

## New Meets Old – Stainless Steel in Renovation and Renewal



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Euro Inox is the European market development association for stainless steel.

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- Development associations of the alloying element industries.

A prime objective of Euro Inox is to create awareness of the unique properties of stainless steels and to further their use in existing applications and in new markets. To assist this purpose, Euro Inox organises conferences and seminars, and issues guidance in printed form and electronic format, to enable architects, designers, specifiers, fabricators, and end users to become more familiar with the material. Euro Inox also supports technical and market research.

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New Meets Old – Stainless Steel in Renovation and  
Renewal  
First Edition 2007 (Building Series, Vol. 12)  
ISBN 978-2-87997-202-2  
© Euro Inox 2007

French version ISBN 978-2-87997-266-4  
German version ISBN 978-2-87997-203-9

### **Publisher**

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## Introduction

More and more building projects these days are not just about designing new structures, but about preserving, altering, extending, converting or refurbishing what is already there. All of these measures represent ways to enhance function and improve value.

But not only that: they also help preserve our cultural heritage. In some instances the very survival of buildings or building ensembles, and our continued appreciation and utilization of them, is dependent on the application of these measures. As such, conservation, modernization and refurbishment projects play an important role in preserving and protecting our built environment.

The challenge of preserving the old while creating the new is giving rise to some exciting new architectural achievements. Firmly embedded within this balance between innovation and tradition is stainless steel – in structural applications such as cables or profiles, where its strength allows open, wide-span constructions, and as cladding covering surfaces on the inside and outside of buildings. The broad range of alloys and surface finishes available in stainless steel sets virtually no limits as to where the material can be used.

The collection of examples shown here in this brochure takes a broad view of the

*Transparent walkways of glass and stainless steel make it possible for thousands of visitors each year to take a close-up view of the largest and best-preserved mosaics from the early Christian period in the Basilica of Aquileia in Italy.*

Client: Arcidiocesi di Gorizia  
Architects: Ottavio di Blasi Associati, Milan  
Photo: Ottavio di Blasi Associati, Milan/  
Favero & Milan Ingegneria, Milan





theme of New Meets Old. It includes historic buildings where careful intervention has rescued them from decline and preserved them for future generations. But the spectrum of bold, innovative solutions with stainless steel also encompasses more modern buildings from the second half of the last century which are increasingly falling short of modern requirements.

Client: Spanish Cultural Heritage  
Architect: Salvador Perez Arroyo, Madrid  
Photo: Cedinox, Madrid

*The new roof protects the badly damaged walls of the Ancient Roman theatre in Orange, France, from further decay. The underside of the roof is covered with stainless steel mesh, to both give the required transparency and preserve the acoustic qualities of the arena.*

*Extensive renovation work has given the 1000-year-old Monastery of Santa Maria de Carracedo in Spain a new lease of life. Stainless steel was used in many invisible applications such as wall ties, and also as the supporting beam for this spiral staircase, in combination with solid wooden treads.*



Client: Ville d'Orange  
Architect: Didier Repellin, Lyon  
Photo: Alexander Felix, Munich



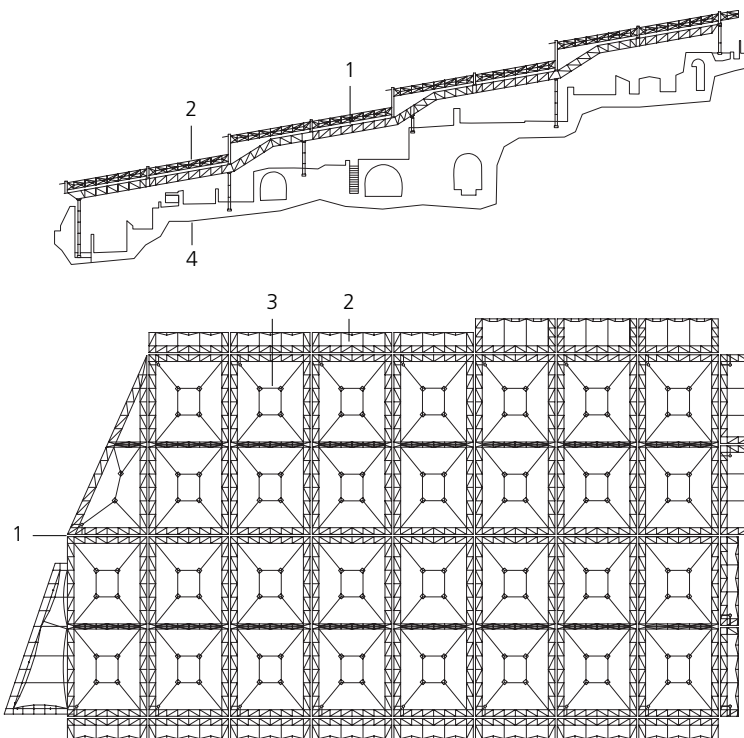
*The shelter for Terrace House 2 covers over 4,000 m<sup>2</sup> of space. Tracing the line of the slope, it blends well into the ancient site.*

**Archaeological site in Ephesus, Turkey**

Client:  
 Österreichisches Archäologisches Institut,  
 Vienna  
 Architect:  
 Otto Häuselmayer, Vienna  
 Structural engineer:  
 Wolfdietrich Ziesel, Vienna

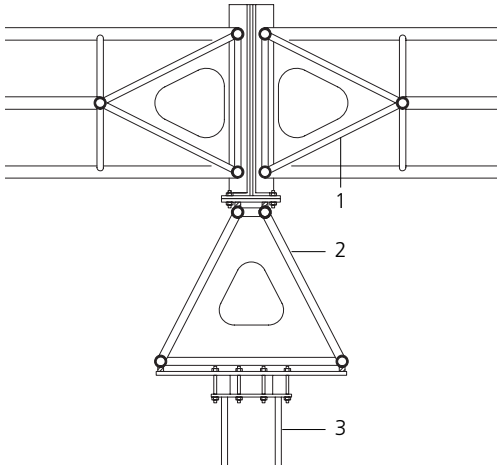
‘Terrace House 2’ in Ephesus is a unique historic monument, very well preserved and featuring rich painting and mosaic decoration. A shelter was built over the archaeological site to protect it from the elements. A lightweight construction with only a few supporting columns made it possible to achieve the wide spans necessary across the ancient remains. Two rows of columns were erected outside the actual house and just a single row within it – in positions carefully chosen with respect to the archaeological substance.

The main girder down the middle of the shelter descends in a series of steps to match the terrain. A curved membrane, tensioned above and below, is spanned across the resulting four roof sections. Light and airy in its visual effect, the stainless steel roof frame also offers advantages in terms of low maintenance and corrosion resistance. The structure is stabilised by wind bracing in a longitudinal direction and tying the columns in the middle into the foundations. The façade of transparent polycarbonate panels is suspended from the roof frame. It provides protection from the outside and also allows air exchange to take place between the inside and outside.



Longitudinal section · Roof frame scale 1:1000

- 1 Central girder
- 2 Trussed frame
- 3 Tensioning on underside of roof membrane
- 4 Archaeological remains



*The stainless steel frame was produced and pre-assembled in Austria, transported to Ephesus and erected on site within a few months.*

Section through central girder/trussed frame scale 1:50

1 Trussed frame, stainless steel, grade: EN 1.4571, brushed finish, top chord, bottom chord Ø 82/12 mm Ø 41/4 mm diagonal 12 mm reinforcing plate

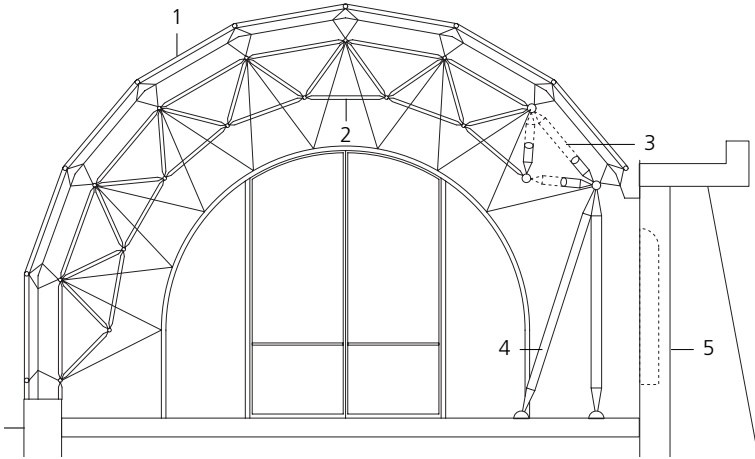
2 Central girder, stainless steel, grade: EN 1.4571, brushed finish, top chord, bottom chord Ø 82/12 mm Ø 54/6 mm diagonal 12 mm reinforcing plate

