

# TRIMO QBISS ONE



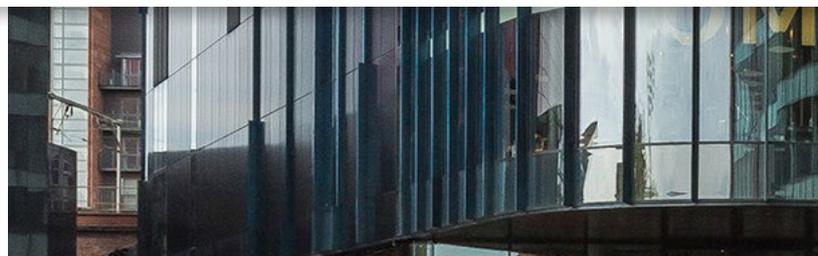
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# BROCHURE

Jälleenmyynti yksinoikeudella Suomessa

 **TrutecOy**





# Prefabricated architectural wall.

Qbiss One is a design and technological breakthrough. An architectural metal wall offers a true alternative to conventional built-up system. Qbiss One delivers the greatest freedom of expression and offers designs of almost limitless possibilities.

Qbiss One is a world-class engineered, prefabricated, class A1 mineral wool-insulated, metal façade system that offers a through wall solution within a single construction element. Façade elements with closed corners, unmatched flatness and advanced technical characteristics place Qbiss One among the best façade systems in the world.

It brings a system approach to the building envelope by uniting all the desired functional advantages of high-quality wall systems with the best aesthetics. The combination of aesthetics, design and function are all united in one system.

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## + Composition

Fewer **layers.**  
More beauty.



Qbiss One façade element consists of two galvanized and pre-finished steel sheets bonded to non-combustible class A1 mineral wool core. All layers together make a solid element of thickness ranging from 80 mm to 250 mm. Qbiss One is available in either flat or curved options.

Preinstalled gaskets prevent water from entering the system, drip element serves as a secondary protection and drains water out of the system, whilst a decorative T-extrusion defines the colour of the joint and together with transversal gasket covers the fixing elements and protects against water ingress.

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# 100% prefabricated, cut-to-size and **ready to install.**

Qbiss One system brings all the necessary components of total wall (from inside out) solutions.

Elements are self supporting, bearing their own loads to eliminate transferring loads to the next element and beyond. The maximum allowable span is 6.5 meters without any intermediate support, which reduces costs through shorter construction times and less load-bearing structural requirements.

Elements are custom-made according to requirements. There is no need for on-site cutting or any other post-production modification and quality control.

2022



Qbiss One is aesthetically pleasing, with outstandingly flat surface and crisp details. In particular, rounded corners are made without any cuts, welds or folds.

### Prefabrication advantages

As the system is fully prefabricated, integrating more than 95% of the necessary parts, it offers significant advantages in comparison with a standard rainscreen solution: it's faster, easier, more efficient.

+ Composition

Get the most from your façade.

**QBISS ONE SYSTEM**

- 1. Steel substructure
- 2. Concealed fixing
- 3. Qbiss One façade element



**QBISS ONE FEATURES**

- Water and air tightness**
- Tailored project solutions**
- BIM libraries**
- 99% recyclable**
- Flexible warranties**

**QBISS ONE BENEFITS**

- Superb workplace climate
- Optimal cost solution, passion, creativity
- Smooth collaboration, reduced errors and conflicts, project visualisations
- Environmentally friendly material with at least 13% recycled content
- Robust, durable and high quality coatings

**MULTILAYER CLADDING BUILD-UP SYSTEM**

- 1. Façade water-proofing membrane
- 2. Mechanical fastener
- 3. Substructure
- 4. Visible rainscreen fastener
- 5. Adhesive
- 6. Solid substructure
- 7. Insulation
- 8. Rainscreen



**QBISS ONE FEATURES**

- Total wall solution**
- Self supporting**
- Prefabricated**
- Mineral wool insulation**
- Rounded corner**

**QBISS ONE BENEFITS**

- Save time & money by choosing only one supplier
- Elements up to 6,5 m long
- Regular quality control, produced in controlled environment
- High level of fire resistance, non-combustibility
- No cuts, no welded edges, no leakage and corrosion

# Imagine perfectly **rounded** corners.

Façade elements are improved with our unique rounded corner, which eliminates the need for any rivets, cuts, or welding that would normally be visible on a traditional rainscreen cassette.

