

Textilní zkušební ústav, s.p.

TEXTILNÍ ZKUŠEBNÍ ÚSTAV, s.p.
(TEXTILE TESTING INSTITUTE)

Cejl 480/12, Zábrdovice, 602 00 Brno, Czech Republic

Notified body No. 1021

INSPECTION REPORT

of results of supervision over the geotextile factory production control

pursuant to the Regulation of the European Parliament and Council (EU) No. 305/2011 which determines the harmonized conditions for launching building products in the market and which cancels the Decree of the Council No 89/106/EEC, Annex V, article 1.3, par b) - ii)

No.: 1021/11/018/K9

(1021/20/325)

Manufacturer: **AKİZO YALITIM SİSTEMLERİ SAN. Ve TİC. A.Ş.**
D.O.S.A.B., Reyhan Sok., No: 3, Osmangazi, TR - 16245, Bursa, Turkey

Manufacture location: **AKİZO YALITIM SİSTEMLERİ SAN. Ve TİC. A.Ş.**
D.O.S.A.B., Reyhan Sok., No: 3, Osmangazi, TR - 16245, Bursa, Turkey

Product: **LineFlex EPDM geomembrane**
- types 1,0/ 1,1/ 1,2/ 1,3/ 1,4/ 1,5/ 1,6/ 1,65/ 1,7/ 1,8/ 1,9/ 2,0/ 2,5 mm
geosynthetic rubber geomembrane used as a fluid barrier
made of ethylene-propylene-diene monomer
thickness: 1,0 - 2,5 mm
function: fluid barrier

Technical specification: **EN 13361:2004/A1:2006, EN 13362:2004, EN 13491:2004/A1:2006**
EN 13492:2004/A1:2006, EN 13493:2004, EN 15382:2013

Contract No. of inspection
activity: 1021/11/02-A

Number of pages: 5

Date of issue of the Inspection
Report: 30.10.2020

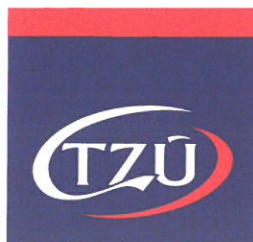
Issued by:

Tomkova
Ing. Lenka Tomková
Certification department

Approved by:

Pavel Malčík
RNDr. Pavel Malčík
Managing director





Textilní zkušební ústav, s.p.

TZÚ Brno, NB 1021, Inspection report No.: 1021/11/018/K9

Page: 2/5

1. General data

1.1 Ordering firm

AKİZO YALITIM SİSTEMLERİ SAN. Ve TİC. A.Ş.

D.O.S.A.B., Reyhan Sok., No: 3, Osmangazi, TR - 16245, Bursa, Turkey

Ordering was realised in cooperation with commercial agent of producer:

Efectis Era Avrasya Test ve Belg. A.Ş., Dilovasi Organize Sanayi Bölgesi, 5. Kisim Firat Cad. No. 18 Dilovasi Kocaeli/Türkiye TURKEY.

1.2 Manufacture location - description

Manufacture location: **AKİZO YALITIM SİSTEMLERİ SAN. Ve TİC. A.Ş.**

D.O.S.A.B., Reyhan Sok., No: 3, Osmangazi, TR - 16245, Bursa, Turkey.

Factory keeps the Quality system certificate according to ISO 9001:2015 (certificate No. TR009143) issued by BUREAU VERITAS, validity till January 02, 2021.

1.3 Product description

LineFlex EPDM Geomembrane (types 1,0/ 1,1/ 1,2/ 1,3/ 1,4/ 1,5/ 1,6/ 1,65/ 1,7/ 1,8/ 1,9/ 2,0/ 2,5 mm) is a waterproof geosynthetic sheet. It is made of EPDM (ethylene-propylene-diene monomer), thickness 1,0 - 2,5 mm. It is declared as a fluid barrier used in constructions.

