



Architecture and History



RADIALSYSTEM·V·
NEW SPACE FOR THE ARTS IN BERLIN

Inhalt

- 01 The Radial System
- 02 Architecture of the historical building
- 03 The development of Berlin's sewer system
- 04 The historical pumping station
- 05 Radialsystem V 1944 – 1999
- 06 Conversion of the building 2005 – 2006
- 07 Architecture today
- 08 Information



01 The Radial System

In September 2006, RADIALSYSTEM·V· was opened as a new creative space for the arts in Berlin. Formerly a turn of the century pumping station for the Berlin Wasserwerke (Berlin Water Services), RADIALSYSTEM·V· – situated in the urban centre of Berlin between Friedrichshain, Mitte and Kreuzberg – currently functions as a cultural centre where new ideas 'radiate' out in all directions, attracting artists and the public from within as well as beyond the city limits of Berlin.

The balanced synthesis of old and new elements in the architecture reflects the basic idea of RADIALSYSTEM·V·: the concept of dialogue. This concept is also shown in the interaction of early music with contemporary dance, visual arts and new media, culture and economy.

The potential of this idea is mirrored in the heavy demand by the political and business community, as well as the cultural industry to host different events at RADIALSYSTEM·V·: the large halls, the numerous studios, the sun deck and the beautiful terrace on the Spree river are not just suited for modern dance, theatrical productions and classical concerts, but are also suitable for gala-dinners, receptions and presentations.



02

Architecture of the historical building

Built on Holzmarktstrasse in 1881, Radialsystem V was one of twelve pumping stations for a new system of wastewater management for the city. The building is typical of the industrial architectural style found in this region at the time, also seen in the Charlottenburg power plant (1900), the Oberbaumbrücke (1896) and the Wasserwerk Friedrichshagen (1893).¹

Using decorative elements of the so-called 'Märkische Backsteingotik' (Brick Gothic from the region of Mark Brandenburg), the architect Richard Tettenborn (1857 – 1923) designed the pumping station with large windows allowing a view from the street into a large, bright room filled with powerful machinery. Tettenborn's plan most likely followed the ideals of James Hobrecht, the engineer responsible for the design and construction of Berlin's sewer system, who stressed the necessity of cleanliness and elegance in industrial architecture and technology.

¹ This is the current location of the museum and historical archives of the Berlin Water Services: www.museum-im-wasserwerk.de



Pumping station Radialsystem V, view from the river Spree, 1925 © Berliner Wasserbetriebe



Plant floor of the pumping station Radialsystem V, 1925 © Berliner Wasserbetriebe

03 The development of Berlin's sewer system

In 1866 a cholera epidemic forced the politicians to come up with a plan to provide Berlin with a practical and cost effective sewage removal system. In 1869 the building engineer James Hobrecht (1825 – 1902) was commissioned to develop a sewage system for Berlin, resulting in a plan that is still in use today.

Having analyzed the topography of the city, Hobrecht was able to divide Berlin into twelve districts, setting a pumping station at the lowest part of each. Waste water flowed into the pumping station by the force of gravity through a series of underground sewers. It was pumped out in pressurized iron pipes to drainage fields located on the outskirts of the city. There, the sewage was filtered and used as fertilizer for crops grown in the fields. As the system was decentralized, Hobrecht's plan could be easily expanded upon. It also succeeded in taking the strain off the Spree River as a supply of fresh water.