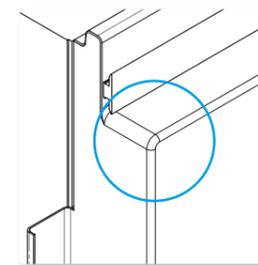


Closed element  
corners

Closed element corners advantages:

- **Without cuts**
- **Without folds**
- **Without welds**
- **Without rivets**
- **No corrosion**
- **100% protected steel sheet**

**Qbis One closed  
element corner**



+ Fire

An hour of fire resistance would be great. **Here's two.**

The entire element has an A2-s1-d0 fire classification.

- Assuring two hours fire resistance (integrity and insulation) at thickness of only 150 mm.
- Does not emit any toxic gases.
- No burning droplets are developed during the fire.

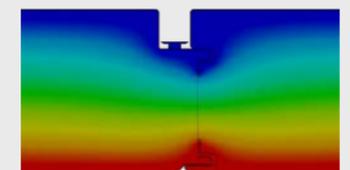
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Wrapped in warm  
**embrace.**

Qbiss One modular façade system was designed to provide a comfortable living environment according to the requirements of physical construction conditions in buildings. A stationary heat transfer calculation was made using the numerical modelling method in accordance with the guidelines and recommendations for heat transfer calculations, provided in standard EN 14509.

Thermal transmittance (U) of only 0,15 W/m<sup>2</sup>K with the 250 mm thick elements.



+ Joint and installation options

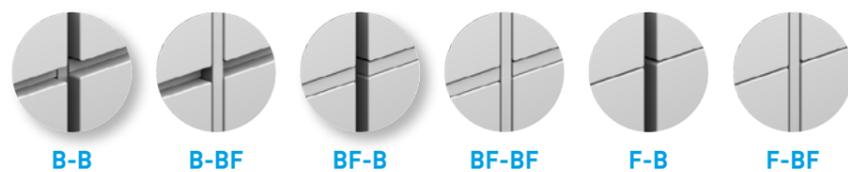


Countless ways to arrange your façade.

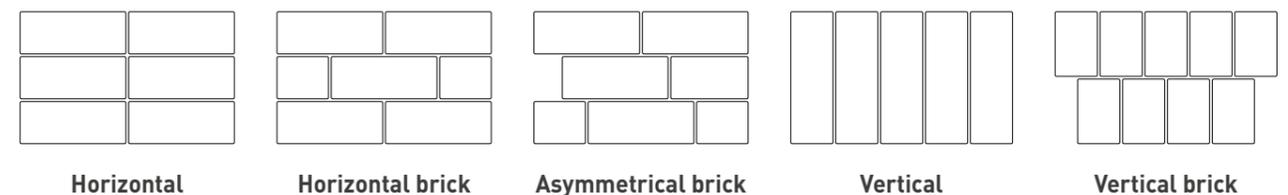
Countless ways to install your façade.

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Qbiss One delivers the greatest freedom of expression. It enables you to create a unique aesthetic for the building by using different types of joints between elements. A playground for architects and a tool to show the world the excellence of design.



To give architects the freedom to express their style when choosing Qbiss One façade elements / system, we developed elements, that can be installed in many different orientations.



+ Accessories

# An absurd amount of design control.

Prefabrication is the uniqueness of Qbiss One. In addition to rectangular elements, we produce corner elements as well as corner elements connecting two different façades or a façade projecting directly into a soffit. Rounded and trapezoidal façade elements are no mystery for Qbiss One system as well.

