# TRI MO QBISS ONE

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## PREFABRICATED ARCHITECTURAL WALL

Qbiss One is a world-class engineered, prefabricated, A1 mineral wool-insulated, metal façade system that offers a through wall solution within a single piece of construction element. Façade elements with embossed corners, unmatchable flatness and advanced technical characteristics place Qbiss One among the best façade systems in the world. It brings system approach to the building envelope by uniting all the desired functional advantages of high-quality wall systems with the very best aesthetic.





## 

#### **Qbiss One benefits:**

#### Uncompromised aesthetics:

- rounded corners without cuts, folds or welds
- smooth and flat surface

#### Total wall solution:

- fully prefabricated and self-supporting systemtime saving up to 40% compared to traditional installations

#### Maximum safety:

- non-combustible mineral wool core
- air- and water-tightness

#### **Ecological integrity:**

- energy efficient
- environmentally friendly solution

## UNCOMPROMISED AESTHETICS

Qbiss One delivers the greatest freedom of expression and offers designs of almost limitless possibilities. Without any doubt, it is one of the smoothest and flattest façade envelopes in its class.

#### Joint options

Qbiss One system allows the combining of various permutation of recessed and flush joints.



JOINT OPTION TYPE B-B



JOINT OPTION TYPE F-B



JOINT OPTION TYPE BF-B



JOINT OPTION TYPE F-BF



JOINT OPTION TYPE B-BF



JOINT OPTION TYPE BF-BF

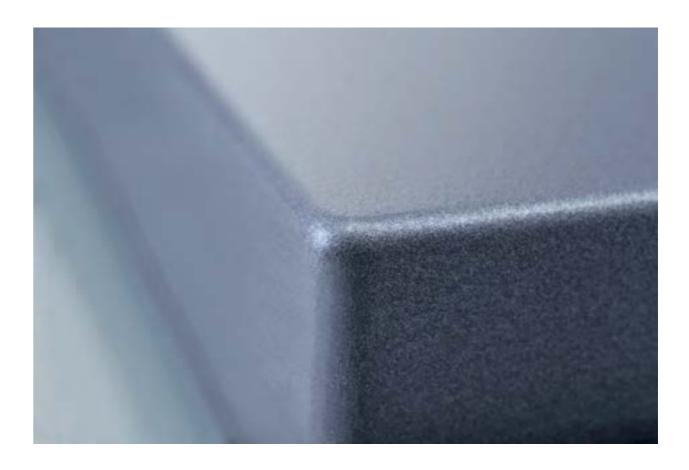
#### World class engineering

Qbiss One is distinguished by the unique rounded corner of the element, which eliminates the need for any rivets, cuts or welding. A solution is the result of world-class engineering and the highest automated technology and patented manufacturing systems.

Embossed corner provides a superior aesthetic appearance whilst also preventing any potential threat of corrosion. All other available products on the market use a "cut and fold" approach that needs to be sealed manually and then touched-up with paint.