James Hobrecht (1825 – 1902) © Berliner Wasserbetriebe



Drainage fields Malchow 1935 © Berliner Wasserbetriebe

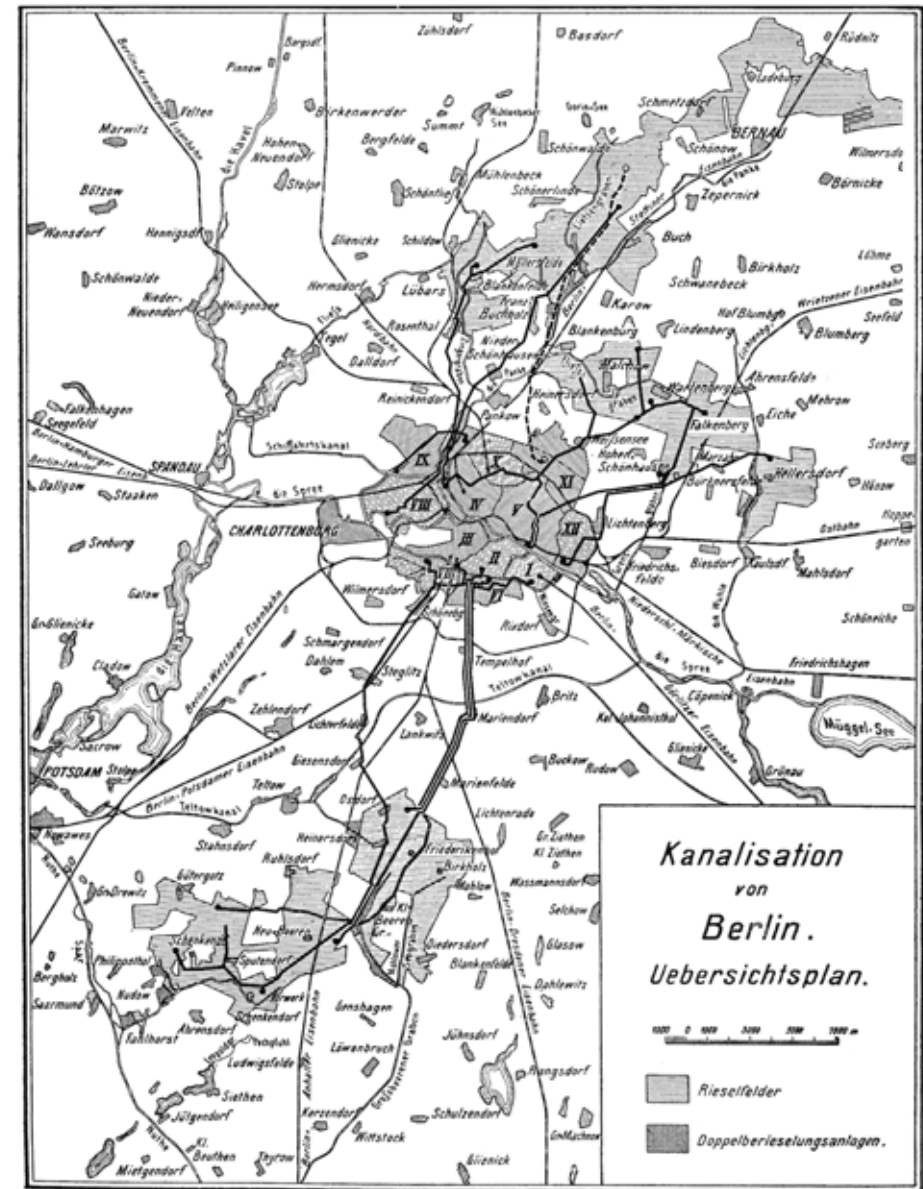
03

The development of Berlin's sewer system

In 1873 ground was broken for Berlin's first pumping station, Radialsystem III. Located directly across from the German Technical Museum on Schöneberger Straße, Radialsystem III went into operation in 1878. In 1881 Radialsystem V was built and became the largest pumping station of Berlin in 1905 after architectural modifications had been made.

By 1909 all twelve pumping stations were completed, an amazing feat of engineering that succeeded in serving the needs of almost all of Berlin's 1.5 million residents. With 16,000 hectares of drainage fields (the equivalent of 23,000 football fields) the city was finally provided with effective and practical means of waste removal. However, from 1931 onwards, the sharp increase of industrial waste that flowed into the system made it necessary for these drainage fields to be gradually replaced by more modern sewage treatment plants.

Radialsystem V alone served 400,000 residents, its drainage fields located northeast of the city in Bürcknersfelde and Falkenberg. Now a nature reserve, part of the original layout of the Falkenberg drainage field is still recognizable today.