Limitation for construction:

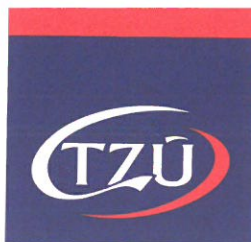
LineFlex EPDM Geomembrane is declared for use in water reservoirs, dams, puddles, waterways, tunnels, solid-liquid waste storage areas, transportation infrastructure applications... The range of application and important properties of the barriers for the intended use, the system of conformity assessment and the inspection system in the manufacture plant are specified in harmonised standards: EN 13361:2004/A1:2006, EN 13362:2004, EN 13491:2004/A1:2006, EN 13492:2004/A1:2006, EN 13493:2004, EN 15382:2013 in article ZA.1 an ZA.2. Detailed description is mentioned in certification report No. 1021/11/026 (29.06.2011), 1021/11/26-1 (08.08.2011), 1021/11/026-2 (12.10.2011) issued NB 1021 TZÚ Brno.

1.4 Technical specifications relating to the assessment and verification of the constancy of performance

- CPR Regulation No. 305/2011 (Annex IV - code 8, Annex V - art. 1.3, system 2+)
- Harmonised standards for geomembranes (EN 13361:2004/A1:2006, EN 13362:2004, EN 13491:2004/A1:2006, EN 13492:2004/A1:2006, EN 13493:2004, EN 15382:2013)

Standards EN 13361, EN 13362, EN 13491, EN 13492, EN 13493 (versions 2004/2006) and EN 15382:2013 were cancelled and new versions from 2018 were issued. But new versions are not harmonised to CPR. It is why the certification – regular surveillance was performed according to old harmonised versions from 2004/2006 and 2013. Some requirements of new versions from 2018 were considered (frequency of inspection testing, durability testing ...).





Textilní zkušební ústav, s.p.

TZÚ Brno, NB 1021, Inspection report No.: 1021/11/018/K9

Page: 3/5

1.5 Issued certificates and final reports on the verification of the constancy of performance

Certificate No.	Issued	Products	Conformity assessed according to	Final report No.	Inspection report
1021-CPD-018/11	30.6.2011 updated: 8.8.2011	LineFlex EPDM Geomembrane (types 1,0/ 1,1/ 1,2/ 1,3/ 1,4/ 1,5/ 1,6/ 1,65/ 1,7/ 1,8/ 1,9/ 2,0/ 2,5 mm)	CPD – 89/106/EEC Contract No.: 1021/11/02-A	1021/11/026 1021/11/026-1 (8.8.2011) 1021/11/026-2 (12.10.2011)	Inspection report 1021/11/018/K1 1021/11/018/K2 1021/11/018/K3 (12.6.2014)
1021-CPR-018/11	updated: 12.10.2015		CPR: 305/2011		1021/11/018/K4 (12.10.2015)
					1021/11/018/K5 1021/11/018/K6 1021/11/018/K7 1021/11/018/K8 (04.11.2019) 1021/11/018/K9 (30.10.2020)

1.6 Information about previous assessment of the factory production control

Regular surveillance inspection of the factory production control in the manufacturer's plant was carried out 15/10/2019 by auditor of NB 2184 ERA. Report on the application of requirements for the factory production control of geosynthetic rubber geomembrane from 15/10/2019 and Inspection report No. 1021/11/018/K8 of 04/11/2019 issued by NB 1021 TZÚ Brno show the inspection results.

2. Assessment of the factory production control

2.1 Technical specification requirements, technical regulation requirements for the factory production control

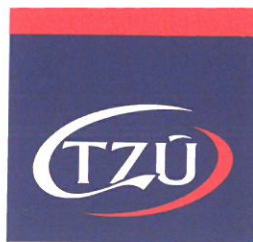
Principal requirements of CPR (Regulation No. 305/2011) are specified in detail the harmonised standards EN 13361:2004/A1:2006, EN 13362:2004, EN 13491:2004/A1:2006, EN 13492:2004/A1:2006, EN 13493:2004, EN 15382:2013 (annex A1, A2, ZA). These standards stipulate effectual properties of the products and testing methods for manufacturer's testing and verification of these properties. They stipulate the requirement for the method of conformity assessment by the assessment of the factory production control with supervision. See notice in Art. 1.4.

The factory production control has been verified according to Questionnaire to check of the factory production control that is an appendix No. 2 of the harmonised standards mentioned above.

