

Kaunas (Lithuania) Vienybės Square

THE NEW PAVING TURNED THE SQUARE INTO AN ATTRACTION IN THE CENTRE OF KAUNAS

Vienybės square is a newly refurbished public area in the heart of Kaunas, the second-largest city in Lithuania and an important centre for the country's economic, academic, and cultural life. Full of fountains, pools and ramps for bmx'ers or skaters, the square is surrounded by cafés and restaurants, so citizens and visitors can enjoy a lot of activities there. The renovation of the square was one of the largest investments in public spaces in the whole of Lithuania and intended to make this space one of the city's main attractions.

The challenges of installing paving

One of the main highlights of Vienybės Square is the very large-size granite slabs used for paving the square that is located above a multistorey underground parking. High-quality installation of the very large-size tiles required special care and involved some challenges. Several factors had to be taken into account, such as the compressive and tensile stresses due the constant traffic of pedestri-

ans and vehicles and the combined effects of de-icing salts and freeze/thaw cycles that can cause shrinkage and deformations in the paving. Secondly, proper paving materials and installation technology had to be chosen to guarantee long service life to the surfaces. As mentioned by Artūras Ručinskas, Project Manager of Velve M.S.T. (exclusive Mapei distributor in Lithuania), "Several factors that can cause the decay and erosion of pavements and shorten their service life had to be taken into account."

MAPESTONE for durable and environmentally friendly paving

Considering the specifics and scale of the project, the MAPESTONE system was chosen for the installation of granite slabs. This system allows to create long-lasting monolithic paving, resistant to aggressive environmental conditions, mechanical stresses and de-icing salts. It included the use of MAPESTONE TFB 60 pre-blended mortar for creating installation screeds, CONBIT fast cur-



ABOVE. Vienybės square is a newly refurbished public area in the centre of Kaunas.

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The large-sized granite slabs were installed with MAPESTONE TFB 60 and grouted with MAPESTONE PFS 2 VISCO.



ing, waterproof and frost resistant mortar to prepare a bonding slurry to be applied on the back of the tiles, and MAPESTONE PFS 2 VISCO pre-blended, low viscosity mortar for grouting joints. Both MAPESTONE products feature high compressive strength and chemical resistance, good resistance to de-icing salts, seawater and freeze-thaw cycles, and exposure class XF4 and XS3.

According to Jonas Dogelis, Project Manager of the installation company JSC Gevalda, "The fact that all the MAPESTONE mortars are easy to use - they just need to be mixed with water in the ratio specified by the man-

ufacturer – played a key role in choosing this system. The training provided by Velve M.S.T. together with technicians from the Group's mother company and its Norwegian subsidiary, was also particularly useful as it allowed to anticipate and solve problems that might have arisen on site."

Mapei solutions for waterproofing, sealing and strengthening

In the fountain and on the concrete stairs, MAPELASTIC elastic waterproofing mortar was used to protect the substrates before installing granite tiles with ELASTORAPID two-component, high performance,

highly deformable, quick-setting and drying cementitious adhesive.

MAPEFLEX PU 40 polyurethane sealant was used for sealing all the elastic joints in the project.

The MAPEWRAP C-UNI-AX structural strengthening system was used for increasing the bearing capacity of columns in the parking under the square without losing precious space in the parking area.



Find out more
MAPESTONE TFB 60

TECNICAL DATA
Period of construction: 2018-2020
Period of the Mapei intervention: 2018-2019
Owner: SBA Group and Kaunas City Municipality
Design: '3deluxe', JSC 'Giedraitis & architektai'
Main contractor: JSC "SBA Urban"

Installation company: JSC "Gevalda"
Project Manager: Artūras Ručinskas, Velve M.S.T.
Mapei distributor: Velve M.S.T.
Mapei coordinators: Tor Viggo Moen, Mapei AS (Norway)
Photos: SBA Group

MAPEI PRODUCTS
Installing granite paving: Mapestone TFB 60, Combit*
Waterproofing substrates in the fountain and stairs: Mapelastic
Installing granite tiles in the fountain: Elastorapid
Structural strengthening: MapeWrap C UNI-AX

Sealing joints: Mapeflex PU 40

*This product is manufactured by Mapei AS (Norway) and distributed in Lithuania by Velve M.S.T.

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