

# THEATRE DE LA NOUVELLE COMEDIE DE GENEVE

## DESCRIPTION

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Author: FRES architectes

### THE GENESIS OF THE PROJECT. A BOTTOM-UP PROJECT

In 1987, Matthias Langhoff, a Franco-German scenographer, published his "Rapport" (Zoé Editions), a document that highlighted problems of the existing stage equipment of the Comédie de Genève.

In 2000, the Association for a New Comedy (ANC) was formed, composed of professionals from the world of theater and entertainment, which brought the project of a new construction to the City of Geneva.

It is in this context that the City launched in January 2009, an open international competition for the construction of the New Comedy Theatre of Geneva on the field of the former Eaux-Vives train station.

In October 2009, the « SKYLINE » project, proposed by FRES ARCHITECTES > Laurent Gravier + Sara Martin Camara, won the competition. In 2020, the building is delivered and it opened its doors in august 2021.

### LA NOUVELLE COMEDIE DE GENEVE. MUCH MORE THAN A THEATER

La Nouvelle Comédie is more than a theater : it is not only a place for performances, with its two halls, but also a place for creation, with its large construction workshops. These workshops make the Nouvelle Comédie a true creative center, bringing together under one roof all of the theater's trades.

The character of a « performance factory » was a determining factor in the design of the project, which had to be both a hyper-functional facility and a singular building with its own identity.

The project places the performance halls at the heart of the building, with an articulation of the programs that generates a singular profile, a skyline, giving the building its identity.

Where classical theaters distinguish the stage house as the central element of the building's composition, the crenellated profile characteristic of the project expresses the multiplicity of activities present in the new place.

The theater is above all a place of exchange between artists and the public. If traditionally this

exchange was limited to theatrical performances, for the Nouvelle Comédie the point was to design a more convivial space, a place that is alive all day, plural and dynamic. Creation process is no longer hidden but part of the building. Activities are shown by visual transparencies from the street or from the restaurant, expressing the architectural vision of a contemporary theater open to the city.

## **THE NEW COMEDY. A FACILITY OPEN TO THE CITY**

The theater is located near the new Eaux-Vives train station, within a new urban district composed of buildings with mixed uses: facilities, shops, offices, and housing. It is the main public facility of the district and an important cultural center. At the neighborhood level, it is the major facility that brings to life the esplanade, the backbone of the urban project. At a city level, the theater attracts people from Geneva through its shows and its public uses. At a national and international level, the Comédie de Genève is a reference facility. The project provides a response that integrates these different scales; a theater that radiates internationally while maintaining a human and friendly scale within the district.

The Nouvelle Comédie is a facility open to the city, with welcoming place linked to the public space.

The esplanade enter into the theater through a large full-height volume, the hall, which dissolves the limit between life of the theater and the city. It is a generous, lively, and luminous space that hosts the public uses located at the level of the esplanade: cafeteria, ticket office-library, foyer... It is the reference space of the building that has a vocation of multi-functional uses: restaurants, exhibitions, conferences, performances, happenings... The theater and its functions activate the esplanade by inviting the passer-by and the spectator to enter.

The foyer, accessible by day, also expresses the opening of the theater to the city. The principle of internal distribution places the technical and public circulations on the facades, open to the city. A strong visual relationship is created between the cafeteria, the kitchen and the construction workshops, which are no longer hidden. These different transparencies and visual relationships aim to open the theater to the city.

The Comédie is a theater in the city, and a city in the theater.

In the evening, facades of the hall receive a red lighting which stages this volume in the city, and invites the spectator to the show. The image of the building evolves throughout the day: sober and elegant by day, multiple and colorful by night.

« When we design a theater, the scenography begins on the sidewalk because that's where the evening begins » said Jean Vilar.

## **THE NEW COMEDY. A HYPER-FUNCTIONAL FACILITY**

The Nouvelle Comédie is designed as a hyperfunctional facility. The circulation of people is organized with great rationality, distinguishing between the flow of the public, artists, technicians and administrative staff in order to give priority to the functionality of the building. The public and private circulation spaces are located in the facade surrounding the programs to which they give access.

