RECONSTRUCTION AND UTILIZATION OF KARL FRIEDRICH SCHINKEL'S BAUAKADEMIE

HISTORY, FUTURE USE, FLOOR PLANS, CONSTRUCTION COSTS, PROFITABILITY ANALYSES

Version 31 July 2016



SCHINKEL'S BAUAKADEMIE

INTERNATIONAL CENTRE FOR INNOVATION, EXHIBITIONS, EVENTS AND CONFERENCES

(SCHINKEL-FORUM: INTERNATIONAL CENTRE FOR THE RESPONSIBLE CONCEPTION OF LIVING SPACE)

WIEDERAUFBAU UND NUTZUNG DER SCHINKELSCHEN BAUAKADEMIE
INTERNATIONALES ZENTRUM FÜR DIE VERANTWORTUNGSBEWUSSTE GESTALTUNG VON LEBENSRÄUMEN









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BAUAKADEMIE THROUGH THE AGES



Bauakademie with monuments by Beuth (left), Schinkel (centre) and Thaer (right; photo: 1888)



1945: Female Red Army soldiers and American soldiers (viewed from Schlossfreiheit Plaza to Schinkelplatz with Bauakademie and bank building in the background; source: feasibility study of the Senate for Urban Development and Transportation – 1997 – for the reconstruction of the Bauakademie)



The ruins of the Academy and Deutsche Industriebank buildings at Schinkelplatz, photo: Dr.- Ing. Helmut Maier, in the fifties of the 20th century



Bauakademie 202? (church Friedrichswerdersche Kirche in the background), RKW Rhode Kellermann Wawrowsky)



FRIENDS' ASSOCIATION
FOUNDATION FOR THE RECONSTRUCTION
OF THE BAUAKADEMIE









BAUAKADEMIE: INTERNATIONAL CENTRE FOR THE RESPONSIBLE CONCEPTION OF LIVING SPACES

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BAUAKADEMIE: INTERNATIONAL CENTRE FOR THE RESPONSIBLE CONCEPTION OF LIVING SPACES

1)1 INTRODUCTION

When standing on the perron of the Old Museum (Altes Museum) on Museumsinsel in central Berlin Mitte, an image – just like a Camera Obscura - of the area around Schloss- und Schinkelplatz as it used to be forms in the visitor's mental eye. The replication of the Bauakademie² by Karl Friedrich Schinkel and the structural work of the Berlin Palace enable the visitor to perceive the ensemble's beauty.



Model Facade (left-hand side), photo: 2012 ws

Since its foundation in 1994, the Friends' Association has promoted plans for the reconstruction of the prominent but vanished Academy building as an urban monument. The re-erected building would also be a testimonial of the historical past following the citizens' clearly perceptible desire to identify with the city's traditionally established urban character.

To realize the project of reconstructing and operating the Academy building, the Friends' Association and interested parties have founded the Reconstruction Foundation Bauakademie.

The architectural proposal for the reconstruction of the Academy building envisages the restoration of the façade true to the historical model.

The interior is to correspond in function and design to the future use of the building while retaining historical grids and structures. This approach in particular would revive the visions of "Synthesis of Functionality, Construction and Material Aesthetics" the former Governing Mayor of Berlin, Mr. Eberhard Diepgen, mentioned in his editorial of the brochure accompanying the International Real Estate Fair (MIPIM) in Cannes in 2001 regarding the original Academy building as his views echo what the historical institution Bauakademie has shaped for modern architecture. The utilization concept does not concentrate on museum functions and contexts but focuses on a symbiosis of urban life at a historically central city location as a centre for innovation, exhibitions, events and conferences with a focus on architecture and education.

1.1) HISTORY OF SCHINKEL'S BAUAKADEMIE

The Bauakademie was erected from 1832 to 1836 according to plans of Karl Friedrich Schinkel on the site of the former storage facilities Alter Packhof. The Academy building rounded off the Kupfergraben landscape designed by Schinkel. With spatially corresponding buildings – Stadtschloss, Altes Museum, Schlossbrücke, Zeughaus and the development of Friedrichswerder – Schinkel realized the urban style of landscaped gardens (Lenné), an urban landscape using cubic elements.

Sources, item 1: Brochures of the Friends' Association Bauakademie, the Reconstruction Foundation Bauakademie and the exhibition brochure of MIPIM – International Property Fair in Cannes (2001).

² A replication (a temporary simulated reconstruction of the Academy building using scaffolds and printed plastic sheets, in which the masoned model façade of the north-eastern corner of the Academy building was integrated) was erected by Internationale Bauakademie Berlin. The Model Façade (idea, project development, concept planning 1992 – 1999: Dipl.-Ing. Horst Draheim) was erected in the context of a training building site organized by the Educational Association for Civil Engineering. The erection of the Model Façade was supported by a panel of experts including architects, art historians and monument conservators ensuring that the replications met – in the minutest details – the quality standards generally required by monument conservation for replications. Thus, the Model Façade is to be included in the building to be reconstructed.

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BAUAKADEMIE: INTERNATIONAL CENTRE FOR THE RESPONSIBLE CONCEPTION OF LIVING SPACES

1.1) HISTORY OF SCHINKEL'S BAUAKADEMIE (CONTINUED)

The institution Bauakademie was trend-setting in numerous aspects. Inspired by the English factory buildings of the early 19th century, the building, in its technological aesthetics, was considered to be Germany's first architecturally designed industrial construction. It is considered precursor of modern skeleton construction generating the type of multistorey factory building currently in fashion again (e.g. Hackesche Höfe in Berlin).

The building facades were decorated with classicist imagery, which – as Schinkel formulated – depict "moments of the historical evolution of architecture".

Schinkel cooperated with Peter Joseph Lenné (Landscape Architect) and Peter Christian Wilhelm Beuth. Beuth, amongst others, was secret Superior Councillor on the Prussian Interior Ministry for Commerce, Trade and Construction. From 1836 the Bauakademie at Kupfergraben housed royal Prussian authorities, the Institute for Construction and the Prussian



Laying of the foundation stone,1st floor, 3rd window left (detail from a photogram 1911), Brandenburgisches Landesamt für Denkmalpflege, Wünsdorf

Construction Commission Schinkel presided over.

Both institutions changed in the late 19th century and the need for additional buildings was pondered. The Academy building was to be converted and a Renaissance-style extension to be added. The project was not realized due to strongly increasing student numbers. The institutions merged in 1879 and formed the Royal Technical College of Berlin in Charlottenburg (today: TU Berlin).

The apartment Schinkel used to reside in later housed the Schinkel Museum.

Subsequently, until 1945, the Academy building was used in manifold ways. The building housed the University of Political Science, the Meteorological Institute of Friedrich Wilhelm University and others, in particular museum institutions.

The cellar rooms of the Academy building and the neighbouring bank, due to their solid construction, were used to shelter artwork after it was removed for safety from nearby museums during World War II.