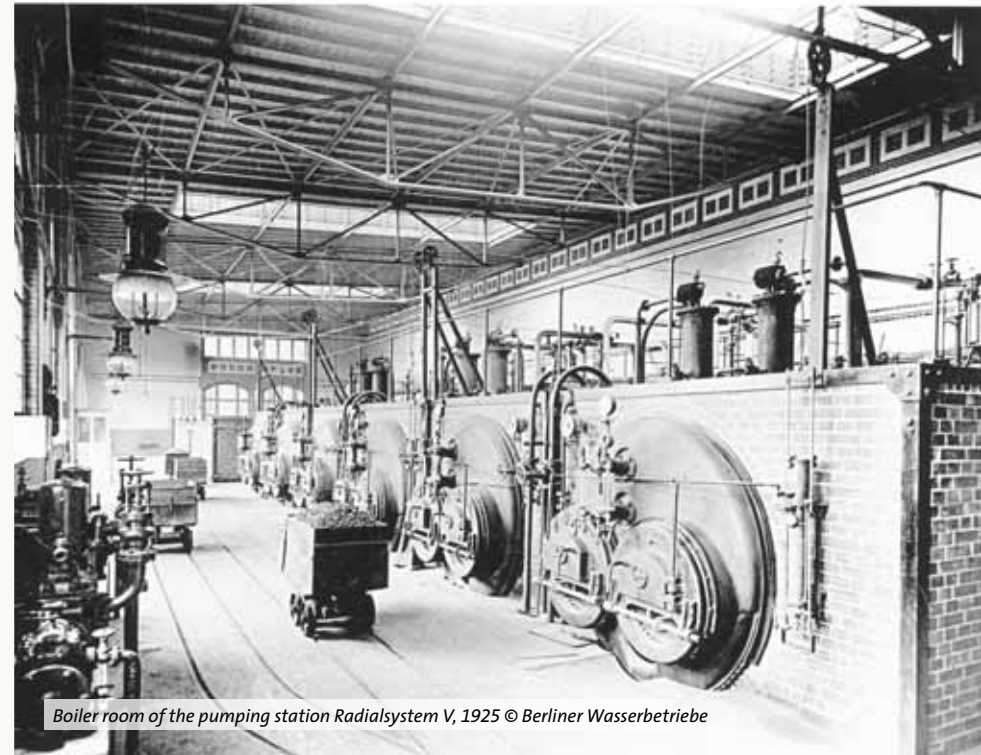
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The historical pumping station

Typical of all pumping stations in Berlin, Radialsystem V was made up of four parts:

- a sand trap, or collection tank, into which the entire waste water of the district was collected
- the machine hall and boiler room, designed respectively to house the pumps and steam engines in operation
- living quarters for the workers on duty
- a shed, which served both as workshop and storage area

Often, the pumping stations were located next to the river or one of the canals in order to facilitate the delivery of coal, needed to fuel the steam engines. The location also helped during times of extreme rainfall, providing a means of drainage for excess water.



Boiler room of the pumping station Radialsystem V, 1925 © Berliner Wasserbetriebe



Pumping station Radialsystem V, view from the river Spree, early twenties © GASAG Berliner Gaswerke AG

05

Das Radialsystem V 1944 – 1999

With one-third of Radialsystem V destroyed in World War II, what remained of the building was hastily repaired and set back into operation.¹

In 1999 the pumping station was shut down as it could not meet the increasing demands and was financially inefficient. The listed building ensemble of Radialsystem V was up for sale.

A pumping station next door on Holzmarktstrasse 31-32 took over and since then serves the districts of Mitte, Prenzlauer Berg and Friedrichshain. Here, waste water from the districts is pumped out to sewage treatment plants in Waßmannsdorf and Schönerlinde.

¹ See photo: the damage still visible just behind the bar in the foyer.