3 Column, HEM 360, galvanized and powder-coated

*The lightweight roof membrane of rigid, permeable fibreglass and polytetrafluorethylene maintains a pleasant, mild indoor climate.*

Photos: Rupert Steiner, Vienna





*The barrel-shaped glasshouse backs onto a 400-year-old stone wall. It is supported by a net-like exoskeleton of stainless steel.*

Cross section scale 1:100

- 1 Network of tubular stainless steel
- 2 Space frame girder, curved
- 3 Space frame, horizontal
- 4 Paired columns
- 5 Old wall

### **Glasshouse in Prague, Czech Republic**

Client:

Prague Castle Management Office, Prague

Architects:

Eva Jiricna Architects, London

Structural engineers:

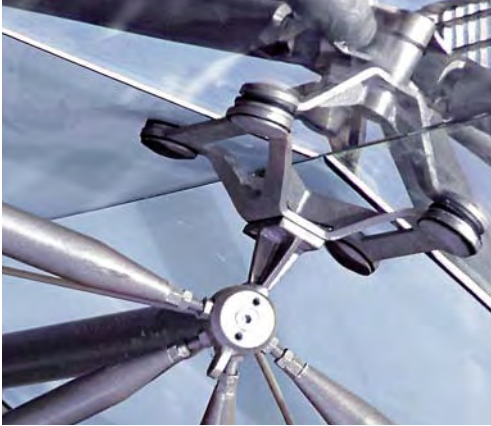
Techniker, London

All that remained of the first orangery built in the mid-seventeenth century on the south side of the royal gardens in Prague is an old supporting wall. The new glasshouse has been kept to the same scale as the original

Photo: Richard Bryant/Arcaid, Kingston upon Thames







Photos: Pavel Hokynek, Prague (links); Pavel Stecha, Prague (right)

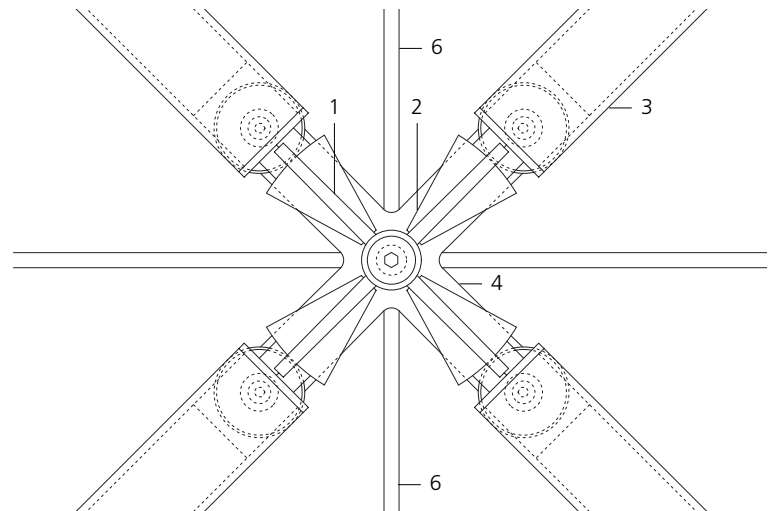
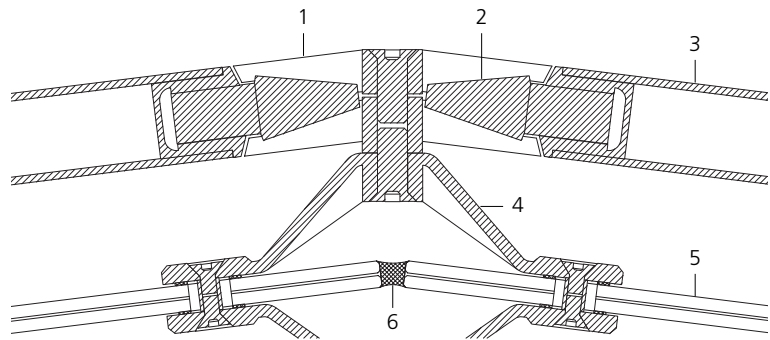


Only one bolt is needed to hold together the component parts in the stainless steel connection points. This enabled rapid assembly on site.

building (long since disappeared) on this spot but given a contemporary architectural face – the panes of glass are suspended from a net-like barrel vault of tubular stainless steel.

As the old wall could not be put under any load, a 94-metre long horizontal space frame girder was positioned parallel to it and supported on four paired columns. The curved lattice girders that support the loadbearing frame are also located at these junctions. Partition walls under the girder arches separate the glasshouse into three different climate zones while also stabilising the whole structure.

The external roof frame is made up of stainless steel tube arranged on the diagonal and with the ends tied into cross-shaped junctions. Stainless steel glass retainers attached to these junctions support the flat panes of glass.



Section through load-bearing junction scale 1:5

- 1 Connecting bracket, stainless steel, star-shaped, fixed with M16
- 2 Connecting piece, stainless steel
- 3 Ø 60.3/5 mm stainless steel

- 4 Four-point glass retainer, stainless steel
  - 5 Laminated safety glass: 2x 8 mm toughened glass
  - 6 Joint, black silicone
- Stainless steel: grade: EN 1.4301 bead-blasted finish

### Office building in Helsinki, Finland

Client:  
Bank of Finland, Helsinki  
Architects:  
Groop & Tiensuu, Espoo  
Structural engineers:  
Kompis Oy, Yrjö Lietzen, Vantaa



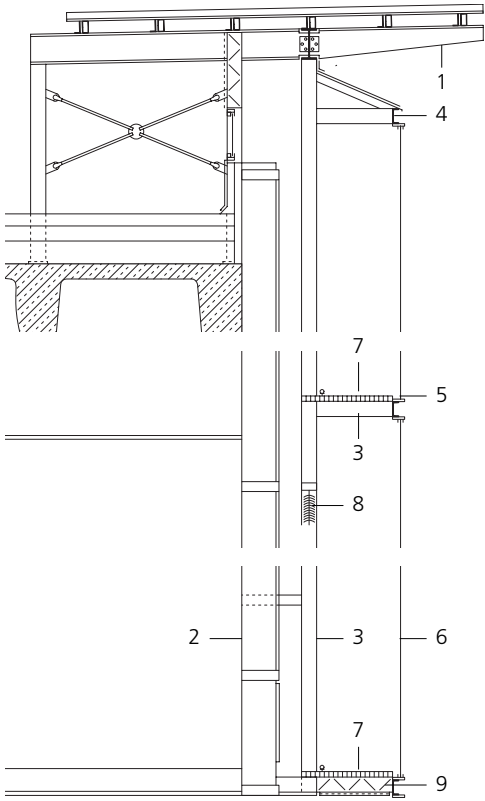
This office building near Vantaa Airport was built in 1979 as a concrete-framed building with an aluminium and glass façade. Over the years gaps had opened up in the façade and considerable damage had occurred due to expansion caused by thermal stresses.

*The new glass façade is suspended from a cantilevered steel frame on the roof of the building.*

*The tempered glass panes are supported on horizontal channel sections of stainless steel.*

Photos: Groop & Tiensuu, Espoo

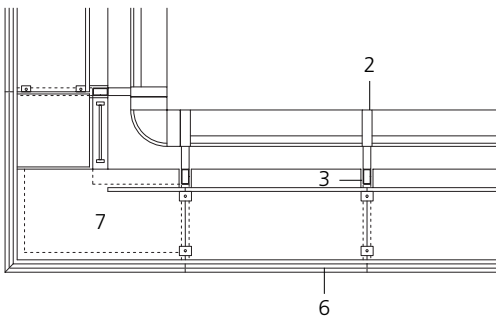




Section · Plan of façade scale 1:50

- 1 Steel framework on existing roof from which the new façade is suspended
- 2 Existing lightweight metal façade with fixed glazing
- 3 100/50/3 mm hollow-section stainless steel
- 4 UNP 100/50/6 mm stainless steel profile
- 5 40/40/5 mm stainless steel angle profile
- 6 Glazing, tempered, fixed with structural glazing adhesive
- 7 Maintenance walkway, 30/30/3 mm grating
- 8 Solar shading
- 9 Metal flaps for ventilation

Stainless steel: grade: EN 1.4301



Two alternative designs were investigated in the search for a solution to these problems. The choice was between completely renovating the existing façade or adding a new façade in front of the old one. For the same cost, a double glass façade offered considerable advantages in terms of air handling, noise, design and construction. Using standard profiles the prefabricated, stainless steel façade frame was suspended from a projecting steel framework fixed to the roof. The existing aluminium profiles take up horizontal forces.