Transversal curved Qbiss One element



Trapezoidal



3D corner



Transversal curved



Longitudinal curved



U-shaped corner



Transversal corner



Transversal spliced corner



Longitudinal corner

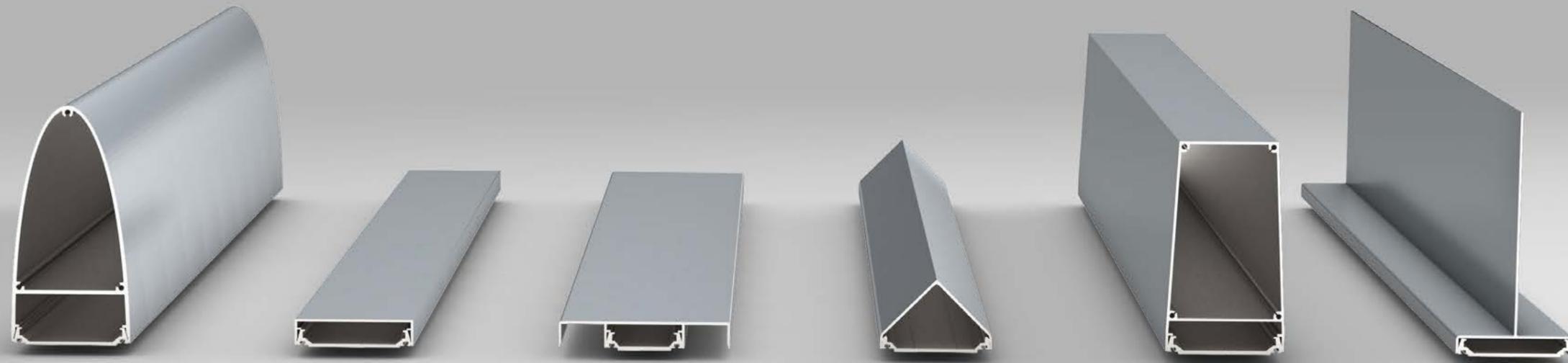


Longitudinal inclined corner



Transversal inclined corner

+ Decorative profiles



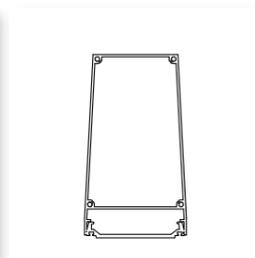
# Give your façade a compliment.

The range and the variety of decorative elements caught our attention and charm us with luxuriously decorated façades. Our aluminium decorative elements are powder coated to match the colour of your façade or you can have the option to choose your own colour as you wish.

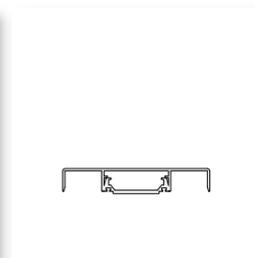
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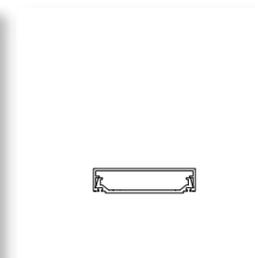
Profile HF 1



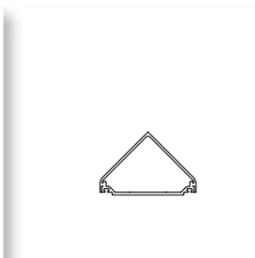
Profile HF 2



Profile HF 4



Profile HF 5



Profile HF 7



Profile HF 8

+ ArtMe

# ArtMe. A breath of fresh innovation.

Artme is the latest, unique façade surface treatment that allows unlimited shapes, patterns and visual effects to be expressed on the Qbiss One surface for dramatic, individual and creative results. From designs and pictures to inscriptions, logos, brands and bespoke creations, ArtMe makes everything possible without the need to use adhesives, additional elements or structural devices.



## Name of the building

Office of Ministry of Labour Social Affairs and Family of the Slovak Republic in Nitra, Slovakia

## Year

2020

## Architectural office

Ateliér Neutra, Ing. arch. Peter Mizia

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+ Colour range

# Nothing beats our **colour** range.

With exceptional technical characteristics and perfect visual expression, Trimo's façade system easily adapts to your vision of space. To meet our customer's needs, we prepared a range of colours and colour coatings, suitable for the external and internal skin of Qbiss One elements.

## COLORCOAT PRISMA®



## SPECIAL METALLIC



## SOLID COLOURS



## STAINLESS STEEL



## + Value proposition

# Everyone deserves a better planet.

Qbiss One façade element consists of two galvanized and pre-finished steel sheets bonded to the non-combustible A1 mineral wool core. Together with silicone gaskets and adhesive, elements are up to 99% recyclable and produced from at least 13% recycled content. It has a low CO<sub>2</sub> footprint of just 60 kg/m<sup>2</sup> during the production stage (EPD, Qbiss One, 12 December 2019).