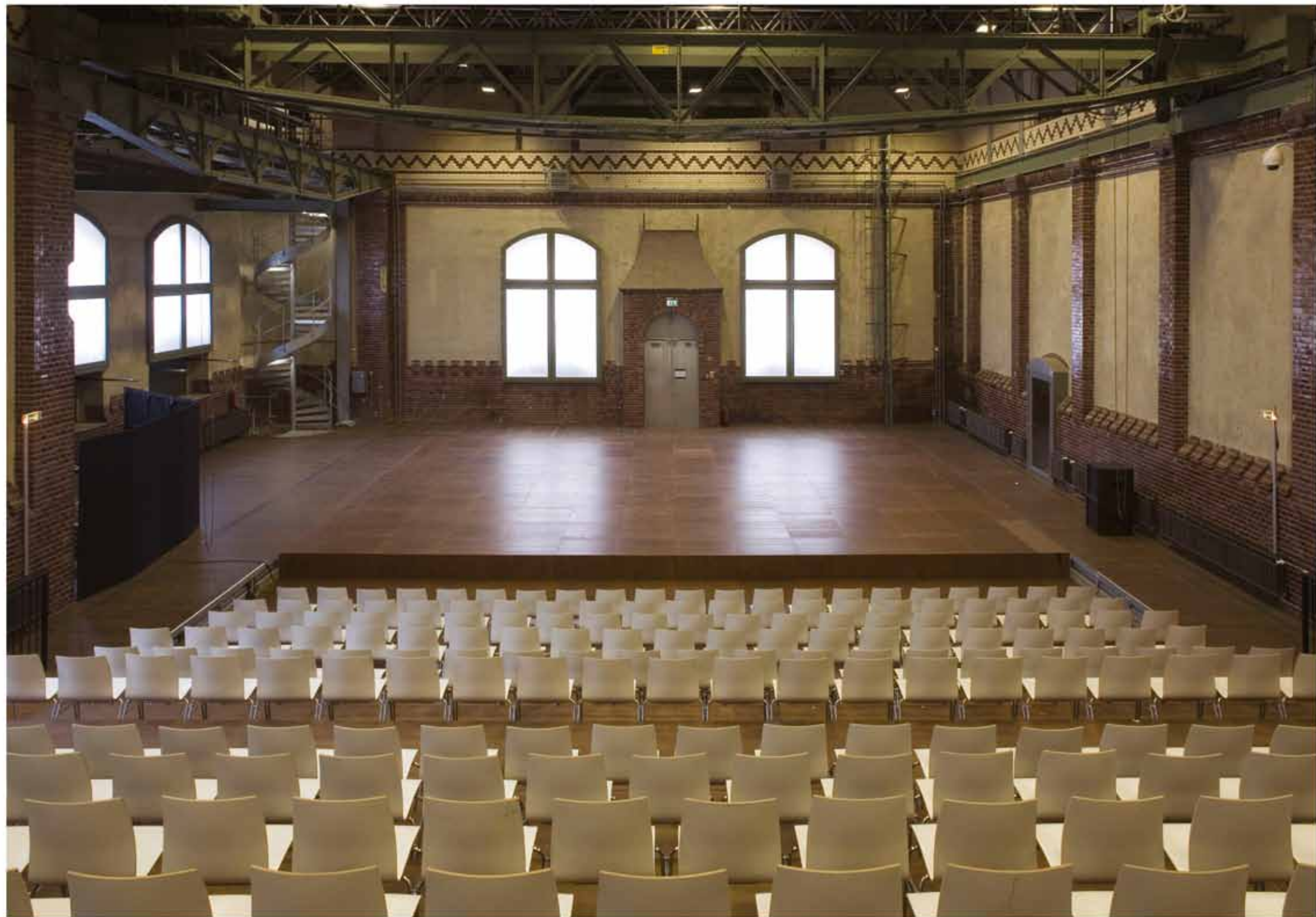
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Conversion of the building 2005 – 2006

Starting with the original structure, Gerhard Spangenberg, the architect who took up the reconstruction project in 2004, was confronted with the task of redesigning the building so that the original facade would remain visible. Not only did the two halls have to be modernized, the war-torn west side also had to be completely redone. New studios were to be added as well. Financing of the project was made possible by the investment group TELAMON Vermögensverwaltungsgesellschaft, and by September 2006 RADIALSYSTEM·V – New Space for the Arts in Berlin, operated by Radialsystem V GmbH, was reopened to the public.

