



## *Leisure Facilities*

Auditoriums  
Theaters & Cinemas  
Sports Facilities  
Bars & Discotheques  
Shopping Malls  
Stores & Showrooms  
Restaurants



Photo © Paul Cotroneo, Enzo, Werner Hubmacher

# Gota de Plata Auditorium Theater

Pachuca, Mexico 2005

## ARCHITECT

Jaime Vance, Abraham Merlo, Ato Merlo, Miguel Arquitectos

## CLIENT

Government of the state of Hidalgo, Mexico

## PARTNERS

ITSA - Ingeniería Tlasoltepec de Industrias (structure and principal contractor), CTC Civil Engineers, AEF Engineers (electromechanical installations design), Luz y Forma (lighting and theatre mechanics design), Miguel Kuri Grining (ultraviolet and glass design), Eduardo Saad Ejean, Omer Saad (acoustic and acoustic design), Laboratorio Itali (floor mechanics)

## AREA

Total construction area: 190,700 sq. ft.  
Area: 75,330 sq. ft.

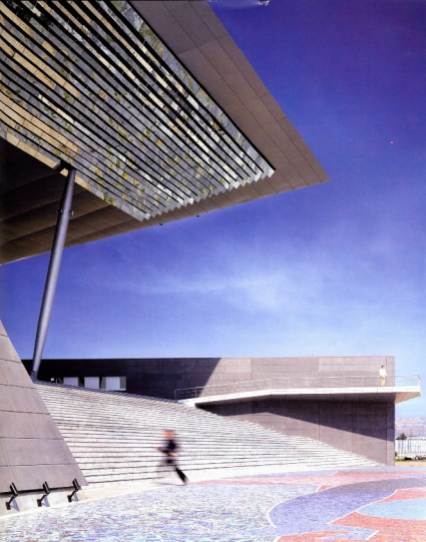
## PROGRAM

Culture auditorium in the David Ben Gurion complex

This theater-auditorium is situated in the city of Pachuca del Soto, the capital of the state of Hidalgo, 60 miles north of Mexico City. It is historically famous for mineral prospecting, particularly silver, making it one of the foremost mining centers in the country. Today, it is also a busy commercial and cultural center, with a wide variety of architectural styles.

The structure is part of the David Ben Gurion Culture and Recreation Complex, a 60-acre complex situated in the Zona Plateada. This culture and services complex was built thanks to public bodies and private developers who set up a partnership for a cultural community center for the inhabitants of Pachuca. A good many architects, builders, and even artists took part in the project. The nerve centre of the complex is a large elongated plaza, where a local artist, Byron Gálvez, designed a 250-by-1,300 ft. mural. The mosaic is made of small bright-colored tiles that form a 338,000 sq. ft. image. Around this area other amenities were built such as the Museum of Contemporary Art, Science and Technology Museum, Auditorium, Sculpture Park, Central Library, Convention Center, and finally a five-star hotel.

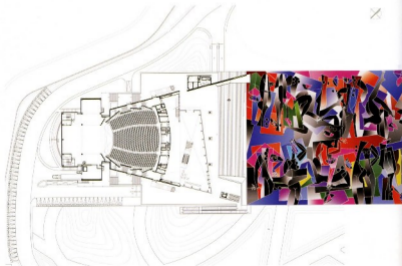
When the architects were told where the theatre was to be situated, they designed a building that would reflect the plaza's mural while acting as a vantage point for the work, so that visitors to the complex would feel visually attracted by this theater-plaza combination. The roof structure, at a height of 80 ft., managed to establish this two-way exchange. It acts like a mirror formed by reflective glass panes and juts out some 130 ft at both ends, supported by three large steel pillars. At the lower part of the building, occupying the same space as the roof, a vast podium gives access to the theatre and is, at the same time, a vantage point for the mural. The rest of the building is hidden behind a 50 ft. high structure of metal and glass panels, which serves as an anteroom to the complex. On the left are the elevator and access stairs, and on the right, the ticket offices. Inside, the backstage, the theater machinery and, in short, the entire complex, is contained in a stone structure. Its location is known as the Zona Plateada, which explains the choice of silver and black for the framework of the theater-auditorium. The name refers to a now-defunct silver mine in the zone.



However, this color scheme is in contrast to the interior, where the bright reds and browns of the stage and adjacent areas, predominate. Once again, the architects wanted to give a classic feel to the building, recalling the great theaters of the past. The theater holds 2,000 and the installers include the latest in sound technology. Various studies were conducted to find the right definition of angles and distances to the stage. The center aisles were done away with so that people could move around between the rows and on the edges. This resulted in the acoustics being perfect at any point in the auditorium. Similarly, the insulating material lining the interior walls keeps out outside noise.

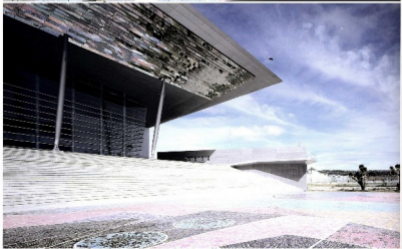
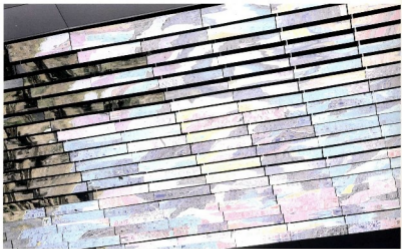
The building was completed in just eleven months, using material such as reinforced concrete, pre-cast concrete, steel, metal structures, and so on. Six concrete walls, each 2 ft. thick, were built in the center of the building, and another two outside support the entire roof. Some 1500 tons of steel were used, as well as 150 ft.-long frames and pre-cast concrete for the columns, beams, and piling. The lighting design was based on two concepts: serviceability and harmony with the architecture. To light the areas, small spotlights with indirect light were installed; they were brighter than usual because the building is also a concert hall.

*Sustainability and aesthetics are perfectly integrated into this piece of architecture. The facade, finished in silver and dark grey, measures more than 43,000 sq. ft., and is made of a mixture of black granite, cement, and concrete aggregates, which together give the appearance of natural stone. The main materials used were 1,500 tons of steel, glass, metals, and pre-cast concrete.*



Location plan











The architect decided to create a dialogue between the building and the extensive 1,200-by-400-ft. mezzanine situated in the central place of the David Lee Gordon Cultural and Recreation Complex. The geometric shapes of Bruce Galtner's work are clearly deconstructed in the reflecting glass panels 10-1/2 ft. from the ground. The primary colors contrast with the opaque grey shades that make up the facade of the theater auditorium. The vestibule is framed by a glass and metal structure that lets in plenty of natural light, creating straight visual lines.