closed element corners



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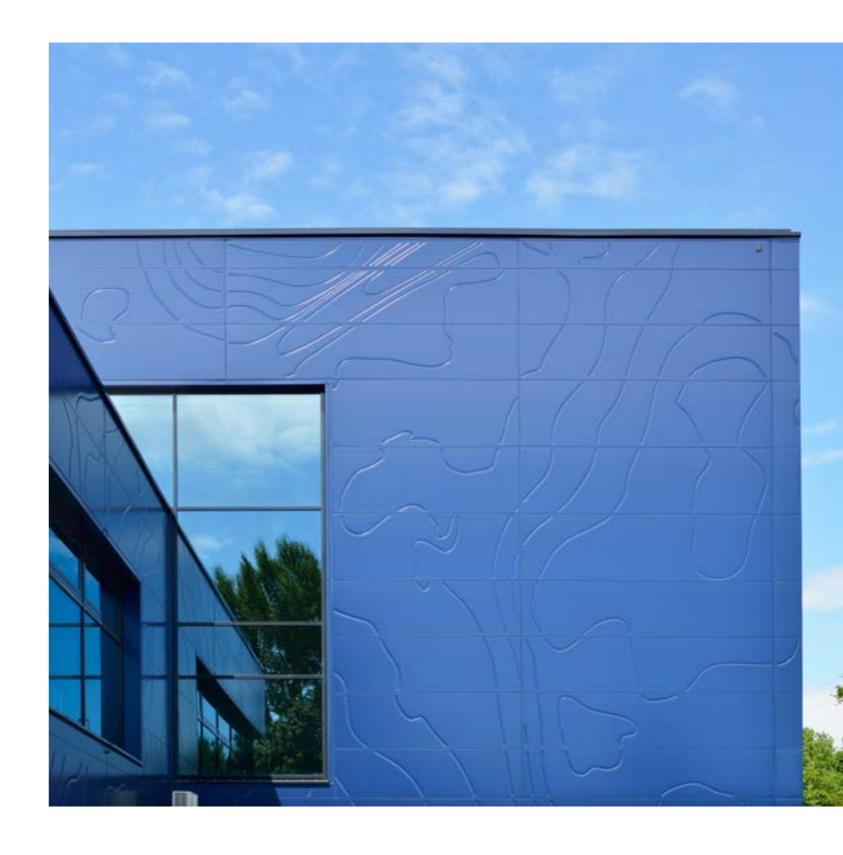
#### World class engineering:

- Completely prefabricated elements - facilitated through automated and robotized technology
- **Assured quality** elements produced consistently in controlled environment
- **Personalized solution** elements are custom-made according to project requirements
- **Robust solution** Qbiss One meets tough CWCT standards. The tests were carried out by Wintech Engineering Ltd, one of the UK's most respected, independent, UKAS accredited, testing laboratories.

## Individual design ArtMe

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







#### Variety of assembly options

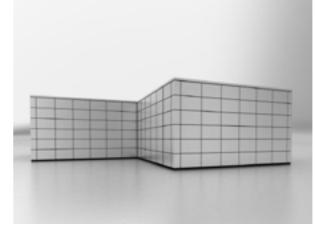
With the focus on optimal façade flexibility, when designing the building envelope, Trimo has developed five basic options, which allow a variety of impressions to be achieved. The basic grid style can be orientated vertically or horizontally, without compromising any of the façade's outstanding features.

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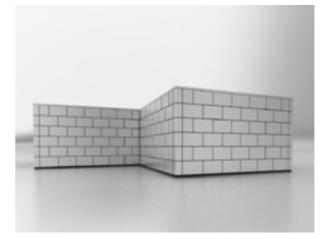
#### **Qbiss One assembly options:**

- Horizontal
- Brick horizontal
- Asymmetrical horizontal
- Vertical
- Brick vertical

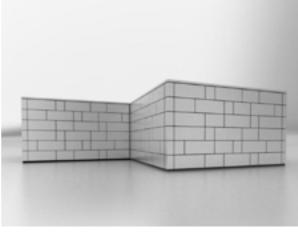




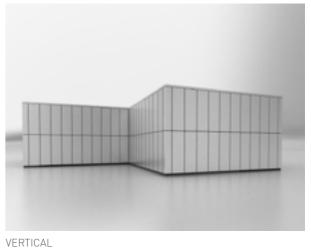
HORIZONTAL



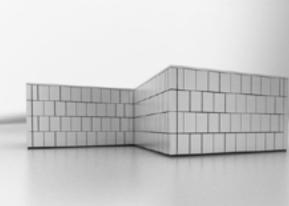
BRICK HORIZONTAL



ASYMMETRICAL HORIZONTAL







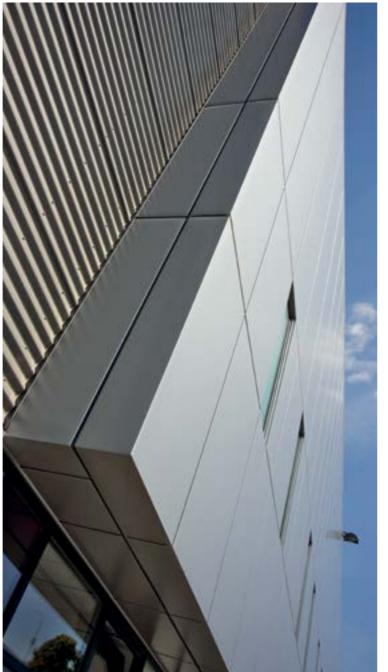
BRICK VERTICAL

## Special solutions

Architects do not limit themselves solely to the façade solution, but rather on the whole buildings' construction to convey the look and feel of their vision to the overall appearance of the building.