# Generations **ahead of** any other façade systems.

Tested to the most demanding conditions of CWCT standards, Qbiss One façade system provides a superior air and water tight single wall solution. Tests have been corroborated with the latest CWCT standard performed by UKAS accredited testing laboratories. System water permeability is classified as Class A (1200 Pa).



# An infinity pool of design.

Design details not only increase design efficiency, but shorten the design process. They ensure the stunning appearance of the building with more than 500 different typical details available. To help you design with Qbiss One elements, parametric design details are available to download free from our website.

## More details.... even in BIM.

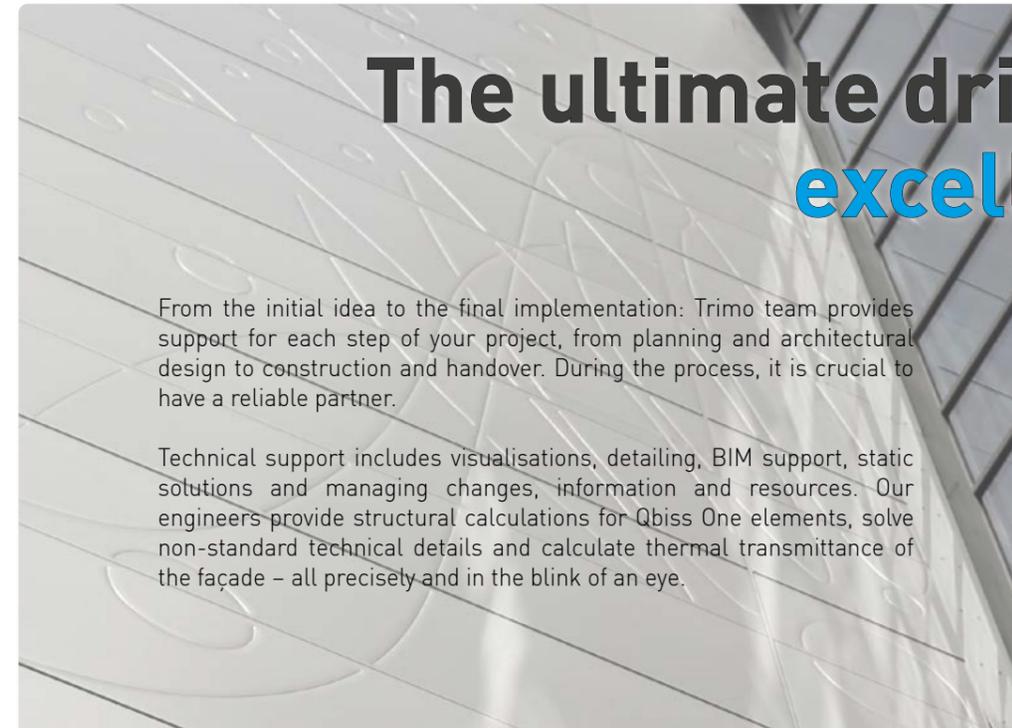
In-house design department provides the most optimal solution to your project requirements. Trimo BIM libraries ensure efficient information management and enable fast building envelope design. Non-standard details - No problem.



# The ultimate drive for **excellence.**

From the initial idea to the final implementation: Trimo team provides support for each step of your project, from planning and architectural design to construction and handover. During the process, it is crucial to have a reliable partner.

Technical support includes visualisations, detailing, BIM support, static solutions and managing changes, information and resources. Our engineers provide structural calculations for Qbiss One elements, solve non-standard technical details and calculate thermal transmittance of the façade - all precisely and in the blink of an eye.



+ Utilising Qbiss One

## Built-in security.

Qbiss One is certified as RC3 for burglar resistance. Despite many different design possibilities, the Qbiss One façade always comes certified as burglar resistant. Built-in security, classified as RC3 protects all your valuables from the unexpected and violent visitors despite the many design options.

## Go ahead. We've got your back.

Qbiss One façade system provides long lasting aesthetic and functional performance. The use of materials is carefully selected and the latest three layer chrome free coating technology ensures a robust and durable performance, together with high density non-combustible rock wool structural insulation core. With the extensive testing and experiences we are confident our product can be utilized for projects with a design life of up to 50 years.

Standard product warranties are 10 years and for paint coatings up to 30 years according to certain terms and conditions, location of the building, colour, and corrosion environment. Such performance makes it ideal choice for public, retail, commercial, office, residential, aviation and other types of superior aesthetic developments that are built to last.