The war-torn west side of RADIALSYSTEM·V was closed off with a two-story glass extension for offices and to the Spree side of the building a similarly transparent extension was placed over the former boiler room for studios. The new addition is separated in part from the older section by a large terrace, allowing the original facade of Radialsystem V to remain visible. Similar to the historical part of the building, this modern element was built with limited materials – concrete, steel, and glass – focusing on function and simple elegance. The new addition not only contrasts, completes, and complements the older part in its multifaceted, transparent and closed quality, it also triples the amount of available space for the entire building.



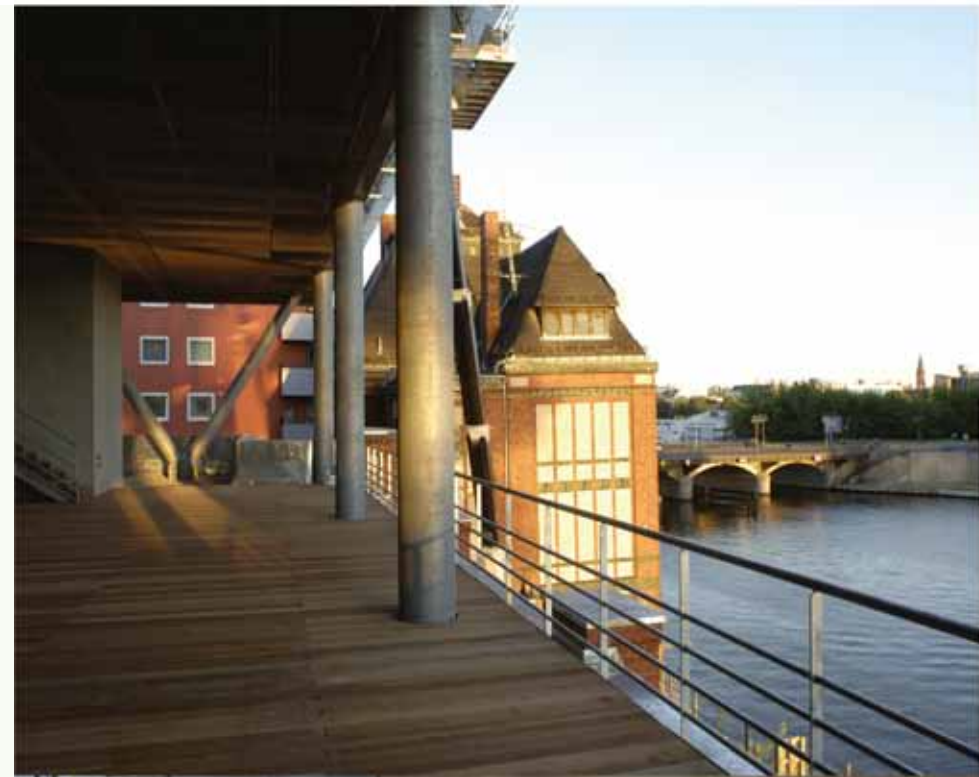


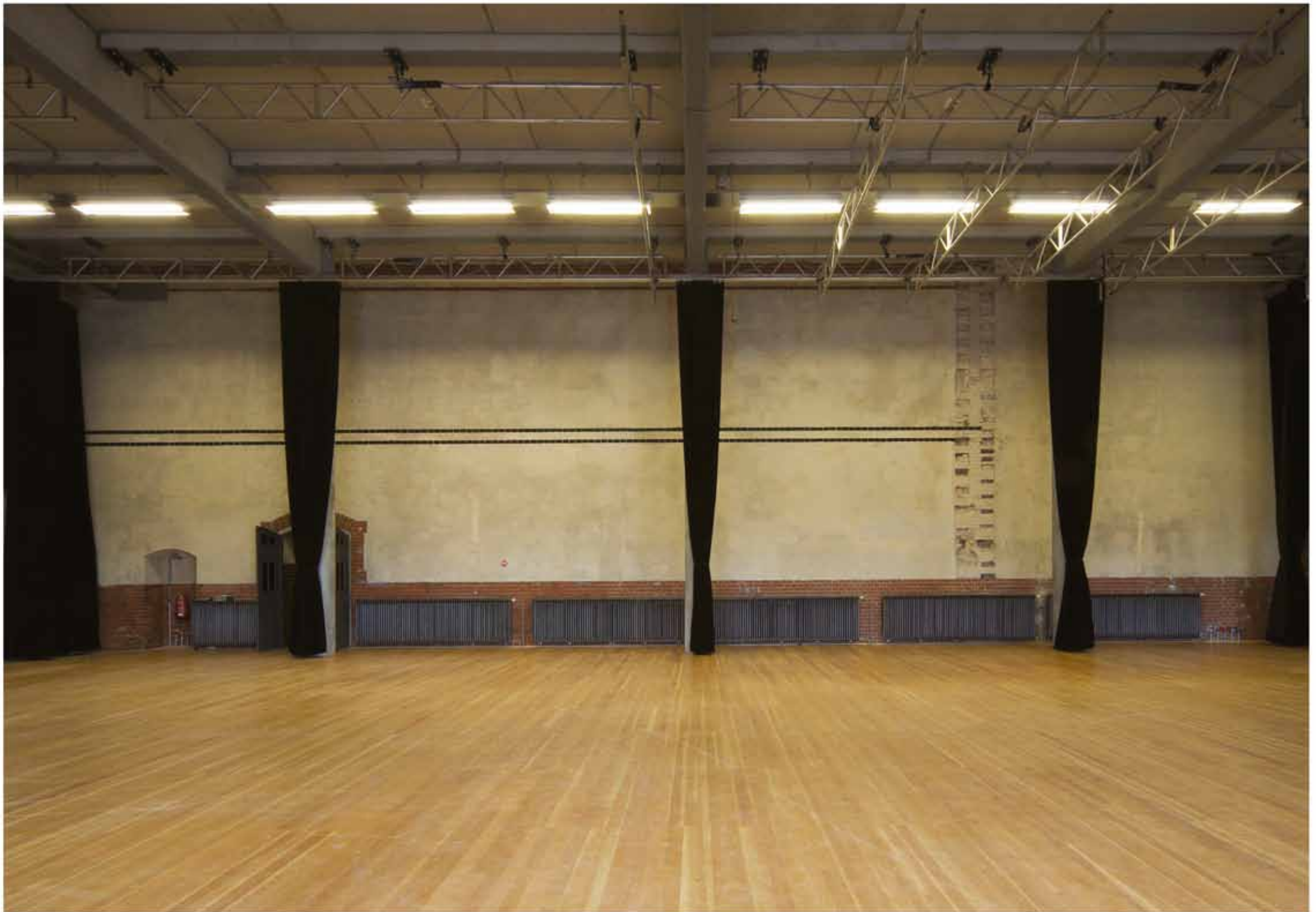
07

Architecture today

The building's main advantage is the fact that the rooms can be simultaneously and flexibly used for different art productions and events by Radialsystem GmbH as well as by other users. The machine hall and boiler room of the former pumping station were transformed into a main hall of 600 square meters and a smaller hall of 400 square meters. The new addition provided the building with a foyer for visitors and artists, as well as wardrobes, office space and three studios facing south onto the Spree river: Studio A with 400 square meters, and Studios B and C with 200 square meters of space each. Also, there is a two story cube with a glass facade facing southwest, a 400 square meter covered deck and a large terrace by the banks of the Spree River with a boat landing. The former work quarter on the premises of RADIALSYSTEM·V· has been turned into a guest-house. All of this makes RADIALSYSTEM·V· an extremely attractive place during the entire year.

RADIALSYSTEM·V· is a prime example of the successful metamorphosis of an industrial age building, allowing it to both tell and create history at the same time.





08 Information

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Guided tours of the building, explaining the history, architecture and concept of **RADIALSYSTEM·V·** are offered regularly in both German and English. Tours start in the foyer of the building and last approximately 60 minutes. You can find the dates of the tours on www.radialsystem.de.

Cost: 5 € per person, reservations should be made at
+49 – 30 – 288 788 588.

Unfortunately, guided tours are currently not accessible to wheelchairs.





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