Why not choosing designs that are proven to work physically and aesthetically into soffits, partition walls and ceilings or to custom-designed corners. Qbiss One offers wide range of possibilities to realize any vision, it is just a matter of how and which option to use.







## TOTAL WALL SOLUTION

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 material.

Qbiss One elements are custom-made according to requirements. There is no need for on-site cutting or any other post-production modification. Self-supporting; it eliminates the need for any additional support or substructure, as well as reducing build time. No brick or concrete wall is needed.

As the system is fully prefabricated, integrating more than 95% of the necessary parts, it offers significant advantages in comparison with a standard rain screen solution: it's faster, easier, better and quality controlled.



Total wall solution:

- **Cost saving** self-supporting ready-toinstall system
- **Peace of mind** elements, pre-fabricated under controlled conditions for rapid and efficient site installation
- **Time saving** up to 40% compared to traditional installations



## MAXIMUM SAFETY

#### Fire safety

Element's core is made of mineral wool, which is class A1 non – combustible material and does not add any energy to fire. The entire façade system has an A2 classification and assures two hours fire resistance (integrity and insulation) at thickness of 150 mm.

#### Non toxic smoke

Non - combustible insulation materials, like mineral wool, do not emit toxic smoke, which is acknowledged to be the major cause of death in instances of fire and not the fire itself.

#### Air and water tightness

Tested to the most demanding conditions of **CWCT standards**, Qbiss One façade system provides a superior air and water tight envelope. Qbiss One also passed the tough FM 4881 hurricane test.

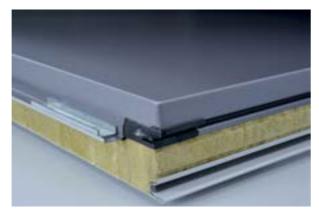
#### Guarantee

Qbiss One guarantees ultimate corrosion protection for up to 30 years. Terms and conditions apply.

#### Insurance

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.







#### Maximum safety:

- Fire resistance class up to EI 120
- Water permeability Class A (1200 Pa)
- Non combustible mineral wool core

## ECOLOGICAL INTEGRITY

Qbiss One was developed with sustainability in mind, with all manufacturing processes designed to minimise emissions and energy usage and with products engineered with end-of-life recycling built-in.

#### **Energy efficiency**

Qbiss One façade system was designed to provide a comfortable living environment in accordance with the requirements of physical construction conditions in buildings. The system is highly energy efficient, achieving values down to 0.15 W/m<sup>2</sup>K at 250 mm thickness.

#### **Recyclability and emissions**

Qbiss One is made of environmentally friendly materials, is 98% recyclable and has a low  $CO_2$  footprint of just 44 kg/m<sup>2</sup> (LCA) during the lifetime of the building.









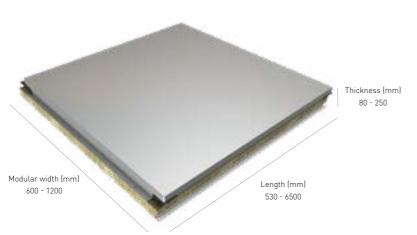
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#### **Ecological integrity:**

- 98% recyclable product
- CO<sub>2</sub> footprint of just 44 kg/m<sup>2</sup>
- High energy efficiency down to 0.15 W/ m<sup>2</sup>K

## **TECHNICAL DATA**

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



Use	External walls, internal walls and ceilings			
Panel thickness (mm)	80 - 250			
Cover width (mm)	600 - 1200			
Length (mm)	From 530 up to 6500			
Max. achievable fire resistance (EN 14509)	EI 45 - EI 120			
Thermal transmittance (W/m² K)	0.50 - 0.15			
Insulant core	Non-combustible mineral wool Class A1			
Coating	Standard coating PVDF or PUR/PA			
External facing - profile	Steel sheet, stainless steel, thickness: 0.70; G			
Internal facing - profile	Steel sheet, stainless steel, thicknesses: 0.50, 0.55, 0.60, 0.70; G, S, V, V2, M, M3			
Reaction to fire	A2-s1, d0			
Water permeability (Pa - wall)	1200			
Water vapour permeability	Impermeable			
Airborne sound insulation: Rw(C:Ctr)	30 (-1;-3) (dB)			

More detailed technical data is available at: https://www.trimo-group.com/files/downloads/Qbiss%20One%20Book.pdf For specific project data refer to Technical CE specification data and contact Trimo Technical Support.

