

# XIANDAI JIANZHU JICHENG 现代建筑集成



观演建筑



百通集团

辽宁科学技术出版社

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# 序 言

如果不包括“能”和“歌舞伎”等日本的传统舞台艺术所使用的场所的话，那么，日本的剧场和礼堂则是在明治时代以后的一个世纪期间出现的。当时的公会堂成了典型的礼堂建筑。接着，在战后的十年期间，各地又出现了一种典型的礼堂建筑，即当时遍及各地的用于集会的会馆。但是，那时的会馆几乎都是一些集会的场所，没有什么别的功能。之后的十年期间又出现了所谓的“多功能大厅”的建筑，当时以行政部门为主体开展了大规模的建设。因为这种礼堂建筑代表行政部门的形象，所以规模很大，建筑设施非常豪华。这种礼堂的功能并非特定，可以进行市民和行政部门的各种文化活动。它成了各行政区的文化中心建筑。但是这种礼堂建筑既不是剧场也不是音乐厅，而且也不是大会场，它被称作“大厅”。因为“大厅”这个名称能包容一切内容，它是一个功能分类不明确的名称。

另外，剧场和音乐厅是按照活动内容和用途而设计的，它的空间形状、音乐效果、舞台设备等空间机能都是按照其用途而设计的。这里的空间、技术和人员都是按场所使用目的而组织安排的，可以说，这种场所是协调了空间机能、技术实施和营运方式三者之间关系之后形成的艺术环境。这种专用的剧场、礼堂在日本早就以民间方式开始建设和运营，大部分的剧场和礼堂都按照特定的功能而规化、运营，每一个建筑都有自己独特的服务内容。

这样看来，民间的剧场、礼堂的应用目的明确，营业特性强。其中的公共建筑除了少数以外，大多数都是千篇一律的“多功能大厅”形式。其后，我国开始计划建设的能上演歌剧、戏剧的大规模剧场还是十年前从建造第二国立剧场开始的。作为一部分介绍剧场、礼堂建筑的书，向读者介绍剧场、礼堂的

发展历史固然重要，但本书编辑的目的主要是介绍最近建成的剧场和礼堂，因此，本书只收录了从多功能大厅转换为专用剧场这一期间建成的剧场和礼堂。这样，像上野的东京文化会馆这种在剧场、礼堂的建筑历史上具有划时代意义的建筑就没有收入本书。但是谁也不会忘记，像这样的名牌建筑成了后来建造剧场、礼堂的标准模式，我们必须记住它在历史上所起到的重要作用。

剧场要达到它专用的目的，并创造出有特色的艺术环境，必须不断充实它的各项功能，其运营机制要不断发展。我国的剧场建筑、舞台技术等硬件方面总是领先的，而软件建设却总是落后的、不同步的。这主要是由支撑舞台艺术的经济不景气 and 经营危机而造成的。

剧场和礼堂是展现人类艺术的场所，它的存在意义深远。尤其是在舞台上表现出的大部分内容是由人的形体去表现的，这是其他建筑的功能无法比拟的。因此，能够客观地传达人的微妙的感情表现成了这种建筑设计重点。要完成这种设计必须有尖端的技术和灵敏的感性。当然，为了满足演出的要求，舞台周围的构成也必须充分投入精力。舞台工作者经常提出批评说，设计人员不理解舞台周围的辐凑功能。看来这项设计必须与剧场、礼堂的运营同步进行。要得到实用可靠的设计，必须组成一个由剧场顾问和有关专家参加的设计联合体。

要特别注意的是，剧场、礼堂建筑是否成功的关键还在于一开始提出的规划设计是否可靠。正是在策划的最初阶段才需要剧场顾问和专业人员认真论证。当前，在设计剧场、礼堂时，关于规模的大小、剧场的特点等内容好像轻易就能确定，对此，不能不令人感到有潜在的危机。当然，从运营哲学来看，没有

