

# Responsibility

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*from concept beyond completion*





# Facade *Experience*

Priedemann was founded in 1993, since then, a simple mission moves us: **To do the ONE thing, that makes our heart beat – FACADES.**

That knowledge is grounded in German craftsmanship and continuously improved by stretching our boundaries through research and daily challenges. Only best practice is not enough for us.

## Building *Skins*

### Facade Consultancy & Engineering Services

We are focused on Facades: Priedemann Facade Experts are global operating engineering offices with the focus specifically on the building envelope. In a unique way we make our holistic full-service facade competency available to investors, architects and building contractors. Beside façade consultancy and third-party execution control, we develop the system design and prepare the final shop drawings. Mastered facade techniques, brave to own responsibility and the passion to chase nearly impossible objectives are our strengths.

#### Services

Whether it is the comprehensive consultancy package or a single engineering discipline; our clients can rely on Priedemann's competency from project conceptualization to the stages beyond commissioning. We understand the envelope as an interface to almost all adjacent trades and we consider ourselves as the partner of all five main construction participants, namely the investor/ developer to the architect/ general consultant,

the general contractor and the façade fabricator extending finally to the supplier of the envelope's components and materials. Over 1,000 successfully completed projects world over and long-term client relationship tells its own tale.

#### Beyond standard Solutions

Dare to tackle something new, exceed expectations – Priedemann Facade Experts stands for innovative solutions with a practical approach. Beside applied implementation of sophisticated facade projects in all climate zones, we contribute in research and engage in professional knowledge exchange. The Facade-Lab, a subsidiary of Priedemann, drives the quest for innovative facade solutions and develops specific and customized products. We develop and test these products together with our partners from the science and research industry. In addition, a separate facade forum offers a platform for the exchange with colleagues and manufacturers. In a showroom of 750 sqm we exhibit over 60 mock-ups, material samples and information.



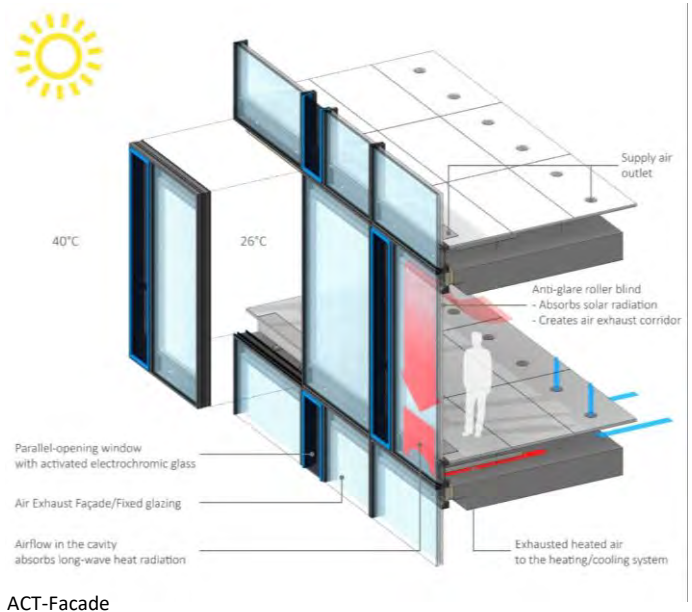
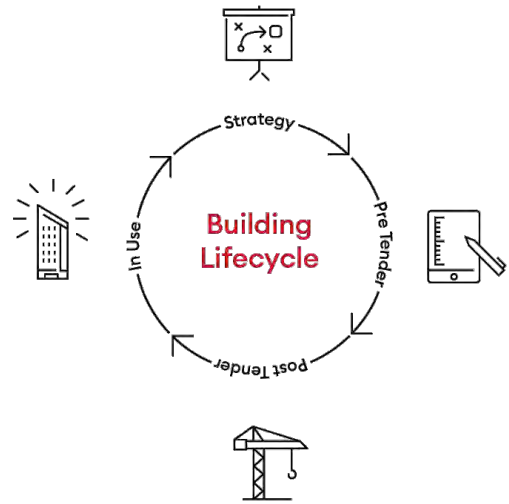
# Sustainability Concept

We at Priedemann Facade Experts understand our great responsibility for the sustainable use of material and energy resources. With this in mind, we are a member of the **Council on Tall Buildings and Urban Habitat (CTBUH)**, the **German Sustainable Building Council (DGNB)** and the **Aluminium Wertstoffkreislauf (A|U|F; aluminum reusable material cycle)**, among others.

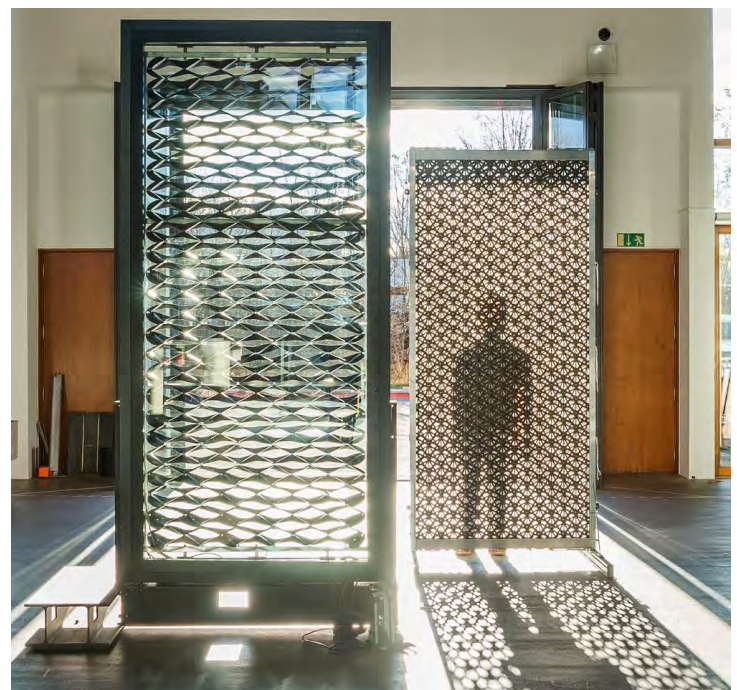
Furthermore, under the guiding principle "**Close The Loop**", we pursue a comprehensive approach in our planning services, which considers the building envelope in interaction with the overall structure, from planning, through production and operation, to deconstruction and reuse. In this context, our understanding of sustainability is based on an ecological, economic, and social approach. Additionally, following current **DGNB** criteria, we consider the technical quality of the facades we construct, the quality of their manufacturing processes, and their impact on the project site.

We are convinced that providing innovative technologies is key to achieving ambitious sustainability goals. That is why we are actively developing new technical solutions in our R&D department with academic and industrial partners from various research backgrounds and networks, such as the **Innovation Network on Functional Facades** or the **Cradle-2-Cradle Façade Network**. These endeavours include façade integration of renewable energy generation in the **TABSOLAR** or **BIPVslim** project, performance enhancement of façade structures through adaptive capabilities in the **ACT Facade** and **ADAPTEX** projects, as well as the application of new materials to the façade, for example, in the **NEERO FACADE** project. Thereby we are also familiar with the methods and tools of **Life-Cycle Assessments (LCA)** of materials. Lately, we also got awarded a first prize at the international "*Metals in Construction - Design Challenge 2022*" with our concept **EVOCON**, a circular and highly adaptable façade construction.

Sustainability at Priedemann is created at the interface of façade consulting, engineering and R&D. Many of our realized projects confirm the Priedemann sustainability concept. For example, the Festo AutomationCenter high-rise completed in 2015 received the DGNB Platinum certificate, in which the novel ACT Facade developed by us was used.



ACT-Facade



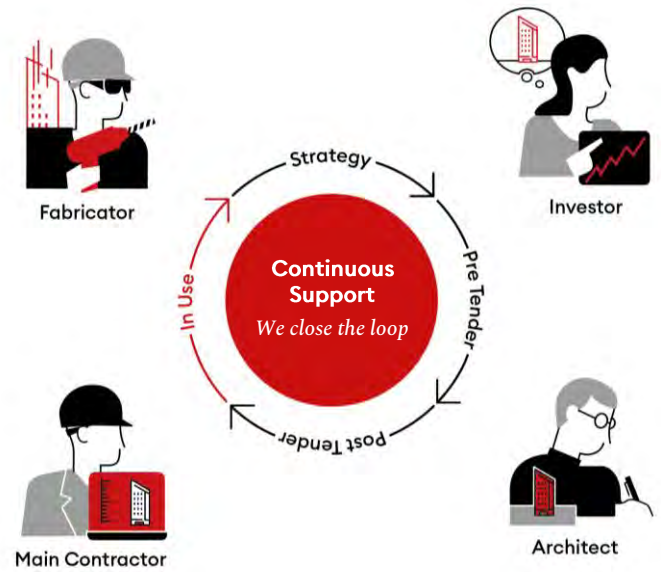
ADAPTEX in the Facade-Lab Showroom

# Continuous Support

At Priedemann, we take care of facade consulting AND engineering. In this way, we close the gaps between planning and execution.

We ensure that the project knowledge we have gained is transferred to the construction phase. In this way, you can rely on the ONE person responsible for the facade.

With this, we support the architect as design author and generalist on the building site and the client and investor as idea provider, initiator and financier.



## Scope of Services

	Consultancy	Engineering	Specials	Facade-Lab
Strategy	<ul style="list-style-type: none"> <li>Architectural Competitions</li> <li>Refurbishment Concept</li> <li>Feasibility Study</li> <li>Project-/Peer Review</li> <li>Technical Due Diligence</li> </ul>	<ul style="list-style-type: none"> <li>Factory Layout</li> <li>Prequalification</li> </ul>	<ul style="list-style-type: none"> <li>Thermal Building Physics</li> <li>Building Acoustics</li> <li>Simulations</li> <li>Decentralized Energy</li> <li>Green Building Certification</li> </ul>	<ul style="list-style-type: none"> <li>Research &amp; Development</li> <li>Showroom</li> <li>Forum</li> <li>Mock-Up &amp; Prototype</li> <li>Model Workshop</li> </ul>
Pre-Tender	<ul style="list-style-type: none"> <li>Project Objectives &amp; Brief</li> <li>Concept/Schematic Design</li> <li>Detailed/Developed Design</li> <li>Technical/Construction Design</li> <li>Specs/Tender Docs</li> <li>Tender Evaluation</li> </ul>	<ul style="list-style-type: none"> <li>Bidding Stage Association</li> <li>Value Engineering</li> </ul>	<ul style="list-style-type: none"> <li>3D Modelling</li> <li>BIM</li> <li>Parametric</li> <li>Digital Production</li> <li>Media Facade</li> </ul>	<div style="border: 1px solid black; padding: 5px; text-align: center;"><b>Asset Transformation</b></div>
Post-Tender	<ul style="list-style-type: none"> <li>Construction Objectives &amp; Brief</li> <li>System/Concept Design</li> <li>Mock-Up Development</li> <li>Provision/Shop Drawings</li> <li>Material Take Off</li> <li>Production Documentation</li> <li>Installation Documentation</li> <li>As-Built Drawings</li> </ul>	<ul style="list-style-type: none"> <li>Design Compliance Control</li> <li>Mock-Up Association</li> <li>Execution Compliance Control</li> <li>Approval of As-Built Docs</li> <li>Variation Claim Evaluation</li> <li>Handover</li> </ul>	<ul style="list-style-type: none"> <li>Maintenance</li> <li>Structural Design</li> <li>Design-, Cost Optimization</li> <li>BMU Concept &amp; Design</li> </ul>	
In Use	<ul style="list-style-type: none"> <li>1401 Monitoring</li> <li>1402 Defect-/Failure Investigation</li> </ul>		<ul style="list-style-type: none"> <li>PI Insurance</li> </ul>	

# Clients as *Partners*

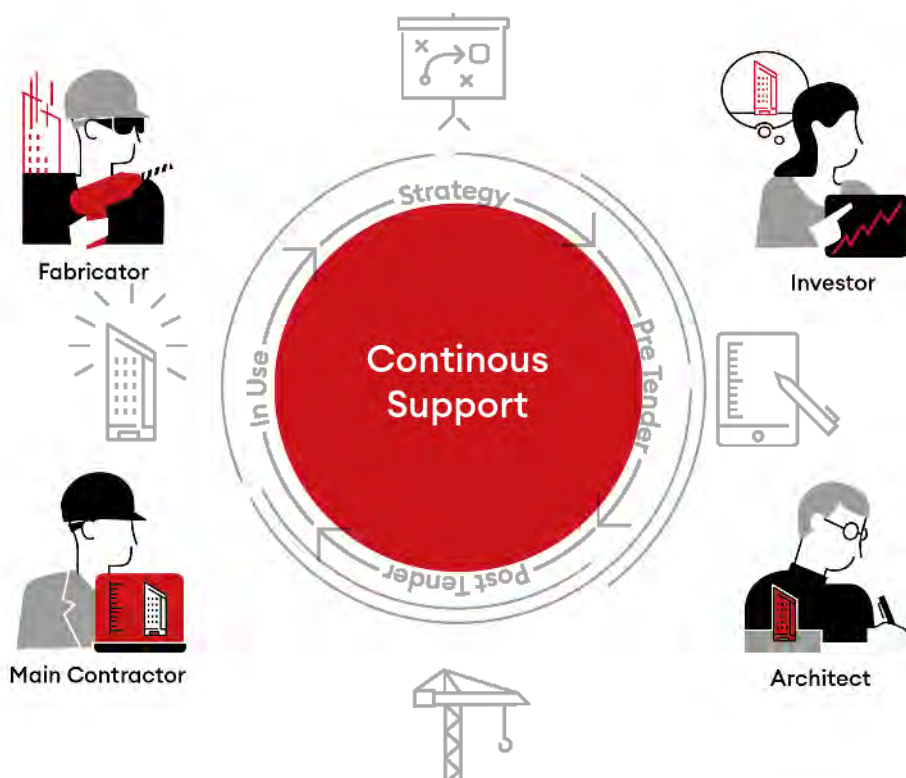


Our clients range from architects, developers, general contractors, fabricators to system suppliers.