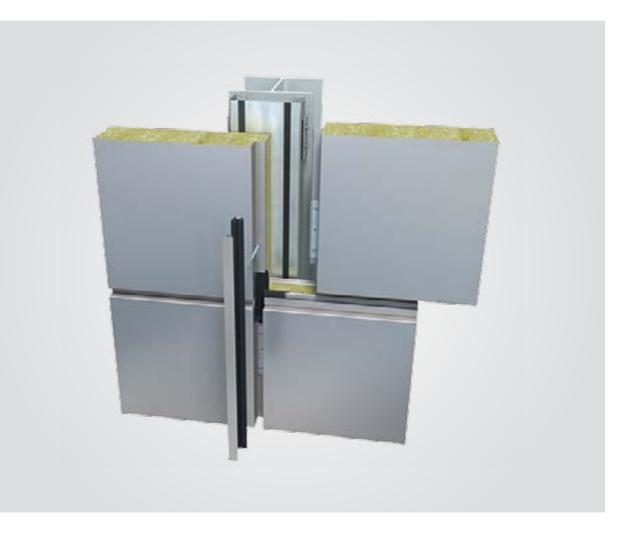


#### Element marking (Qbiss One T B-B 100/1000 GS)

	Qbiss One	Т	Type B-B	100	1000	G	S
-	product name	mineral wool type	joint option	thickness (mm)	module (mm)	external steel skin profile	internal steel skin profile

## SYSTEM COMPOSITION

Qbiss One brings a system approach to the building envelope by uniting all the desired functional advantages of high quality façades with the very best aesthetics. It presents the ultimate combination of aesthetics, design and function. With all elements prefabricated and manufactured by the latest automated technology, it delivers a long-term building solution.



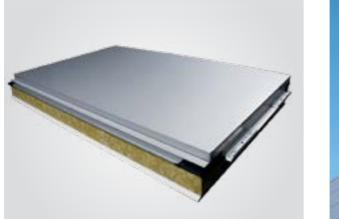
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The system's main components are:

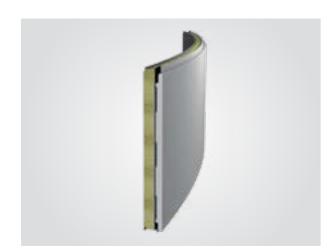
- Modular façade elements
- Fixing and sealing material
- Architectural performance details
- Corner elements
- Adjustable substructure (optional)
- Windows (optional)

#### Modular façade element

The basic Qbiss One prefabricated modular façade element consists of two galvanised and prefinished steel sheets bonded to a non-combustible mineral wool core. All layers together make a solid element of thickness ranging 80 – 250 mm. Qbiss One is available in either totally flat or curved options. When there is no need for insulation, Qbiss is available also as Qbiss Screen.



QBISS ONE – FLAT MODULAR FAÇADE ELEMENT



QBISS ONE - CURVED MODULAR FAÇADE ELEMENT

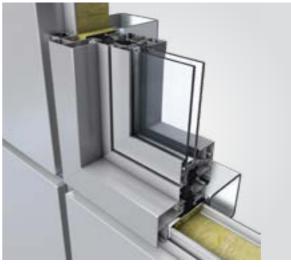


#### Architectural performance details

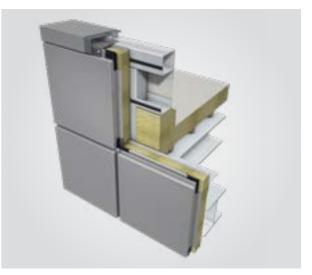
Qbiss One is complemented with the full scope of architectural detail solutions. These solutions not only increase design efficiency, but shorten the project design process, as well as ensure the stunning appearance of the building with different typical details available. There is also the ability to create bespoke details to meet specific project requirements.



