The Yokosuka arts theatre is in the complex institution called The Bay Side Square Yokosuka. It has opened in February 1994, after decade of its conception. There is the Yokosuka art theater other than, office, a hotel, shops, gathering residences in this institution.

The Yokosuka arts theatre, with 1,806 seats, is designed as opera house. It is a horseshoe in plan with four layers of high balconies. The small hall called “The Bay Side Pocket” is designed for multipurpose space, having capacity of 600 seats, can be used as a flat level floor for a variety of performances. This paper reports on the acoustical design and results of acoustical measurements of the two halls.

Yokosuka-City is at the center of Miura Peninsula and there is the distance of about 50 km from Tokyo. The site for The Bay Side Square Yokosuka was the former site of the EM Club (Enlisted Men’s Club) which is an U.S. navy personnel meeting place at one time. The plot was returned from U.S. in 1983. The EM club was the birthplace of the jazz of Japan in the postwar, as it was continued in the EM club, a concert was carried out. Such a performance was supporting development of the music world of Japan.

The Bay Side Square Yokosuka was planned in this plot as the facilities that have the central role of the development of the culture and industry of Yokosuka-City. The Yokosuka Arts Theater is in the Bay Side Square Yokosuka. The Yokosuka arts theatre is designed as opera house with 1,806 seats. The small hall called “The Bay Side Pocket” was planned as the multi-purpose hall.

**BUILDING DETAILS AND ACOUSTICS DATA**

<table>
<thead>
<tr>
<th>Location</th>
<th>3-27 Honmachi Yokosuka-City Kanagawa, Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tel</td>
<td>046-828-1601</td>
</tr>
<tr>
<td>Architect</td>
<td>Kenzo Tange &amp; Associates</td>
</tr>
<tr>
<td>Acoustic Consultant</td>
<td>Nagata Acoustics, Inc.</td>
</tr>
<tr>
<td>Owner</td>
<td>City of Yokosuka</td>
</tr>
</tbody>
</table>

**The Yokosuka Arts Theater**

- Seating Capacity: 1,800
- Room Volume: 19,700 CM
- Surface Area: 5,300 SM
- Reverberation Time (Mid-Frequency)
  - With Orchestra Shell (Classic Concert)
    - Unoccupied: 2.3 sec
    - Occupied: 2.0 sec
  - Without Orchestra Shell (Opera, Drama)
    - Unoccupied: 1.7 sec
    - Occupied: 1.4 sec

**The Bay Side Pocket (Small Hall)**

- Seating Capacity: 500 seats
- Room Volume: 6,700 CM
- Surface Area: 2,200 SM
- Reverberation Time (Mid-Frequency)
  - Unoccupied: 1.4 sec
  - Occupied: 1.2 sec

**Finishings Materials**

- Ceiling: gypsum board (12mm × 2 layers)
- Wall: Marble pitching (30mm), exposed concrete
- Floor: flooring block
- Seat: Upholstered

**Noise Level**: NC – 20
Acoustical Design of Yokosuka Arts Theater

The Yokosuka Arts Theater View from the Audience Area

The Yokosuka Arts Theater View from the Stage

The Bay Side Pocket (Small Hall)

Orchestra pit is narrowed.

Orchestra pit is widened.

Consisting of three telescoping flat archs

ORCHESTRA PIT

ORCHESTRA SHELL