热情就没有成功。但是，如果轻易地通过某项建筑设计计划，那么在工程进行过程中有可能要付出很多辛苦，甚至半途而废。

1993年在名古屋召开的世界剧场设计会议上，理查德·皮尔布罗（剧场顾问）的一席话令人耳目一新。他说：“当前，各地兴起了剧场、礼堂建筑热。怎样才能建成有价值的剧场和礼堂呢？对此必须确定一个方向。一方面是不停地建设，一方面又面临危机。这些危机包括舞台艺术活动缺乏营业价值、雇佣不稳定、缺少艺术家和技术工作人员、顾客数量不稳定、家庭影像文化兴起等。虽说剧场建筑面临困境，但是它却有一种永不消失的力量。只有剧场才有这种独特的魅力，这是一种振奋人心的魅力。台上的表演者会感受到充满活力的观众的存在，观众会影响表演者的情绪，使其产生一种魔法般的临场感。”

本书收录的剧场、礼堂建筑具有高度综合功能，通过书中的图和照片可以充分了解这些建筑中的音响、各种性能数据、舞台装备等特点。作为本书作者，为了收集各有关数据我已经尽了很大努力，但是，不能说书中所列的数据已经很充分，请读者把握住其中最主要的因素。本书收录的建筑中有许多新的创意，通过这些创意读者可以透视当今剧场、礼堂建筑的最新特征，从而预测未来的发展方向。

柳泽孝彦

TAK建筑、城市计划研究所代表



## Foreword

With the exception of theaters for the traditional Japanese performing arts such as Noh and Kabuki, the architectural history of theaters and halls in Japan begins with the public halls and auditoriums which came into being in the early Meiji era. During the decade or so after World War II, so-called "assembly halls" became popular as places for public gatherings and established themselves as the central elements in a network of public facilities. Their main role, however, remained as mere meeting places. The subsequent decade saw the emergence of what we know as "multi-purpose halls", promoted by the administration at different levels. Reflecting the policies of these bodies to promote cultural as well as economic activities, these halls tended to become large in scale and to be equipped with excellent facilities. They were built not to satisfy specific needs, but were broadly intended for cultural and public activities, and they quickly assumed the role of the core cultural facilities in the community. However, their paradox was that even though they were neither theaters, concert halls nor assembly halls, they were destined to accommodate a wide range of activities because of their classification as "halls". The term "hall" in its definition was quite ambiguous. With theaters and concert halls, spatial elements such as the configuration of the spaces, acoustic effect, and stage facilities are in general planned and designed to best suit the main function and usage, and the spaces, technology and human resources are organized with the intent of creating a specific artistic environment. From the early days of its history, architecture of this type has primarily been in the domain of the private sector in Japan. The majority of such facilities were planned and managed with a definite purpose and genre in mind, and each exhibited distinct characteristics in the selection of its programs and titles. In contrast to such private facilities serving specific purposes and managed under definite policies, most public facilities, except for a very few, fell into the general

category of "multi-purpose halls". It was only very recently, less than a decade ago, with the launch of the Second National Theater (provisional name) project, that a turning point was reached and we saw a move toward the building of large-scale theaters equipped specifically for full-scale opera and other theatrical performances.

While we think it important to look back at the history of theaters and halls, we decided to pursue our continuing editorial policy of concentrating on recent works, and have compiled this monograph showing theaters, concert halls and multi-purpose halls that were built in the recent transitional period. Even though some epoch-making buildings in the history of theaters and halls such as the Tokyo Festival Hall, are not included in this monograph, we should always bear in mind that they set the standard for those which followed and should be remembered when we consider the history of theaters and halls.

In order for a theater to serve its specialized purpose and create an artistic environment of a unique character, solid management with a view to future development and expansion as well as improvement of facilities is essential. However, in this country, greater emphasis tends to be laid on theatrical hardware, such as the architectural fabric and stage technicalities of theaters, while elements related to software tend to lag behind. We should be ever alert to economic and social situations which might threaten the existence of the performing arts, but we should also pay special attention to this imbalance of emphasis between hardware and software in the management of theaters. The role of theaters and halls as places where people discover and appreciate their true human potential has an immense significance. This is particularly true as most activities performed on the stage are the sublime expression of the physical nature of the human being. It is the task of architects, therefore, to enable the audience to experience directly the

subtle nuances expressed through the performing arts. This calls for architecture which is designed with keen sensibility and equipped with state-of-the-art technology. At the same time, it hardly needs saying that sufficient attention should be paid to the construction and plan of the stage and its surrounding facilities, which are the very means for bringing the performance into being. Designs which disregard the complicated functions around the stage often elicit criticisms from theatrical circles. Harmonious and smooth management of theaters and halls is expected of those concerned. Cooperation among consultants and specialists in the related fields has now become more readily available, creating a situation in which more reliable designs can be implemented.