*Automatically controlled air exchange and solar shading systems are fitted in the façade cavity.*



The renovation work also involved recreating the original street façade of this 18<sup>th</sup>-century terrace house.



A curved staircase of polished stainless steel and glass connects the existing structure to the new, light-filled extension.

### House extension in London, England

Client:

Private

Architects:

Eva Jiricna Architects, London

Structural engineers:

Dewhurst Macfarlane and Partners, London

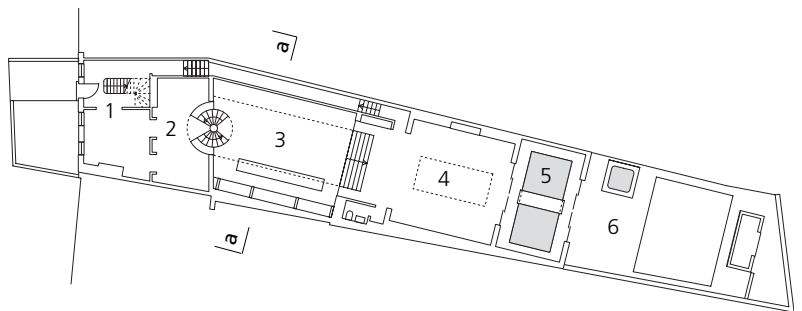
This listed three-floor terrace house in Belgravia in London dates from the eighteenth century. The house was renovated and an extension added at the back in the form of a long, single-storey sequence of light-filled spaces. A curving staircase of glass and stainless steel leads from the old part to the new kitchen and dining area.

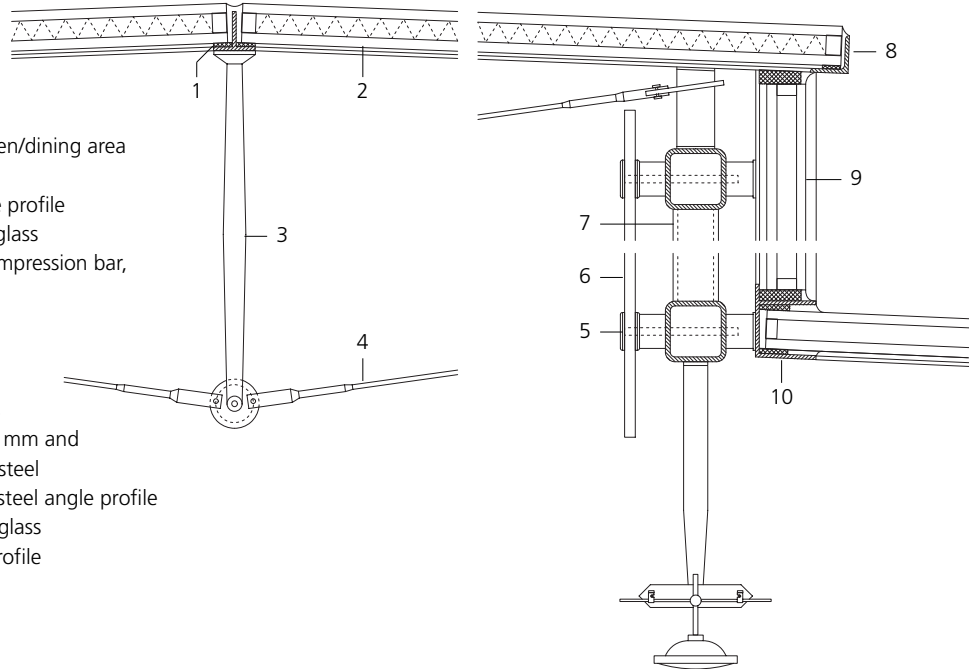
Above is a lightweight sloping glass roof supported at the sides on 10-metre long Vierendeel girders that are covered by panes of white glass. The horizontal glazing is held in narrow stainless steel profiles and tensioned underneath with slim cables and bars. A layer of translucent white insulation fills the cavity in the panes of insulating glass to prevent overheating. Transparent glass strips on both sides open up a view of the sky.

Photos: Richard Bryant/Arcaid, Kingston upon Thames



- Floor plan scale 1:500
- 1 Entrance
  - 2 Hallway
  - 3 Kitchen/dining area
  - 4 Lounge
  - 5 Pool
  - 6 Terrace





Section through glass roof in kitchen/dining area  
scale 1:10

- 1 50/45 mm stainless steel angle profile
  - 2 45 mm translucent insulating glass
  - 3 Ø 18-30 mm stainless steel compression bar, polished surface
  - 4 Ø 6 mm stainless steel tie bar, polished surface
  - 5 Stainless steel point-holder
  - 6 12 mm white toughened glass
  - 7 Vierendeel girder of 80/80/6.3 mm and 60/60/6.3 mm hollow-section steel
  - 8 Edging, 45/45/5 mm stainless steel angle profile
  - 9 45 mm transparent insulating glass
  - 10 Glass retainer, stainless steel profile
- Stainless steel: grade EN 1.4401, ground finish (grit 240)

*The spaces are lit from above by transparent or translucent glass roofs framed with slim stainless steel profiles.*



Section aa scale 1:200



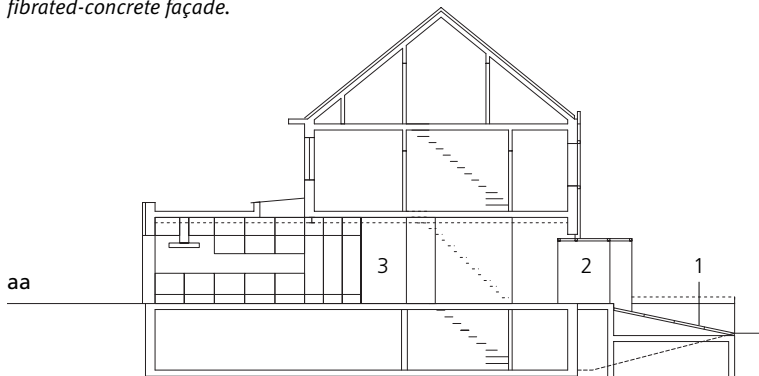


**Terrace house conversion in Hasselt, Belgium**

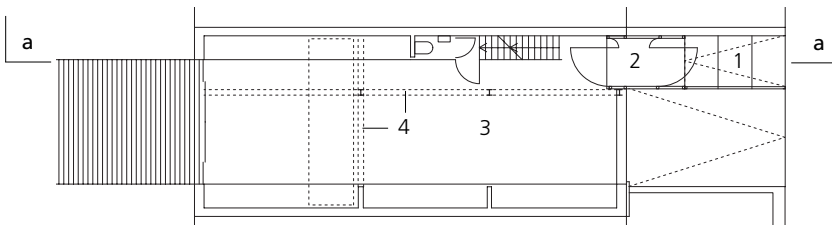
Clients:  
Heidi and Benoît Van Hecke-Simons, Hasselt  
Architect:  
Wim Geens, Tekton Architecten, Sint Truiden

This 1950s mid-terrace house was refurbished to achieve a new look and greater functionality more suited to the space needs of its occupants, a family of five. The internal walls on the ground floor were removed and replaced by a steel loadbearing frame to create a generously sized, light living space measuring 6 x 13 metres. The kitchen is integrated into this lounge area.

*Part of the new stainless steel entrance porch projects from the insulated, fibrated-concrete façade.*



*The parapets of the small ramp are clad with perforated and smooth stainless steel sheet with a ground finish.*



- Section · Floor plan  
scale 1:250  
1 Ramp  
2 Draught lobby  
3 Lounge/kitchen  
4 Steel frame to support the walls



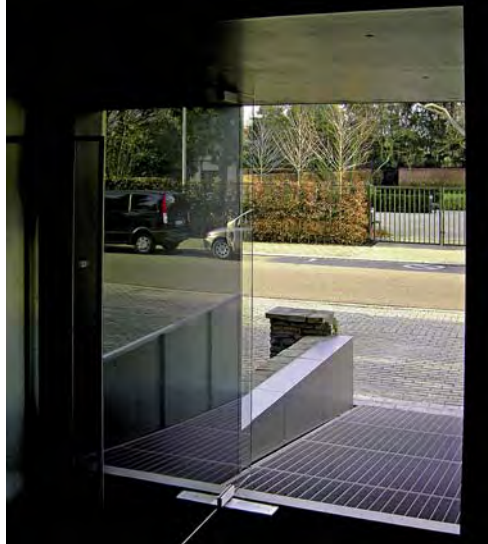
Photos:  
Benoît Van Hecke, Hasselt



*The entrance porch was built to a design worked out with a skilled metal-worker on site.*

A skylight towards the back of the lounge boosts natural light levels in the interior. The long, narrow hallway was replaced with a new compact entrance porch which protrudes a little from the street façade next to the steep garage access. On the entrance ramp the parapet is made from a tubular steel frame panelled with both regular and perforated 1.5 mm stainless steel sheet (grade: 1.4301), fixed via visible stainless hexagon socket screws. Two frameless glass doors, 1.65 m in width, close off the entrance porch.

