



საჯარო სამართლის იურიდიული პირი -
 ივანე ჯავახიშვილის სახელობის თბილისის სახელმწიფო უნივერსიტეტი
 ალექსანდრე თვალჭრელიძის სახელობის მინერალური
 ნედლეულის კავკასიის ინსტიტუტი

LEGAL ENTITY OF PUBLIC LAW -
 IVANE JAVAKHISHVILI TBILISI STATE UNIVERSITY
 ALEXANDER TVALCHRELIDZE CAUCASIAN INSTITUTE OF MINERAL RESOURCES

№ 39-1/98

„04“ March 2022 წ.

To Mr. Robert Tsirekidze

Mr. Robert,

In the Research Department of Silicates and Construction Materials Technology the sample of Natural stone - Teshenite from the Lolasheni deposit provided by you has been tested.

Abrasion testing was carried out on a Los Angeles machine according to the ASTM C131 standard; crystallization (salt resistance) to a solution of magnesium sulfate according to the EN 1367-2 standard.

According to the test results (see Appendix 1 – Test Report No.9-1, dated 03/04/2022:

- Weight loss for abrasion testing - 9.65%;
- Weight loss after treatment with magnesium sulfate solution- 3.09%;

The presented sample of Teshenite from the Lolasheni deposit meets the requirements of the BS EN 13383:1 (ARMOURSTONE. SPECIFICATION) standard in terms of the above parameters.

Respectfully,

Director of the Alexander Tvalchrelidze
 Caucasian Institute of Mineral Resources (TSU)

 R. Kvatashidze



სსიპ ივანე ჯავახიშვილის სახელობის თბილისის სახელმწიფო
უნივერსიტეტი (თსუ)
ალექსანდრე თვალჭრელიძის სახელობის მინერალური წედლეულის
კავკასიის ინსტიტუტი (მწკი)

IVANE JAVAKHISHVILI TBILISI STATE UNIVERSITY (TSU)
CAUCASIAN ALEXANDER TVALCHRELIDZE INSTITUTE OF
MINERAL RESOURCES (CIMR)

სილიკატების და სამშენებლო მასალების ტექნოლოგიის სამეცნიერო-კვლევითი განყოფილება
Research Department of Silicates and Construction Materials Technology

საქართველო, ქ. თბილისი, მინდელის ქ. N11, მობ.: 599 51 90 20,
N11, Mindeli st., Tbilisi, Georgia, mob.: 599 51 90 20
E-mail: tcimr@internet.ge, ellennelia@gmail.com, www.caumineral.org.ge

Test report No.9-1

Tbilisi

March 04, 2022

Customer: Robert Tsirekidze

Customer application: Contract No.190/08, 02/03/2022

Test subject: Natural stone - Teshenite from the Lolasheni deposit

Test purpose: Abrasion and salt resistance testing

Regulatory documents used during testing:

BS EN 13383:1 Armourstone. Specification

ASTM C 131 Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

EN 1367-2. Tests For Thermal And Weathering Properties Of Aggregates. Magnesium Sulfate Test

The customer delivered sample of Natural stone - Teshenite from the Lolasheni deposit to the Research Department of Silicate and Construction Materials Technology.

Samples were selected by the "Customer". The "Contractor" is not responsible for the correct sampling.

The abrasion test was carried out on a Los Angeles machine according to ASTM C131 standard.

Test for soundness to magnesium sulfate solution – by EN 1367-2 standard.

The results of laboratory tests are presented below.

Results of Testing

1. Weight loss for abrasion testing - 9.65%.
2. Weight loss after treatment with magnesium sulfate solution- 3.09%

Head of the Department, PhD

Senior Researcher, PhD



E. Shapakidze

I. Gejadze