

# Surveillance visiting protocol



Third party surveillance: **year 2024**

Client: **Laviosa Chimica Mineraria, S.p.A.**  
Via Leonardo da Vinci, 21  
57123 Livorno  
Italy

Inspector SKZ:  
Melanie METZUNG  
Interlocutor:  
Marco BELLEZZA  
Irene CAVALLINI  
Matteo IEGRE  
Claudio TRAVERSI

Manufacturing site: 57123 Livorno

Contract no: 4452, 4489, 4510, 5119

Construction products: *clay geosynthetic barrier*  
"MODULO GEOBENT XP", "EDILMODULO XP", "MAPERPROOF", "MACLINE GCL W",

Basis: EN 13361:2004/A1:2006, EN 13362:2005,  
EN 13491:2004/A1:2006, EN 13492:2004/A1:2006,  
EN 13493:2005, EN 15382:2013

No.	Results by the inspection body	Measures	Deadline	Responsible	Realized
1.	no measures				
2.					
3.					

No.	Recommendations
1.	no recommendations
2.	
3.	

Follow-up visit necessary:  yes  no

Date: \_\_\_\_\_

The factory production control fulfils the requirements

yes  no

The test equipment is complete and in good working condition

yes  no

The labs staff is qualified and in sufficient amount available

yes  no

Complains about the inspected products?

yes  no

Confirmation to the above written:

Livorno  
2024-04-24

company  
Laviosa S.p.A

inspection body  
SKZ-Testing GmbH

### Checklist for the assessment of a Factory Production Control system (for CE marking purposes)

Question	Comment
<i>If the manufacturer is ISO 9001 certified, these questions (in italics) do not have to be checked during every audit</i>	<i>Refer to the manufacturer's documentation and specific comments</i>
<b>1 Product identification and traceability</b>	
1.1 What are the means used for the unique identification of any individual finished product?	article code number, batch number, roll number
<i>1.2 Is traceability guaranteed from final product to production date and raw materials?</i>	Yes, with article code number and batch number  checked on MODULO GEOBENT XP5 /360 from 22.04.2024 lot. no 19044 sample 244
1.3 Does the marking on the final product comply with EN ISO 10320	Yes, roll is printed even every 2.5 3 to 4 metres
<b>2 Production process control</b>	
<i>2.1 Are the specified requirements concerning process validation, including the associated personnel and equipment documented and implemented?</i>	Yes, M0.P0Q.05.B.C, Rev. 01 Report GCL-(current year)
<b>3 Inspection and testing on in-coming raw materials</b>	
3.1 Are there specification sheets concerning incoming raw materials?  Does raw material meet the required specifications?	Yes, purchase and specification M0.06.A.D-A, Rev. 05 from 05.11.2019 PGQ.11.I rev 01 from 13.04.2021  Specification for Bentonite: M0.04.A.C_Eng Rev. 01 (14.04.2018)  Yes, checked on several examples
3.2 Is there a testing plan for in-coming raw materials and is it followed?	No testing plan for the incoming material, the company uses the certificates of their suppliers

<b>4 Inspection and testing during manufacturing</b>	
4.1 Is there a documented inspection and/or testing plan?	Yes, <del>MO10AC01 piano controllo prodotti</del> <del>REV05_14.06.2023</del> <b>MO.PGQ.11.C rev 00 from 11.03.2019 (current year)</b> Length, width, weight are checked during production
<b>5 Final inspection and testing</b>	
5.1 Are all the facilities, equipment and trained personnel to carry out the required inspections and tests available (including subcontracted tests)? <i>(This requirement may be fulfilled by subcontracting with one or more organisations or persons having the necessary qualifications and equipment.)</i>	Yes
5.2 Are the tests conducted at the minimum frequency required for the FPC/harmonised Standard?	Yes, <del>MO10AC01 "Piano controllo Prodotti" (Rev. 4; 22.03.2017)</del> <b>MO.PGQ.11.C rev 00 from 11.03.2019</b> Tabella Riassuntiva Analisi CE (current year)
EN 16416 Water permeability test	ASTM D5887 - Water permeability test frequency: 25.000 m <sup>2</sup>
ASTM D5890 Swell index	ASTM D5890 - Swell index frequency: every day (30 t or 60 t) on the raw material CoA of every batch Bentonite shipped from India is checked
ASTM D6496 Peel test	ASTM D6496 frequency: 20.000 m <sup>2</sup>
EN 14196 Mass per unit area	EN 14196 – Mass per unit area frequency: each lot (minimum) GCL Lab L2
EN ISO 10319 Tensile test	EN ISO 10319 - Tensile test frequency: 20.000 m <sup>2</sup>