*A ramp of galvanized metal grating bridges the height difference between the street and the front door.*



*The wide frameless glass doors enable views in both directions and give a feeling of expansiveness.*





**Visitors' centre at the Parliament of the Republic of Austria, Vienna**

Client:  
Republic of Austria  
Architects:  
Geiswinkler & Geiswinkler, Vienna  
Structural engineers:  
Gmeiner-Haferl, Vienna

The Austrian house of parliament, built 1873-1884 by Theophil Hansen, recently opened its doors to the general public with the completion of a new visitors' and press centre. A renovation programme had opened up the possibility of creating a new central entrance area usable by both parliamentarians and visitors. On the façade of this historic building only the new folding gates under the approach ramp indicate the presence of this modern facility. Behind them is a foyer with access through to the interior of the parliament and a spacious press and visitors' centre on the mezzanine and lower floors.

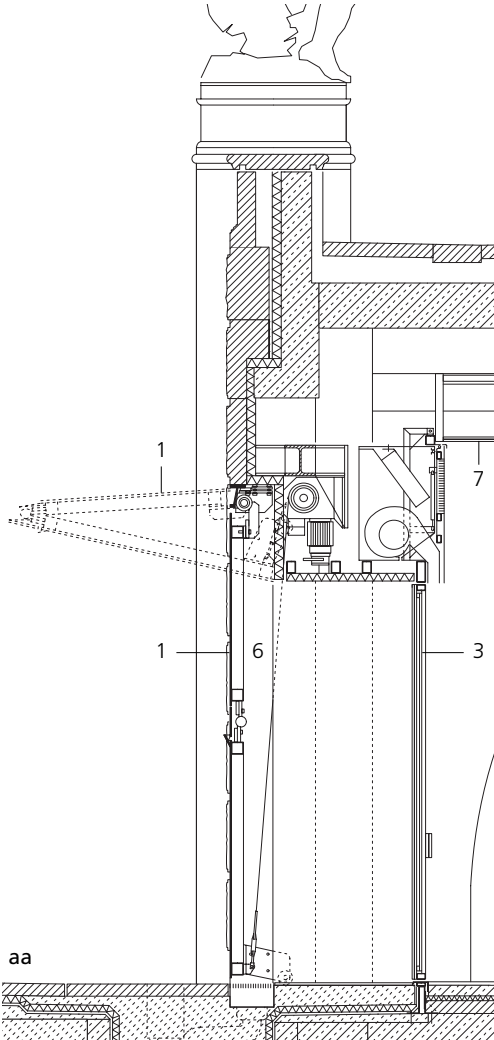
*Vertically folding gates in black-coloured stainless steel mark out the new entrance to the parliament building. When closed the panels form a solid wall, in line with security requirements; when open they function as a canopy.*



*Selective application of materials and colours distinguishes the new visitors' centre: black-and-white terrazzo flooring, fitted units in light-coloured Corian and stainless steel, and dark-coloured glass.*

Photos:  
Manfred Seidl, Vienna (top);  
Stefan Zunhamer, Munich  
(bottom)

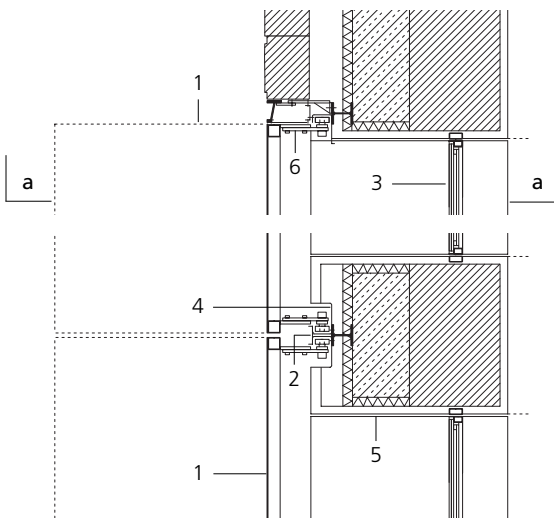




*The open staircase leads down to the visitor information area with infoscreen, computer terminals and café.*

Sections through entrance gates scale 1:50

- 1 Folding gate, 10 mm stainless steel sheet, frame of 80/80/3 mm hollow-steel section
  - 2 Track, 2x 5 mm stainless steel channel profiles, bent cover, 3 mm stainless steel channel profile, bent
  - 3 Entrance door, insulated glazing in 60/40/4 mm hollow-section stainless steel frame
  - 4 3 mm stainless steel sheet, bent
  - 5 Stone plaster on lathing
  - 6 Surround, 20 mm stainless steel
  - 7 Ceiling, satin-finish laminated safety glass, back-lit
- Stainless steel: grade: EN 1.4301, polished surface, electrolytically coloured black in nos. 1, 2 and 4



Photos:  
Stefan Zunhamer, Munich

*Large swing doors panelled with perforated stainless steel screen off the multifunctional press area.*



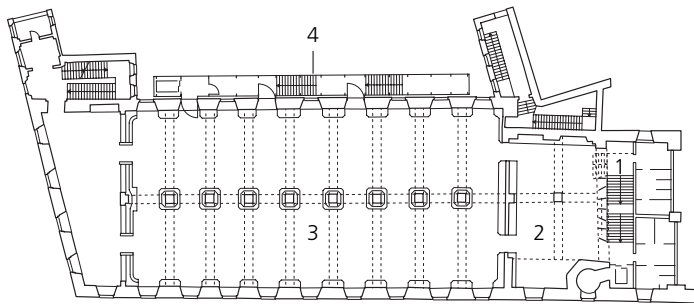
Photos: Paul Ott, Graz

*Elegant portals of stainless steel mark out the new entrance on the façade of this 17th-century building.*

**Old University in Graz, Austria**

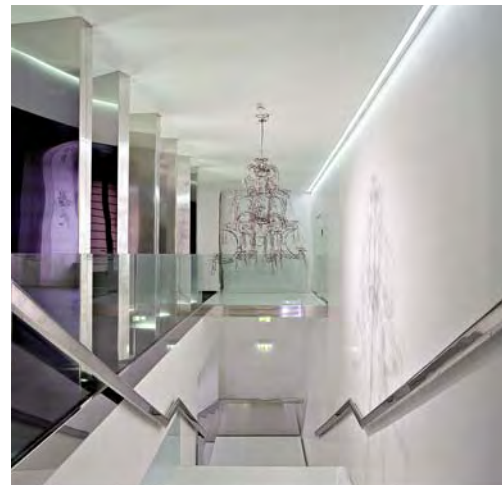
Client:  
Landesimmobilien GmbH Steiermark, Graz  
Architects:  
Bramberger architects, Graz  
Structural engineers:  
Manfred Petschnigg, Graz

Over the course of its 400-year history, this former Jesuit university building in the centre of Graz has served as a lecture hall, library and national archive. Now it has been transformed into a stylish events venue. On the street front, all that indicates the new use are minimal changes to the façade. Slim portals of stainless steel sections mark out the new glazed entrance. A former external passageway was transformed into a foyer thus allowing the entrance to be aligned with the centre of the adjacent square. Alongside the foyer on the ground floor are a café, media centre and cloakroom. A new staircase leads up to the first floor where a restored



Plan of upper floor  
scale 1:750  
1 Main staircase  
2 Foyer  
3 Baroque hall  
4 Emergency staircase

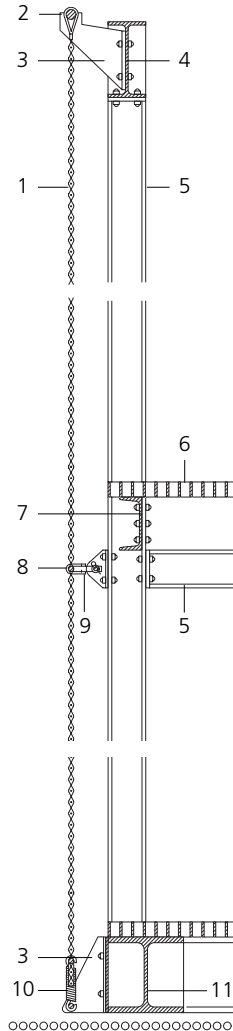
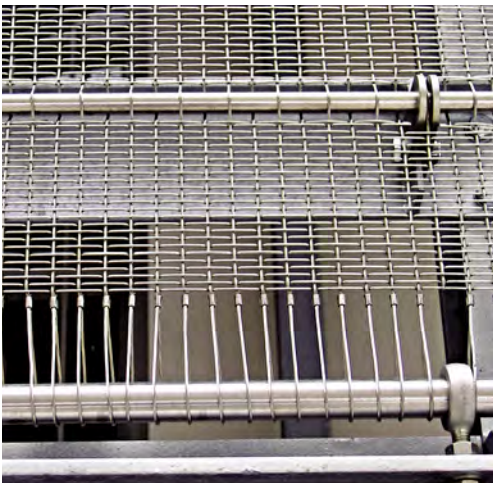
*Stainless steel is the common element in all the changes to the old university building – seen here in the bent-sheet handrails on the staircase.*



Baroque hall provides space for receptions, concerts and exhibitions.