The public circulation is along the south-east facade, at the same level as the esplanade from which the public accesses to the theater. It serves the public uses of the theater, including the foyer which gives access to the two performance halls.

The circulation of the artists, technicians and administration is done along the northwest facade, on the lake side, by superimposed galleries that allow the distribution of the entire theater. They are organized in a qualitative, clear and efficient way, while creating a refined and sober image of the theater.

The circulation of the sets, a true technical backbone of the project, located under the hall, allows to efficiently serve the two delivery areas of the theater, the large construction workshop and the stages of the two halls on one level only.

The more compartmented uses (administration, dressing rooms, fabrication workshops...) are placed in the emergencies, in volumes perpendicular to the esplanade, creating the recognizable form of the building. The production workshops are in the front of the building, on the street side. The two rehearsal rooms are located above the modular room and are accessible to the public to accommodate school groups.

## THE ROOMS. TWO POETIC SPACES

The building houses two complementary performance stage, which can accommodate any type of performance. Each of them develops its own identity, both from a scenographic and architectural point of view.

### The Great Hall

The large hall, with 500 seats, is designed in the continuity of the European theater, in the Italian style, with a pre-established front stage-hall relationship. The envelope is made of a folded and faceted skin, like an origami, which gives its architectural identity to the hall and accommodates all the acoustic and lighting devices specific to a theater. The envelope, made of expanded metal, allows a discreet integration of these technical elements behind it, in a subtle play of transparency and opacity.

### The Blackbox

With a seating capacity of 200 and a standing capacity of up to 500, the blackbox is dedicated to experimentation. An elementary and neutral volume, with a modular tier system, allows for the implementation of multiple configurations. The walls are covered with black fiber-reinforced concrete slats whose pattern guarantees excellent acoustics. This skin integrates all of the technical constraints of a performance hall into its design: acoustics, stage connections, architectural lighting, ventilation, smoke extraction. The architectural identity of the hall is given by the illumination of vertical blades that constitute the acoustic pattern of the hall.

The two auditoriums are conceived as poetic spaces to provide emotions. Architecture prepare the performance and create a break between everyday life and the show.

« It may be, as Bachelard said, that all architecture is basically a poetic space, but that it is not possible to materialize it. However, if I tend resolutely towards the construction of such spaces, it is because today the environment in which we live seems to me to be out of whack, and we are only confusedly aware of our own existence; I hope that in this way architecture itself will give the sensation of existence, by establishing a contact with what is strongest and deepest in man. » Tadao Ando in *Thoughts on Architecture and Landscape*.

## MATERIALITY. EXPRESS THE INDUSTRIAL CHARACTER

The materiality of the project expresses the productive character of the building in the image of the

workshops for the production of sets and costumes. The materials used, both in the workshops and in public spaces, are raw materials that remind the industrial character: concrete, glass, metal and wood. They give unity to the project while differentiating between the programs that make up the building.

## **STRUCTURAL AND ACOUSTICAL APPROACH. « THE BOX WITHIN THE BOX »**

Construction of a theater so close to railroad tracks requires special consideration from a constructive, structural and acoustic point of view. In order to minimize the impact of train-related nuisances, Fres architects created a massive concrete structure, into which the two stage rooms are inserted, supported on independent structures which themselves rest on spring boxes. This principle allows a perfect disassociation of the two structures and avoids the transmission of sound pollution during a show.

In the rest of the building, the massive concrete structure allows to fight against the vibrations of the trains, particularly shear walls perpendicular to the railroad tracks. The principle of these walls makes it possible to easily create the cantilevers of the hall. This large space is free of load-bearing elements, amplifying the impression of lightness and transparency.

From a thermal point of view, the concrete structure provides great inertia, an essential factor in controlling energy consumption.

The theater is essentially composed of large volumes, with reduced load-bearing points, which can communicate with each other and accommodate various uses, allowing the great flexibility of the building. The large construction workshop is a volume of more than 550m<sup>2</sup> by 8m high without intermediate support. The rehearsal rooms have a surface of 600m<sup>2</sup> by 6,50m high also without support. The painting workshop and the manufacturing workshops are designed on the same principle. The use of hollow-core slabs lightened by hollow bodies makes it possible to achieve large spans with limited slab thicknesses and reduced material quantities.