EN ISO 12236 Static puncture test (CBR-test)	EN ISO 12236 - Static puncture test frequency: 50.000 m <sup>2</sup>
EN ISO 13438 Resistance to thermal oxidation	every 5 years Reports from GTX suppliers are available last test was performed by SKZ in 2022 (220738/21-l)
5.3 Are all tests conducted in accordance with the applicable standard and in conformance with Annex ZA for declared essential characteristics (has the confidence level been met)?	Yes
5.4 <i>Are there records providing evidence that the product has been tested?</i>	Tabella Riassuntiva CE (current year)
5.5 <i>Is there traceability to the person responsible for testing final products and for releasing the products?</i>	Traceability is done via CQ lot number given on test protocols
5.6 How are the requirements regarding RWM, PCM and PIM established and fulfilled?	Recycling material is not used
5.7 Are the requirements regarding raw materials and durability tests established and fulfilled?	Yes
<b>6 Control of inspection, measuring and test equipment</b>	
6.1 <i>Are there defined procedures to control, calibrate and maintain the equipment used?</i>	Yes <del>Me.11.AB.02</del> Programma Taratura Periodica Strumenti Laboratorio QC & GCL (current year)
6.2 <i>Is inspection, measuring and test equipment in accordance with relevant test standard? (Check calibration records for inspection, measuring and test equipment and - if existing - round robin test results)</i>	Yes, external calibration certificate checked on various examples  e.g. for balance, calibrated on 14.03.2024
<b>7 Control of non-conforming products</b>	
7.1 <i>Are all the cases of non-conforming products (including customer complaints) recorded?</i>	Yes, Complaints were received not on performance of products but on packaging/delivery etc. Complaints are recorded in CRM system

7.2	<i>Are non-conforming products identified and segregated from the rest of the production?</i>	Label "non-conforme" is placed on the non-conforming products
7.3	<i>Are all the cases of non-conforming products investigated? Who has the authority to take decisions concerning them? (check organigram)</i>	Data collected in CRM-System Group of people (Quality, Process, Purchase ....)
<b>8</b>	<b>Corrective actions</b>	
8.1	<i>Are there documented procedures to implement proper corrective actions?</i>	PG 09, Rev. 02 from 03.01.2022  Gestione delle non Conformità dei Reclamine e delle Aziono Corretive
<b>9</b>	<b>Handling, storage and packaging</b>	
9.1	<i>Has the manufacturer identified the extent of his responsibility in relation to storage, protection and delivery? Are the methods used to protect the product during handling, storage and packaging described?</i>	Short description is given in PGQ. 09 (Rev. 00; section 6/7) from 03.01.2018 Workers are trained internally by production plant manager
9.2	Is the labelling of products in conformance with the provisions of the harmonised standards?	Yes, checked on various examples, e.g. MACLINE GCL W20 Roll and batch no. 21 24044
<b>10</b>	<b>Control of quality records</b>	
10.1	Are quality records legible and maintained for at least 10 years? <i>(Electronically stored records shall be protected against changes and deletion)</i>	Yes, Description in PR.10.A, Rev. 11 PQ.11 rev 2 from 25.05.2020 PGQ.11 rev 03 from 14.11.2023  Procedura per il controllo Qualità in LCM
<b>11</b>	<b>Personnel</b>	
11.1	<i>Does the manufacturer ensure that the personnel involved in the process are suitably trained?</i>	Lab technicians are trained internally by quality manager Documented in M0.PG.02.C (Rev 0; 14.02.2019)  Safety training is done externally
11.2	<i>Are the job descriptions and responsibilities of the operators specified?</i>	Yes, Scheda Mansion no. 12  checked on example of Irene Cavallini (employee of QC Lab) operator of production