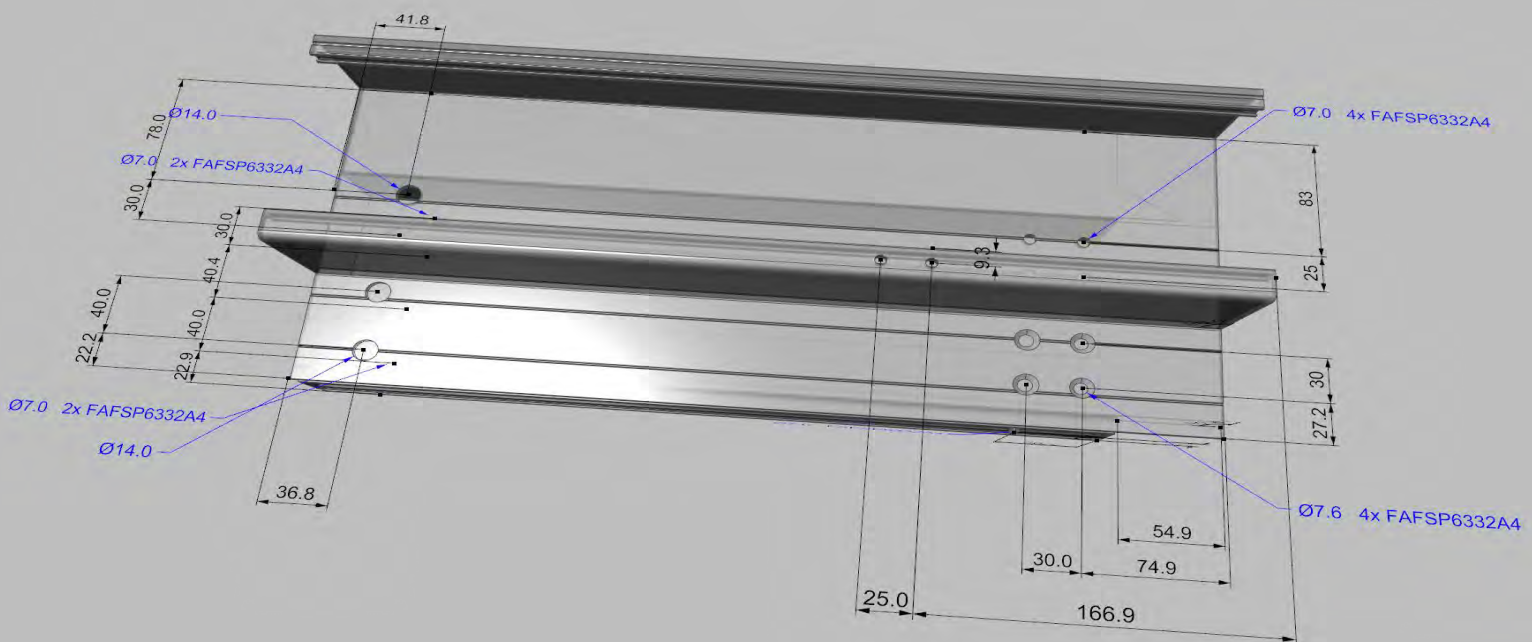
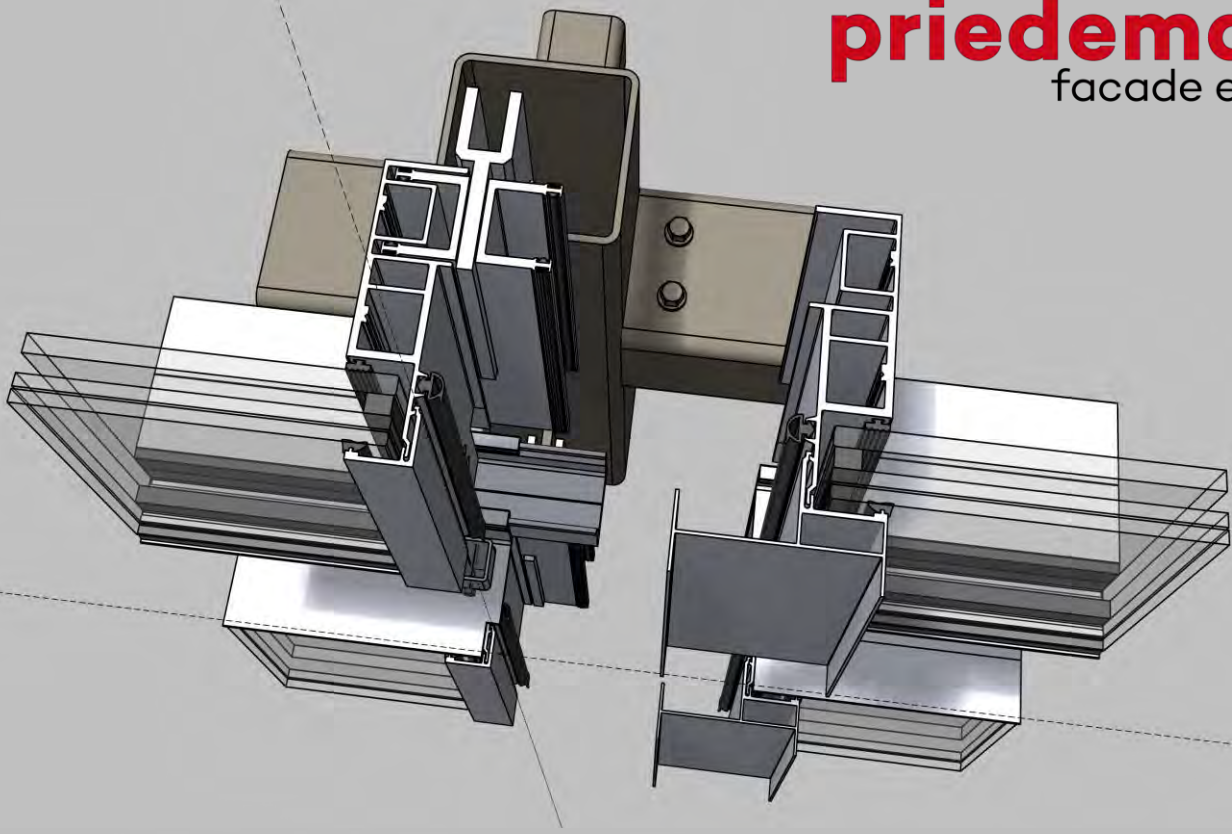
*The difference arises from the responsibility, for each planning stage and every customer*

We are constantly aiming to deliver the best possible services to our clients, sharing their prime interest of accomplishing a well-constructed project.

Supporting them from the first concept sketch in an architectural competition until the last screw is tightened on the building, as well as during the entire operational phase







Priedemann Digital Twin

# The efficient support in 3D and BIM for Design, Construction and Production

*Clear concepts. Individual solutions. Suitable tools for every project.*

# We close the loop.

*With Digital Twin to sustainable buildings! We optimise the building envelope through comprehensive 3D BIM planning, avoid errors, and increase efficiency.*

**Priedemann Digital Twin** supports your project with decades of experience in the digitally supported implementation of facade projects.

We are a strong partner at every stage, from early analysis and design optimisation to models for bidding and contracting to production data development and beyond.

We select the most efficient digital processes for your project and, if required, develop customised methods and tools for optimal implementation of even the most complicated facades.

Through comprehensive planning of all essential aspects of each project, we optimise the entire building lifecycle, including operation, conversion or deconstruction.

Thanks to the best digital planning, you benefit from cost-effective buildings executed with foresight and high quality.

This way, you increase planning reliability, reduce your risk, save energy and time.

Our methods based on our experience are your profit.



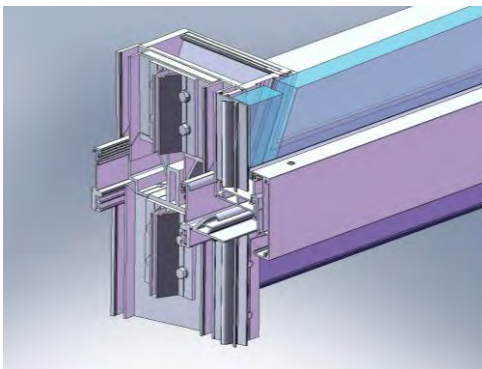


**3D/ Parametric**  
*Reference selection*





Progress of construction work



3D construction detail



Finalized Al-Tijaria Tower



Site installation check



Mock-Up test

**Client**

Alico Aluminium and Light Industries Co. Ltd.

**Owner ▪ Developer**

The Commercial Real Estate Co.

**Architect**

- Al Jazera Consultants
- NORR Group Consultants

**Project Data**

- approx. 219 m building height
- approx. 29,000 m<sup>2</sup> facade surface

**Building Function**

Office

**Technical Features**

- Twisted facade
- Unitized curtain wall
- Structural glazing

**Engineering Services**

- Value Engineering
- Construction Objectives and Brief
- System/Concept Design
- Structural Design
- Mock-Up Development
- Provision/Shop Drawings
- Material Take Off
- Production Documentation
- Installation Documentation

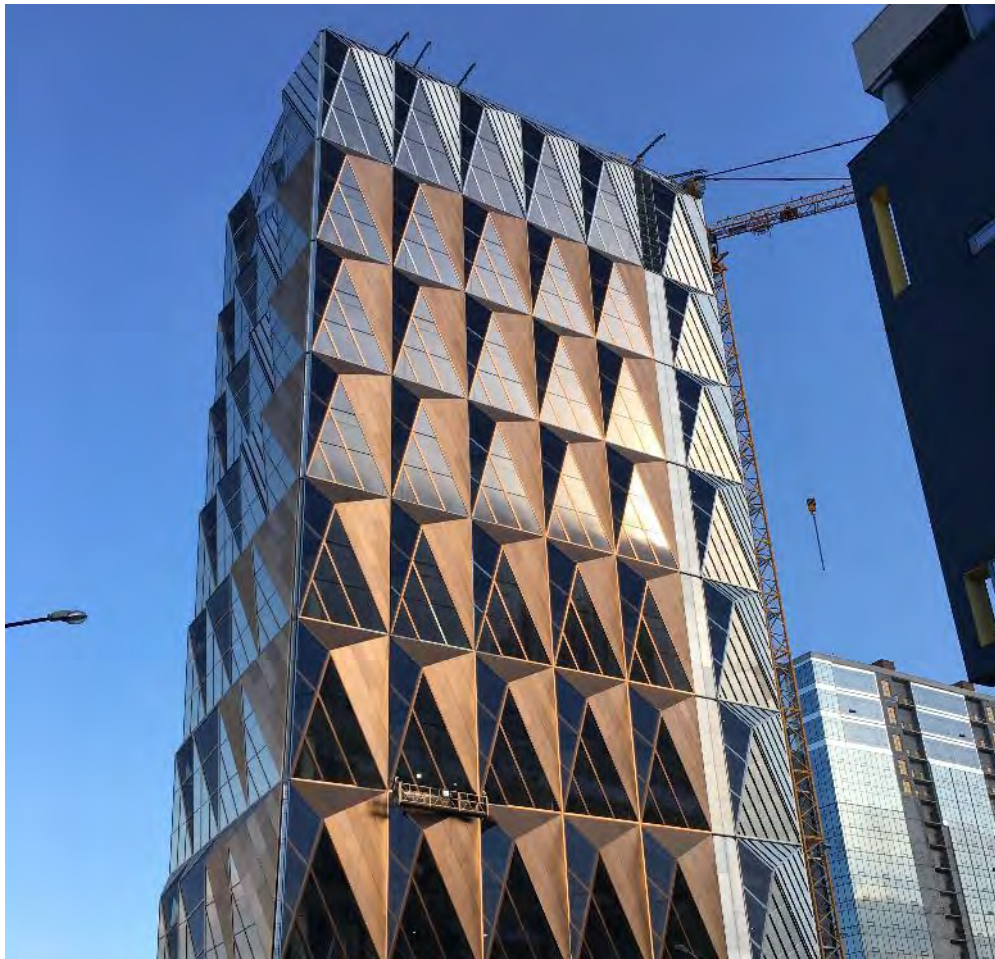
**Special Services**

- 3D Modelling
- Parametric Design

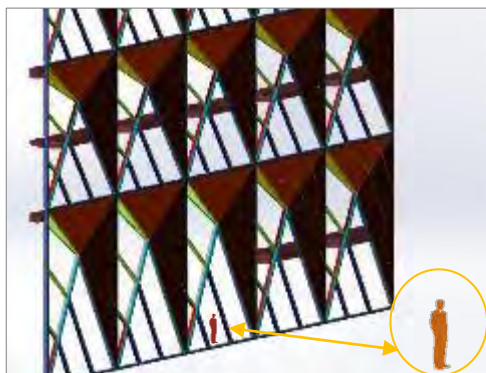
**Status**

Completed 07/2009





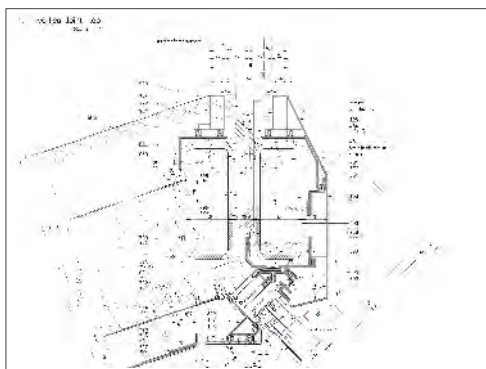
RMK New Headquarters during construction progress



