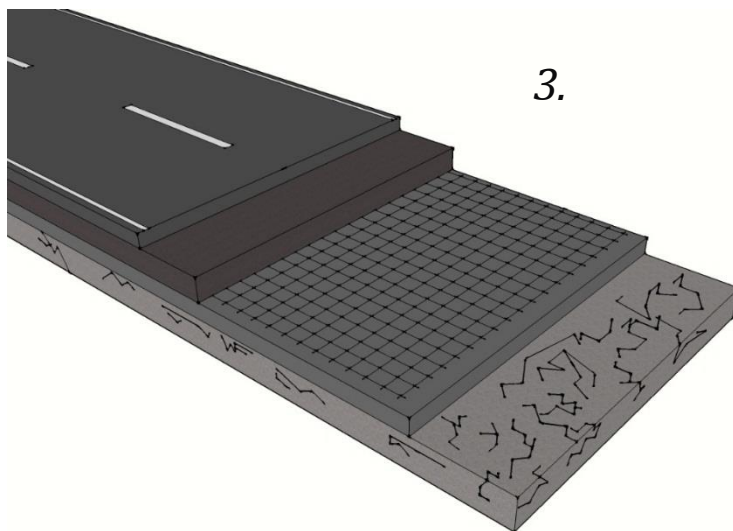
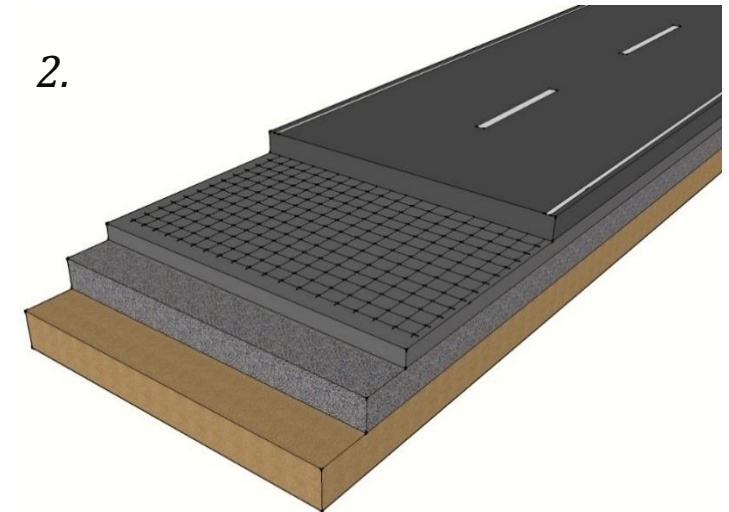
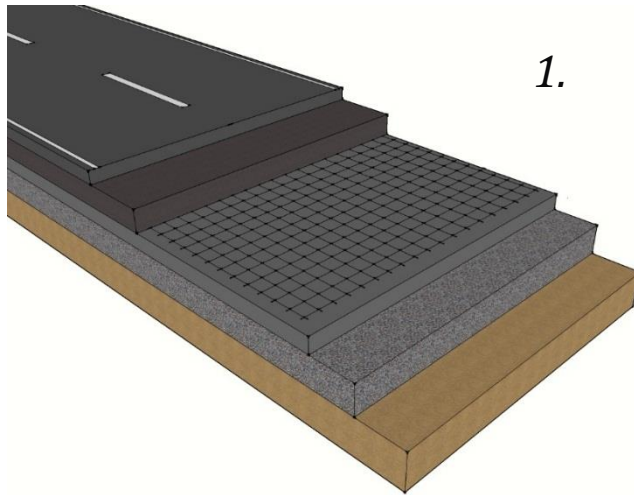
PS HIGHWAY is produced by warp-knitting method of **polymer (polyester) fibers**.

All geogrids are impregnated with complex formulations based on bituminous binding agents in order to improve their adhesive behavior.



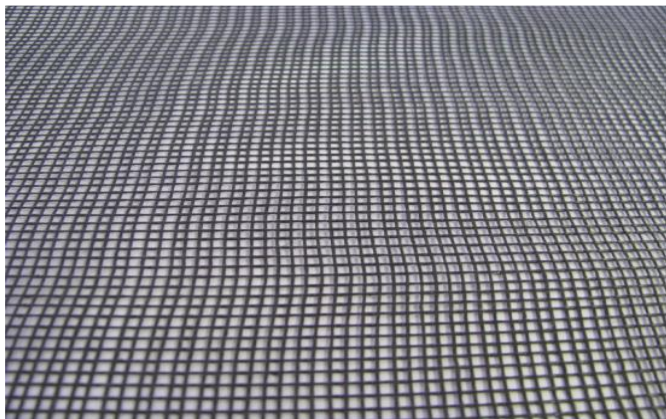
“HIGHWAY” geogrids significantly extend inter-maintenance period of road pavement.

“HIGHWAY” geogrids extend service life of road structure, increase its bearing capacity, reduce shear deformation and slow crack and rutting formation



1. We recommend to lay “HIGHWAY” geogrids underneath two layers of asphalt concrete, which is mainly the case when a new road is constructed or during road renovation.
2. We recommend to lay “HIGHWAY” geogrids underneath one layer of asphalt-concrete, which is the case during road maintenance.
3. We recommend to lay “HIGHWAY” geogrids onto cement concrete base. Geogrid is laid onto asphalt-concrete leveling course.
4. When laying three layers of asphalt concrete, it is recommended to lay geogrid on the bottom layer.