The volume of dressing rooms and the artistic direction, located above the front room, is designed in concrete structure on the principle of a building-bridge, resting on the two concrete volumes of the vertical circulations.

## **CONSTRUCTIVE APPROACH**

From the structure to the execution detail, the building is thought in a rational way from the constructive point of view. The plan is modulated on a grid of 2.70 meters. This grid, based on a multiple of 30 cm, makes it possible to use standard construction elements and control the construction costs.

Facades are built on a single module, a 'brick' of 270 x 110 cm. The module can be declined in different types of panels, depending on the facades, orientations or other specific constraints.

The ribbon, which constitutes the enveloping skin of the building, is made of perforated aluminum cassettes that cover the facades and the roofs. Natural light can enter into work spaces and gives the building a unitary aspect. In the daily work rooms, painting and costume workshops, dressing rooms and administration, the panels are tilting to offer users a direct view of the outside.

## THE NEW COMEDIE. A SUSTAINABLE FACILITY

The Nouvelle Comédie is also a sustainable facility, designed to minimize its energy needs, with an efficient envelope and the bio-climatic management of large spaces, such as the hall and the galleries. The building is designed to cover all of its energy needs with renewable energies, and produces electricity by photovoltaic plant located on the roof.

### Fitted for the City of Geneva's Agenda 21

The building anticipates the strategies adopted by the City to disengage from fossil fuels, in particular for heating needs. The City aims to be supplied by 100% renewable resources by 2050.

### Energy concept

The Nouvelle Comédie is part of a neighborhood plan whose associated energy concept that has targeted the energy resources to be exploited preferentially, either solar potential for electricity production, and lake water for thermal energy needs (heating and cooling).

While waiting for the arrival of the energy infrastructure GéniLac, which is currently being studied, the heating and the production of domestic hot water (DHW) of the Nouvelle Comédie are ensured by an air heat pump (PAC). The latter operates in a reversible manner and also ensures the cooling needs of the performance halls and the control rooms. A biogas boiler provides back-up and emergency functions. This solution ensures that 100% of the New Comedy's energy needs are covered by renewable energy. The primary energy consumption of the building is 29.45 kWh(ep)/m<sup>2</sup>.an

Finally, the building is ready to be connected to Génilac as soon as it would be operational.

### Thermal quality of the envelope

The building has a high level of energy performance (HPE) and a thermal envelope with an insulation level equivalent to the thermal requirements of the Minergie label. The insulation is installed on the outside to limit thermal bridges.

With its glazed facade on the esplanade side, the hall works as a bioclimatic space. In winter, passive solar gain heats and reduces heat loss from adjacent buildings. In summer, natural ventilation is generated by a chimney effect due to the upper openings, ensuring a pleasant thermal comfort.

Most of the theater's spaces are ventilated by a high-efficiency double-flow system with heat recovery. These system save 26% of the heating needs.

### Electricity

The entire building is equipped with high-efficiency luminaires, maximizing direct lighting. It makes the most of natural lighting to reduce energy consumption through simple and efficient automation devices, presence and luminosity detectors.

### Local electricity production

The solar potential of the building is exploited to produce local and renewable electricity. The New Comedy allows the City to build its largest power plant, and increase its annual solar photovoltaic production by more than 50%.

A solar photovoltaic power plant is built on the roofs of the four volumes of the theater. Architecturally integrated with a total surface area of 1136 m<sup>2</sup>, these photovoltaic panels have a peak power of 153 kWp and produce approximately 154,000 kWh per year.

## THE RELATIONSHIP BETWEEN ARCHITECT AND CLIENT. BUILDING TOGETHER

The development of the project, following the competition, was carried out through an operational working group with the City of Geneva (project owner), the Canton of Geneva, the Association for une Nouvelle Comédie, the Comédie de Genève, and the architects; a working group that met every month for three years between 2010 and 2013. The purpose of this working group was to refine the competition project in order to create a theatrical facility that would meet the expectations of future users. This study monitoring system was recognized as an exemple by all participants.