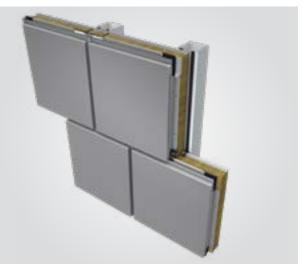
BASE



WINDOW



PARAPET



JOINT BRICK SYSTEM

## SERVICES

## REFERENCES



From an initial idea to the final implementation: the Trimo team supports you at every phase of your project, from planning and architectural design to the construction and handover.

The Trimo technical consulting team is a partner you can count on to provide comprehensive support throughout the entire duration of your project. Technical support includes visualisations, rendering, detailing, BIM engineering, virtual and augmented reality, structural calculations and management of changes, information and resources.

Individual solutions: The technical consulting team provides you with special product solutions designed to perfectly suit your project.

Support and consulting: t: + 386 (0)7 34 60 135

e: qbiss.one@trimo-group.com

#### Building Information Modelling (BIM)

Building Information Modelling (BIM) enables quick, precise, and aesthetically perfected production of façade cladding in a 3D virtual environment together with an overview of the parameters, information, and advantages of the chosen system. It also speeds up the communication in the initial design phase.

We have developed BIM libraries of our products for the most sophisticated engineering software ArchiCAD and Revit in order to support and speed up the building design process.

Qbiss One BIM library is available on: https://trimo-group.com/en/trimo/downloads/ design-tools/bim