On 3 February 1945, the buildings around Schinkelplatz plaza were heavily damaged by bombs. In the 1950s already, the re-erection of the Academy building was initiated, and the topping-out ceremony was celebrated on 21.



West side of the war-damaged Academy building, Photo: Dr.—Ing. Helmut Maier

November 1953 Construction work, however, was delayed due to the GDR's plans of constructing new government buildings, which were later realized in Berlin's city centre.

In the early 60s, the decision to demolish the Academy building was made despite numerous protests

from Germany and abroad. The decision then was coupled with the announcement that the building would be re-erected in due time at an alternative location at Werderscher Markt.

1.2) RECONSTRUCTION OF THE ACADEMY BUILDING

The Academy building is to be re-erected while retaining the historical façades true to the original and under consideration of former interior proportions and grids. The model façade as well as the building's foundations are listed historical monuments and are to be included in the considerations.





BAUAKADEMIE: INTERNATIONAL CENTRE FOR THE RESPONSIBLE CONCEPTION OF LIVING SPACES

1.2) RECONSTRUCTION OF THE ACADEMY BUILDING (CONTINUED)

Due to functional restraints, utilization of the space within the reconstructted historical interior supporting structure is only feasible if adjusted to modern standards. An exact recreation of the former interior rooms is not possible as, in the past, the rooms were often converted for or by former users. For instance, in 1879, Lucae integrated a staircase and added new developments to the atrium. An adjusted variant introduced by the Friends' Association and the Reconstruction Foundation Bauakademie is based on the concept presented by the interest group "Reconstruction of Schinkel's Bauakademie Berlin" at MIPIM in Cannes.

1.3) UTILIZATION AND FINANCING

The hub of the utilization concept is the multi-functional event hall with foyers and lobbies of approx. 850 m² each forming centre points. This concept facilitates events with up to 400 participants, a dimension, which, according to the opinion of experienced organizers, there is demand for in Berlin and, in particular, at this location. The "large" hall is separable by means of mobile dividing walls and is accessible via the spacious foyer.

The sections facing the outside are to be used commercially. Envisaged are gastronomic establishments, whose economic feasibility could be ensured by using the premises also for Bauakademie events, thus facilitating "duplicate utilization".

Currently, the optimum organizational structure for the venture is being examined; conceivable is a permanent partnership with an event organizer and a permanent supporting organization, possibly a Public-Private-Partnership model. The combination of large separable rooms and smaller spaces on the upper floors, together with the planned integration of modern communication media allows for a diverse use of the premises,

for instance for the education and training activities of universities, associations, ministries, hotels and other interested parties.

It needs to be examined whether or which unique evidence of the architectural planning of former Prussia and Berlin/Brandenburg can be integrated and which architectural models can be used. In addition, further definitions as regards spatial and functional design are being formulated. These considerations include the installation of a "virtual" Academy building for a crossmedia and transboundary promotion of the work of architects and engineers realizing the integrated approach Schinkel himself demanded and promoted.

The rooms on the upper floors form the perimeter of the inner area with a glass roof and may be used as offices by entities with activities correspondding to the institution Bauakademie or generally as seminar and conference rooms. This concept also puts an emphasis on as varied a use as possible to facilitate versatile options and counteract a mere occasional use of the premises. At the same time, these considerations form an adequate economic basis for the project.

The construction costs supported by the Friends' Association and the Reconstruction Foundation Bauakademie to the amount of approx. EUR 55m are based on the results of a study by a Master semester of Beuth University of Applied Sciences and an earlier use and feasibility study for the reconstruction of the Academy building compiled in the context of a Master thesis of the postgraduate course Real Estate Management of TU Berlin³. It is initially assumed that construction costs are financed predominantly from external contributions and donations.

Alternatively, mixed financing from trusts, foundations and external funds is possible. Two variants are listed under item 9 and following pages.

³ Incidental cost increases (1.875% on average) up to the estimated completion of the Academy building in spring 2021 have been allowed for in the projection of the overall costs at 55,00m Euro.







BAUAKADEMIE: INTERNATIONAL CENTRE FOR THE RESPONSIBLE CONCEPTION OF LIVING SPACES

1.3) UTILIZATION AND FINANCING (CONTINUED)

The Reconstruction Foundation Bauakademie envisages partners for the use of the Bauakademie for events to be in particular the hotel, construction and real estate sectors as well as federal ministries, associations and universities⁴. An operational charter has been compiled. Furthermore, a statute for the institution Bauakademie (Wissens- und Forschungsgemeinschaft Bauakademie e.V.) to be re-founded is available and has been reconciled with the institution Deutsche Akademie der Naturforscher Leopoldina e.V. A Berlin credit institution has conveyed that (quote) "it would be available to the Reconstruction Foundation Bauakademie or the Friends' Association as contact partner regarding the financing of the construction costs through a mix of trust funds and external funding". Besides the various solutions for necessary funding it is to be examined whether and to what extent the Higher Education Construction Fund is an option. An association of the German construction sector is willing to lobby their members to make available to the Reconstruction Foundation Bauakademie external funds to finance the reconstruction. Costs associated with purchasing the real estate are to be streamlined. Due to the high costs associated with reconstructing the historical façade, financial valuecreation for the Construction Foundation Bauakademie will not be a given.

1.4) OPERATING THE ACADEMY BUILDING

The Construction Foundation Bauakademie is to assume the reconstruction and operation of the Academy building. The economic result will be, at best, balanced for a longer, not foreseeable period of time. Possible deficits are to be financed through revenues from the endowment fund, which will increase after operation of the Academy building has been resumed⁵. A later availment of the funds of the Berlin state or the German Federation is

to be excluded.

1.5) FINAL CONSIDERATIONS

The importance of reconstructing Berlin's historical centre and the prominence of the topic for the city is recognizable in current discussions as regards the development of Berlin's centre, in which the importance of visible history, in particular through architecture, is very preeminent. The re-erected Academy building with its facades reconstructed true to the original and a use oriented on the building's interior (if historical grates and proportions are considered) will be the apex and completion of Schinkel's original composition of the Kupfergraben landscape.

The International Centre for Innovation, Events, Exhibitions and Conferences (Schinkel Forum) in the reconstructed Academy building is envisaged to be an internationally aligned venue for the transfer and exchange of knowledge in the interdisciplinary domains of architecture, residential and urban construction as well as urban and regional development and is to be available to the value-creation chain construction including the real estate sector while also considering Digitalization/4.0 (International Centre for the Responsible Conception of Living Space). On the other hand, the Bauakademie will be accessible to other cultural and scientific institutions and will thus comply with Berlin's claim to be an international and sustainable City of Knowledge.

1.6) PERSPECTIVES: The earliest possible laying of the foundation stone will orient on an inauguration of the Academy building in **spring 2021** with Schinkel's 240th birthday on 13 March and the original opening of the Bauakademie 185 years ago on 1 April. Already 15 months before (i.e. late 2019), the Humboldt Forum in the Berlin Palace opposite is to be inaugurated.