Façade 3D Model, different element sizes



Mock-Up on site, January 2017



Shop drawing, horizontal section of unitized curtain wall



Digital production of a junction detail

**Client**

- Pre-Tender: Foster + Partners
- Post-Tender: Diamond Building

**Owner**

Russian Copper Company

**Architect**

Foster + Partners

**Project Data**

- approx. 90 m building height
- approx. 12,500 m<sup>2</sup> facade surface

**Building Function**

Office

**Technical Features**

- Diamond shaped facade
- Oversized elements, max. element size 12 m height, 6 m width
- Semi-unitized curtain wall
- Coloured stainless steel cladding

**Consultancy Services**

- Detailed/Developed Design
- Technical/Construction Design
- Specification/Tender Documentation
- Tender Evaluation

**Engineering Services**

- System/Concept Design
- Structural Design
- Mock-Up Development
- Provision/Shop Drawings
- Material Take Off
- Production Documentation
- Installation Documentation

**Special Services**

- 3D Modelling
- Maintenance, Cleaning, Facade Access, BMU

**Status**

Completion 2020



NPP Control Tower at twilight, rendering and the progress during construction

**Client**

Arab Engineering Bureau

**Owner • Developer**

Port Authority, State of Qatar

**Architect**

PLP Architecture

**Project Data**

- approx. 110 m building height
- approx. 26,000 m<sup>2</sup> facade

**Building Function**

Mixed-Use, Office,  
Port Navigation

**Technical Features**

- Twisted facade
- Unitized curtain walls, cold-bent glass
- Stick system, structural glazing, glass fins
- Sunshade elements

**Consultancy Services**

- Project Objectives and Brief
- Concept/Schematic Design
- Detailed/Developed Design
- Technical/Construction Des.
- Specification/Tender Doc.
- Feasibility Study

**Engineering Services**

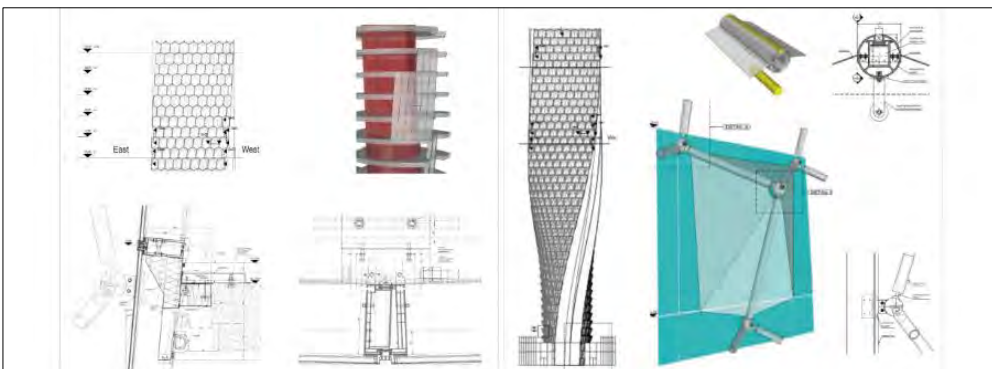
- Construction Object. & Brief
- System/Concept Design
- Structural Design
- Mock-Up Development
- Provision/Shop Drawings
- Material Take Off
- Production Documentation
- Installation Documentation
- As-Built Drawings

**Special Services**

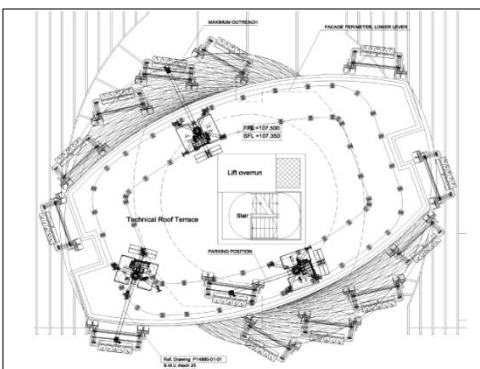
- Parametric
- Maintenance, Cleaning, Facade Access, BMU

**Status**

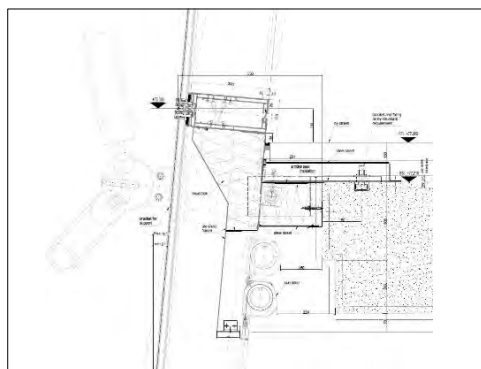
Completed 03/2017



Facade design development, typical details of the main facade wall type 04 and the facade spider system wall type 07



Facade access and maintenance strategy, proposal - track mounted roof BMU with dedicated cradle, detailed overview



Typical in detail in process, vertical cross section main facade





The New Headquarters – Central Bank of Kuwait at dawn

**Client**  
SCHÜCO International KG

**Owner - Developer**  
Central Bank of Kuwait

**Architect**  
HOK International Ltd.

**Project Data**  
- approx. 240 m  
  building height  
- approx. 34,000 m<sup>2</sup>  
  facade surface

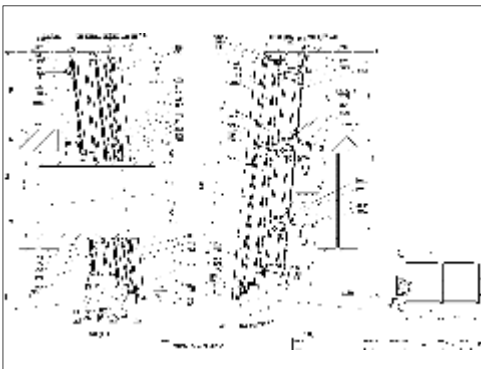
**Building Function**  
Office

**Technical Features**  
- Unitized curtain wall,  
  blast resistant

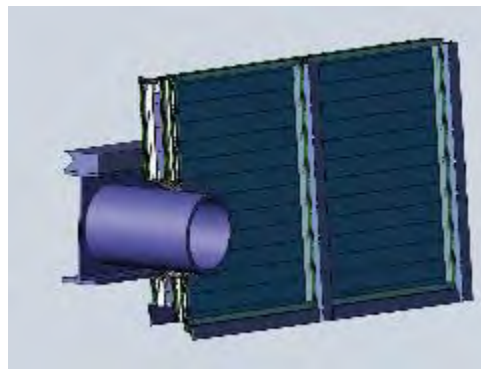
**Engineering Services**  
- Construction Objectives  
  and Brief  
- Provision/Shop Drawings  
- Material Take Off  
- Production Documentation

**Special Services**  
Parametric Design

**Status**  
Completed in 2014



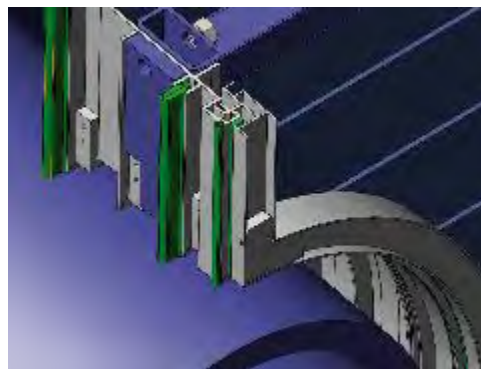
Unitized curtain wall, Excerpt of production paper



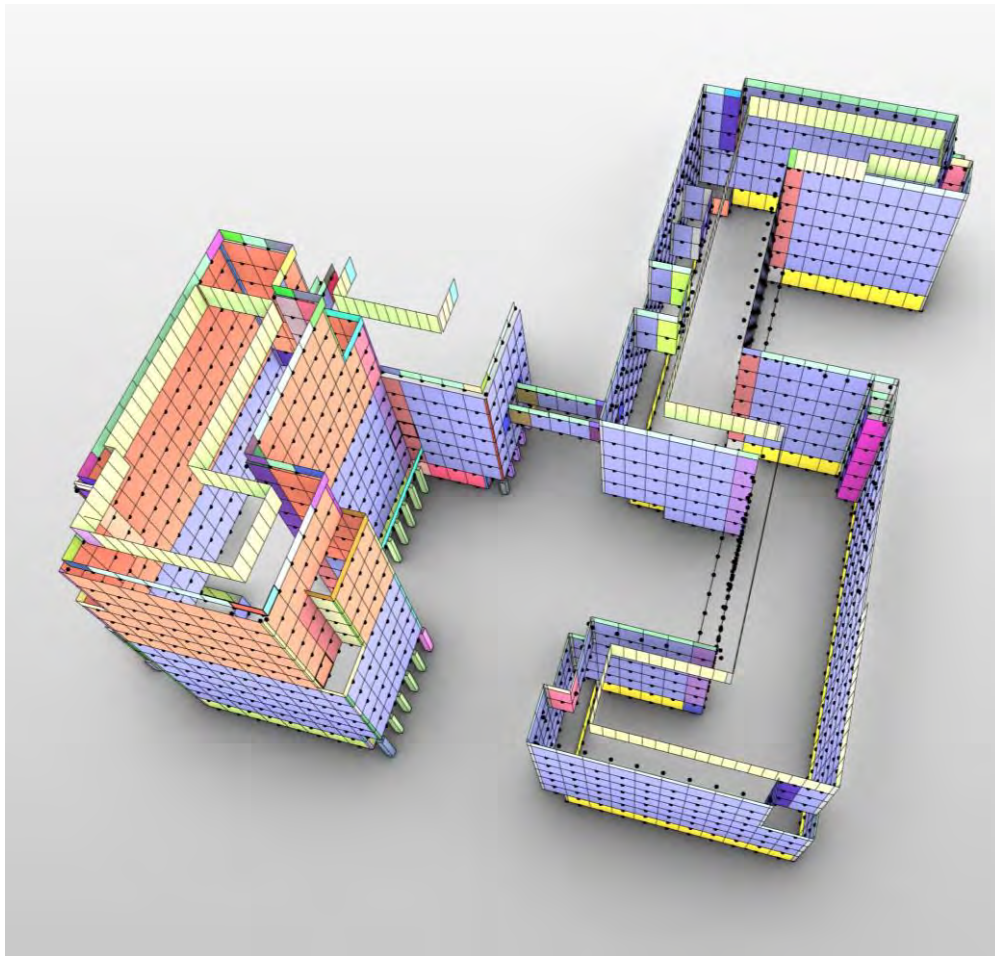
3D model of UCW



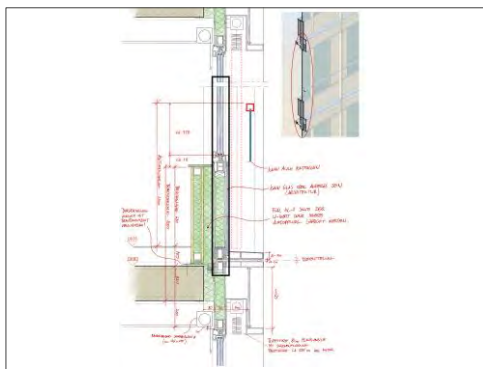
Detail of facade elevation



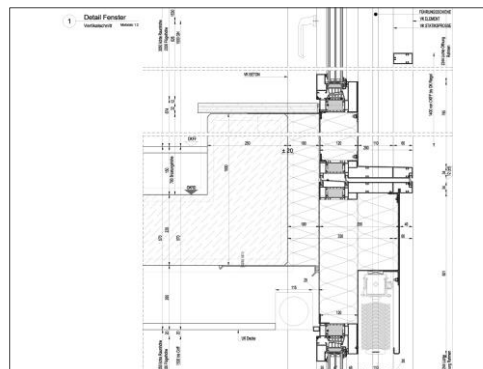
3D detail of facade element module



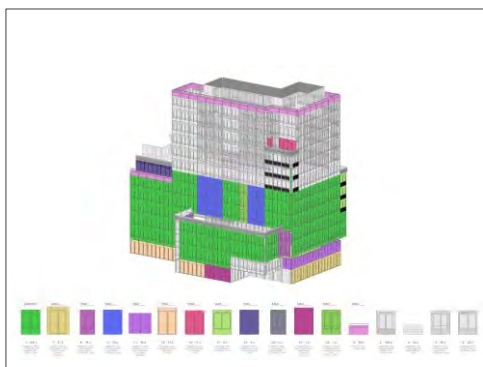
3D-Analyse zur Ermittlung der Elementvariationen des Gesamtareals mit Bauteil 1 und 2