At the back of the building, facing the courtyard, a scaffold of steel sections was erected to take the emergency staircases and ventilation systems that had become necessary as a result of the building modifications. Wrapped around this framework is a translucent mesh of stainless steel, half concealing the technical infrastructure and acting as a safety screen. Different weave densities in the 15.8-metre long, 2.4-metre wide mesh panels add rhythm to the surface and clearly distinguish the structure as an added layer in front of the façade.

*The mesh panels are threaded onto bars through cable loops and fixed to the support frame by means of eye bolts.*



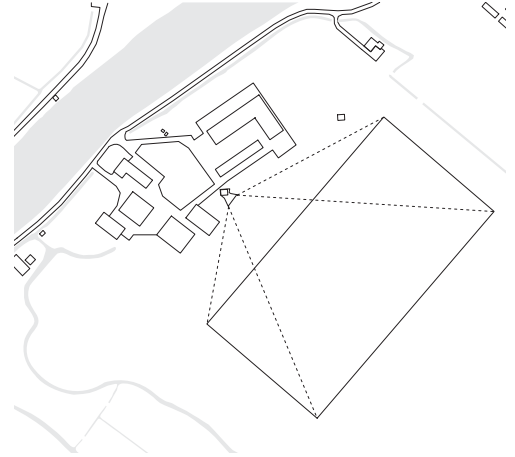
Vertical section through courtyard façade  
scale 1:20

- 1 Stainless steel mesh, warp  $\varnothing$  2 mm, weft  $\varnothing$  1.5 mm  
50.6 or 64.4 % open area
  - 2  $\varnothing$  26 mm stainless steel bar
  - 3 10 mm stainless steel bracket
  - 4 Steel section, IPE 200
  - 5 Steel section, HEB 100
  - 6 30 mm grating
  - 7 Steel section, UPE 140
  - 8  $\varnothing$  16 mm stainless steel bar
  - 9 Shackle, bent stainless steel, sliding connection to bracket via stainless steel bar
  - 10 Tension spring
  - 11 Steel section, HEB 200
- Stainless steel: grade: EN 1.4404



*If, in any future change of use, the emergency staircases were no longer required, the whole structure could be dismantled without leaving any noticeable traces on the historic building substance.*

Photos:  
GKD/Gira International  
(bottom left); Paul Ott,  
Graz (top right)



Site plan scale 1:7500

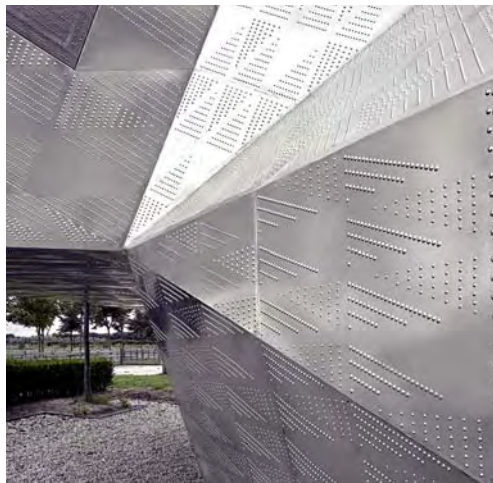
*The projecting stainless steel-clad structure is extensively glazed on the side facing the polo field*

### Former bunker in Vreeland, Netherlands

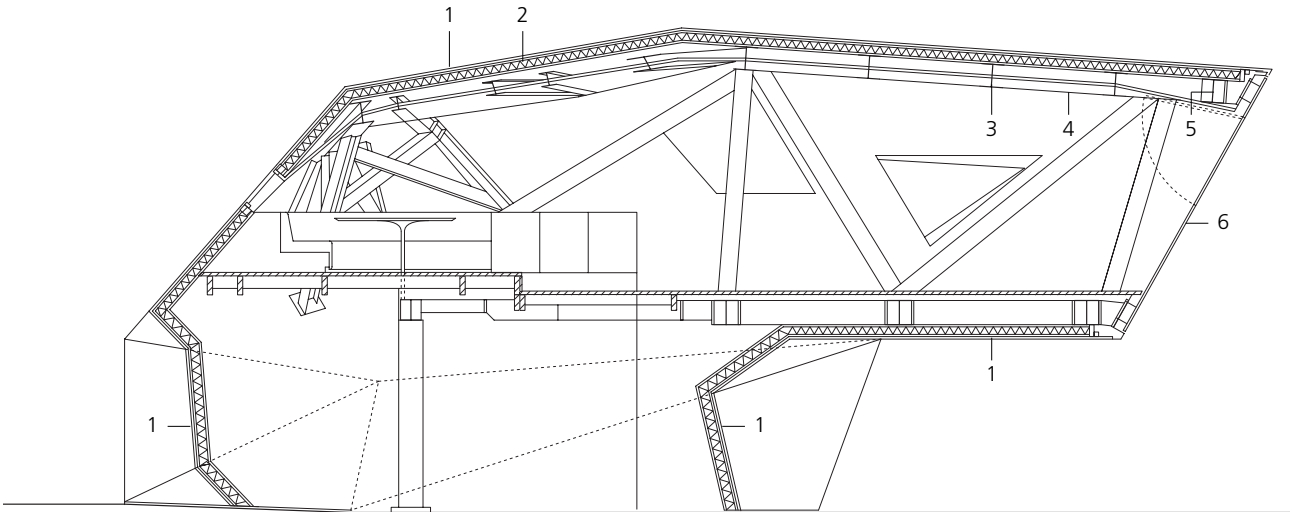
Client:  
Cor van Zadelhoff, Amsterdam  
Architects:  
UNStudio, Amsterdam  
Structural engineers:  
ABT, Velp

Stretching out in a line across the Dutch polder landscape along the river Vecht is a row of bunkers which, together with an 80-kilometre long dyke, formed a defensive line through into the twentieth century. One of these bunkers, located on an estate near Vreeland now used as the national polo centre, has been converted into a multifunctional meeting space. To achieve this, an angled sculptural form – a skin of stainless steel over a steel frame – was fitted over the cube of the bunker. The weight of the concrete acts as a buttress for the meeting room which projects 12 metres into space. Extensive glazing on the upper floor opens up a view of the nearby polo field. A raised design punched into the surface of the stainless steel sheet lends additional texture to the skin. The steel's matt finish takes on the hues of the changing skies.

