# Elevating sustainability with the PERI UP Scaffolding Kit

**Metrodom Green Project, Budapest, Hungary**

**The Metrodom Green project, located in a redeveloped district of Budapest, is a residential development known for its premium quality, sustainability and innovative technical solutions.**

The 513-apartment complex is being developed in two phases. The first phase, comprising 277 apartments, is currently under construction and will take approximately two and a half years to complete. The most characteristic feature of the building is the green façade, which extends from the fifth to the tenth floor, where preplanted plants are grown in a nursery and maintained by a watering system in front planters. A 36-metre-high scaffolding system covering a total of more than 12,000 square metres was required in order to construct the façade. Due to the unique design of the green wall panels and the challenging anchoring requirements, it was essential that a supplier with compatible scaffolding solutions be commissioned for the project. PERI was the ideal choice for meeting these specific requirements. Due to the complex layout, the PERI UP Scaffolding Kit is being used to facilitate an efficient construction process over a period of 13 months, with a second phase of a similar scope to follow.

**Anchoring Challenges and Compatibility**

The project team faced several difficulties, including a complex layout, special anchoring characteristics, and metal trusses on almost every vertical surface. The main challenge was the prefabricated structure of the green wall panels on the façade, which limited the number of scaffold anchoring options. To overcome this difficulty, PERI engineers developed a solution to anchor the façade scaffold directly to the modular scaffold erected between the balconies, thus providing the required stability and safety. Another challenge was the high demands on the load bearing capacity of the scaffolding and the height of 36 metres to be erected. However, the innovative components of the PERI UP Modular Façade Scaffold made it possible to manage this requirement.

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**Innovative Scaffolding Technology for a Modern Complex**

PERI engineers provided detailed 3D drawings for the scaffolding plans. These visualisations gave the scaffolding contractor a deeper and more vivid insight into the proposed solutions. Not only the 3D design, but also the on-site training and ongoing site support were key factors in enabling the customer to realise this project successfully.

**Versatile Scaffolding Solution**

A total of 19,000 cubic metres of modular scaffolding is being erected between the balconies and in the lobbies. The project required flexible scaffolding solutions, which were achieved thanks to the modular design and adaptability to the specific building environment. In this case, a wide range of ledgers and decks allowed the direction of the decks to be varied during assembly to suit the specific geometries.

**Client Satisfaction: A Unified Perspective**

Everyone involved in this project expressed their appreciation for the scaffolding solutions and services provided by PERI. They emphasised the quality and safety of the scaffolding materials, as well as the sophisticated designs tailored to the unique requirements of the project. They also appreciated the continuous site support and efficient materials management as well as the problem-solving expertise in day-to-day operations.

The Metrodom Green project exemplifies how advanced scaffolding technology can facilitate the implementation of sustainable architectural solutions. Effective use of PERI UP Scaffolding System not only enables safe and efficient construction, but also plays a pivotal role in creating an environmentally responsible façade. This project serves as a model for future developments and shows that innovation and sustainability go hand in hand.

**About PERI**

*With a turnover of € 1,847 million in 2023, PERI is one of the largest manufacturers and suppliers of formwork and scaffolding systems. With around 9,200 employees and well over 160 warehouse locations in more than 65 countries, the family-owned company with its headquarters in Weissenhorn (Germany) serves its customers with innovative system equipment and comprehensive services relating to all aspects of formwork and scaffolding technology.*

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**Photo 1**
With its system advantages, the PERI UP Scaffolding Kit is making a significant contribution to the construction of an environmentally responsible façade.
(Photo: PERI SE)



**Photo 2**
PERI UP Modular Scaffolding is being used between the balconies to assist with the installation of the planter boxes for the green façade.
(Photo: PERI Hungary)

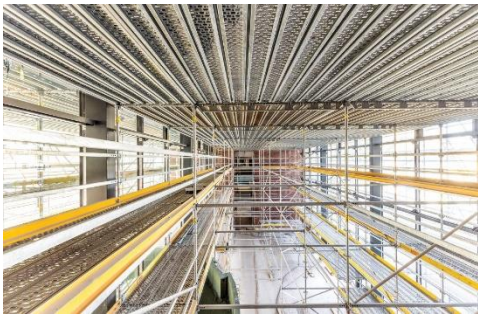


**Photo 3**
A special feature of the project is the lobby, where nearly 2,000 cubic metres of modular scaffolding supported the construction of the steel structure and the suspended ceiling.
(Photo: PERI SE)



**Photo 4**
Due to the prefabricated green wall panels, the anchoring options for the façade scaffolding were limited. PERI engineers solved this by anchoring the façade scaffold directly to the modular scaffold, thus providing stability and safety.
(Photo: PERI Hungary)

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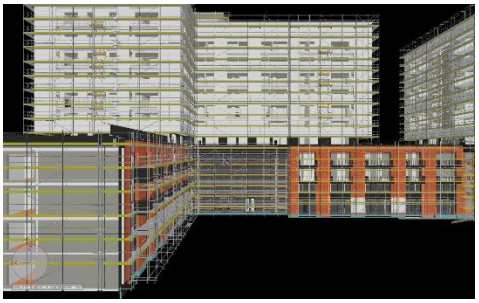


**Photo 5**
The 3D visualisation of the scaffolding plans gave the contractor a clearer and more detailed overview of the proposed solutions.
(Photo: PERI Hungary)



**Photo 6**
The assembly of the 36-metre-high scaffolding system with a total area of more than 12,000 square metres required close cooperation between PERI and the scaffolding contractor on a daily basis.
(Photo: PERI SE)



**Photo 7**
The steel structure for the planters, which extends from the fifth to the tenth floor, required a versatile system and advanced engineering design in combination with on-site support.
(Photo: PERI SE)



**Photo 8**
PERI UP scaffolding solutions provided support during the façade greening process. This project is an example of how advanced scaffolding technology can be combined with sustainable architectural solutions.
(Layout: Hajnal Építész Iroda)

**Contractor**
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