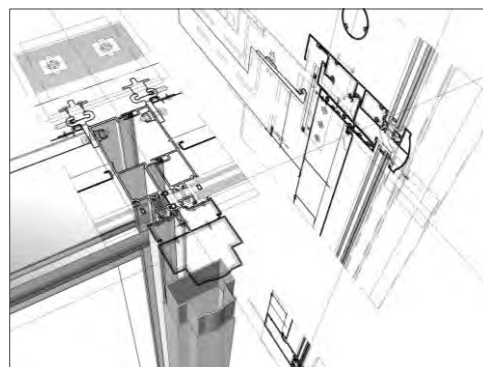
Fassadenskizze Standardelement, Vertikalschnitt



Vertikalschnitt, Standard-Fensterelement



3D-Fassadentypenübersicht, selektierter Bereich



3D Modelling

**Auftraggeber**  
Europa-Center AG

**Bauherr • Projektentwickler**  
Europa-Center AG

**Architekt**  
Europa-Center AG

**Projektdaten**  
- ca. 51 m Gebäudehöhe  
- ca. 30.000 m<sup>2</sup> Fassadenfläche  
- ca. 25.000 m<sup>2</sup> BGF

**Gebäudefunktion**  
Office

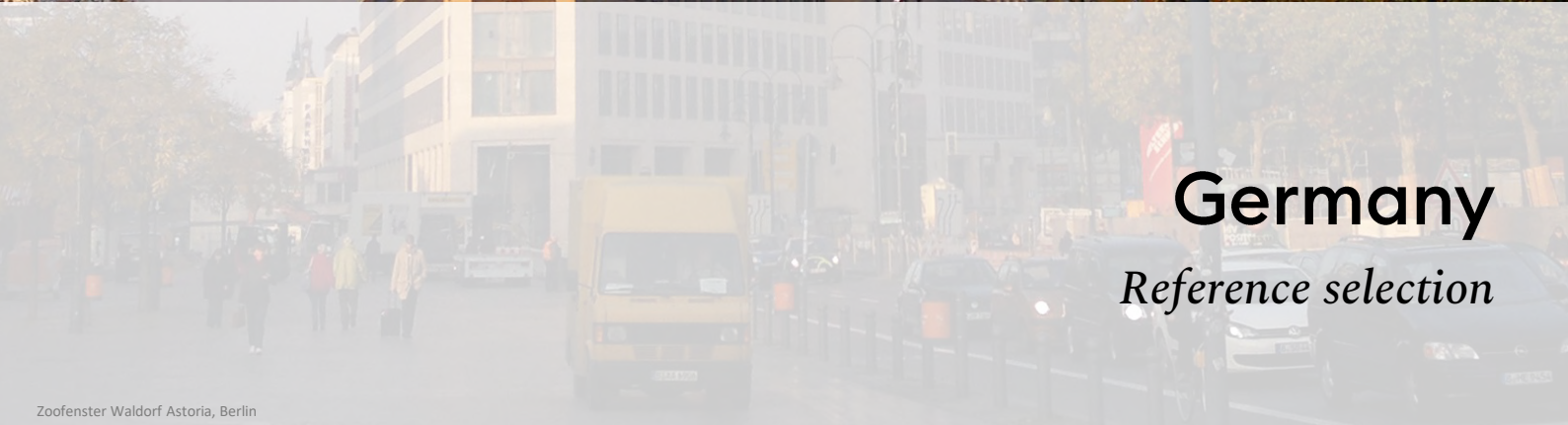
**Technische Daten**  
- Elementfassade,  
teilweise als Kaltfassade  
- Entwurf W90 Brüstung  
- DGNB Vorzertifikat in Gold  
wird angestrebt

**Consultancy Services**  
- Grundlagenermittlung und  
Zielstellung  
- Entwurf  
- Leitdetailplanung

**Special Services**  
- BIM, Stufe 1  
- 3D Modelling  
- Parametrik  
- Fassadenstatik, Entwurf  
- Bauphysik,  
Vordimensionierung  
 $U_{CW}$ -Werte  
- Kostenschätzung

**Status**  
In Planung – on hold





**Germany**  
*Reference selection*





Zoofenster Waldorf Astoria in Berlin, November 2011

**Owner**  
BIC Ingenieur-Consulting

**Owner - Developer**  
Swan Operations Limited

**Architect**  
Prof. Christoph Mäckler  
Architekten

**Project Data**  
- approx. 119 m  
building height  
- approx. 20,500 m<sup>2</sup>  
facade surface

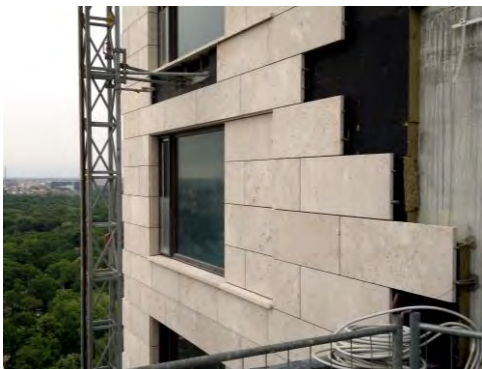
**Building Function**  
Mixed-Use, Hotel,  
Office, Retail

**Technical Features**  
- Unitized curtain wall  
- Interior sunshade  
- Rain screen, natural stone  
- Casement windows  
- Composite windows  
- Top hung windows

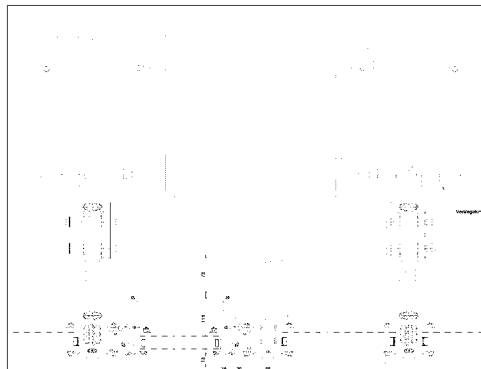
**Consultancy Services**  
- Project Objectives and Brief  
- Concept/Schematic Design  
- Detailed/Developed Design  
- Technical/Construction  
Design  
- Specification/Tender  
Documentation  
- Design Compliance Control  
- Execution Compliance  
Control

**Special Services**  
Maintenance, Cleaning,  
Facade Access, BMU

**Status**  
Completed 01/2013



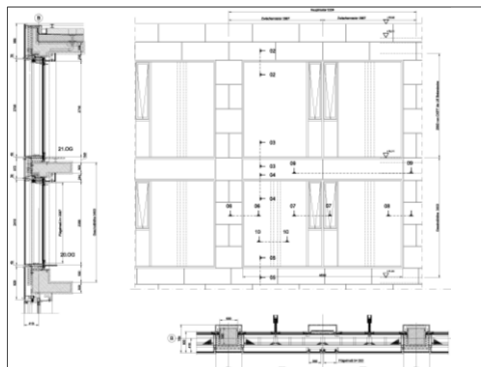
Installation of the natural stone cladding panels



Typical detailing, horizontal section, top hung window



Facade elevation with casement window



Typical detailing of casement windows,  
elevation and overview of sections



Visualization Störmer Murphy and Partners

The Fontenay at dusk

**Client**

ARGE GP Fontenay consisting of:

- Störmer Murphy Partners
- Höhler + Partner

**Owner - Developer**

Kühne Immobilien GmbH

**Architect**

Störmer Murphy Partners

**Project Data**

- approx. 30 m building height
- approx. 14,000 m<sup>2</sup> facade surface

**Building Function**

Hotel

**Technical Features**

- Amorphous-shaped facade
- Filigree sliding doors, glass
- Rain screen, bent, ceramic
- Ribbon windows, aluminium-wood windows
- Glass fin facade

**Consultancy Services**

- Project Objectives and Brief
- Architectural Competitions
- Concept/Schematic Design
- Detailed/Developed Design
- Technical/Construction Design
- Specification/Tender Documentation
- Tender Evaluation
- Design Compliance Control
- Execution Compliance Control

**Special Services**

Maintenance, Cleaning, Facade Access, BMU

**Status**

Completed 03/2018



Image by Jochen Stüber

Certical section, hotel facade

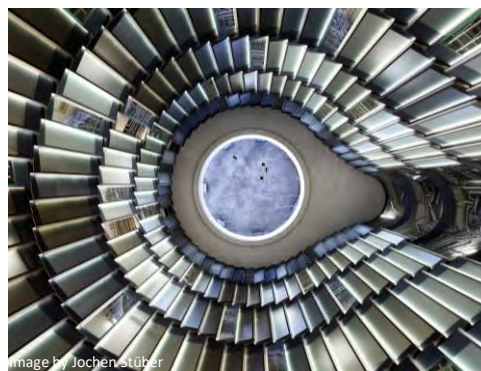
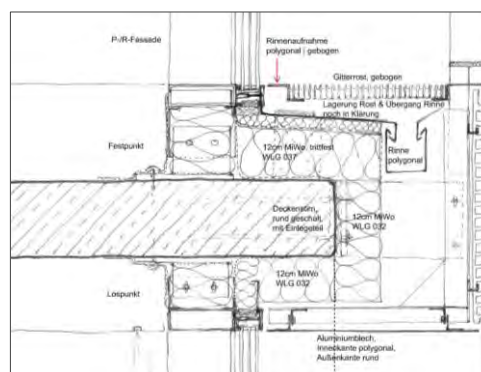


Image by Jochen Stüber

Fontenay from a bird's-eye view



Concept/Schematic Design





Porsche Pavilion in Wolfsburg

**Client**

HENN Architects

**Owner - Developer**

Dr. Ing.h.c.F. Porsche AG

**Architect**

HENN Architects

**Project Data**

- approx. 9 m building height
- approx. 2,900 m building surface

**Building Function**

Building for exhibition and public assembly

**Technical Features**

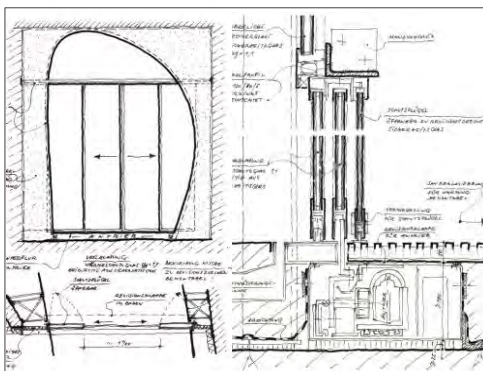
- Sculptural facade shape
- Pavilion in monocoque-construction – homogeneously welded and coated shell structure with stainless steel skin
- Ventilation lamella in fixed slab shell
- Sliding doors, all-glass

**Consultancy Services**

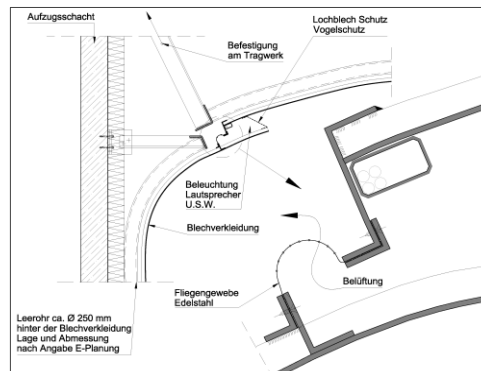
- Project Objectives and Brief
- Concept/Schematic Design
- Detailed/Developed Design
- Tender Evaluation

**Status**

Completed 06/2012



Automatic sliding door detail



Roof shell detail, design of joint

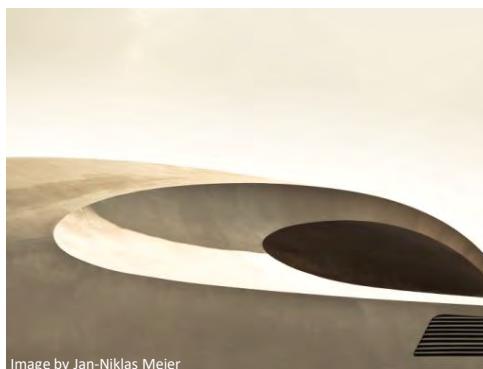
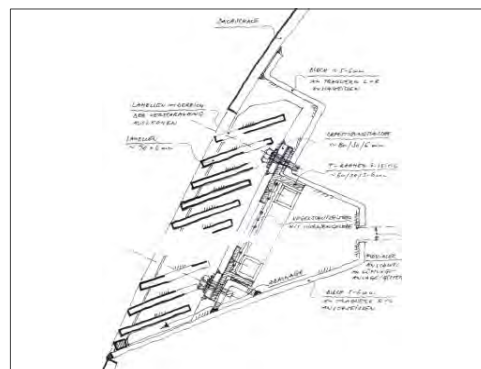