*Punched into the stainless steel sheet are lines of dots arranged in triangular patterns which echo the geometry of the surfaces on the building.*



Photos: Christian Richters, Münster

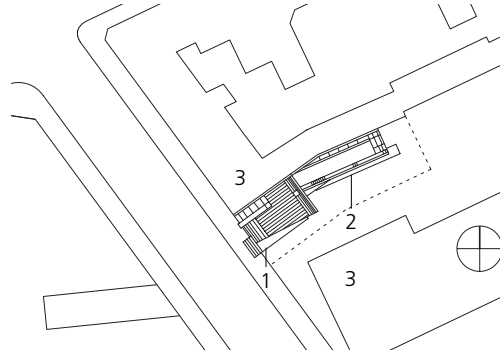


Section scale 1:100

- 1 1.5 mm stainless steel, grade: EN 1.4404  
punched design on surface
- 2 Thermal insulation, 100 mm mineral wool
- 3 Steel section, HEA 280
- 4 Acoustic ceiling, oak veneered
- 5 Steel section, HEA 320
- 6 Insulated glazing  
point-fixing in cavity

*A precisely contoured stainless steel skin fits over the old bunker like a car body. One concrete wall, now covered with vegetation, is left visible.*





Site plan scale 1:1500  
1 Extension, apartment block und loft hotel  
2 Existing side wing with upwards extension  
3 Existing building

*In both form and materials, this conversion and extension sets up a bold contrast to its inner-city environment.*

### Residential building and loft hotel in Berlin, Germany

Client:

Jürgens, Jürgens, Griffin GbR, Berlin

Architects:

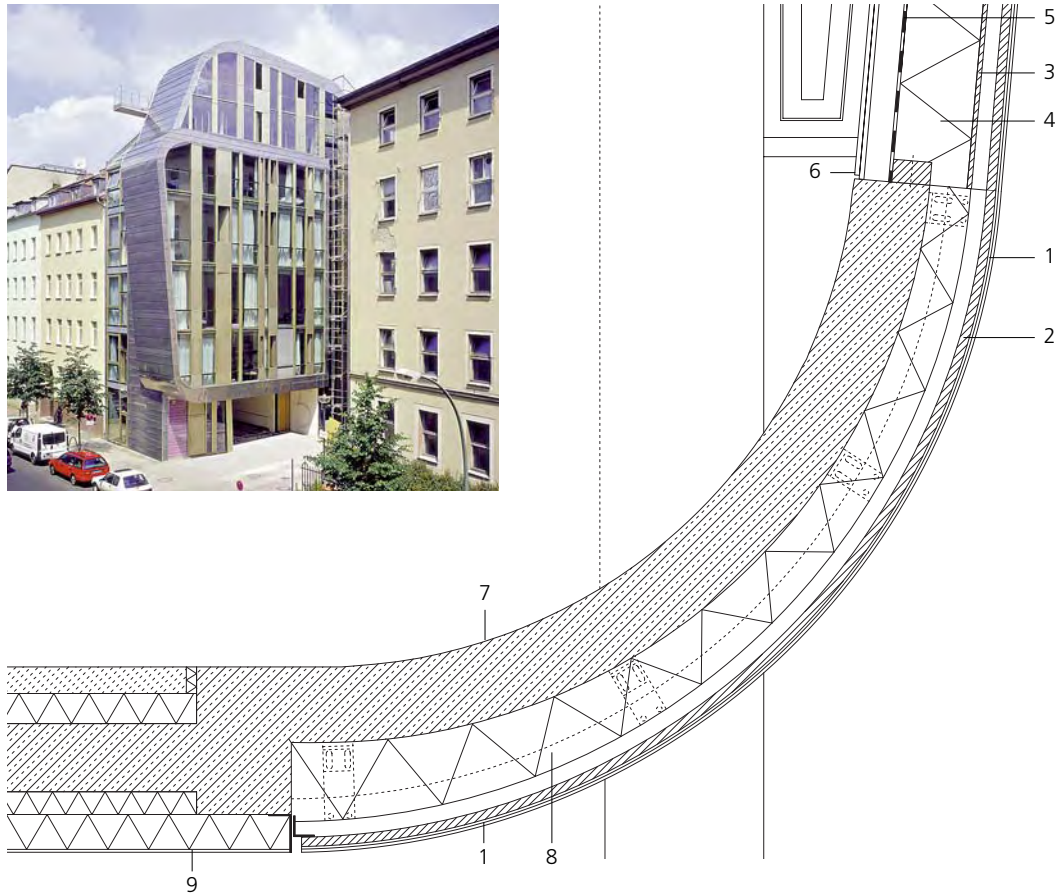
Deadline – office for architectural services, Berlin

Structural engineers:

Eisenloffel.Sattler + Partner, Berlin



The end of a typical city block in the district of Berlin-Mitte was given a bold new look in the form of a new, multi-functional, seven-storey block. Offices, hotel lofts, apartments and a shop are now divided between the three distinct sections. The original four-floor section was remodelled into mini-lofts, for temporary accommodation and a two-storey apartment was added at roof level. The new block, eye-catching both for its form and the materials used in its construction, overhangs the line of the street and rises above the uninspiring building opposite. Vertical lines dominate on the curtain wall on the long side with its storey-high glazing contrasting with the horizontal bands of stainless steel wrapped around the façade on the main street which give the building its unique identity.



*The horizontal sheets of stainless steel were connected via special cross welds that enabled the roof to be covered from the top down. It was therefore possible to avoid any penetration of the metal when tying back to the roof frame.*

Section through base of overhanging façade  
scale 1:20

- 1 0.5 mm stainless steel, grade: EN 1.4301, 2B finish, reinforced with plates adhesively bended to the back
- 2 24 mm timber sheathing, 40 mm frame
- 3 12 mm timber sheathing
- 4 200 mm insulation between glued-laminated timber roof frame
- 5 Vapour barrier
- 6 Interior cladding, 25 mm plasterboard on frame
- 7 200 mm reinforced concrete
- 8 100-200 mm insulation
- 9 Composite thermal-insulation system, 100 mm + 60 mm

Photos: Klemens Ortmeyer,  
Braunschweig

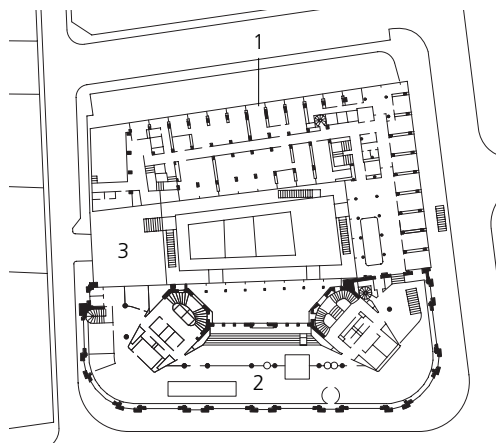




**Government ministry in Paris, France**

Client:  
 Ministère de la Culture et de la  
 Communication, Paris  
 Architect:  
 Francis Soler, Paris  
 Structural engineers:  
 Séchaud & Bossuyt, Paris

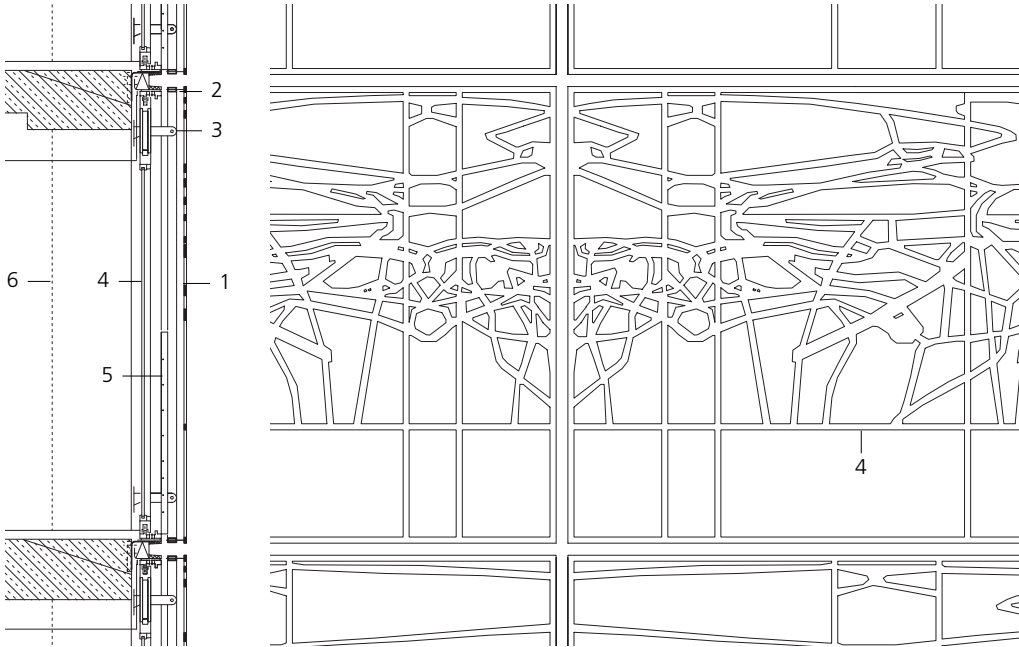
A department store dating from 1919 and an adjacent 1960s building, formerly housing the Ministry of Finance were linked together and converted to provide accommodation for the various departments of the Ministry of Culture and Communication. An extensive decorative screen of stainless steel was overlaid on the outside of these different building parts to give visual harmony to the whole. Six different designs are used on the whole, cut by laser out of 12 mm sheets, to give around 60% perforation. Each panel, 3.8 m x 3.0 m in size, was fixed individually to the support frame in front of the façade.



