

Object report: ZUM shopping center in Kiev, Ukraine



EFFICIENT INSULATION FOR THE "HARROD'S OF KIEV"

In the largest Kiev shopping center, ZUM, 13,300 m² of Kaiflex sheets and 19,200 m of tubes ensure maximum energy efficiency and permanent noise reduction.



ZUM stands for "Zentralnyj Uniwersalnyj Mahasyn" – Central universal shopping center – and it occupies a unique position on Khreshchatyk, Kiev's main shopping street. Opened in 1939, the ZUM was for a long time a real shopping center in which people could go shopping. After the fall of the former Soviet republic, the traditional store continued to exist but was as yet unable to make use of the opportunities of the transition. So the shopping center lost its devotees and its significance, in particular for a younger, brand-aware public. A comprehensive restoration project was to help restore the ZUM, also known as the "Harrod's of Kiev" to its rightful place as a landmark and the place to shop in the city. The plan of the building owner, Altis Holding, was therefore as follows: While the ZUM retained its traditional Soviet architectural façade, the building had been totally gutted inside. Everything – from the brand experience, the retailers and the services to the fittings and floors – were to be renewed. The reconstruction got under way when the ZUM was finally closed in January 2012 and restoration work could start on the building technology. Level of investment in the construction project: a total of 100 million USD, of which 7 million USD is for the façade reconstruction.

The challenge

Public and much frequented buildings such as the ZUM pose great challenges for building owners, designers and the companies carrying out the work. Energy efficiency, sound barriers and fire protection come face to face with more stringent requirements, while profitability plays an important role in terms of the construction materials used. In the case of the comprehensive restoration of the ZUM, the old building structure was also to be retained, which brought with it considerable spatial limitations. Its location in the centre of the city and the restricted freedom to build created another challenge for all those involved.



Healthy air and low energy losses

In order to provide the visitors and employees of the roughly 45,000 m² retail space and the 2,500 m² food court with healthy air and efficient heating while permanently preventing energy losses, disruptive noises and corrosion, Altis Holding chose a technical insulation that particularly fulfilled the requirements of public buildings. And so Kaiflex was chosen; a long-lasting, highly flexible, closed cell foam based on synthetic rubber. Kaiflex is a particularly good choice for installing in old buildings and complex, unalterable installation situations, as is the case with the ZUM. The insulation product is particularly easy to install and is easily adapted to fit inside existing supply shafts. Kaiflex also scores in terms of its high performance: Even with low insulation thicknesses, the insulation has a high level of energy efficiency, an impressive, modern appearance and yet is particularly economic. The insulation product also complies with all mandatory fire protection requirements. Since Kaiflex is free of dust and fibres as well as of heavy metals and formaldehyde, it is perfect for use in public and commercial buildings. For a pleasant temperature while shopping, the ZUM has its own heat and power system. In order to protect this and the pipework that leads into the building from heat losses, all of the system parts and pipes were insulated with Kaiflex. Kaiflex was also used to protect the cold water pipes in the shopping center against corrosion, reduce disruptive noises and prevent energy losses. Since the rainwater is guided from the roof of the ZUM through the building via a drainage system, dependable insulation was also important in this area in order to reliably protect the building against moisture and prevent condensation.

Rapid construction progress creates a new shopping experience

In the summer of 2016, the traditional shopping center in the heart of Kiev, newly brought back to life, opened its doors on schedule after four years of construction work. A completely new purchasing experience awaited the visitors, with the traditional elements of the building being brought together in perfect harmony with a modern form of shopping. In the background, Kaiflex insulation products reliably ensure safety, efficiency and a sound barrier – and thanks to their high quality and reliable installation, they will continue to do so for many years to come.

Property

ZUM Shopping Center in Kiev, Ukraine

Area

47,500 m²

Level of investment

100 million USD

Restoration time

2012 to 2016

Products

13,300 m² Kaiflex sheets

19,200 m Kaiflex tubes