## PORSCHE CAR SHOWROOM



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GOLDBECK RHOMBERG AG

## HEADQUARTERS HEKA HERZOG







LOCATION GERMANY

**YEAR OF COMPLETION** 2018

## RESEARCH INSTITUTE ELI-ALPS

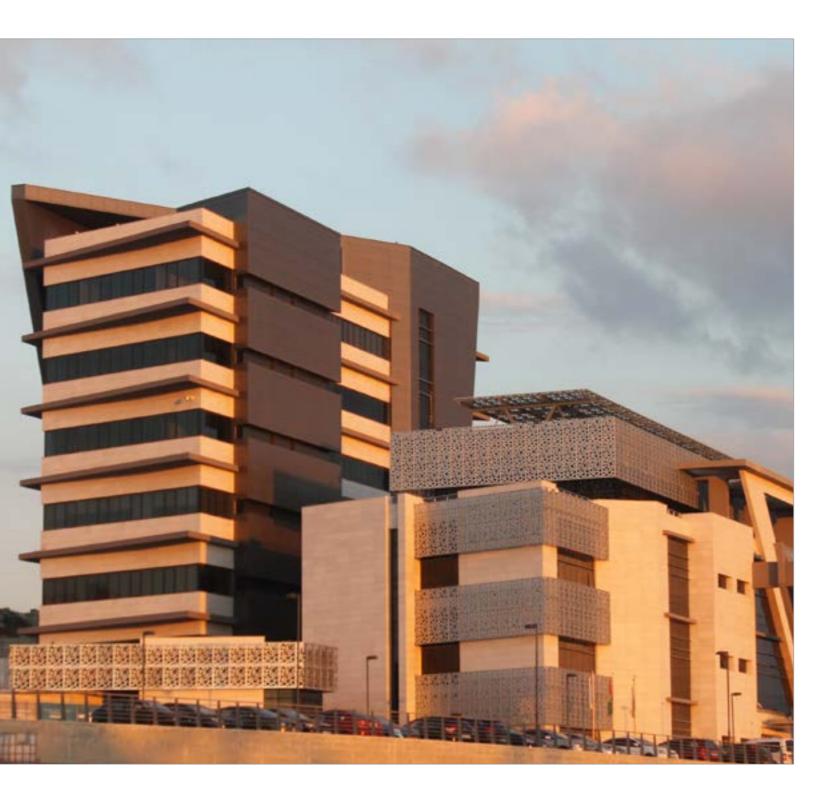


LOCATION HUNGARY



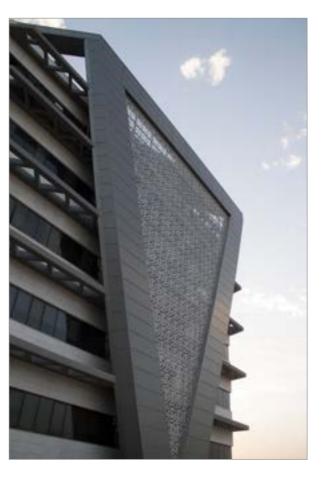


## DENTISTRY SCHOOL FOR GRADUATE STUDIES









**LOCATION** PALESTINE

YEAR OF COMPLETION

ARCHITECT HANI HASSAN ARCHITECTS

## COMMERCIAL CENTRE MANGO







LOCATION SPAIN

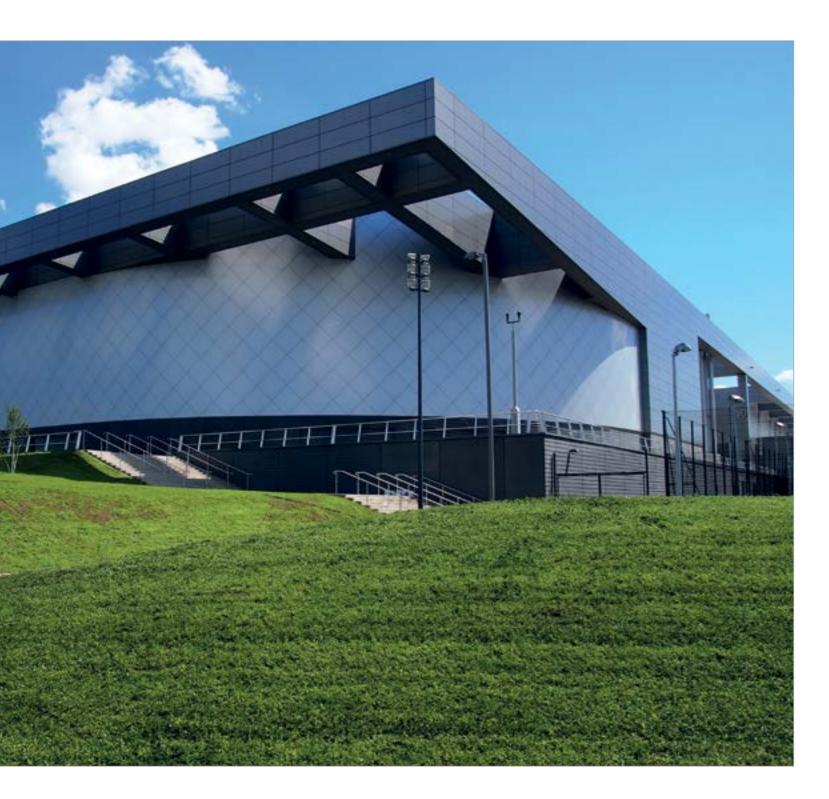
YEAR OF COMPLETION 2015

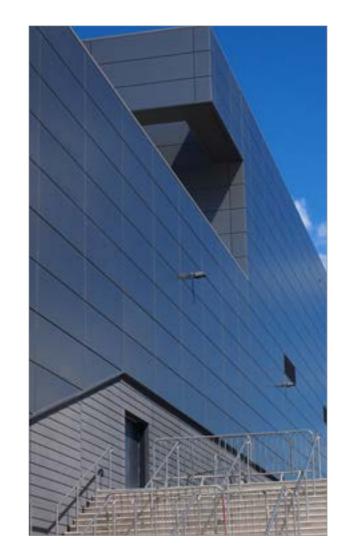
**ARCHITECT** GCA ARQUITECTURA

## EQUINIX LD6 DATA CENTRE



## EMIRATES ARENA AND SIR CHRIS HOY VELODROME





**LOCATION** UNITED KINGDOM

YEAR OF COMPLETION 2012