Plan of ground floor  
 scale 1:1500  
 1 Building section dating  
 from 1960  
 2 Building section dating  
 from 1919  
 3 Landscaped, open inner  
 courtyard



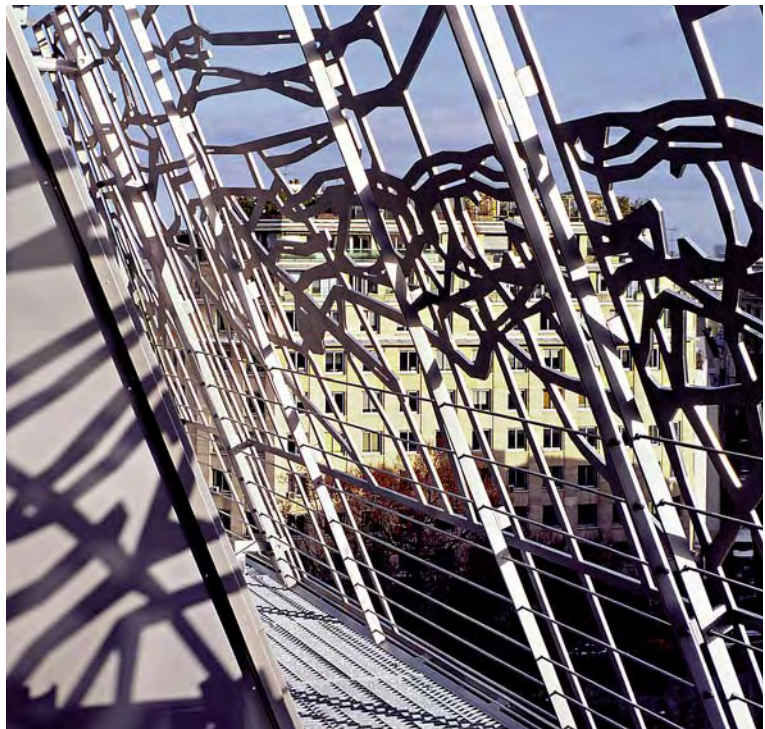




*The large-scale repeating patterns reveal a glimpse of the façades and thus create a link between old and new.*

Section through façade · Elevation scale 1:50

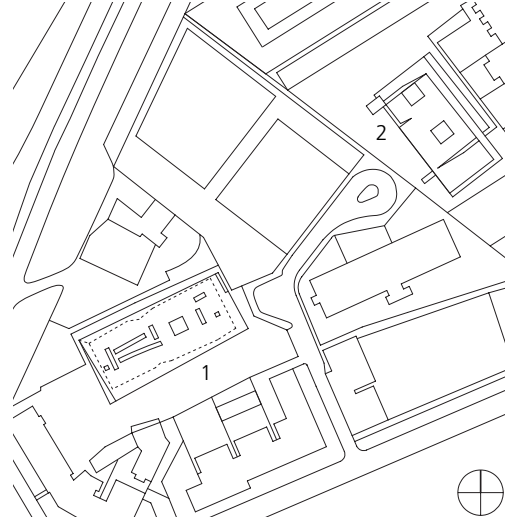
- 1 Façade cladding, 12 mm stainless steel sheet laser-cut, grade: EN 1.4362
- 2 Cladding frame, frame of 60/30 mm steel hollow section
- 3 Fixing, 60 mm steel flat
- 4 Insulated glazing
- 5 Safety railing
- 6 Reinforced concrete column, clad



*The stainless steel panels with their delicate laser-cut designs reduce the amount of solar radiation penetrating into the interior.*

Photos: Georges Fessy, Paris





Site plan scale 1:3000

- 1 Waterloohein 5
- 2 Waterloohein 9

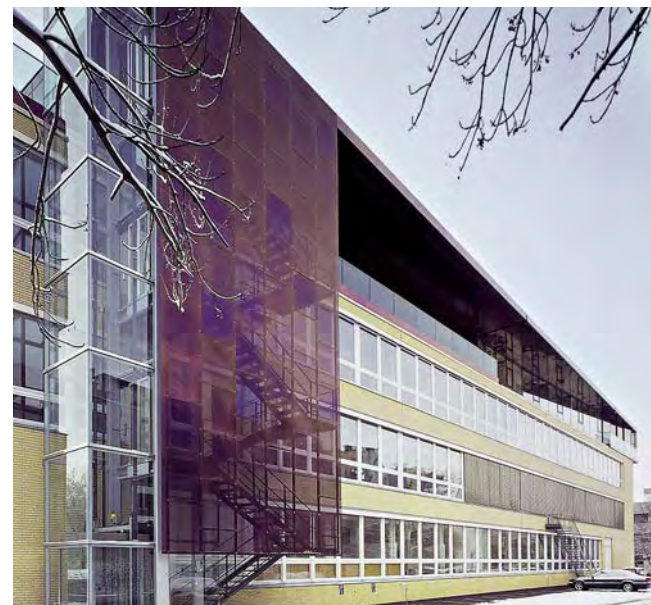
*On the façade of the fourth floor extension, panes of transparent and pink-coloured reflective glass alternate with matt and polished stainless steel sheet, electrolytically coloured red.*

**Office building in Hamburg, Germany**

Client:  
 fischerAppelt Kommunikation GmbH,  
 Hamburg  
 Architect:  
 Carsten Roth, Hamburg  
 Structural engineers:  
 Windels Timm Morgen, Hamburg

A media agency in Hamburg acquired two unprepossessing post-war buildings and converted them into a single ‘media pool’ with a unified look. The building at Waterloohein 9, once Hamburg’s biggest ten-pin bowling centre, was stripped down to its loadbearing structure and fitted on three sides with a new façade – a curtain wall of industrial construction glass and translucent thermal insulation. The association between the two buildings, each originally three

*The staircase behind the semi-transparent cladding of perforated stainless steel sheet leads up to the head office of the media agency located on the top floors.*

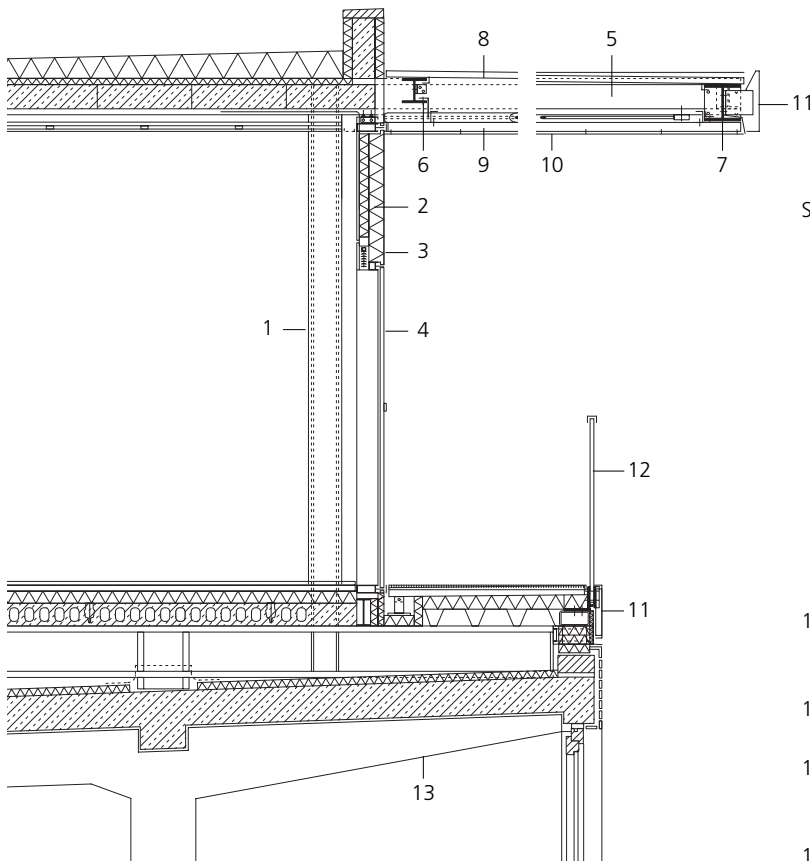


storeys high, is evident in the respective fourth-floor extensions. Each is clad with a distinctive skin of reflective glass and electrolytically coloured stainless steel sheet, which gives the buildings their identity. The red-violet colour, the owner's Corporate Identity colour, changes from orange to red to green, depending on the angle of the sun, as a result of interference effects on the surface of the sheets.

Courageous intervention in the old building substance and careful planning of details and materials, both inside and out, have turned previously unattractive rental properties into a sought-after address.