,

⁴ As regards the later use of the Academy building, the Reconstruction Foundation Bauakademie / Friends' Association have established contacts to the Federal Foreign Office, which has shown interest in use for two cultural institutions supported by the office, as well as to the federal foundation for building culture Bundesstiftung Baukultur and an IT software company (Digitalization 4.0) active in the construction and real estate sector. This is known to the Senate Department for Urban Development and the Environment.

⁵ The Foundation's endowment funds, depending on the financing option- amount to a sum of between 75,25m Euro and maximally 133m Euro (see pages 21 and 22).







BAUAKADEMIE: INTERNATIONAL CENTRE FOR THE RESPONSIBLE CONCEPTION OF LIVING SPACES - SCHINKELFORUM -

2) RECONSTRUCTION OF THE ACADEMY BUILDING

The Bauakademie is to arise once again at its former location in Berlin Mitte opposite the Humboldt Forum in the Berlin Palace and in its previous exterior form while using ecological building materials in line with conservation practice as an example for sustainable construction (keywords passive house, use of solar energy, energy storage and transfer, etc.). The completion of the interior is to be oriented on later usage under consideration of former proportions and grids.

3) UTILIZATION

- as an International Centre for Innovation, Events, Exhibitions and Conferences,
- by shops (boutiques) as already executed by Schinkel –,
- \triangleright by arts, cultural*^A and scientific institutions*^B,
- through restaurants and cafés,
- by other parties.
- *A On some partial areas, possibly, a small Schinkel Museum could be established once again.
- *B Analogous to the time the institution Bauakademie was founded, occupants are to include the institution Bauakademie an association of academics and practitioners of construction sciences to be re-founded

*B The Academy building is to be developed into a unique international venue for innovative cooperation of the leading sectors of architecture, residential and urban construction, urban and regional development as well as the value-creation chain construction taking into account the Internet of Things (Digitalization/4.0) and is to contribute to the emergence of a corresponding Centre for Science and Research (Schinkel Forum).

3a) USE SCENARIOS (SELECTION)

- Events and conventions of the construction sector to support the efforts of associations, societies and universities. Conveyance of innovations relevant to design including requirements for sustainable construction
- Development of modern forms of the professional development of architects and engineers
- Vocational training of young professionals in the construction sector taking into account requirements for sustainable construction
- Award ceremonies for exemplary developments and designs in architecture, monument conservation, construction, engineering, landscaping and urban development
- Organization and realization of exhibitions to relate Schinkel's work to both present and future

continued in next column









BAUAKADEMIE: INTERNATIONAL CENTRE FOR THE RESPONSIBLE CONCEPTION OF LIVING SPACES — SCHINKELFORUM —

4) USE OF SPACES / EXAMPLES OF USE

INTERNATIONAL CENTRE FOR INNOVATION, EVENTS, EXHIBITIONS AND CONFERENCES - SCHINKELFORUM -

| | | GFA m ² |
|------|---|--------------------|
| 4.1) | Function hall / auditorium (for approx. 400 persons | |
| | (partition walls, modifiable telefloor): | 850 |
| 4.2) | Exhibit hall with lobby and foyers: | 3,500 |
| 4.3) | Exhibition space in atrium: | 400 |
| 4.4) | Seminar/conference rooms: | 900 |
| 4.5) | Gastronomy and retail: | 1,125 |
| 4.6) | Offices: | 2,100 |
| 4.7) | Archive/collections: | 1,800 |
| , | | 10,675 |





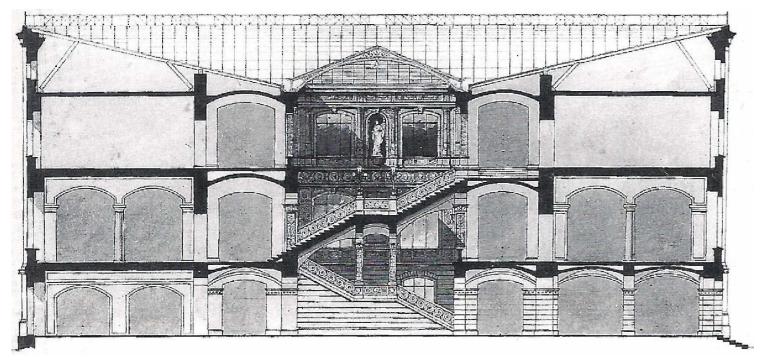






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5) BAUAKADEMIE: HISTORICAL SECTION DRAWINGS, GROUND PLANS AND VIEWS 5.1) HISTORICAL SECTION DRAWINGS



Richard Lucae: Converted staircase (1875)





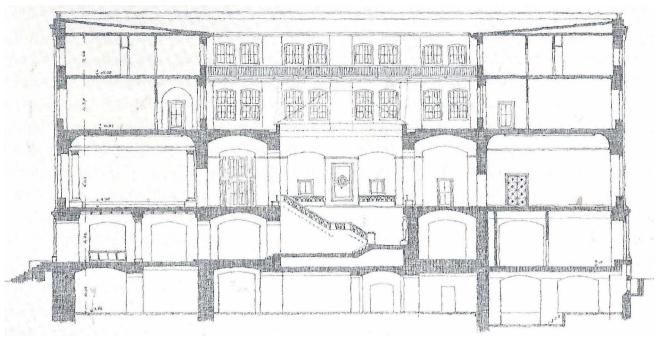






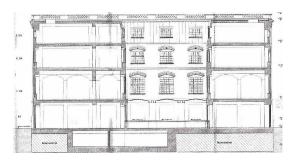
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5) BAUAKADEMIE: HISTORICAL SECTION DRAWINGS, GROUND PLANS AND VIEWS (CONTINUED) 5.1) HISTORICAL SECTION DRAWINGS



Richard Paulick (Reconstruction 1953)*

*A complete planning record (brownprint) by Richard Paulick for the reconstruction of the Academy building from 1953 is kept in the Central Archive of the Berlin State Museums.