## Added security.

Qbiss One façade system has been tested and approved to Factory Mutual (FM4880, FM4881) and Loss Prevention Certification Board (LPS1208 - fire resistance of constituent materials and LPS1181 - spread of flame), standards to comply with property insurers risk requirements.



650a to LPS 1208  
650d to LPS 1181

# Can you be more precise? YES.

### Qbiss One façade elements technical data

Qbiss One elements are differentiated based on type of mineral wool being used according to thermal insulation and structural spanning requirements.

Thickness (mm)	80	100	120	133	150	172	200	240	250
Use	External walls, internal walls and ceilings								
Cover width (mm)	600 - 1200								
Length (mm)*	From 500 up to 6500								
External facing - profile	Steel sheet, stainless steel, thickness: 0.675 - 0.80; G								
Internal facing - profile	Steel sheet, stainless steel, thicknesses: 0.50 - 0.80; G, V, V2, S, M, M3								
Coating	Coating PVDF or PUR/PA								
Reaction to fire	A2-s1, d0								
Water permeability (Pa - wall)	Class A (1200)								
Air permeability [C (m <sup>2</sup> /Pa*s);n]	C = 0.0046; n = 0.970								
Water vapour permeability	Impermeable								
Airborne sound insulation: R <sub>w</sub> [C;C <sub>r</sub> ]	30 [-1;-3] (dB)								
CORE: POWER T									
Weight (kg/m <sup>2</sup> ) for 0,55mm int. skin	18.7	20.6	22.4	23.8	25.1	27.1	29.6	33.19	34.1
Ψ <sub>L</sub> - Longitudinal joint (W/mK)	0.0456	0.0243	0.0157	0.0143	0.0096	0.0072	0.0053	0.0036	0.0034
Ψ <sub>T</sub> - Transversal joint (W/mK)	0.0461	0.0266	0.0176	0.0141	0.0110	0.0082	0.0058	0.0041	0.0038
U - Thermal transmittance (W/m <sup>2</sup> K)*	0.46	0.37	0.31	0.28	0.25	0.22	0.19	0.16	0.15
CORE: POWER S									
Weight (kg/m <sup>2</sup> ) for 0,55mm int. skin	20.6	22.9	25.2	27.0	28.6	31.2	34.3	38.9	40.0
Ψ <sub>L</sub> - Longitudinal joint (W/mK)	0.067	0.032	0.020	0.016	0.012	0.009	0.007	0.005	0.004
Ψ <sub>T</sub> - Transversal joint (W/mK)	0.050	0.029	0.019	0.015	0.012	0.009	0.006	0.005	0.005
U - Thermal transmittance (W/m <sup>2</sup> K)*	0.50	0.41	0.34	0.31	0.28	0.24	0.21	0.17	0.17
CORE: PERFORM C									
Weight (kg/m <sup>2</sup> ) for 0,55mm int. skin	21.1	23.5	25.9	27.8	29.5	32.2	35.5	40.3	41.5
Ψ <sub>L</sub> - Longitudinal joint (W/mK)	0.067	0.032	0.020	0.016	0.012	0.009	0.006	0.005	0.004
Ψ <sub>T</sub> - Transversal joint (W/mK)	0.049	0.029	0.019	0.015	0.012	0.009	0.006	0.004	0.004
U - Thermal transmittance (W/m <sup>2</sup> K)*	0.49	0.40	0.33	0.30	0.27	0.24	0.20	0.17	0.16
To get an exact Qbiss One thermal transmittance, use the following formula: U <sub>TOTAL</sub> = (U x Area <sub>element</sub> + Ψ <sub>L</sub> x Length <sub>element</sub> + Ψ <sub>T</sub> x Width <sub>element</sub> ) / Area <sub>element</sub> The minimum Qbiss One length is set to 550 mm and maximum Qbiss One length to 6475 mm for the element types: 5, 6, 7, 8, 9, 10, 11, 12.									