ARCHITECT 3DREID



## COMMERCIAL CENTRE HOME







## EAST BLACKBURN LEARNING COMMUNITY









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**LOCATION** UNITED KINGDOM

YEAR OF COMPLETION 2012

**ARCHITECT** NICHOLAS HARE ARCHITECTS

## VIALIA HIGH-SPEED TRAIN STATION





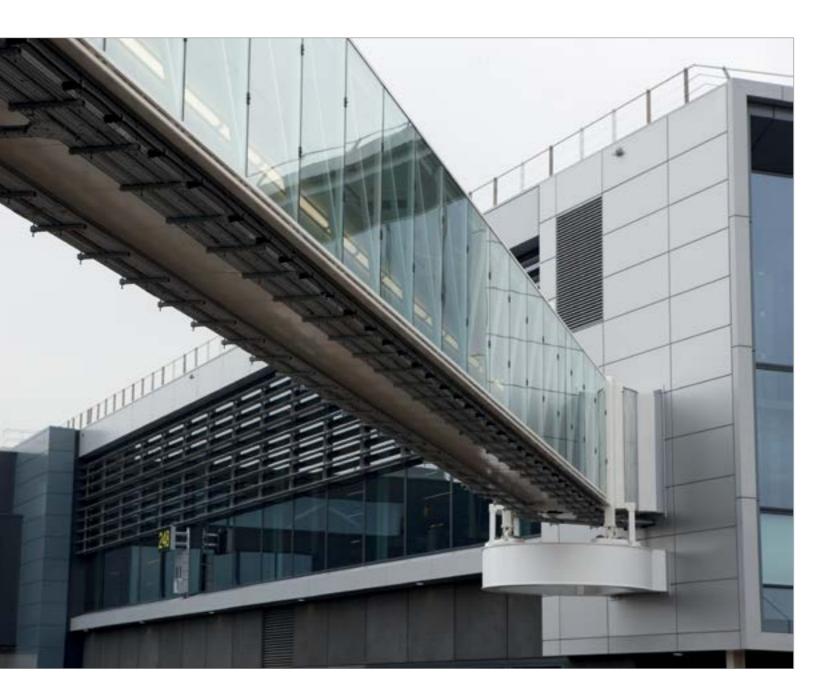


LOCATION SPAIN

YEAR OF COMPLETION 2010

**ARCHITECT** MÉTRICA TIP ARQUITECTURA

## HEATHROW AIRPORT TERMINAL 2 CONCOURSE B







**LOCATION** UNITED KINGDOM

YEAR OF COMPLETION 2009

**ARCHITECT** GRIMSHAW ARCHITECTS

## SHOPPING CENTRE C.C. FACTORY OUTLET





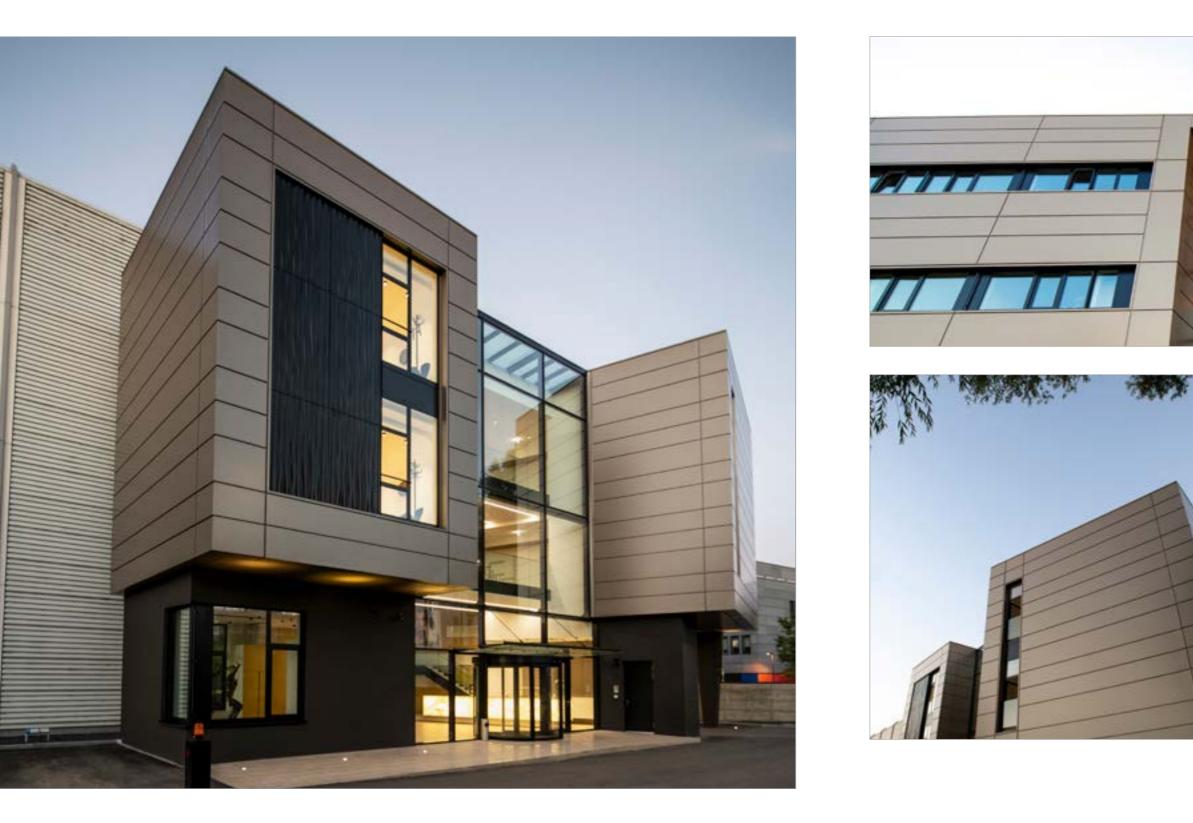


LOCATION SPAIN

YEAR OF COMPLETION 2011

**ARCHITECT** ROSA LÓPEZ

## HEAD OFFICE DR GRANDEL AUGSBURG







LOCATION GERMANY

YEAR OF COMPLETION 2009