Image by Jan-Niklas Meier

Facade elevation with ventilation lamella



Typical detailing of ventilation lamella





Image by Bernd Borchard

Visualization of SKAIO in Heilbronn

**Client**

Stadtsiedlung Heilbronn

**Owner - Developer**

Stadtsiedlung Heilbronn

**Architect**

Kaden + Lager

**Project Data**

approx. 34 m building height

**Building Function**

Residential

**Technical Features**

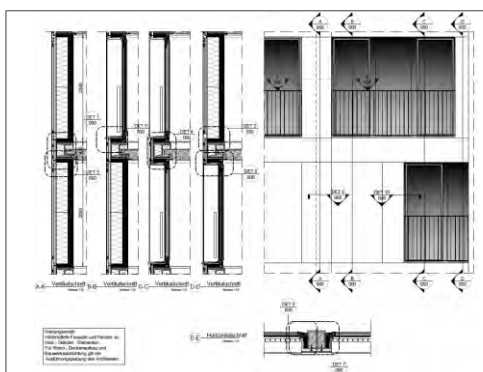
- Wooden skyscraper
- Rain screen, wood-aluminium, metal sheet
- Composite window, wood-aluminium integrated sunscreen
- Stick-system facade, wood-aluminium

**Consultancy Services**

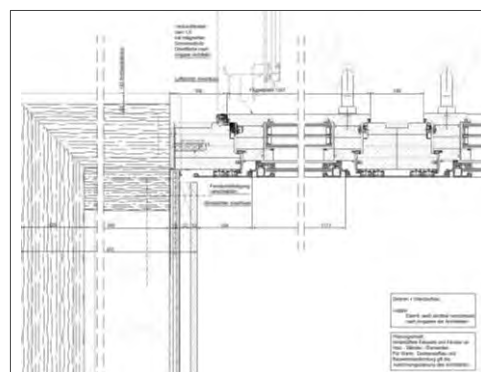
- Project Objectives and Brief
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- Specification/Tender Documentation

**Status**

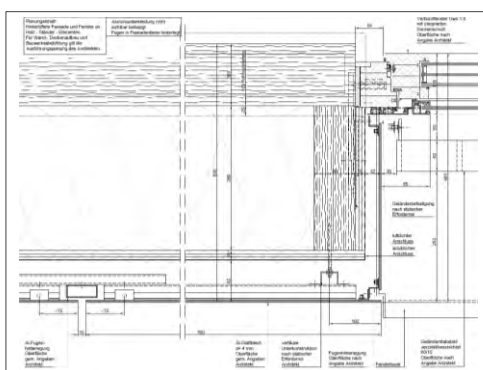
Completed 05/2019



Typical detail overview, wood-aluminium windows



Horizontal loggia detail, lateral connection



Typical horizontal detail

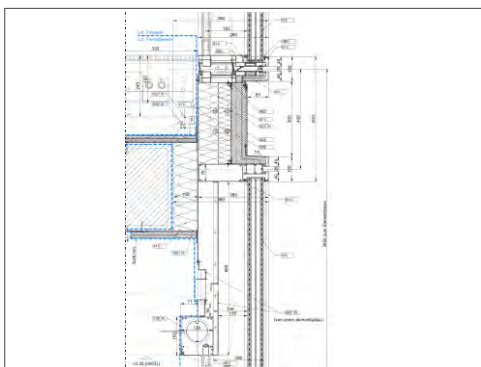


During construction progress

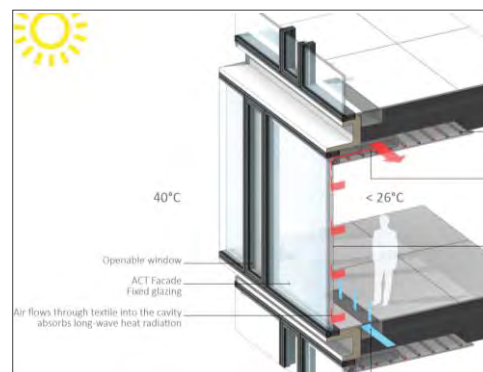




Wettbewerbsentwurf von HENN Architekten



Vertikalschnitt



Fassadenansicht



Wettbewerbsentwurf von HENN Architekten

**Auftraggeber**

Continental AG/ HENN GmbH

**Bauherr ▪ Projektentwickler**

Continental AG

**Architekt**

HENN GmbH

**Projektdaten**

- ca. 20 m Gebäudehöhe
- ca. 15.000 m<sup>2</sup> Fassadenfläche

**Gebäudefunktion**

Büro

**Technische Daten**

- ACT Facade
- Elementfassade

**Facade-Lab**

Forschung & Entwicklung

**Consultancy Services**

- Grundlagenermittlung und Zielstellung
- Entwurf
- Genehmigungsplanung
- Ausführungsplanung
- Leistungsbeschreibung/ Vergabe-Dokumentationen
- Mitwirkung bei der Vergabe
- Werkplanprüfung
- Mitwirkung bei der Mock-Up Ausführung
- Ausführungs-Überwachung

**Status**

Im Bau



Image by Inge Kanakaris-Wirtl, hosted on wikipedia  
Hans Otto Theater in Potsdam at twilight

**Client**

Provincial capital Potsdam

**Owner - Developer**

Provincial capital Potsdam

**Architect**

Gottfried Böhm

**Project Data**

- approx. 21 m building height
- approx. 350 m<sup>2</sup> facade surface

**Building Function**

Theatre

**Technical Features**

- Polygonal steel facade, point-fixed glazing
- Double skin facade

**Consultancy Services**

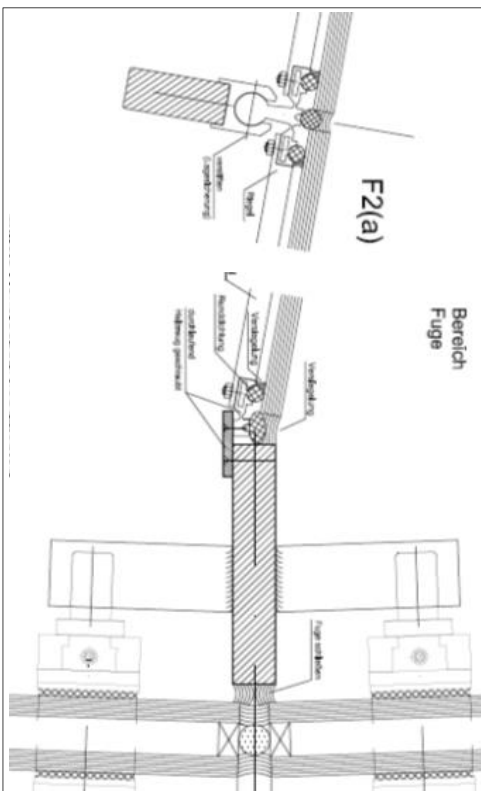
- Project Objectives and Brief
- Concept/Schematic Design
- Technical/Construction Design
- Specification/Tender Documentation

**Special Services**

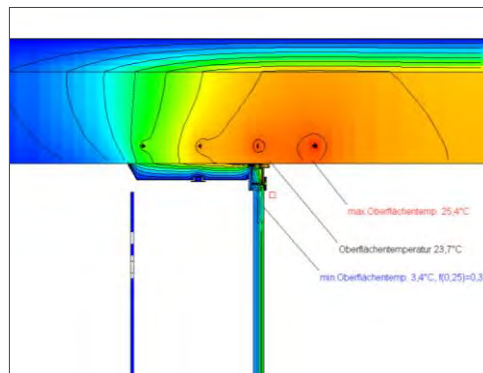
- Thermal Building Physics
- Simulations

**Status**

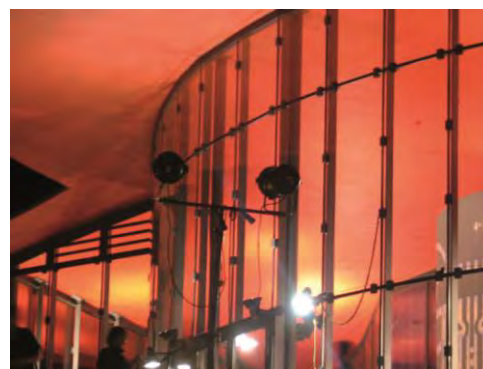
Completed 09/2006



Typical detailing



Heat flow and surface temperature calculation



Facade elevation of point fixed glazing





## Middle East

*Reference selection (Consultancy & Engineering)*

# Asia United Arab Emirates

# ICD Brookfield Place Dubai



Image by ICD Brookfield-Dubai

Rendering of ICD Brookfield Place in Dubai

## Client

ICD Brookfield Management

## Owner • Developer

ICD Brookfield Management

## Architect

Foster + Partners

## Project Data

- approx. 283 m tower height
- approx. 46,000 m<sup>2</sup> facade surface
- approx. 45 m podium height
- approx. 15,000 m<sup>2</sup> facade surface
- LEED Platinum

## Building Function

Mixed-Use, Office, Retail

## Technical Features

- Razor-sharp building skin
- Unitized curtain wall
- Freeform steel structure add-on system
- Skygarden, inclined unitized curtain wall
- Stainless Steel cladding (A-Frame)
- Louvres

## Consultancy Services

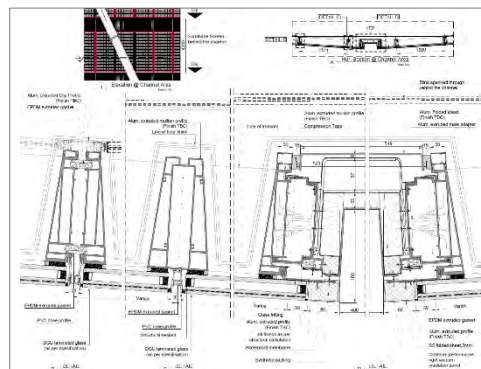
- Project Objectives and Brief
- Concept/Schematic Design
- Detailed/Developed Design
- Technical/Construction Design
- Specification/Tender Documentation
- Tender Evaluation
- Design Compliance Control
- Mock-Up Association
- Execution Compliance Control

## Status

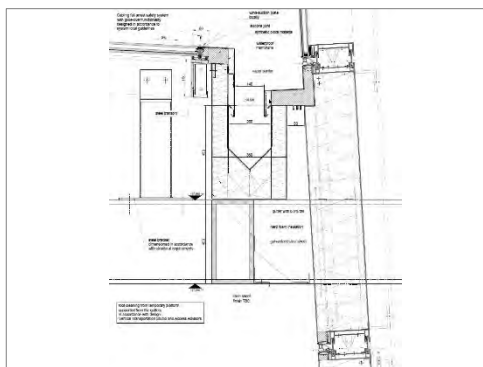
Completed 09/2020



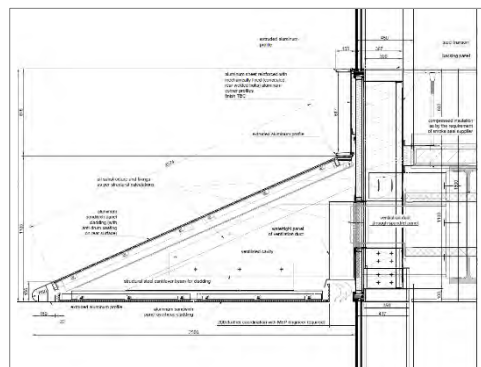
Concept report, separation of facade types



Tower office facade, vertical section channel interface



Podium glass roof over summer garden, Vertical section detail - interface tower

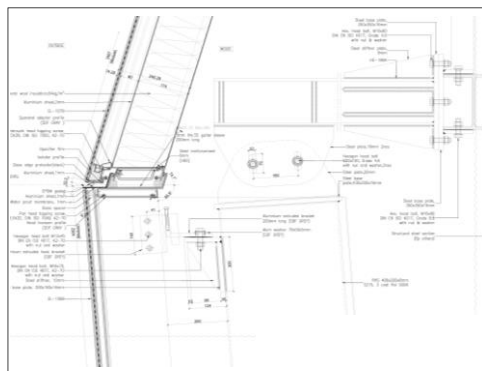


Podium main facade, vertical section, floor/ slab interface with 2.5m fin

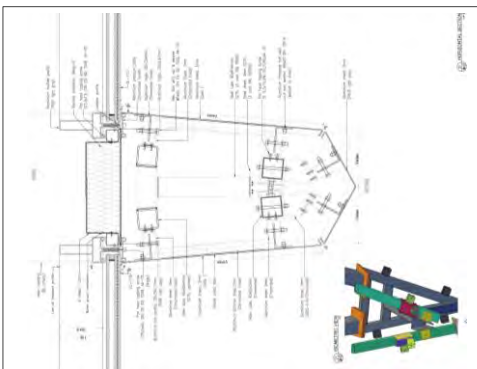




Expo 2020 Metro station on commissioning



Typical detail, vertical section



Horizontal section of diamond shaped facade



Diamond shaped cladding

**Client**

JML FACADES

**Owner ▪ Developer**

RTA Dubai

**Architect**

Parson Systra

**Project Data**

- ca. 37 m building height
- ca. 12.200 m<sup>2</sup> facade surface

**Building Function**

Transport

**Technical Features**

- Unitized curtain wall
- Stick curtain wall
- Diamond-shaped cladding, aluminum
- Ceiling
- Automatic sliding door

**Engineering Services**

- Construction Objectives and Brief
- System/Concept Design
- Material Take-Off
- Mock-Up Development
- Production Documentation
- Installation Documentation

**Status**

Completed 11/2020





Rendering of The View Hospital in Doha

**Client**

Profession Aluminium  
Company

**Owner - Developer**

Assets Real Estate  
Development Co. W.L.L.