Theater and hall facilities can thus be seen as hybrids, being the result of a complex multitude of factors. Various data such as that concerning acoustics and stage-related equipment, in addition to drawings and photographs, are an important source of information for readers in understanding the architecture. We have therefore endeavored to include as much of such data as was possible. They may be far from sufficient, but we hope that the readers will find them useful.

Richard Pilbrow (theater consultant) gave an impressive speech at the International Theater Conference '93 held in Nagoya. "In order that the current upsurge in the building of theaters and halls should not simply create fortresses of culture, we need to discover a direction that will give meaning to the theaters created. Parallel to this building activity, there is a crisis in the performing arts. Shortages of funding, uncertain opportunities for employment, a lack of trained artists and personnel, fickle audiences and almost overwhelming competition from television, film and video. Indeed, it has often seemed on the edge of terminal decline. Yet it possesses surprising tenacity. Why? Perhaps because alone among its more glamorous competitors it possesses something unique: it is alive. The presence of

a live audience has a palpable effect, and their excited reaction can inspire the performers."

However, I wish to emphasize that the success or failure of a theater may be decided at the very beginning of the planning process, and is dependent upon the reliability of the process of program development. Despite the fact that it is vital to include theater consultants and other experts in a thorough study at the earliest stages, in most cases the scale and character of theaters are decided in an ill-considered fashion, and I feel a strong sense of crisis. Needless to say, without an Intendant or Artistic Director it is impossible to formulate a production philosophy. Furthermore, it should be recognized that the design problems that arise as a result of these haphazard decisions can only lead to unsatisfactory results.

Theaters and halls included in this monograph all propose new concepts, and we are confident that the readers will be able to recognize the meaning of such buildings' existence in today's world, and hope that we can thereby inspire new thoughts for the future.

Takahiko Yanagisawa  
Representative,  
TAKAHIKO YANAGISAWA  
& TAK ASSOCIATED ARCHITECTS INC.

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# THEATERS & HALLS

New Concepts in Architecture & Design

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劇場／専用ホール Theater/Hall

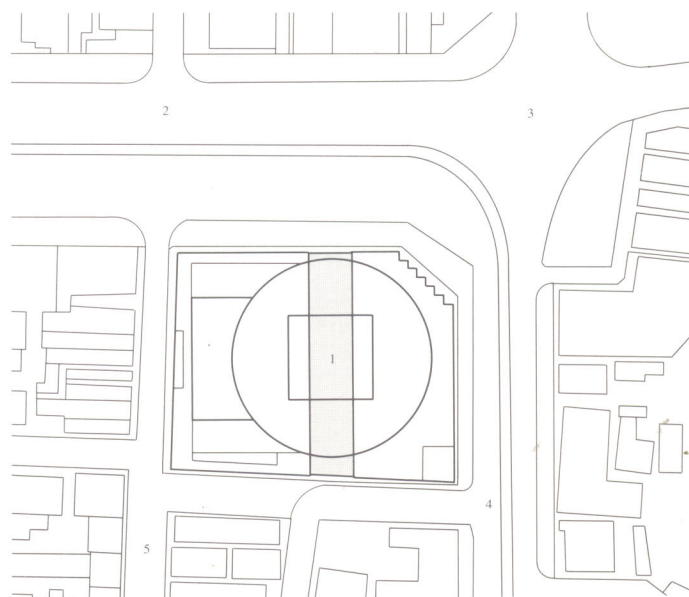


# 岡山シンフォニーホール OKAYAMA SYMPHONY HALL

芦原建築設計研究所+アール・アイ・エー  
Y. ASHIHARA · ARCHITECT & ASSOCIATES    RIA RESEARCH INSTITUTE OF ARCHITECTURE