+ References

# Building overview.

**Name of the building**  
Cargo partner d.o.o. warehouse, Slovenia

**Year**  
2019

**Architectural office**  
Protim, Ržišnik-Perc

www.trimo-group.com

+ References

# Building overview.

**Name of the building**  
Mango, Spain

**Year**  
2016

**Architectural office**  
GCA Arquitectura

www.trimo-group.com

+ References



# Building overview.

**Name of the building**  
Etele Plaza, Hungary

**Year**  
2021

**Architectural office**  
Paulinyi&Partners, Group Dyer

www.trimo-group.com

# Building overview.

**Name of the building**  
Industrieweg 2 te Bladel, The Netherlands

**Year**  
2021

**Architectural office**  
Valeres industriebouw

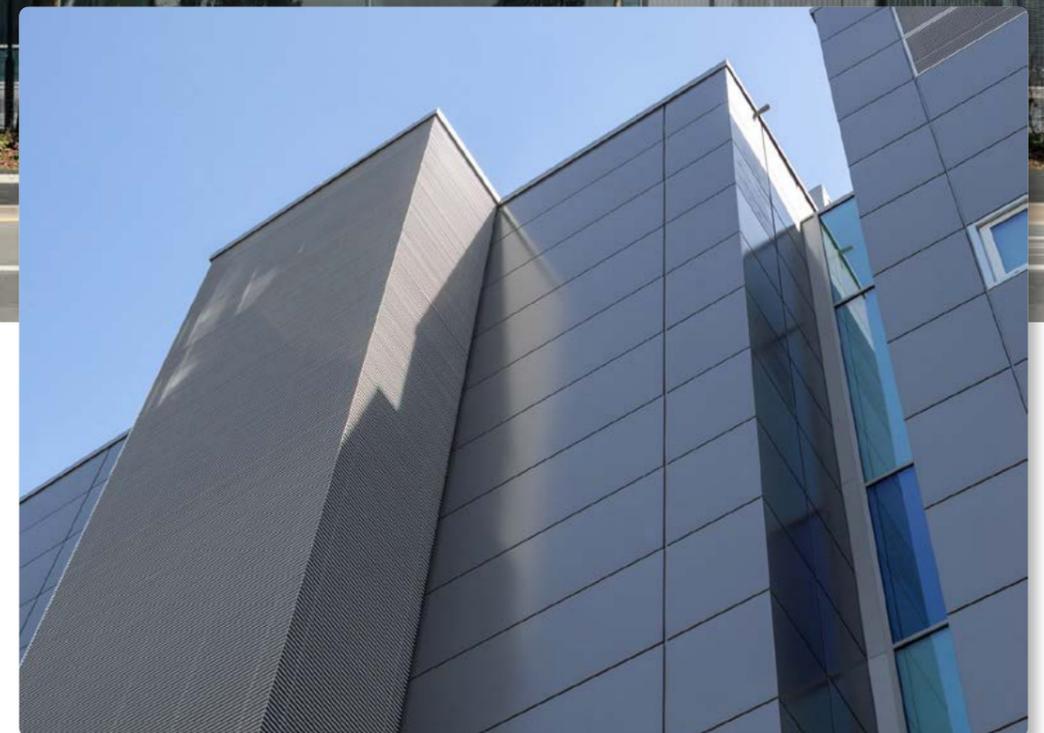


# Building overview.

**Name of the building**  
Equinix LD6 data centre, United Kingdom

**Year**  
2016

**Architectural office**  
Arup Associates



+ References

# Building overview.



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**Name of the building**

Trimo top management office interior, Slovenia

**Year**

2021

**Architectural office**

Trimo d.o.o.