**“POLISET”
GEOGRIDS FOR
REINFORCING ROAD
PAVEMENTS**



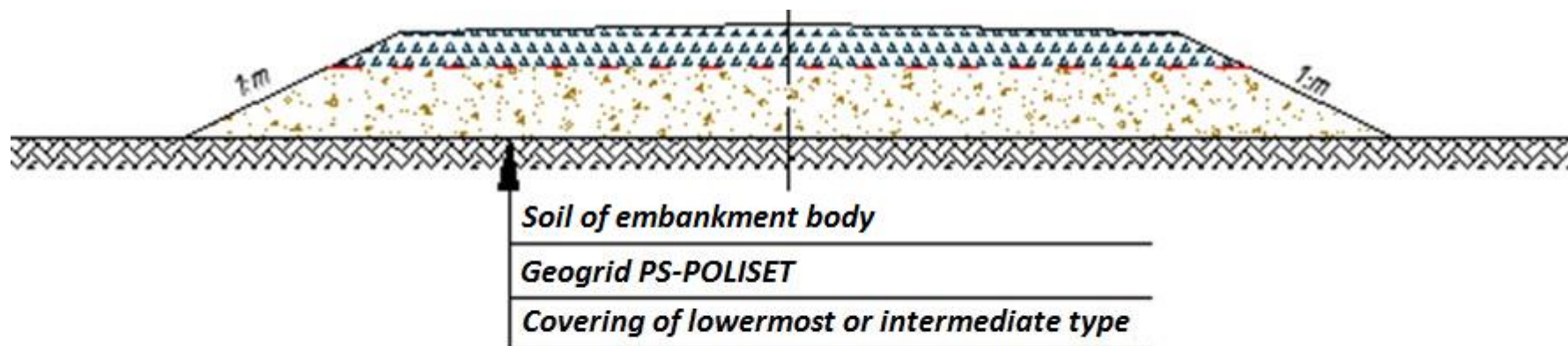
‘POLISET’ geogrids are made of high-strength polyester threads saturated with protecting compositions according to thread-sewing technology;

POLISETs are used for reinforcing road pavements that contact with large-fraction (inert) materials and, in combination with other materials, creating powerful ground yokes and reinforced ground structures.

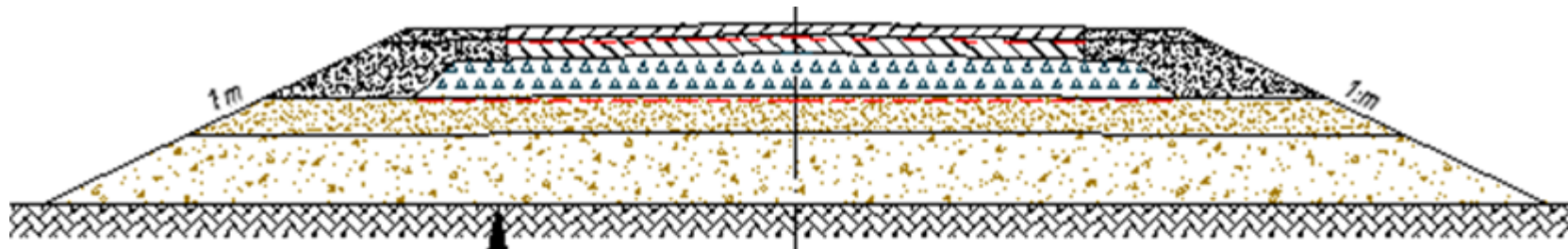
Functions of geogrids in ground structures:

- The increase of bearing capacity;
- The insurance of general stability;
- The reduction of differential settlements;
- The extension of service life.

Road dressing of lowermost or intermediate type



Heavy-duty pavement



earth roadbed boundary

drainage layer (sand)

PS-POLISSET geogrid

large gravel

lower layer of asphalt-concrete surfacing

PS-HIGHWAY/SSNP-HIGHWAY geogrid

upper layer of asphalt-concrete surfacing

1. Decrease in differential settlements

Due to redistribution of incoming loads caused by motor vehicles to a greater area, banked ground settlement is more uniform.

2. Separation Extension of road dressing service life

Structural layers of sand and macadam are not intermixed and function for a long time.

3. Decrease in thickness of macadam layer

When calculated, macadam layer thickness may sometimes be 15-30% reduced by means of increasing general elasticity modulus of road dressing , depending on road characteristic and properties of construction materials.

WE ARE TRUSTED BY



- ✓ We have been producing glass-fiber materials for **56 years**
- ✓ More than **3 700 projects have been implemented** using our products
- ✓ **Full-cycle manufacturing enterprise**: from production of glass-fiber to manufacture composite articles and designing application solutions
- ✓ Quality of products is confirmed by **Russian and international certificates**
- ✓ **European equipment**, team of experienced and qualified specialists, **innovative approach to work**

THANK YOU FOR YOUR ATTENTION!

STEKLONIT JSC

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