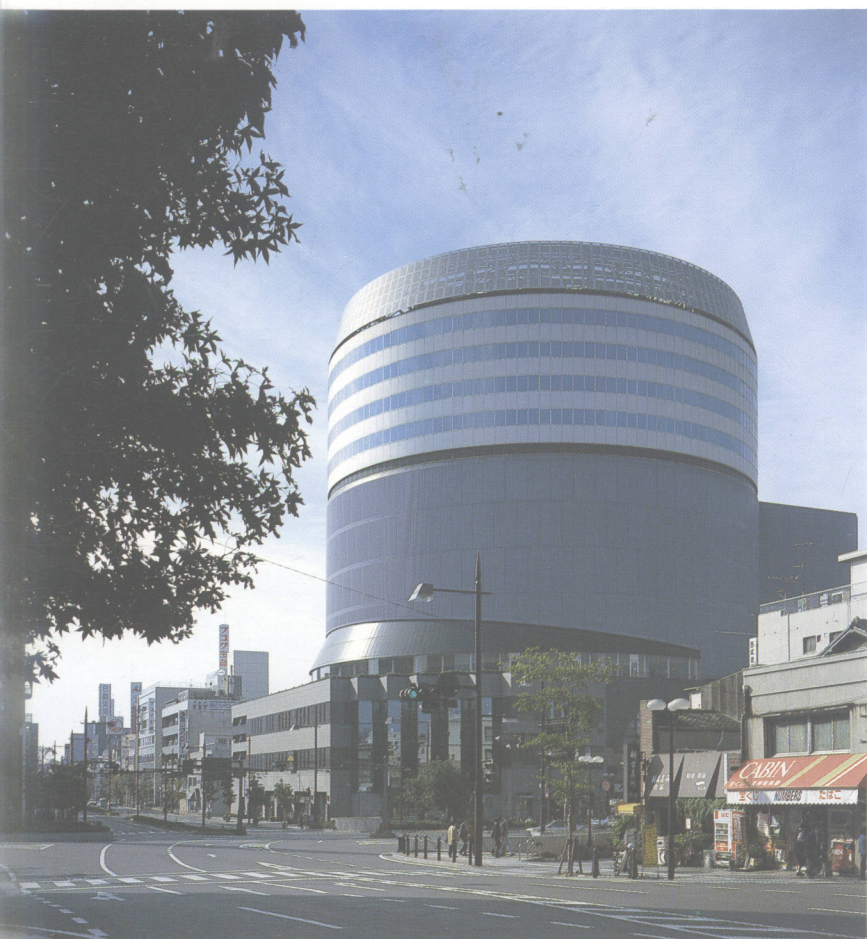
北東側全景 Overall view of northeast facade



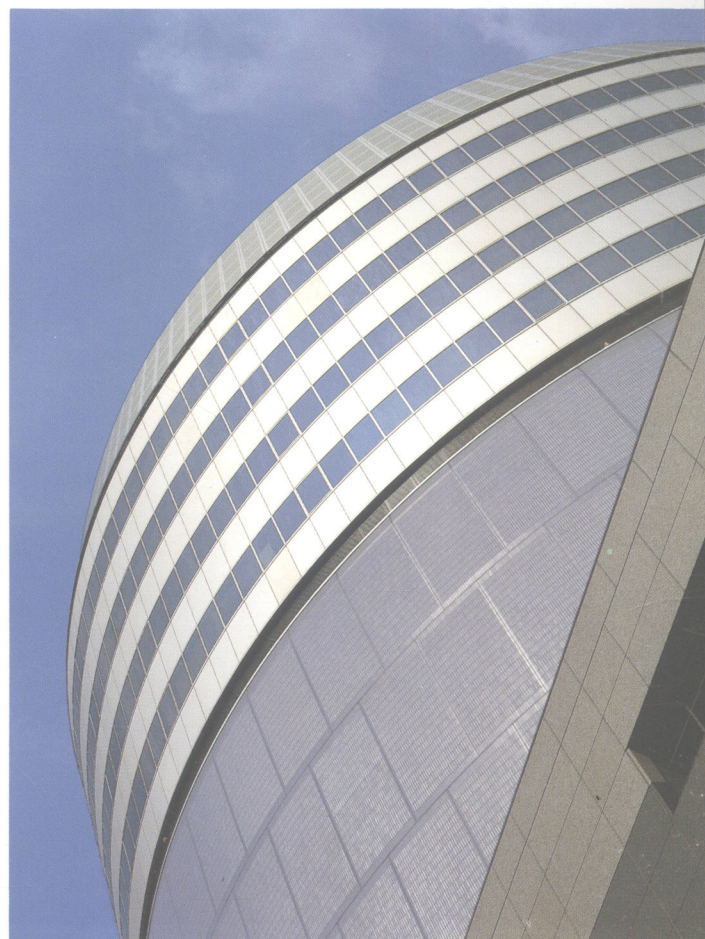
- 1 ガレリア Gallery
- 2 桃太郎大通り Momotaro Avenue
- 3 城下交差点 Johka Intersection
- 4 城下筋 Johka Street
- 5 表町商店街 Omotemachi Shopping Street