Section of the north side: Tender procedure, Liegenschaftsfonds - Prof. Hans Kollhoff + Kahlfeldt Architekten GmbH (2008 / 2010)





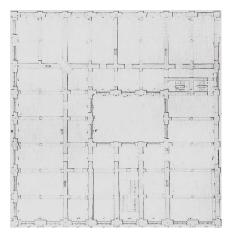




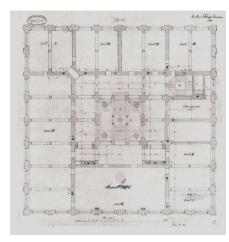


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5.2) BAUAKADEMIE: HISTORICAL GROUND PLANS

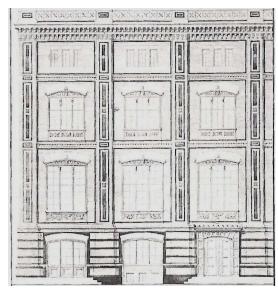


Floor plans: first main floor, Schinkel, SMB Preußischer Kulturbesitz

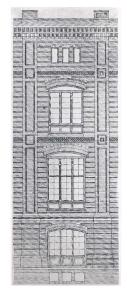


Floor plan: 1st floor after conversion by Lucae (1875), source: Jonas Geist Fischertaschenbuch 1993

5.3) BAUAKADEMIE: HISTORICAL VIEWS



Schinkel: Vertical section of the Academy facades with four floors, washed pen-and-ink drawing, 1831 (National Gallery, Schinkel-Archiv; Jonas Geist, Fischer Taschenbuch Verlag 1993)



Facade axis of the Academy building, Gaertner ca. 1831 (Stadtmuseum Berlin)



Bauakademie, west side – photo: 1911 / Messbildanstalt –



Carl Daniel Freydanck: View of the Royal Building Academy; Royal Porcelain Manufactory - Archive (now KPM, 1838)



Bauakademie viewed from the Palace Bridge (photo: 1905)

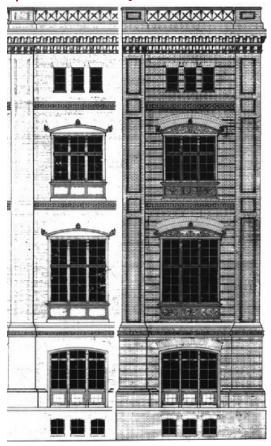




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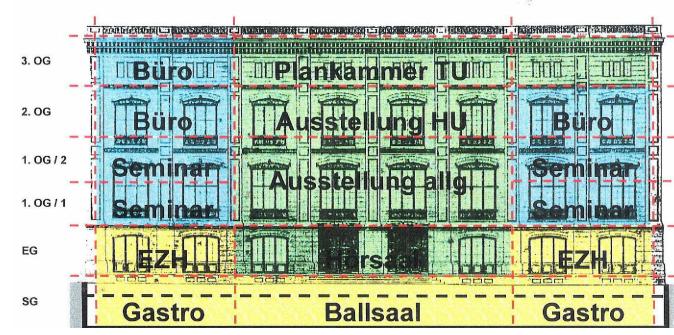
BAUAKADEMIE: INTERNATIONAL CENTRE FOR INNOVATION, EVENTS, EXHIBITIONS AND CONFERENCES

6) VIEW MODEL FAÇADE



Model Façade 2001, Dipl.-Ing. Horst Draheim

7.0) VIEW, UTILIZATION STUDY



Drees & Sommer (the term "ballroom" is a synonym for a multi-purpose hall)

- HU and TU place holders -

3 rd floor: Office: Cartographic Archive, TU 2 nd floor: Office: Exhibition, HU - Office

1 st floor/2: Seminar room - Exhibition, general - Seminar room

1 st floor/1: Seminar room - Seminar room

Ground floor: Retail - Auditorium - Retail Plinth level Gastronomy -Ballroom - Gastronomy







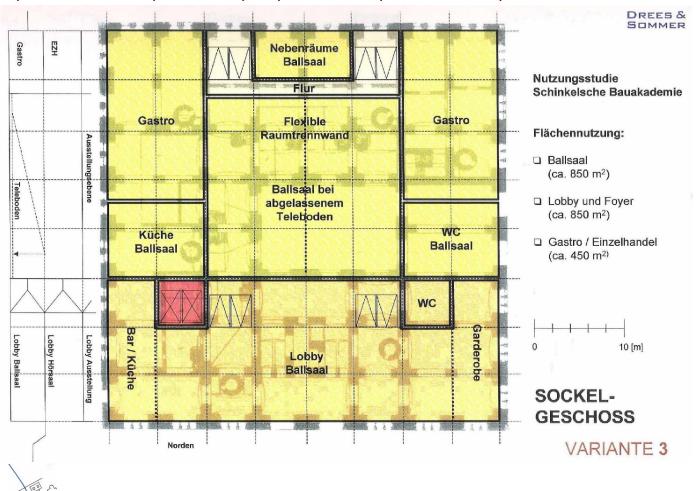




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BAUAKADEMIE: INTERNATIONAL CENTRE FOR INNOVATION, EVENTS, EXHIBITIONS AND CONFERENCES

7) UTILIZATION STUDY (FLOOR PLANS) / 7.1) PLINTH LEVEL (DREES & SOMMER)



Nutzungstudie Schinkelsche Bauakademie

Utilization Concept, Schinkel's Bauakademie

Flächennutzung

Space Planning

Ballroom (approx. 850 m²)

Lobby and fover (approx. 850 m²)

Gastronomy and retail (approx. 450 m²)

Ausstellung Exhibition Ausstellungsebene Exhibition level Ballsaal Ballroom

Ballsaal bei abgelassenem Baalroom with lowered

Teleboden telefloor Bar/Küche Bar/Kitchen EZH Retail

Flexible Raumtrennwand

Flexible partition wall

Hallway Flur Cloakroom Garderobe Gastro Gastronomy Auditorium Hörsaal Lobby Lobby

Secondary rooms Nebenräume

North Norden Teleboden Telefloor WC **Toilets**

Sockelgeschoss Plinth Level



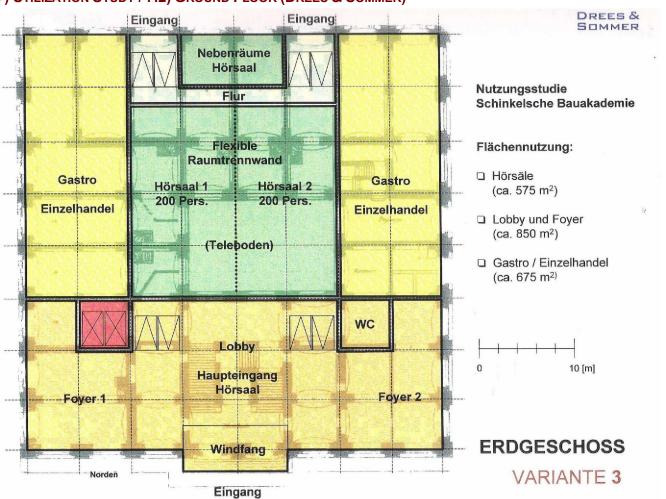




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BAUAKADEMIE: INTERNATIONAL CENTRE FOR INNOVATION, EVENTS, EXHIBITIONS AND CONFERENCES

7) UTILIZATION STUDY / 7.2) GROUND FLOOR (DREES & SOMMER)



Nutzungstudie Utilization Concept, Schinkelsche Schinkel's Bauakademie Bauakademie

Flächennutzung Space Planning

Auditoriums (approx. 575 m²)

Lobby and foyer (approx. 850 m²)

Gastronomy and retail (approx. 675 m²)

Eingang Entrance Einzelhandel Retail

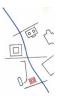
Flexible Raumtrennwand Flexible room separator