**Architect**

Lacasa Qatar

**Project Data**

- approx. 70 m building height
- approx. 18,000 m<sup>2</sup> facade surface

**Building Function**

Hospital

**Technical Features**

- Unitized curtain wall panels
- Media facade integrated in Unitized curtain wall
- Unitized curtain wall, glass fibre reinforced concrete
- Stick curtain wall system
- Steel add-on curtain wall system

**Engineering Services**

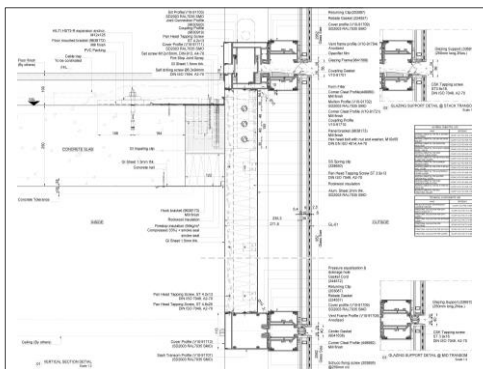
- Construction Objectives and Brief
- System/Concept Design
- Mock-Up Development
- Provision/Shop Drawings
- Material Take Off
- Production Documents
- Installation Documentation
- As-Built Drawings

**Special Services**

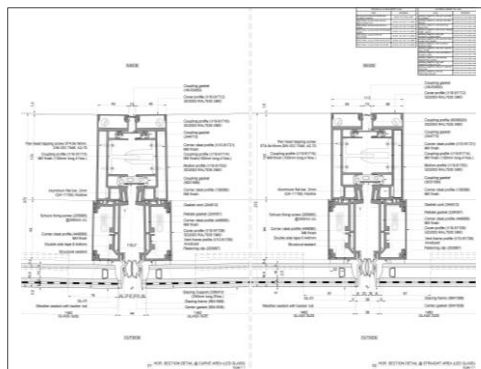
- Structural Design
- Media Facade

**Status**

Under construction



Shop drawing, front façade, vertical section detail



Front facade, horizontal section detail (LED glass)



Under construction, almost finalized



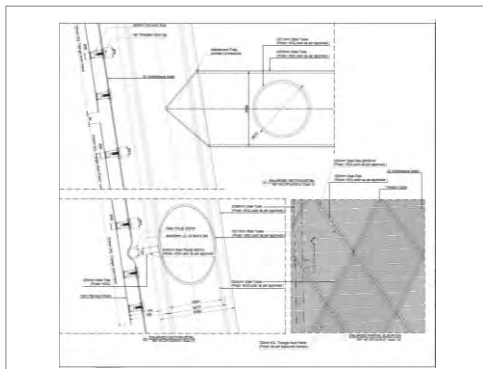
Under construction



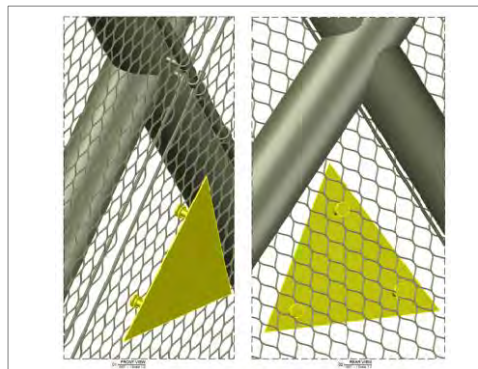


Rendering by Creative Urban Design

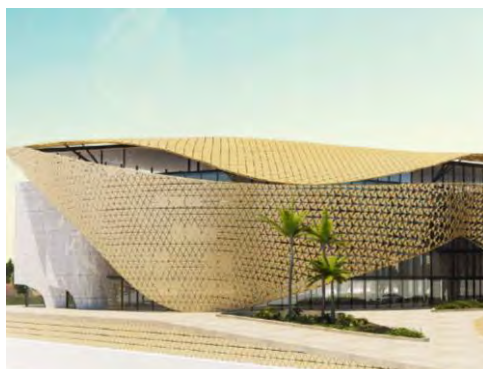
Entrance area, glazing facade with the secondary skin. architectural rendering



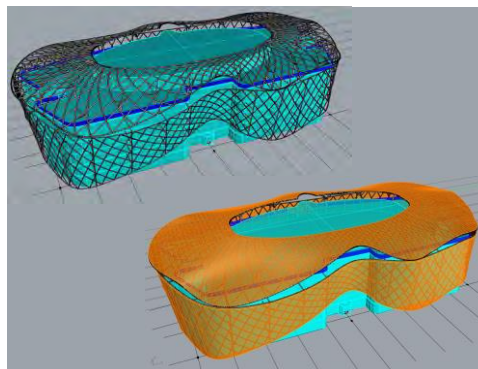
Detailed/Developed Design, section detail



3D model of the second skin, front and rear elevation



Architectural rendering



3D modelling/parametric, geometry surface and steel frame

**Client**

Al Qahtani Holding

**Owner/ Developer**

Al Qahtani Holding

**Architect**

Creative Urban Design

**Project Data**

- ca. 33 m building height
- ca. 15,000 m<sup>2</sup> facade surface

**Building Function**

Office, Residential

**Technical features**

- Glazing facade covered with secondary screen, tessellation geometric design pattern partially covering the building on all sides

**Consultancy Services**

- Project Objective & Brief
- Concept/Schematic Design
- Detailed/Developed Design
- Technical/Construction
- Design Specification/Tender
- Documentation

**Special Services**

- 3D Modelling
- Parametric
- Structural Design

**Status**

Under construction





Al Janoub Stadium im April 2019

Image source: [http://stadiumdb.com/stadiums/qat/al\\_wakrah\\_stadium](http://stadiumdb.com/stadiums/qat/al_wakrah_stadium)

**Client**  
ALUNASA

**Owner • Developer**  
Qatar Football Association

**Architect**  
Zaha Hadid  
AECOM

**Project data**  
- 105 x 68 m field size  
- 230 m long roof arches

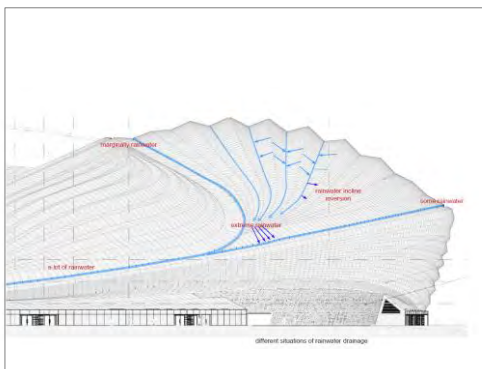
**Building function**  
Sport Stadium

**Technical features**  
- Parametric Double Skin Layer  
- Rain screen  
- Roof, Kalzip  
- Membrane, textile

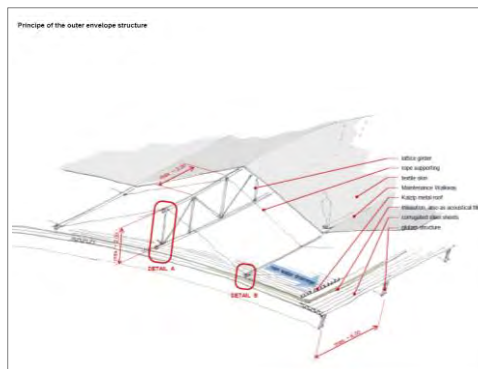
**Consultancy Services**  
- Project Objectives and Brief  
- Architectural Competition  
- Concept/Schematic Design  
- Project Peer Review  
- Feasibility Study  
- Value Engineering

**Special Services**  
- Parametric

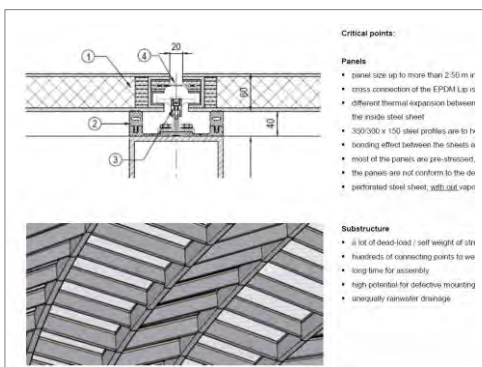
**Status**  
Completed 05/2019



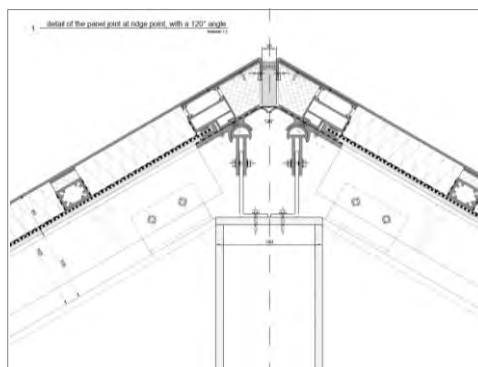
Facade elevation – curved design



Value engineered design, principle sketch



Original Design

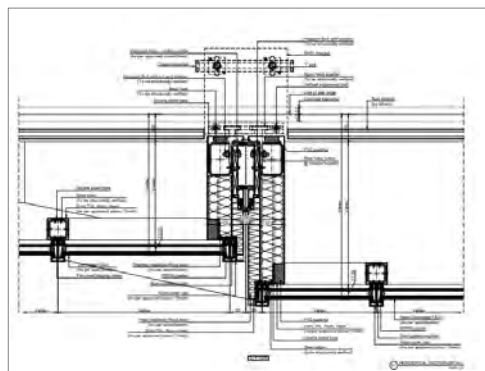


Value engineered design, typical detail

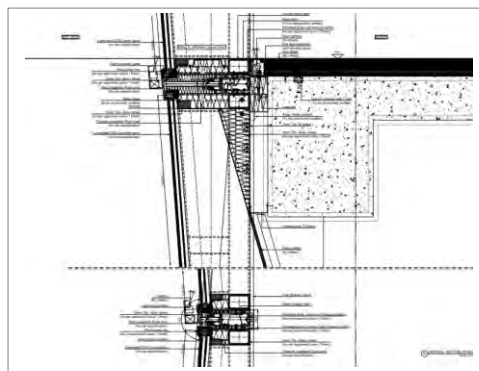




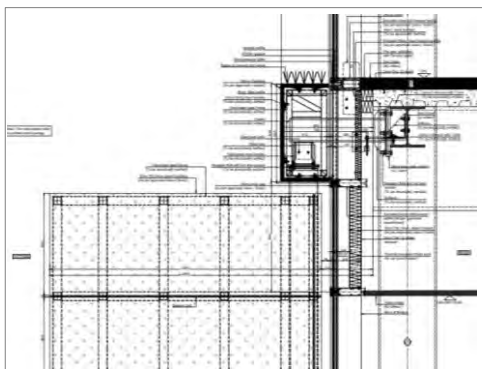
The New Palace of Justice in Kuwait, rendering



Horizontal section detail, typical mullion with inclined transom



Typical vertical section detail at slab area



Typical vertical section detail of the top fin interface



Architectural rendering

**Client**

State of Kuwait/ Al Amiri Diwan

**Owner/ Developer**

State of Kuwait/ Al Amiri Diwan

**Architect**

PACE

**Projektdata**

ca. 124 m Building height

**Building function**

Office

**Technical features**

- 3D unitized curtain wall
- panel on steel framing
- Unitized curtain wall, stone integrated

**Consultancy Services**

- Feasibility Study
- Project-/Peer Review
- Project Objectives & Brief
- Detailed/Developed Design
- Technical/Construction Design
- Specs/Tender Docs

**Special Services**

Facade Cleaning & Maintenance

**Status**

Under construction





Khalifa University after completion

**Client**

Aluminium & Light  
Industries Co. (ALICO) Ltd.