Site plan 1:2000





北東側外観 Northeast facade



外壁部分見上げ Looking up at the exterior walls



北東側全景 夜景 Overall night view of northeast facade





大ホール Main Hall

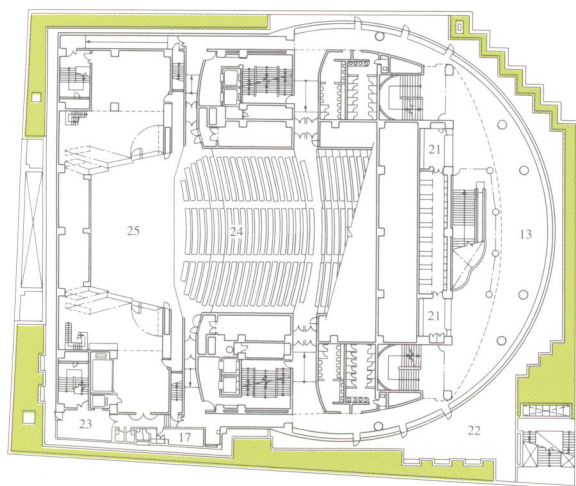


舞台より客席を見る Looking at the auditorium from the stage

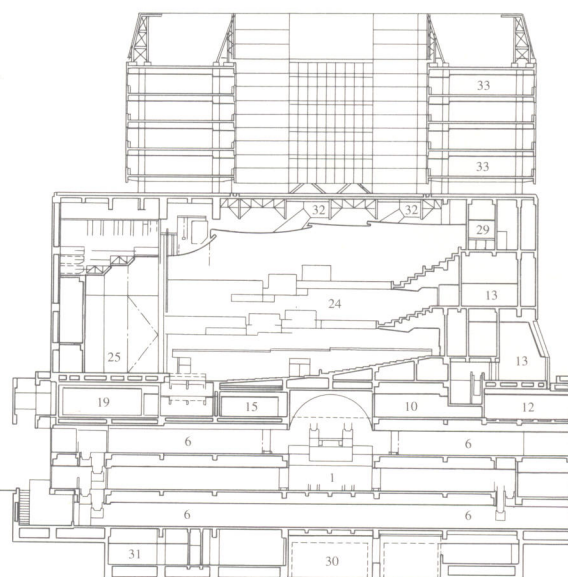




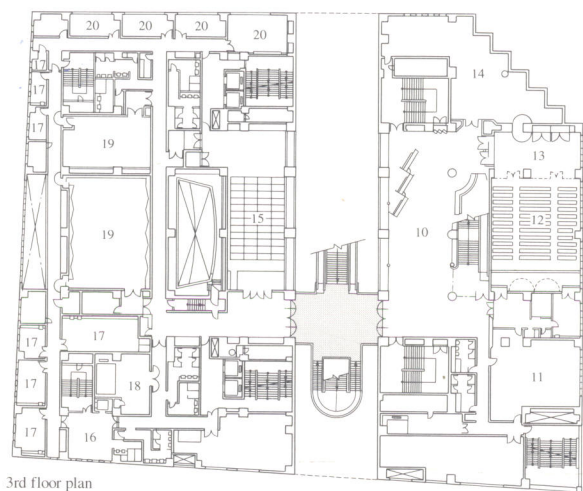




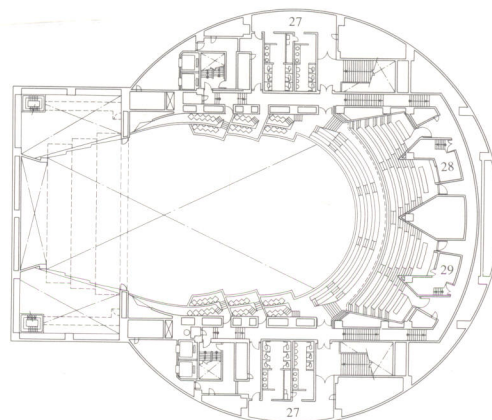
4th floor plan



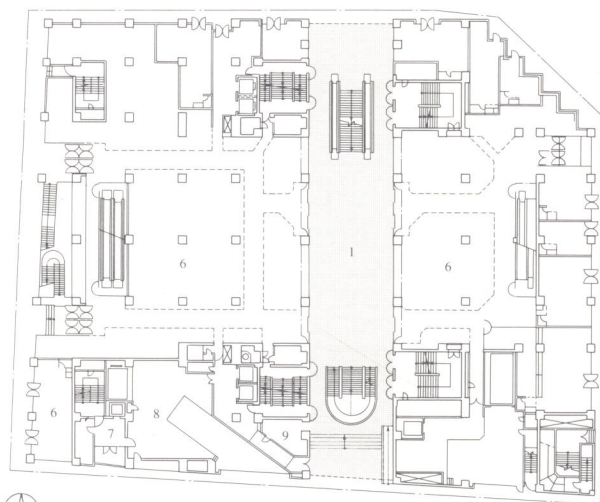
Section 1:1000



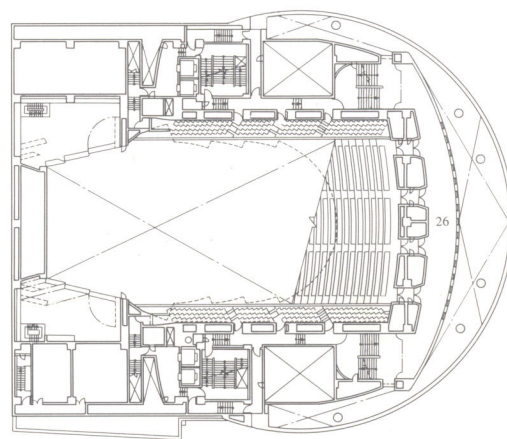
3rd floor plan



7th floor plan



1st floor plan 1:1000



5th floor plan

- |                                     |                                  |
|-------------------------------------|----------------------------------|
| 1 ガレリア Gallery                      | 20 控室 Anterooms                  |
| 6 店舗 Shop                           | 21 クローク Cloakroom                |
| 7 楽屋エントランス Backstage entrance       | 22 屋上庭園 Roof garden              |
| 8 ホール荷捌 Delivery handling area      | 23 オークストラロビー Lobby for orchestra |
| 9 防災センター Disaster Prevention Center | 24 大ホール Main Hall                |
| 10 エントランスロビー Entrance lobby         | 25 舞台 Stage                      |
| 11 ホール事務室 Administration office     | 26 廊下 Corridor                   |
| 12 イベントホール Event Hall               | 27 ロビー Lobby                     |
| 13 ホワイエ Foyer                       | 28 音響調整室 Acoustic control room   |
| 14 喫茶室 Tea room                     | 29 調光室 Light control room        |
| 15 和風ホール Japanese style hall        | 30 駐車場 Parking                   |
| 16 楽屋ロビー Backstage lobby            | 31 中央監視室 Central monitor room    |
| 17 楽屋 Dressing room                 | 32 投光室 Lighting room             |
| 18 ピアノ庫 Piano storage               | 33 事務室 Office                    |
| 19 スタジオ Studio                      |                                  |