Foyer Foyer Gastro Gastronomy

Haupteingang Hörsaal Main entrance - auditorium Hörsaal – 200 Pers. Auditorium – 200 pers. Nebenräume Hörsaal Ancillary rooms, auditorium

Teleboden Telefloor WC Toilets Windfang Vestibule

Ground floor









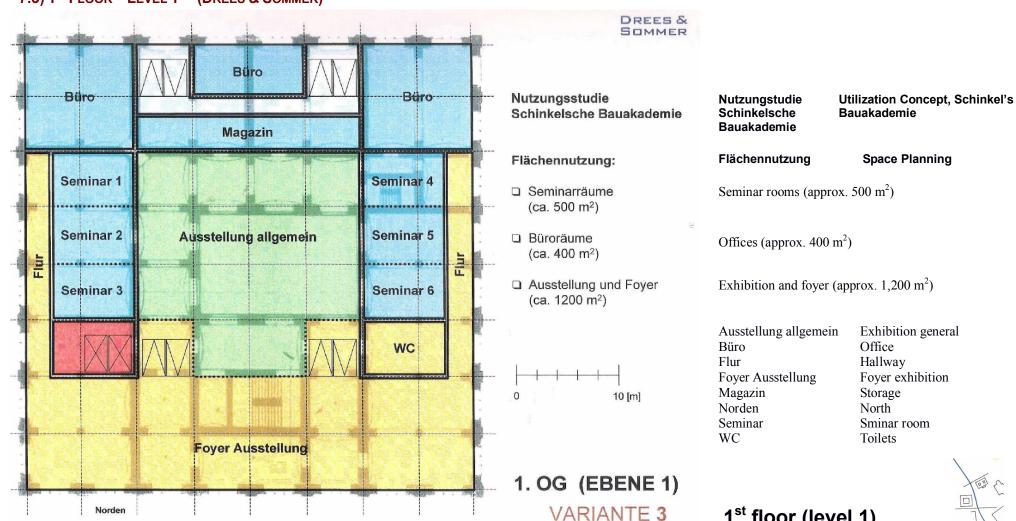


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BAUAKADEMIE: INTERNATIONAL CENTRE FOR INNOVATION, EVENTS, EXHIBITIONS AND CONFERENCES

7) UTILIZATION STUDY

7.3) 1ST FLOOR – LEVEL 1 – (DREES & SOMMER)







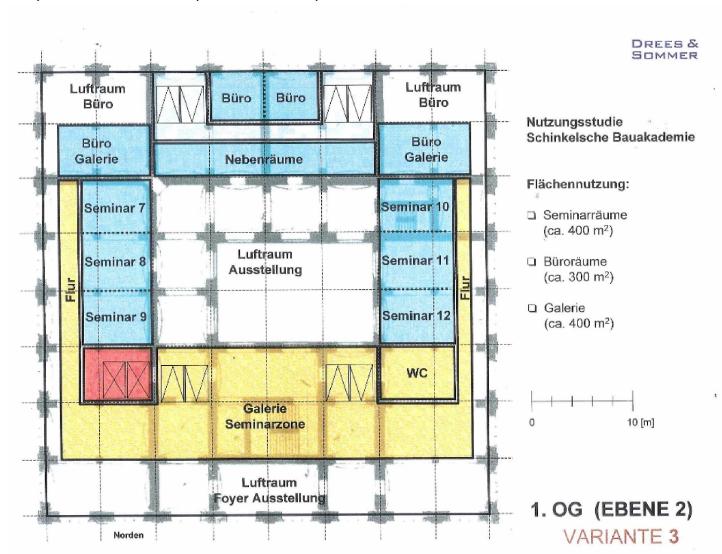


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BAUAKADEMIE: INTERNATIONAL CENTRE FOR INNOVATION, EVENTS, EXHIBITIONS AND CONFERENCES

7) UTILIZATION STUDY

7.4) 1ST FLOOR – LEVEL 2 – (DREES & SOMMER)



Nutzungstudie Utilization Concept, Schinkelsche Schinkel's Bauakademie Bauakademie

Flächennutzung Space Planning

Seminar rooms (approx. 400 m²)

Offices (approx. 300 m²)

Gallery (approx. 400 m²)

Büro Office Flur Hallway

Foyer Ausstellung Foyer exhibition Galerie Seminarzone Gallery seminar

zone

Galerie Gallery Luftraum Void

Nebenräume Ancillary rooms Seminar Seminar room

WC Toilets

1st floor (level 2)







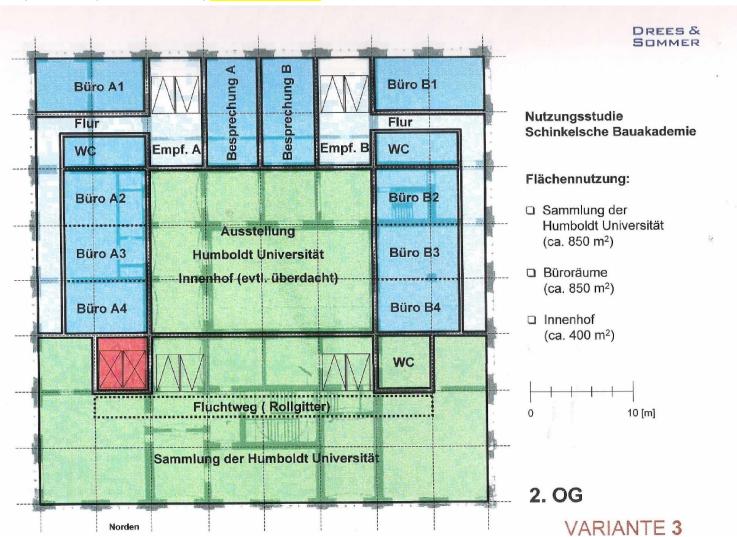




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BAUAKADEMIE: INTERNATIONAL CENTRE FOR INNOVATION, EVENTS, EXHIBITIONS AND CONFERENCES 7) UTILIZATION STUDY

7.5) 2ND FLOOR (DREES & SOMMER) - HU PLACHOLDER -





Nutzungstudie **Utilization Concept,** Schinkelsche Schinkel's Bauakademie Bauakademie

Flächennutzung

Space Planning

Collections Humboldt University $(approx. 850 \text{ m}^2)$

Offices (approx. 850 m²)

Atrium (approx. 400 m²)

Ausstellung HU Exhibition HU Besprechung Meeting room Büro Office Empfang Reception Fluchtweg Escape route grill) Flur Innenhof Hallway Norden North