**Owner - Developer**

Khalifa University of Science  
Technology and Research

**Architect**

- Elite Design & Engineering  
Consultancy
- RSP Architects

**Project Data**

- approx. 36 m building height
- approx. 51,800 m<sup>2</sup>  
facade surface

**Building Function**

University Complex,  
Student Accommodation

**Technical Features**

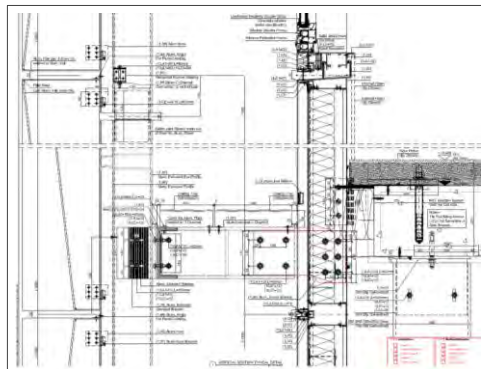
- Unitized curtain wall
- Structural Glazing
- Sunshade elements,  
Mashrabiya screen, louvres

**Engineering Services**

- Construction Objectives and  
Brief
- System/Concept Design
- Structural Design
- Mock-Up Development
- Provision/Shop Drawings
- Material Take Off
- Installation Documentation
- As-Built Drawings



Detail overview



Vertical section detail



Rendering



Elevation

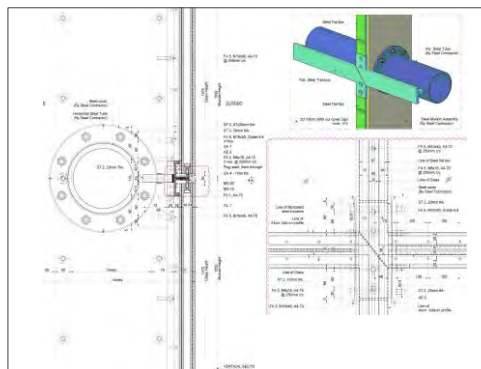
**Status**

Completed in 2017





Images by Omrania  
Architectural rendering



External facade, vertical section detail



Rendering of external facade elevation



External facade during construction in progress

**Client**

Ajwad Aluminium

**Owner • Developer**

Arriyadh Development  
Authority

**Architect**

Omrania

**Project Data**

- ca. 26 m building height
- ca. 6.900 m<sup>2</sup> facade surface

**Building Function**

Transport

**Technical Features**

- Stick add-ons system on steel mullion of span 26m
- Patch system for lift enclosure

**Engineering Services**

- Value Engineering
- Construction Objectives and Brief
- System/Concept Design
- Mock-Up Development
- Installation Documentation

**Special Services**

- Structural Design
- Design-Cost Optimization
- Shop Drawings
- Production supports
- Test Witnessing

**Status**

Under construction





**International**  
*Reference selection*

Collegiate School, New K-12 Facility, New York





Collegiate School after finalization

**Client**

APG International

**Owner • Developer**

Collegiate School

**Architect**

KPF Kohn Pedersen Fox, NYC

**Project Data**

- approx. 41 m building height
- approx. 6,500 m<sup>2</sup> facade surface

**Building Function**

School Building

**Technical Features**

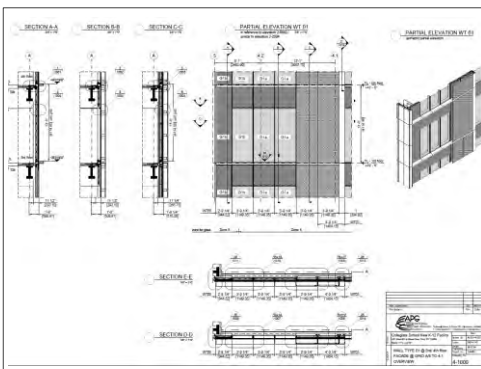
- Unitized curtain wall, stone, glass, corrugated sheet metal
- Louvres, corrugated and perforated screen

**Engineering Services**

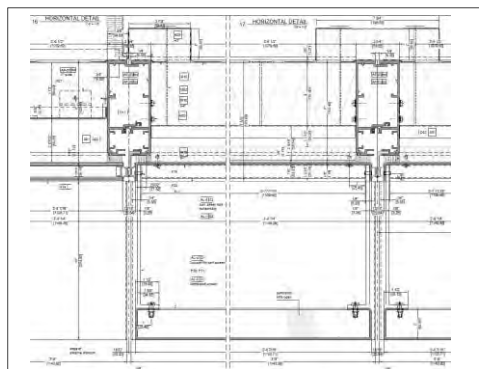
- Construction Objectives and Brief
- System/Concept Design
- Mock-Up Development
- Provision/Shop Drawings

**Status**

Completed 01/2018



Section overview of wall type 01



Facade detail, corrugated panel with perforated screen



Rendering by KPF

Rendering of the Southeast corner



Visual Mock-Up in progress, February 2016



# North America Canada

# Telus Sky Tower Calgary



Rendering by Architects

Telus Sky Tower in Calgary, Canada

## Client

Eagon Windows & Doors Co. Ltd.

## Owner • Developer

TELUS Canada

## Architect

- DIALOG Design Architects
- Bjarke Ingels Group (BIG)

## Project Data

- approx. 225 m building height
- approx. 34,000 m<sup>2</sup> facade surface

## Building Function

Mixed-Use, Office, Retail, Residential

## Technical Features

- Unitized curtain wall
- Structural Glazing
- Top hung windows
- Sliding doors

## Engineering Services

- Construction Objectives and Brief
- Provision/Shop Drawings
- Material Take Off
- Production Documentation
- Installation Documentation

## Status

Under construction



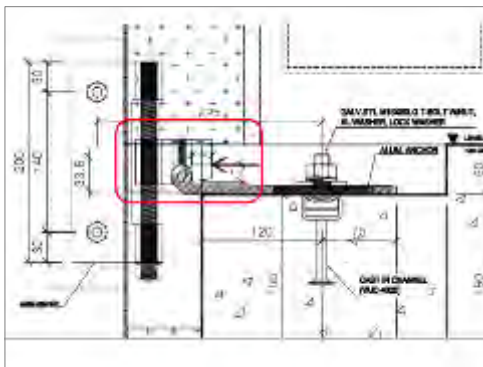
Rendering by Architects

View of the corner facade

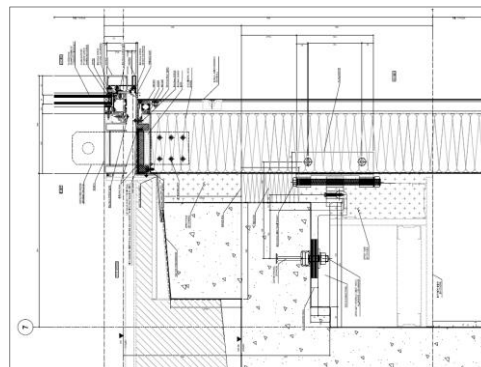


Rendering by Architects

Facade elevation with a view of the top hung windows



Shop Drawings



Shop Drawings





Rendering by Foster + Partners

Rendering of Tocumen International Airport in Panama

**Client**  
Odebrecht

**Owner - Developer**  
Tocumen Airport Authority

**Architect**  
Foster + Partners

**Project Data**  
- approx. 25 m building height  
- approx. 32,000 m<sup>2</sup> facade surface

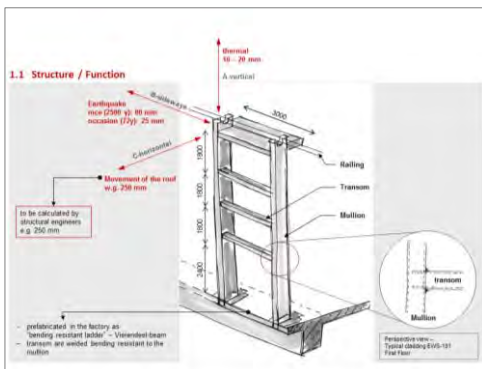
**Building Function**  
Airport

**Technical Features**  
- Unitized steel curtain wall,  
Vierendeel frame system  
- Earthquake resistant  
- Skylight

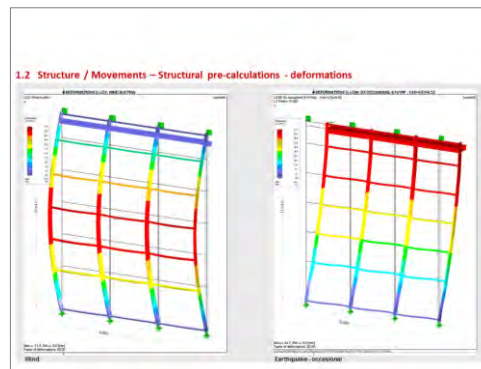
**Consultancy Services**  
- Project Objectives and Brief  
- Concept/Schematic Design  
- Detailed/Developed Design  
- Technical/Construction Design  
- Specification/Tender Documentation  
- Tender Evaluation  
- Execution Compliance Control

**Special Services**  
Maintenance, Cleaning,  
Facade Access, BMU

**Status**  
Under construction



Development concept, main facade

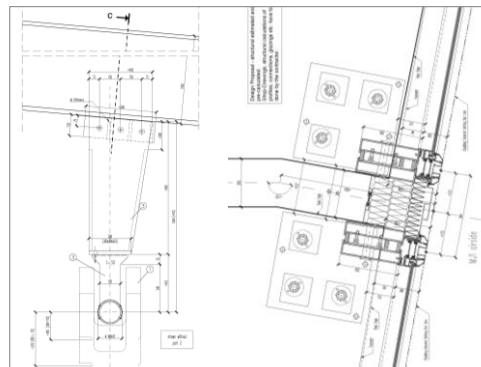


Structural pre-calculations - deformations



Rendering by Foster + Partners

Inside elevation of terminal, rendering



Typical facade details, vertical and horizontal sections



Rendering of Tbilisi Bank Headquarters, designed by UN Studio

**Client**  
TBC Bank

**Owner ▪ Developer**  
TBC Bank

**Architect**  
UN Studio

**Project Data**  
ca. 82 m building height

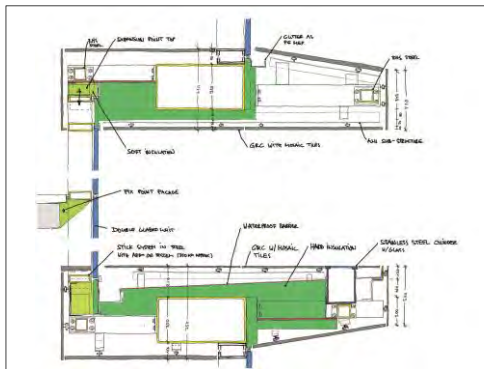
**Building Function**  
Office

- Technical Features**
- Unitized curtain wall, terracotta integrated panels
  - Add-on steel facade @social node
  - Stick curtain wall system

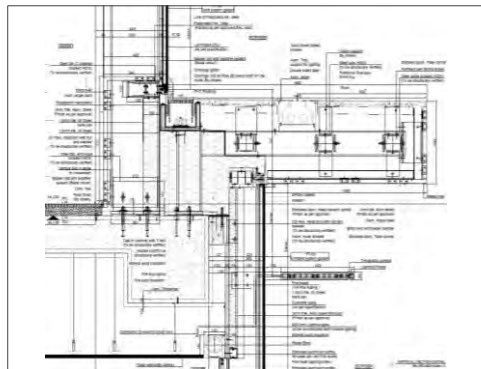
- Consultancy Services**
- Project Objectives & Brief
  - Concept/Schematic Design
  - Detailed/Developed Design
  - Specs/Tender Docs
  - Tender Evaluation
  - Design Compliance Control
  - Mock-Up Association
  - Execution Compliance Control

**Special Services**  
Facade Cleaning & Maintenance

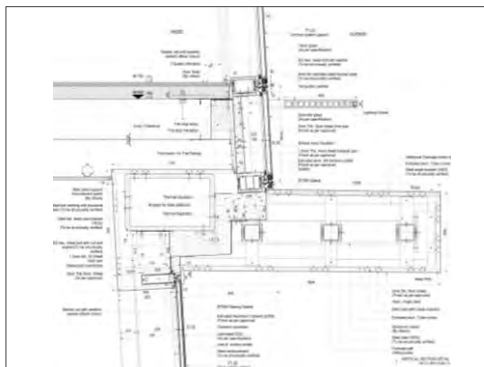
**Status**  
Under construction



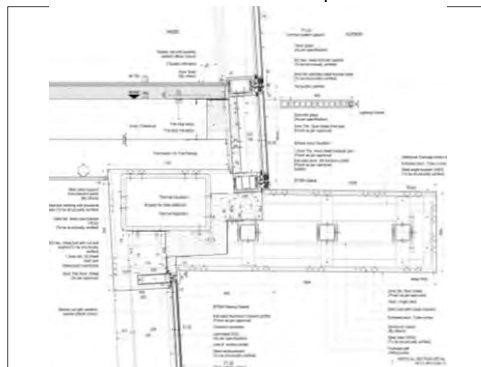
Schematic/Concept design, vertical section detail



Technical/Construction detail, vertical section of the social node top area



Technical/Construction detail, vertical section of the bottom slab connection



CapTechnical/Construction detail, vertical section of UCW inclined panel stack joint





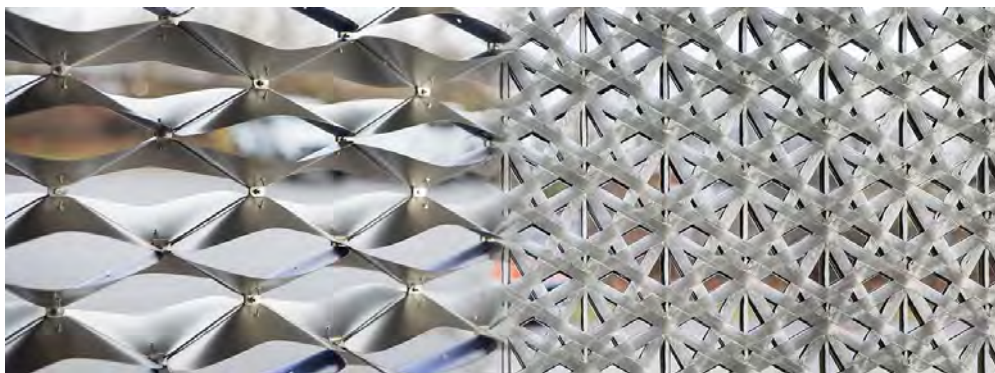
**Sustainability | R&D Innovation**

*Reference selection*



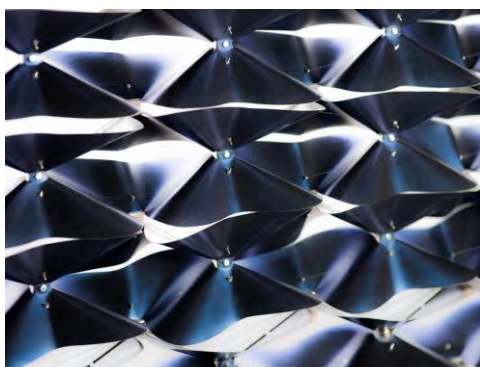


Facade Mock-Ups



ADAPTEX Wave

ADAPTEX Mesh



ADAPTEX Wave



Rendering

### Topic

ADAPtive TEXTile is an autarkic operating textile sun shading solution driven by smart material Shape Memory Alloy (SMA).

