



VÝZKUMNÝ ÚSTAV POZEMNÍCH STAVEB - CERTIFIKAČNÍ SPOLEČNOST, s.r.o.

Autorizovaná osoba Oznámený subjekt Certifikační orgán pro systémy managementu a kvalitu budov Zkušební laboratoř

Certifikační orgán pro výrobky, procesy, kvalifikaci a EPD

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CERTIFICATE

No. VÚPS – 22 – 0248

Producer: **TopTeramo s.r.o.**

ID: 277 89 969

č. p. 444, 790 64 Vápenná

Production plant: TopTeramo, s.r.o., č. p. 444, 790 64 Vápenná

For product: **Terrazzo flags**

Product type: **One-layer terrazzo flag GRANEX**

Two-layer terrazzo flags MRAMORIT and MRAMORA

Intended use of the product: outdoor and indoor use and surfaces of road constructions and pedestrian areas

The certification body for products and processes reviewed the documents submitted by the manufacturer, performed testing of product samples and by this certificate proves conformity of performance for relevant characteristics of the aforementioned product with requirements of: **ČSN EN 1339:2004+Opr.1, Concrete paving flags – Requirements and test methods.**

This Certificate is issued based on the Protocol of Certification No. P-VÚPS-21-0173 of 31.5.2021 and the protocol on surveillance No. KD-VÚPS-22-0247 of 10.08.2022, providing a description of the product in a scale allowing for its identification, test results and assurance of conformity of performance of the product samples with requirements of the technical specification and other findings of the Certification Body and validity conditions of the Certificate.

This Certificate is a proof of suitability of the certified product for use in construction works in terms of § 134, clause 2 of the Act no. 183/2006 Coll., on town and country planning and building code (building act). This Certificate proves the specific performance of the product for design and use of the product in construction works and does not entitle the manufacturer to issue a declaration of conformity in accordance with Government Decree no. 163/2002 Coll., as amended, or a declaration of performance in accordance with EU Regulation no. 305/2011 and to CE mark the product.

The certification scheme comprises: initial testing, checking of the results, assessment of conformity of performance with technical requirements and surveillance of the factory production control with regular testing of product performance with a frequency of 1 x in 12 months (using scheme 4 according to ČSN EN ISO/IEC 17067).

Validity of the Certificate is bound to positive findings of surveillance by testing of product performance against requirements of the technical specification with a frequency of 1 x in 12 months.

An integral part of this certificate is Annex no. 1 with certified product performance.

This Certificate cancels and replaces the Certificate No. VÚPS-21-0173 of 31.05.2021.

Date of issue: 10.08.2022

Print no.: 1

Ing. Lubomír Keim, CSc.

Head of Certification Body for products and processes



K: 21133/1

VÚPScert.VP027-R11-Z1-100214

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Annex no. 1 to Certificate no. VÚPS – 22 – 0248

CERTIFIED PRODUCT PERFORMANCE

For product:

Terrazzo flags

Product type:

One-layer terrazzo flag GRANEX

Two-layer terrazzo flags MRAMORIT and MRAMORA

Product performance values according to ČSN EN 1339:2004

Characteristic	Standard	Certified product performance
Shape and dimensional accuracy - length, width, thickness	ČSN EN 1339	Class 3, mark R permissible deviations ± 2 mm
Shape and dimensional accuracy - max. difference between diagonals	ČSN EN 1339	Class 3, mark L max. difference of diagonals 2 mm
Flatness (convexity/concavity)	ČSN EN 1339	$\leq 2,0$ mm / $\leq 1,5$ mm
Appearance	ČSN EN 1339	No defects, cracks or flaking
Thickness of facing layer for two-layer flags	ČSN EN 1339	min. 4 mm
Bending strength	ČSN EN 1339	Class 3, mark U characteristic 5,0 MPa
Breaking load - one-layer terrazzo flag	ČSN EN 1339	Class 30, mark 3 characteristic 3,0 MPa
Breaking load - two-layer terrazzo flag	ČSN EN 1339	Class 45, mark 4 characteristic 4,5 MPa
Weathering resistance: - water absorption	ČSN EN 1339	Class 2, mark B ≤ 6 % by mass
Weathering resistance: - resistance to freeze-thaw with de-icing salts, method D	ČSN EN 1339	Class 3, $L \leq 1,0$ kg/m ² , none single value in a set shall exceed 1,5 kg/m ²
Weathering resistance: - resistance to water and chemical deicing substance according to ČSN 73 1326/Z1, method A	ČSN EN 1339 cl. NA 3.1.2	Class 3A, $L \leq 1000$ g/m ² / 100 cycles, none single value in a set shall exceed 1200 g/m ²
Abrasion resistance, by Böhme, Annex H - terrazzo flag with flat surface	ČSN EN 1339	Class 3, mark H $\leq 20\,000$ mm ³ / 5 000 mm ²
Abrasion resistance, by Böhme, Annex H - terrazzo flag with relief surface	ČSN EN 1339	Class 2, mark G $\leq 26\,000$ mm ³ / 5 000 mm ²
Slip/skid resistance USRV - terrazzo flag with flat surface	ČSN EN 1339	≥ 54
Slip/skid resistance USRV - terrazzo flag with relief surface	ČSN EN 1339	≥ 44

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Date of issue: 10.08.2022

Ing. Lubomír Keim, CSc.

Head of Certification Body for products and processes

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