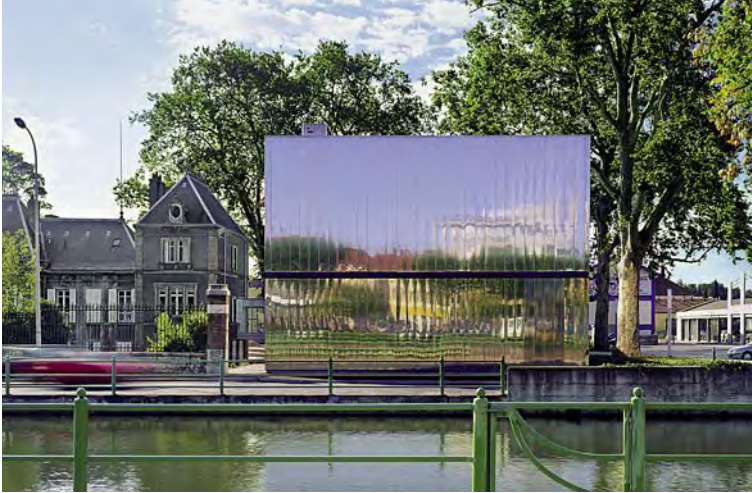


Photos: Klaus Frahm/artur, Essen



Section through façade at Waterloohein 5 scale 1:50

- 1 Column, HEB 180 steel section with fire-resistant cladding
- 2 Façade panels with mineral-wool insulation in post-and-rail frame
- 3 2 mm stainless steel sheet, grade: EN 1.4301, ground and electrolytically coloured red, bolted onto façade panel
- 4 Fixed pane of insulated glass
- 5 Roof girder, HEB 240 steel section, cantilevered
- 6 Transverse girder, HEB 160 steel section
- 7 Edge girder, HEB 240 steel section
- 8 40 mm trapezoidal sheet, d=1 mm, galvanized
- 9 60/60 mm channel-section steel profile
- 10 2 mm stainless steel sheet, grade: EN 1.4301, ground and electrolytically coloured red, overlapping
- 11 Fascia, 2 mm stainless steel sheet, grade: EN 1.4301, electrolytically coloured red
- 12 Parapet glazing, fixed at bottom edge, laminated safety glass, 24/32/24/2 mm stainless steel channel profile on top edge
- 13 Existing structure



**Innovation centre in Montceau-les-Mines, France**

Client:

Communauté de commune de Montceau-Creusot

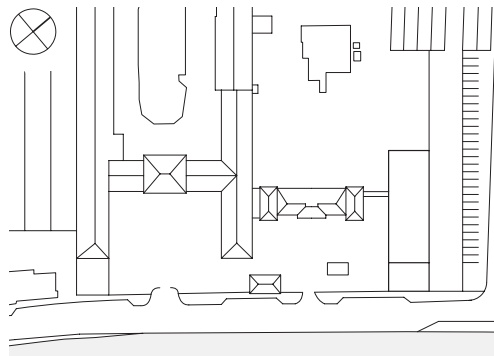
Architects:

B/R/S\_Architectes-Ingénieurs, Paris

Structural engineers:

TECO, Mâcon

*A reflective façade, clad with panels of stainless steel, underlines the innovative character and function of this building by the canal.*



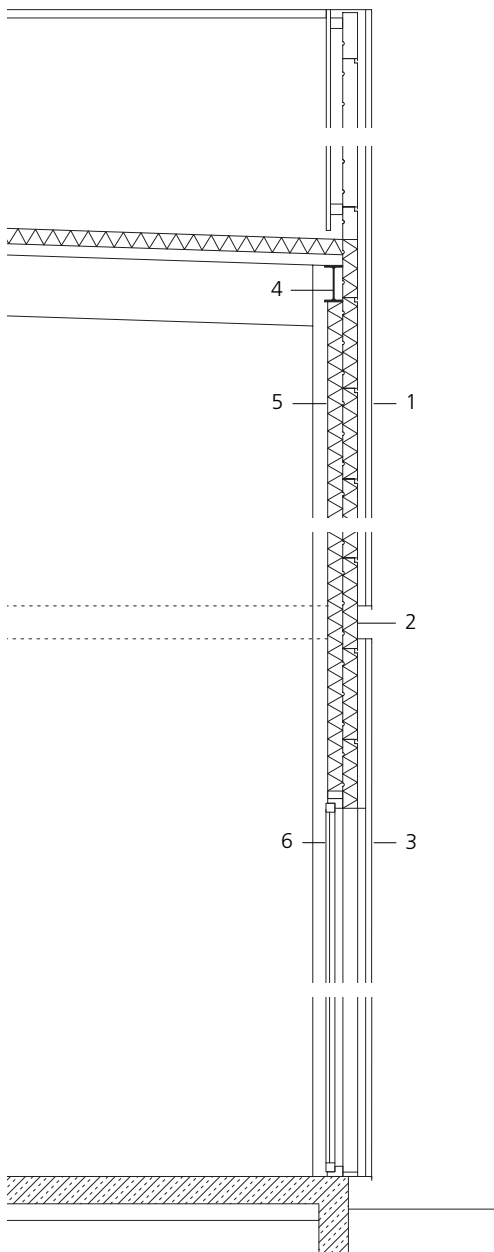
Site plan scale 1:2500

After the decline of the mining industry and the closure of the steelworks in the Montceau-Creusot region, a programme of economic restructuring was initiated. An important part of the concept was to build an innovation centre to serve as a joint research platform for the companies setting up in the area. The new building is located in a prominent position on the main road, right by the canal upon which the coal used to be transported. Its simple, rectangular shape



Section through façade scale 1:50

- 1 1.5 mm stainless steel sheet, grade: EN 1.4301, mirror-finished surface
- 2 Splice plate, painted
- 3 1.5 mm stainless steel sheet, grade: EN 1.4301, perforated, mirror-finished surface
- 4 Steel loadbearing frame
- 5 Double-skinned, thermally insulated steel pan wall
- 6 Window opening



Photos: Roland Halbe, Stuttgart

*Perforated panels of stainless steel screen the inside from inquisitive glances while still admitting high levels of natural light.*

and shimmering metallic envelope blend surprisingly well with the surrounding listed buildings, dating from the nineteenth century. The loadbearing steel frame is fitted with conventional industry-standard roof and wall systems. On the high end section, which houses a laboratory and a Faraday cage, vertical panels of highly polished stainless steel are used on the external skin, celebrating the high-tech, innovative character of the facility.



*When the wooden front panels are folded down onto the pavement and the glazed upper sections folded up, an outside eating area is created and the seating capacity doubled.*

**Restaurant at the ‘Naschmarkt’ in Vienna, Austria**

Clients:

C. Lukaseder, S. Jahanbekloo, Vienna

Architects:

gaupenraub +/-, Vienna

Structural engineers:

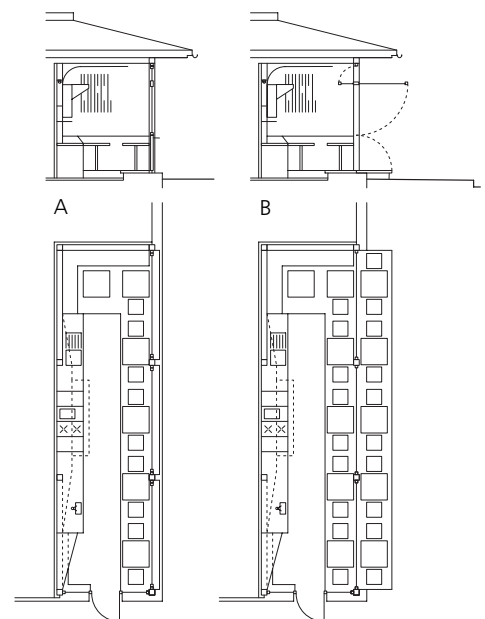
Klaus Petraschka, Vienna

*The built-in kitchen units of stainless steel provide the stage and working area for the chef, who shares the floor space with the customers.*



Photos:  
Patricia Weisskirchner,  
Vienna

In this project, a tiny 20-square-metre corner snackbar at Vienna’s famous food market was turned into a proper restaurant, complete with ‘show kitchen’ along the back wall. The kitchen work surfaces and the cladding on the units are of visually attractive, easy-to-clean stainless steel. The seats and tables are on a raised platform from where guests can watch the chef at work. As with the adjacent market stalls, the façade of the restaurant opens up, in this case doubling the available space. The parapets fold down to extend the platform and the top part folds up to create a canopy.



Sections · Floor plans scale 1:200  
A Winter: façade closed  
B Summer: parapet folded down as a terrace



ISBN 978-2-87997-202-2