Sammlung der HU Collections HU WC **Toilets**

2nd floor 2. OG



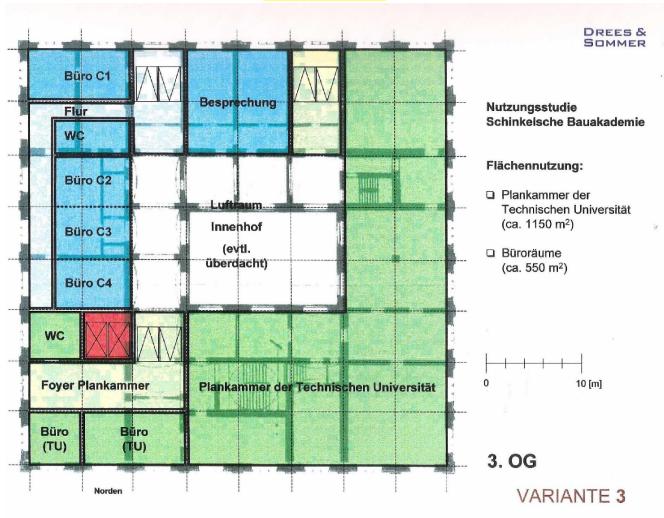




BAUAKADEMIE: INTERNATIONAL CENTRE FOR INNOVATION, EVENTS, EXHIBITIONS AND CONFERENCES

7) UTILIZATION STUDY

7.6) 3RD FLOOR - (DREES & SOMMER) - TU PLACEHOLDER -



Drees & Sommer: Dipl.-Ing. R. Dietrich, Dipl.-Ing. A. Hohlmann, Prof. Dr.-Ing. B. Kochendörfer

Nutzungstudie Schinkelsche Bauakademie

Utilization Concept, Schinkel's Bauakademie

Flächennutzung

Space Planning

Cartographic records chamber TU (approx. 1,150 m²)

Offices (approx. 550 m²)

Besprechung Meeting room

Büro Office Flur Hallway

Foyer – Records chamber Foyer Plankammer Innenhof (evtl. überdacht) Atrium (possibly roofed)

Luftraum

Void Office (TU)

Büro (TU) Plankammer TU

Cartographic records

chamber TU

WC

Toilets

FRIENDS' ASSOCIATION FOUNDATION FOR THE RECONSTRUCTION OF THE BAUAKADEMIE

3. OG

3rd floor









BAUAKADEMIE: INTERNATIONAL CENTRE FOR INNOVATION, EVENTS, EXHIBITIONS AND CONFERENCES

- SCHINKELFORUM -
- 8) CONSTRUCTION COSTS

CONSTRUCTION COSTS (incl. VAT)

| Column 1 | Column 2 DIN 276 | Column 3 Euro |
|-----------------------------------|---------------------|------------------|
| Plot preparation and development: | 200 | 3,00 |
| Construction (building): | 300 | 30,00 |
| Technical facilities: | 400 | 7,25 |
| Interior facilities: | 600 | 3,00 |
| Ancillary construction costs: | 700 | 7,20 |
| Miscellaneous: | | 0,35 |
| Contingencies: | | 4,20 |
| * | • | 55,00 |

^{*} Incidental cost increases of 1.875% p.a. on average up to the estimated completion of the Academy building in spring 2021 are included in the total cost estimate to the amount of **55,00** m Euro. The 13 March 2021 will mark the 240th anniversary of Schinkel's birthday while the initial opening of the institution Bauakademie on 1 April 1836 will celebrate its 185th anniversary.









BAUAKADEMIE: INTERNATIONAL CENTRE FOR INNOVATION, EVENTS, EXHIBITIONS AND CONFERENCES - SCHINKELFORUM -

9) APPROACHES TO ECONOMIC FEASIBILITY, (AMOUNTS IN MILLION EURO)

k)

9.1) VARIANT 1 (81.8 % FOUNDATION ENDOWMENT / 18.2 % FIXED-TERM LOAN FOR 5 YEARS)

| Col. 1 | Column 2 | Column 3 | Column 4 |
|--------|--|----------|----------------|
| a) | Assets: 81.8% of 55 m foundation capital: | 45,000 | |
| b) | Five-year fixed-term loan to the amount of 10,00m Euro; amortization from further external donations to be collected during the lent | 10,000 | |
| | term: | | |
| c1) | 2.25% interest a/fixed-term loan to the amount of 10,0 m Euro: | | - 0,225 |
| d) | Standard land value $01/01/2015$: $\frac{N 6500}{M14.5}$ Interest of building rights: 1.0% p.a. of approx. 14,5 m Euro. | | - 0,145 |
| e) | Amortization (1.365 % p.a.): | | <i>- 0,750</i> |
| f) | Operating costs (net): | | <i>- 0,750</i> |
| g) | Total costs p.a.: | | <i>- 1,870</i> |
| h) | Rental income 1.30 m Euro excl. VAT/ 1.55 Euro m incl. VAT (regulation screw: If rental income increases by approx. 15%, revenues will | | |
| | increase by approx. 0,20 m Euro p.a): | | +1,300 |
| i) | Funding gap p.a.: | | - 0,570 |
| j) | Financial adjustment of the funding gap from interest earnings from further external funding to the amount of 45.6 m Euro. Initial | | |
| | interest rate: 1.25 % | | +0,570 |
| | | 55,000 | 0,000 |

Impact of higher interest on borrowings and bonds (foundation capital) in the years 1 to 5; from year 6 the funding gap will decrease due to available interest yields from additional foundation capital after loan termination resulting in financial surplus (see columns 10 and 11).

| - | Column 5 | Column 6 | Column 7 | Column 8 | Column 9 | Column 10 | Column 11 |
|---|---|----------------------------------|---|--|---|--|--|
| | Variant <i>interest rate</i> on debt for column 2, line c1) | Funding gap, column 4, line i | Minimum foundation capital to offset funding gap column 6 | Interest rate for foundation capital in column 7 | Foundation capital (unchanged) column 2, line j | Surplus based on column 9 for column 4, line j | from year 6: surplus of column 4, line i based on foundation capital in column 9 |
| | 1.000 % | - 0.445 | 59,350 | 0.750 % | 45,600 | - 0,103 | 0,100 |
| | 2.250 % | - 0.570 | 45,600 | 1.250 % | 45,600 | 0,000 | 0,225 |
| | 3.250 % | - 0,670 | 29,800 | 2.250 % | 45,600 | 0,356 | 0,681 |
| | 4.250 % | - 0,770 | 23,700 | 3.250 % | 45,600 | 0,712 | 1,137 |