Two concepts Wave and Mesh enable various design and application scenarios. The customizable SMA ensures proper operation depending on location and orientation being activated by temperature change due to ambient temperature and solar radiation.

### Partner

- weißensee kunsthochschule berlin
- Fraunhofer-Institut IWU
- SGS Ingenieurdienstleistungen im Bauwesen GmbH
- ITP GmbH
- Carl Stahl ARC GmbH
- VERSEIDAG-INDUTEX GmbH
- ITP

### Technical Features

- Sun shading
- Smart Material (SMA)
- Autarkic operation
- Textile construction/ design

### Special Services

Research & Development

### Status

- Testing in progress
- Demonstrator facade U/C

### Period

01.07.2017 – 31.08.2022

### Funding Program



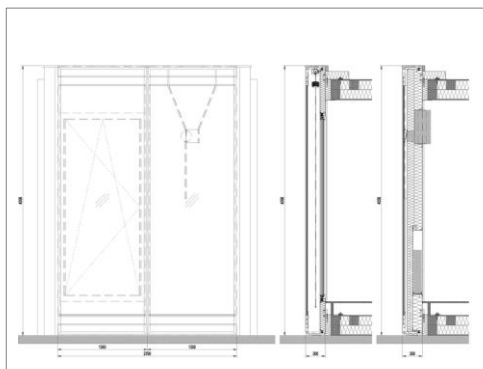
SPONSORED BY THE







PräKlima Mock-Up



Typical detail – elevation and section details



Facade elevation



3D drawing



Facade Mock-Up and detailed elevation

**Topic**

Self-sufficient façades that maximize the energy efficiency of buildings by independent adaptations to external and internal environmental conditions. The focus of the research project is on the development of a modular system which, in addition to integrated sensors, extensive data collection on weather forecasts and user profiles, also makes use of a self-learning control system.

**Partner**

- TU Dresden
- SOMMER GmbH
- Die Netz-Werker AG

**Technical Features**

- Photovoltaic
- Air conditioning

**Special Services**

Research & Development

**Status**

In planning

**Period**

01.03.2019 – 30.06.2022

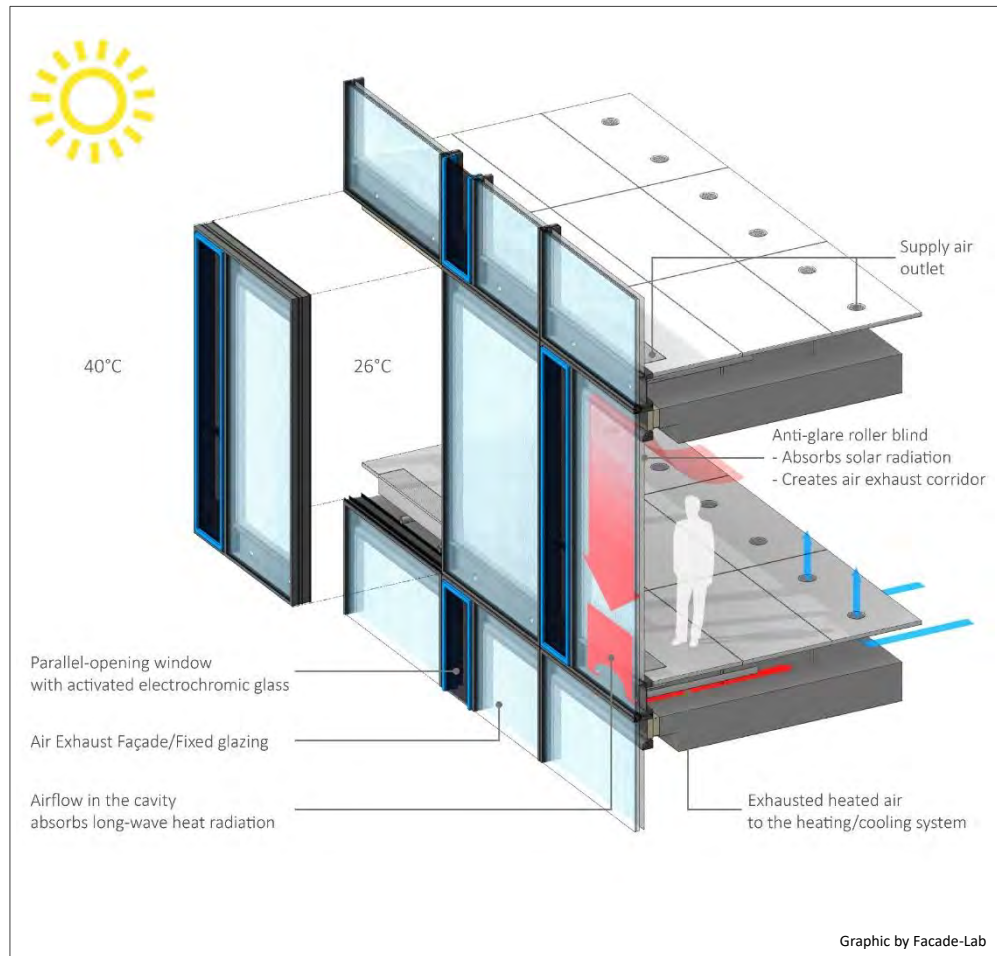
**Funding Program**

BMWK – Central Innovation Programme für SME's (ZIM)

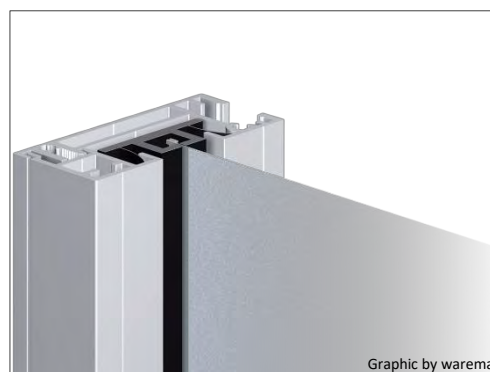


Bundesministerium  
für Wirtschaft  
und Klimaschutz

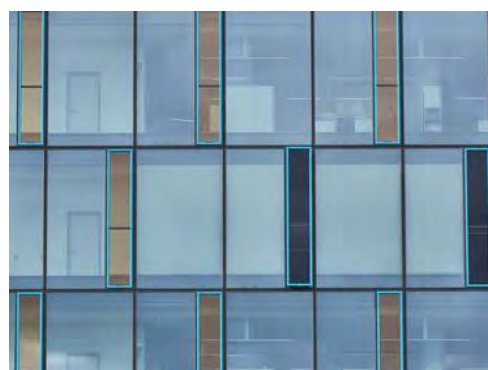




Innovative Exhaust Air Facade, system sketch



Inner layer as a special blind, flexible function



Exhaust Air Facade with closed anti-glare roller blinds



FESTOAutomationCenter after finalization in 2015

## Client

Festo AG

## Owner ▪ Developer

Festo AG

## Architect

architekturbüro jaschek

## Project Data

- ca. 68 m building height
- ca. 8.500 m<sup>2</sup> facade surface

## Building Function

Office

## Technical Features

- ACT Facade
- Parallel-opening windows
- Sunshade, electrochromic glazing
- Automated robot cleaning

## Consultancy Services

- Project Objectives and Brief
- Concept/Schematic Design
- Detailed/Developed Design
- Technical/Construction Design
- Specification/Tender Documentation
- Tender Evaluation
- Design Compliance Control
- Mock-Up Association
- Execution Compliance Control
- Handover, As-Built Documentation

## Facade-Lab

Research & Development

## Status

Completed 05/2015

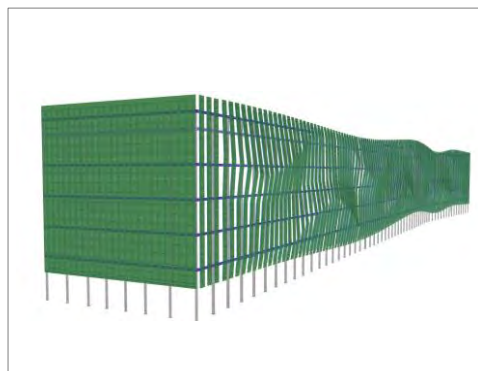




DHL-Campus, car park façade during construction progress, August 2023



PV-modules on steel substructure



Overview with PV-modules



PV-roof and elevation of steel-substructure with PV elements

**Client**

Rubin 65 GmbH

**Owner ▪ Developer**

Stadtbau Leipzig AG

**Architect**

Architektur von Domaros GmbH

**Project Data**

- ca. 17 m Gebäudehöhe
- ca. 2.200 m<sup>2</sup> Fassadenfläche

**Building Function**

Car park, Office

**Technical Features**

- Facade perceives a spatially-acting wave
- PV modules supported by a 15m high, up to 2m cantilever steel substructure in 200 different sections
- The color effect of the PV modules varies based on sunlight exposure and the observer's viewing angle

**Consultancy Services**

- Technical/ Construction Design
- Execution Compliance Control

**Engineering Services**

- System-/Concept Design

**Engineering Services**

- Decentralized Energy
- Design and Cost Optimization
- 3D Modelling
- Parametric

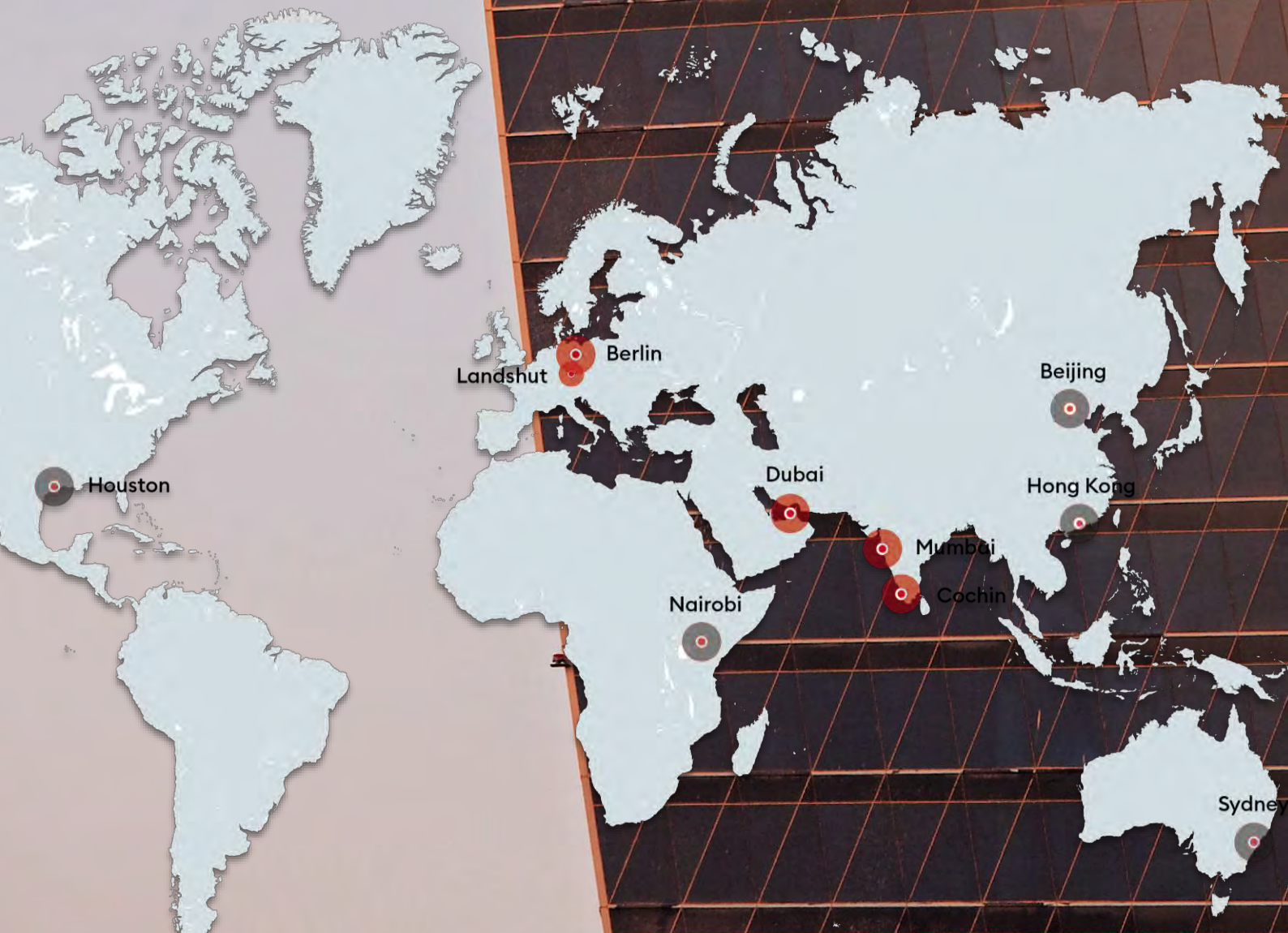
**Status**

Under construction



# Priedemann Facade Experts

*Thinking global – Acting local*





# Priedemann Facade Experts

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