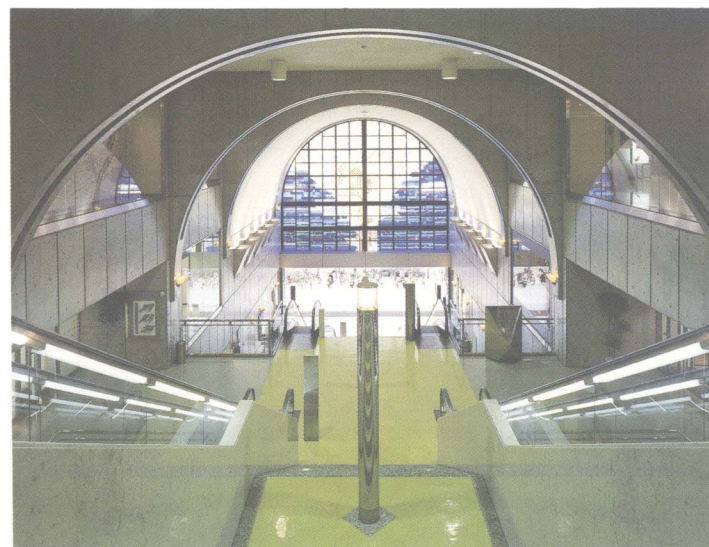




大ホールへの階段 Stairway to the Main Hall



4階 ホワイエ Foyer on the 4th floor



ギャラリー Gallery

岡山シンフォニーホールは文化の拠点として市の中心地の再開発ビルの中層部に計画された。ホールへは低層部を貫通するガレリアを通過してアプローチする。ホール自体はオーケストラによるクラシックコンサートを目玉とする本格的音楽ホールである。シューボックスを原型としつつ、バルコニー形状等空間に変化をもたせた。また小オペラや講演会等にも使用できるよう舞台廻りを工夫している。

The Okayama Symphony Hall, designed to serve as a center of culture, occupies upper floors of a building under an urban redevelopment project in the heart of Okayama city. A gallery that penetrates through the lower floors leads to the Hall, which is designed for classical music concerts by full-scale orchestra. Essentially based on the shoebox type design, the Hall is full of diverse features as represented by the shape of the balcony seats. The stage and its related facilities are designed with flexibility in order to accommodate the Hall to smaller scale operas and lectures as well.

所在地 岡山市

建築設計 芦原、アール・アイ・エー設計監理共同企業体

コンサルタント 構造：織本匠構造設計研究所

設備：新日本設備計画 音響：永田音響設計

建築施工 アイサワ工業・清水建設JV.

設備施工 電気：中電工（協力業者） 空調：ダイダン（協力業者）

衛生：斎久工業・太田設備工業JV.（協力業者）

舞台設備施工 音響：不二音響（協力業者）

照明：松下電工（協力業者） 機構：サンセイ（協力業者）

竣工 1991年9月

敷地面積 4,621.00㎡

建築面積 4,239.00㎡

延床面積 33,642.00㎡

階数 地上12階、地下2階

構造 鉄骨鉄筋コンクリート造、一部鉄骨造

撮影 ナカサ&パートナーズ

#### ●大ホール

主要目的 コンサート

収容数 2,001席 車椅子：20席

客席／舞台形式 3層バルコニー形式、シューボックス型

舞台寸法 20～14.5m×11m（190㎡）

音響 残響時間（500Hz 満席時）：2.0秒 残響可変装置：無

舞台設備 機構：音響反射板、オーケストラ迫り、プロセニウム

バトン、プロセニウムカーテン、引割カーテン、バトン15本、ライ

トバトン5本、ライトブリッジ1台、 Horizont 幕

音響：一般拡声用スピーカー

照明：300kVA/222回路

練習室数 大：1室、中：1室

楽屋数 大：1室、中：3室、小：3室

Location: Okayama-city, Okayama

Architects: Y. Ashihara - Architect & Associates

RIA Research Institute of Architecture

Consultants: Structural design: Takumi Orimoto - Engineer

M&E design: Shin-Nippon Setsubi Consultant Engineers Office

Acoustic design: Nagata Acoustic Engineer & Associates

General contractor: Joint venture of Aisawa Construction and Shimizu

M&E contractor: Electrical works: Chudenko Corp. (subcontractor)