**ARCHITECT** PENEDER BAU-ELEMENTE GMBH

## MERCUT MANUFACTURING HALL





LOCATION CZECH REPUBLIC

YEAR OF COMPLETION 2011

ARCHITECT NEXTLEVEL STUDIO



## BRECON CLEANROOM SYSTEMS B.V.



#### **LOCATION** THE NETHERLANDS

YEAR OF COMPLETION 2017





## MUNSTERS METAAL HELMOND OFFICE BUILDING







#### **LOCATION** THE NETHERLANDS

YEAR OF COMPLETION 2010

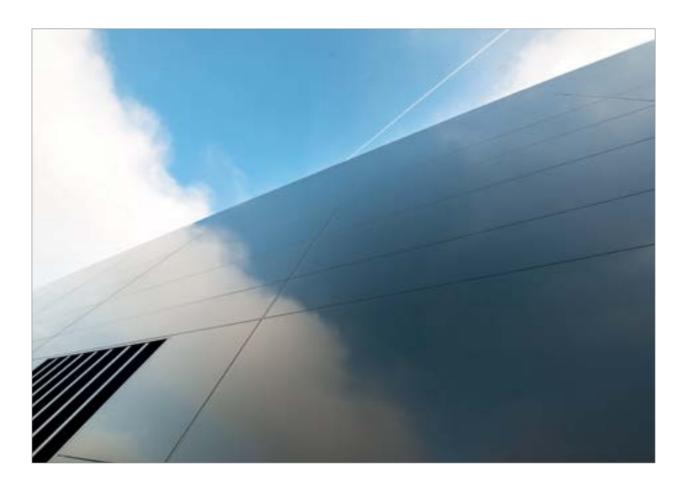
**ARCHITECT** ARCHITECTENBURO JOOSTEN BNA

## CWK OPOLE CONGRESS CENTRE



## PARTYRENT LOGISTIC CENTRE





LOCATION GERMANY

**YEAR OF COMPLETION** 2013

**ARCHITECT** JAROSCH ARCHITEKTUR DARMSTADT

## STÖCKER SHOPPING CENTRE





LOCATION AUSTRIA

# **YEAR OF COMPLETION** 2013

**ARCHITECT** F2-ARCHITEKTEN ZT GMBH



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