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9) Approaches to Economic Feasibility, (amounts in million Euro) 9.2) Variant 2 (60 % foundation capital / 40 % 25-year annuity loan); 9.3) Variant 3: No credit financing⁷

| Col. 1 | Column 2 | Column 3 | Column 4 |
|--------|---|----------|-----------------|
| a) | Capital: 60% of 55 m Euro foundation capital: | 33,000 | _ |
| b) | 25-year annuity loan (no credit financing but 100% foundation capital – see c7 –) ⁶ : | 22,000 | |
| c1) | 1.75 % interest, 2.50 % amortization (annuity: 4.25%): | | - 0,935 |
| d) | Standard land value N 6500 Interest of building rights: 1.0 % .a. of approx. 14.5 m Euro. | | <i>- 0,145</i> |
| | 01/01/2015: <u>M14,5</u> | | |
| e) | Amortization (1.0% p.a.): | | - 0,550 |
| f) | Operating costs: | | - 0,750 |
| g) | Total costs p.a.: | | <i>- 2,.380</i> |
| h) | Rental income 1.30 m Euro excl. VAT / 1.55 m Euro incl. VAT (regulation screw: if rental income increases by approx. 15%, revenues will increase by approx. | | |
| | 0,20 m Euro p.a): | | +1,300 |
| i) | Funding ga p.a.: | | - 1,080 |
| j) | Financial adjustment of the funding gap from interest earnings from further external funding to the amount of 63,5 m Euro. Initial interest rate: 1.7 %: | | + 1,080 |
| | | 55,000 | 0,000 |

Impact of higher interest on borrowings and bonds (foundation capital): these will either result in less foundation capital or, partially, will lead to surplus if further foundation capital, from which the operating costs of the next 25 years will be financed, remains unchanged at 63,5 m Euro.^{7.9}

| | Column 5 | Column 6 | Column 7 | Column 8 | Column 9 | Column 10 |
|-----------|-----------------------|------------------------|-------------------------------|-----------------------|------------------------------|---|
| | Variant interest rate | Funding gap, column 4, | Minimum foundation capital to | Interest rate for | Foundation capital | Surplus / additional funding gaps based on column |
| | | line i | offset funding gap column 6 | foundation capital in | (unchanged) column 2, line j | 9 for column 4, line i |
| | line c1) | | | column 7 | | |
| c2) | 0.750 % | - 0,715 | $100,000^{10}$ | 0.715 % | 63,500 | - 0,261 |
| c3) | 1.750 % | - 1,080 | 63,500 | 1.700 % | 63,500 | 0,000 |
| c4) | 2.250 % | <i>- 1,190</i> | 68,000 | 1.750 % | 63,500 | - 0,088 |
| c5) | 3.250 % | <i>-1,410</i> | 62,650 | 2.250 % | 63,500 | + 0,018 |
| c6) | 4.250 % | -1,630 | 50,100 | 3.250 % | 63,500 | + 0,433 |
| $c7)^{7}$ | 0.000 % | - 0,145 | | 0.715 % | 0,000 | |

10 unrealistic

k

_

⁷ If the re-erection of the Academy building is financed solely by foundation capital, the annual funding gap would amount to 0,145 m Euro, which would have to be compensated by higher revenues or increased foundation capital. Interest earned to the amount of 0.715% would require additional foundation capital to the amount of 20,25 m Euro resulting in a maximum foundation sum of a mere 75,25 m Euro based on estimated but unrealistic interest projections.

⁸ The overall sum of the total foundation capital could, in this case, amount to 133,00 m Euro at the most. This projection would leave 33,00 m Euro for the building; further funds would temporarily be generating revenue and could be used to offset the funding gaps resulting from operation. This assumption, however, is, in all likelihood, unrealistic as interest cycles are much shorter.

With interest levels as depicted in the scenario for c6 (column 1) financial surplus (column 10) could either be used for unscheduled amortization of the loan or to redeploy foundation capital.









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10) REVENUES

| Area | GFA m ² | Euro m ² rentable | Rent T€ per leaser |
|--|--------------------|------------------------------|--------------------|
| | | area | |
| Lecture hall / (event hall) for approx. 400 persons (partition wall, | | | |
| modifiable tele-floor): | 850 | 15,500 | 13,000 |
| Exhibition hall with lobby and foyer zones (75.50% capacity utilization) | 3,500 | 12,500 | 33,000 |
| Seminar / conference rooms (58.00% capacity utilization) | 900 | 25,000 | 13,000 |
| Gastronomy / Retail: | 1,125 | 22,000 | 25,000 |
| Office space: | 2,100 | 15,250 | 32,000 |
| Collections of universities and other institutions, archive: | 1,800 | 5,000 | 9,000 |
| Atrium (3 rd floor): | 400 | 10,000 | 4,000 |
| | 10,675 | | 129,000 |

Rental revenue p.a. incl. VAT: approx. 1,550,00

Rental revenue p.a. less VAT: approx. 1,300,00

FRIENDS' ASSOCIATION
FOUNDATION FOR THE RECONSTRUCTION
OF THE BAUAKADEMIE









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11) FRIENDS' ASSOCIATION BAUAKADEMIE

1994: Foundation as FRIENDS' ASSOCIATION FOR THE EXHIBITION "SCHINKEL'S BAUAKADEMIE - THE BUILDING'S IMPORTANCE FOR BERLIN'S CENTRE (A DCOUMENTATION) E.V. -;

aim: reconstuction of the Academy building. 2001: The association changed its name to: FRIENDS' ASSOCATION BAUAKADEMIE E.V. and amendment of statutes: initiation of the

endavours to reconstitute the institution Bauakademie (use).

PREVIOUS ACTIVITIES

currently Publication of information brochures about the history, reconstruction and use of the Academy building (in German, English and French language).

1996-1998: Planning and preparation of the exhibition **LEGENDARY BAUAKADEMIE** (Replica of the Academy building on an exhibition area with the same dimensions as the actual plot and

featuring the model façade). The large exhibition did not take place, but from 1998: Exhibitions en miniature at various locations, most recently in 2008 at the central Berlin library

ZLB.

1997: Publication of a collection of essays including articles about the Bauakademie to help the preparation of the exhibition Legendary Bauakademie.

1998: Publication of the catalogue accompanying the exhibition Legendary Bauakademie.

1998 – 2002: Realization of the Stone and Terracotta Adoption to co-finance the construction costs of the Bauakademie model façade.

2001: Introduction of the concept for the reconstruction of the Academy building for the real estate fair (MIPIM) in Cannes.

2007: Execution of symposia with representatives of Berlin universities, universities of applied sciences, architects', engineers' and construction associations for the reconstruction and

future use of the Academy building.

2008: Completion of the project "The Digital Project of the Bauakademie Facades" (multi-year seminar project at TU Berlin).

2011: Support of the Master semester at Beuth University for Applied Sciences, Berlin, dealing with the costs of a reconstruction of the Academy building.

2011 / 2016: Execution of the charitable founding act for the Reconstruction Foundation Bauakademie. The charitable status was acknowledged by the Tax Office for Corporations on 25 August

2015. Support of the activities of the Reconstruction Foundation Bauakademie as regards the reconstruction of the Academy building.

Discussions of the foundation with construction associations, senate administrations, members of committees of the House of Representatives, the Federal Foreign Office, politicians

and other interested parties as regards the realization of a proposal to acquire endowment funds as soon as the issues around the real estate have been solved as cost-neutral (e.g.

hereditary building right) as possible.

2012 / 2013: Compilation and adoption of a concept for the acquisition of endowment funds (fundraising).