Air conditioning: Dai-Dan Co., Ltd. (subcontractor)

Hygiene: Joint venture of Saikyu Kogyo and Ohta (subcontractor)

Stage equipment installation: Acoustics: Fuji Sound Co., Ltd.

(subcontractor) Lighting: Matsushita Electric Works, Ltd.

(subcontractor) Mechanism: Sansei Co., Ltd. (subcontractor)

Completion date: September 1991

Site area: 49,739.98sq.ft.

Building area: 45,628.17sq.ft.

Total floor area: 362,119.12sq.ft.

Number of floors: 12 floors above ground, 2 floors below ground

Structure: Steel framed reinforced concrete structure and steel structure

Photographer: Nacása & Partners Inc.

#### ●Main Hall

Main use: Concert

Seating capacity: 2,001 wheelchair spaces: 20

Audience/Stage format: Triple-balcony type, Shoebox type

Stage dimensions: 65.62 - 47.57ft.×36.09ft. (2,045.14sq.ft.)

Acoustics: Reverberation time at 500Hz (full house): 2.0 secs.

Variable reverberation equipment: No

Stage equipment: Mechanism: Acoustic reflector, Orchestra pit/apron

elevating stage, Proscenium batten, Proscenium curtain, Draw curtain,

15 battens, 5 lighting battens, Lighting bridge, Horizont Sound

effects: Amplification speaker Lighting: 300kVA/222circuits

Rehearsal rooms: Large: 1, Medium: 1

Dressing rooms: Large: 1, Medium: 3, Small: 3

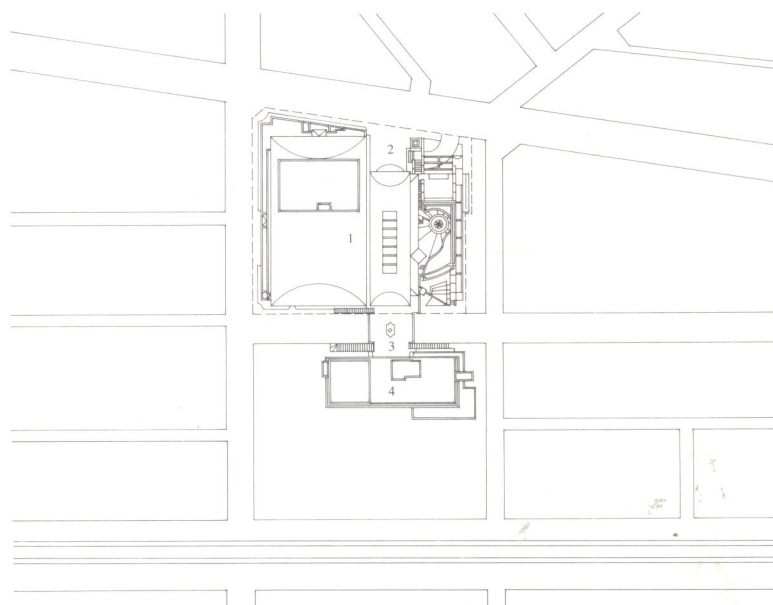


かつしかシンフォニーヒルズ  
KATSUSHIKA SYMPHONY HILLS

佐藤総合計画  
AXS SATOW INC.



北側エントランス外観 Entrance, the north side



- 1 本館 Main building
- 2 モーツァルト広場 Mozart Plaza
- 3 ペDESTリアンデッキ Pedestrians' deck
- 4 別館 Annex

Site plan 1:2800