+ References

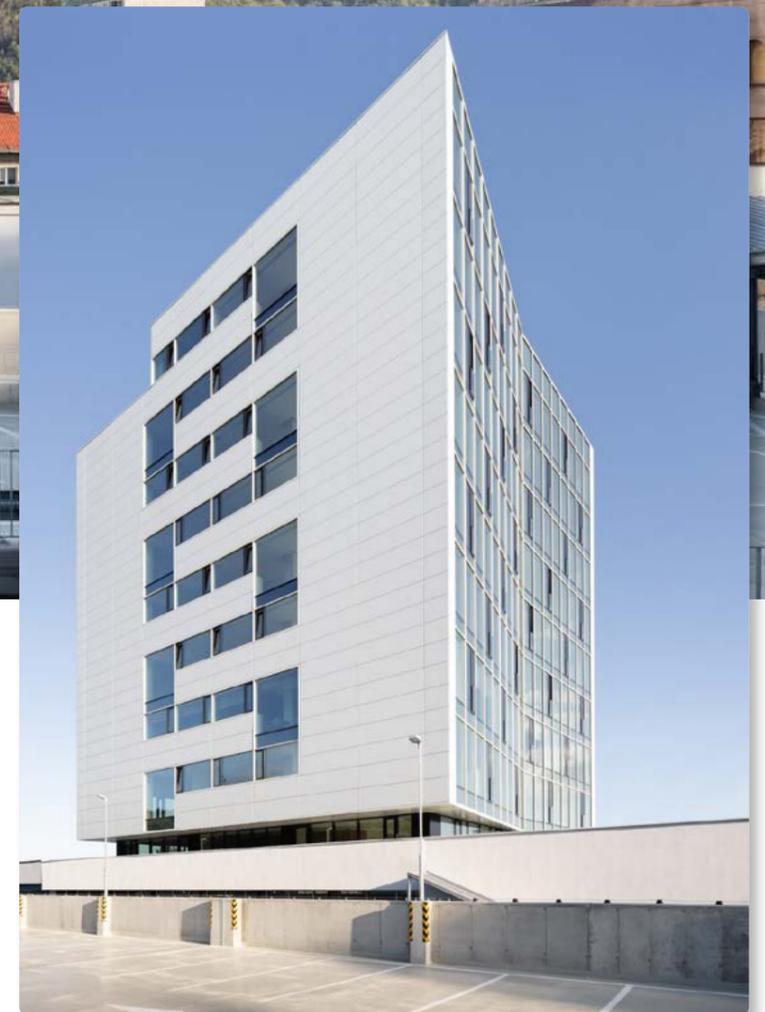
# Building overview

**Name of the building**  
Interpolis Banská Bystrica, Slovakia

**Year**  
2022

**Architectural office**  
Paulíny Hovorka Architekti

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+ References

# Building overview.

**Name of the building**

Sports Hall Mier Bardejov, Slovakia

**Year**

2022

**Architectural office**

A-tyt, architektonický ateliér, spol. s r.o.

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## + References

# Building index.

### Germany

- [Party Rent, München](#)
- [Brunner Innovation Factory](#)
- [Hear Office Dr. Grandel, Augsburg](#)
- [Finke Center Hamm](#)
- [Gasteig HP8 Isarphilharmonie](#)
- [Headquarters Heka Herzog](#)
- [Headquarters Krückemeyer GmbH](#)
- [Klingspor Headquarters](#)

### Hungary

- [Etele Plaza](#)
- [Eli Aplp Szeged Research Facility](#)

### Czech Republic

- [Hirschmann Automotive Vsetin](#)

### Austria

- [Carnaby Modeaus](#)

### Belgium

- [Porsche Centre Mechelen](#)

### Croatia

- [Business Incubator Biograd na Moru](#)

### Netherlands

- [Industrieweg 2 te Bladel](#)
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- [High Tech Campus 1, Eindhoven](#)
- [Brecon](#)
- [Petrol Industries](#)

### Poland

- [MAN Bus Starachowice](#)
- [Komfort](#)

### Palestina

- [Arab American University](#)

### Slovakia

- [University of Veterinary Medicine and Pharmacy](#)
- [Office of Ministry of Labour, Social Affairs and Family](#)
- [KJG Business Center](#)

### Slovenia

- [Transport Finec](#)
- [Cargo Partner](#)
- [Roletarstvo Medle, Novo mesto](#)
- [REM, Trebnje](#)

### Spain

- [Planta de Fabricación de Estaciones de Control](#)
- [Mango, Barcelona](#)

### Switzerland

- [Porsche Centre St. Gallen](#)

### United Kingdom

- [The University of Warwick Sports Hub](#)
- [Rugby Free School](#)
- [NEC Resorts World Birmingham](#)
- [Home](#)
- [Birmingham Dental Hospital & School of Dentistry](#)
- [Silverstone UTC](#)



## Associated documents supporting the Qbiss story.

Qbiss One brochure contains all the basic information about the product. On top of this document, Qbiss One is supported with Qbiss One book, Artme guide and brochure, Product portfolio, Qbiss One flyer, BIM library instructions, Architectural details and Design details, which can all be attained from above.

Trimo recognises the importance of providing correct, current, and neatly structured information, whenever and wherever is needed. The new Trimo Library Mobile App meets these needs offering on-the-go access to all of Trimo's technical documentation, brochures, guides, and videos both on- and offline.



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