Publication of the statement / (white paper) in the third quarter 2012 in the context of the reconstruction and use of the Academy building including names of supporters.

2013: Compilation of a statute for an operating concept, which is now with an event organizer. Further discussions are planned.

2013 / 2015: A draft statute for the scientific institution Bauakademie to be re-founded is available. The draft is being reconciled with Deutsche Akademie der Naturforscher Leopoldina e.V.

(National Academy of Sciences).

2016ff: A task force within the Reconstruction Foundation Bauakademie / the Friends' Association Bauakademie is dealing with the re-founding of the institution Bauakademie (Wissens-

und Forschungsgemeinschaft Bauakademie e.V.). A draft statute has already been prepared.

Members The Friends' Association Bauakademie has 112 members, most of which are private entities (two legal entities, no companies).

Executive Prof. Dr. Karin Albert (First Deputy Chairman), Olaf Gruber (Board Secretary), Prof. Dr.-Ing. Willi Hasselmann (Second Deputy Chairman), Dr. Jochen

Committee Hucke (without portfolio), Dipl.-Ing. Peter Klein (Bursar), Prof. Dr. Rudolf Schäfer (without portfolio), Wolfgang Schoele (Chairman)

Members



Managing Board

FÖRDERVEREIN BAUAKADEMIE



Bank Director, ret. / Friends' Association Bauakademie (Chairman)





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12) FRIENDS' ASSOCIATION BAUAKADEMIE

Berlin

Wolfgang Schoele, Berlin

Members of the Foundation Committees

| Michael S. Cullen, Berlin | Board of Trustees | Historian, journalist and publicist, |
|--|--|---|
| DiplIng. Horst Draheim, Ratingen | Supervisory Board | Architect (Initiator of the Model Façade project), |
| Prof. Dr. oec. Peter Elsner, Berlin | Supervisory Board | Former Managing Director of Bauakademie Gesellschaft für Forschung, Entwicklung und Bildung GmbH, |
| Dr. Benedikt Goebel, Berlin | Board of Trustees | Urban Historian and spokesman of the citizens' forum Bürgerforum Berlin e.V., |
| Prof. DrIng. Willi Hasselmann, Berlin, | Managing Board | Formerly Beuth University of Applied Sciences Berlin, FB IV Architecture and Building Services Engineering / Friends' Association Bauakademie (second Vice Chairman), |
| Prof. Dr. Bernd Henningsen, Berlin | Supervisory Board | Dpt. of Northern European Studies, Humboldt University Berlin, |
| DiplIng. Gerhard Hoya, Berlin | Managing Board | Chairman of the Managing Board of the Berlin Historical Society, |
| DiplIng. Peter Klein, Berlin | Supervisory Board (Chairman) | kleiningenieure, Berlin, member of the Association of German Master Builders (BDB), regional association Berlin |
| Jürgen Klemann, Berlin | Board of Trustees (Chairman) | Lawyer, senator, ret., |
| Prof. Dr. Manfred Klinkott, Karlsruhe | Board of Trustees | Professor for History of Architecture at University of Karlsruhe, |
| DiplIng. Kaspar Kraemer, Cologne | Board of Trustees | Architect BDA, former President of the Association of German Architects (BDA), |
| DiplIng. Hans-Karl Krüger, Berlin | Supervisory Board (Vice Chairman) | Architect, member of the Managing Board of the forum Stadtbild Berlin e.V., |
| DrIng. Helmut Maier, Berlin | Board of Trustees | Architect, |
| DiplIng. Florian Mausbach, Berlin DiplIng. Hans-Walter Mühlhoff, Berlin | Board of Trustees Board of Trustees | Urban Planner, former President of the Federal Office for Building and Regional Planning, Head of the Building Department, ret., |
| Prof. DiplIng. Mara Pinardi, Berlin | Managing Board | Beuth University of Applied Sciences Berlin, FB IV Architecture and Building Services Engineering, |
| DiplPhil. Anneliese Schäfer-Junker, | Board of Trustees | Local historian and chronicler of (13127) Französisch Buchholz, |









13) CONTACT DETAILS (FRIENDS' ASSOCIATION BAUAKADEMIE / SOCIETY FOR THE RECONSTRUCTION OF THE BAUAKADEMIE)

13.1) FRIENDS' ASSOCIATION BAUAKADEMIE

Glienicker Straße 36, 14109 Berlin

Telephone: +49 30 805 54 63

Fax: +49 30 80 60 21 74

e-mail: foerderverein-bauakademie@itskom.net Internet: www.foerderverein-bauakademie.de

Facebook: www.facebook.com/schinkelsche-bauakademie

Tax No. 27/665/60070 Finanzamt für Körperschaften I, 14057 Berlin Bank details: Deutsche Bank: IBAN: DE09 1007 0000 0124 9127 00,

BIC: DEUTDEBBXXX

Translation: Ina Scholtissek

Berlin, 2016-09-14, Wolfgang Schoele

13.2) RECONSTRUCTION FOUNDATION BAUAKADEMIE

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Telephone: +49 30 805 54 63

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e-mail: kf-schinkel@itskom.net

Internet: www.schinkelsche-bauademie.de

Facebook: www.facebook.com/schinkelsche-bauakademie

Tax No. 27/642/07138 Finanzamt für Körperschaften I, 14057 Berlin Bank details: Weberbank: IBAN: DE12 1012 0100 1800 0017 42,

BIC: WELADED1WBB



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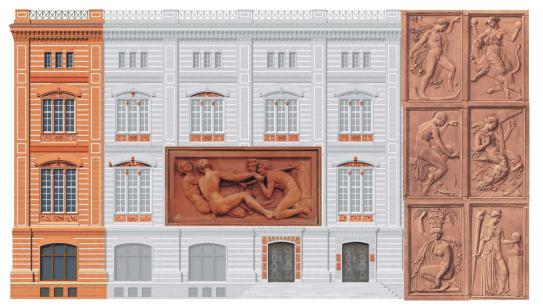


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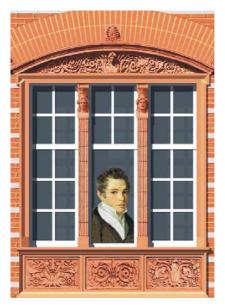
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Model Facade of the Academy building (northeastern corner), photo: Renate Schoele



From the brochure "Stone and Terracotta Adoption", Friends' Association Bauakademie. Motives: the digital model of the facades of K. F. Schinkel's Bauakademie with illustrations from the original north facade and the portals – sketched by Schinkel and realized by Friedrich Tieck; source: Paul Ortwin Rave – Genius der Baukunst, 1938



Schinkel looks from a window of the Bauakademie (Dipl.-Ing. Thomas Rox, Dipl.-Ing. David Bornemann)



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"Digital Model" of the facades of Schinkel's Bauakademie, here, north Façade, ©: Dipl.-Ing. David Bornemann, Dipl.-Ing. Thomas Rox, Friends' Association Bauakademie