2.2 Results of factory production control assessment

The inspection of factory production control - regular inspection was carried out on 08.10.2020 as "remotely audit", through electronic communication in the manufacturing place - factory **AKİZO YALITIM SİSTEMLERİ SAN. VE TİC. A.Ş.**, factory D.O.S.A.B., Reyhan Sok., No: 3, Osmangazi, TR - 16245, Bursa, Turkey - by auditor ERA and auditor NB 1021 TZÚ Brno.





Textilní zkušební ústav, s.p.

TZÚ Brno, NB 1021, Inspection report No.: 1021/11/018/K9

Page: 4/5

Precondition for providing permanent level of the assessed product quality was verified in producer's plant on the basis of documentation, producer's records of the testing performed and performance of requirements specified by the standards mentioned above (Annex A, B, ZA). Requirements of harmonised standard were checked.

Report on the application of requirements for the factory production control of geosynthetic rubber geomembrane No. 33/20 of 08/10/2020 which is enclosed to this report informs about inspection results.

The manufacturer keeps the management quality certificate according to ISO 9001:2015. Complete description of the quality system confirming to the quality control system according to ISO 9001:2015 is specified in technical documents of the producer.

The inspection was aimed especially at the following documentation:

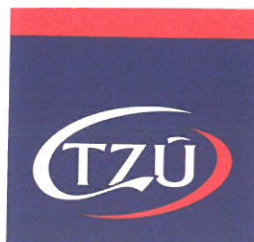
- management quality system, Quality Manual, procedures
- EPDM membrane technical specification
- work orders
- membrane control forms
- quality plan with frequency of testing
- quality and analyse reports, records (raw materials, controls during production, final testing - tensile, tearing)
- external testing
- technical documentation for products, product specification and declaration, CE label
- reports of metrological service of measuring instruments. *Presented protocols on calibration.*

Checked sections of factory production control:

- raw materials
- production, storage, manipulation and treatment
- establishment of continuous internal production control with all specified procedures and effective verification and making provisions for product inspection in the manufacture plant (internal and external control tests and their frequency, statistics in production) – raw material, testing through manufacturing, final testing
- product identification and traceability
- marking and labelling of products according to EN ISO 10320, CE label (according to CPR)
- non-conforming products (control, corrective actions, identification, storage)
- testing equipment
- maintenance procedures
- corrective actions related to results of previous audit 2019:
 - There was not any non conformity mentioned in report from audit in 2019.

Inspection results claim that the introduced system of factory production control of products – **LineFlex EPDM Geomembrane** - complies with requirements of harmonised standards. It is operational and is able to provide permanent quality level of the products verified.





Textilní zkušební ústav, s.p.

TZÚ Brno, NB 1021, Inspection report No.: 1021/11/018/K9
Page: 5/5

3. General assessment

On the basis of findings from the assessment (regular surveillance) of the factory production control in the manufacturer's plant - **AKİZO YALITIM SİSTEMLERİ SAN. VE TİC. A.Ş.**, factory **D.O.S.A.B.**, Reyhan Sok., No: 3, Osmangazi, TR - 16245, Bursa, Turkey - it can be stated that the assessed factory production control for **LineFlex EPDM Geomembrane**:

- is in compliance with the requirements of the technical specification, i.e. the requirements of harmonised standards EN 13361:2004/A1:2006, EN 13362:2004, EN 13491:2004/A1:2006, EN 13492:2004/A1:2006, EN 13493:2004 and EN 15382:2013 specifying principal requirements of CPR (Regulation No. 305/2011)
- and proper function is ensured

The producer is obliged to deliver precise specification including parameters with each variant put on the market. Findings and conclusions of this protocol are valid on presumption that there is no change of facts under which the assessment has been carried out. Any modification shall be reported to NB No. 1021, TZÚ Brno

In accordance with CPR Regulation No. 305/2011 the certificate owner is subject to regular inspection of proper function of the factory production control once a year. **The validity of the certificate issued is qualified by positive assessment of the factory production control.**

4. Annexes

1. Protocol from the supervision audit No. 33/20 dated 08/10/2020, issued by NB1021 TZÚ Brno, an accredited management system certification body.

