“MUZA” Kawasaki Symphony Hall Opens

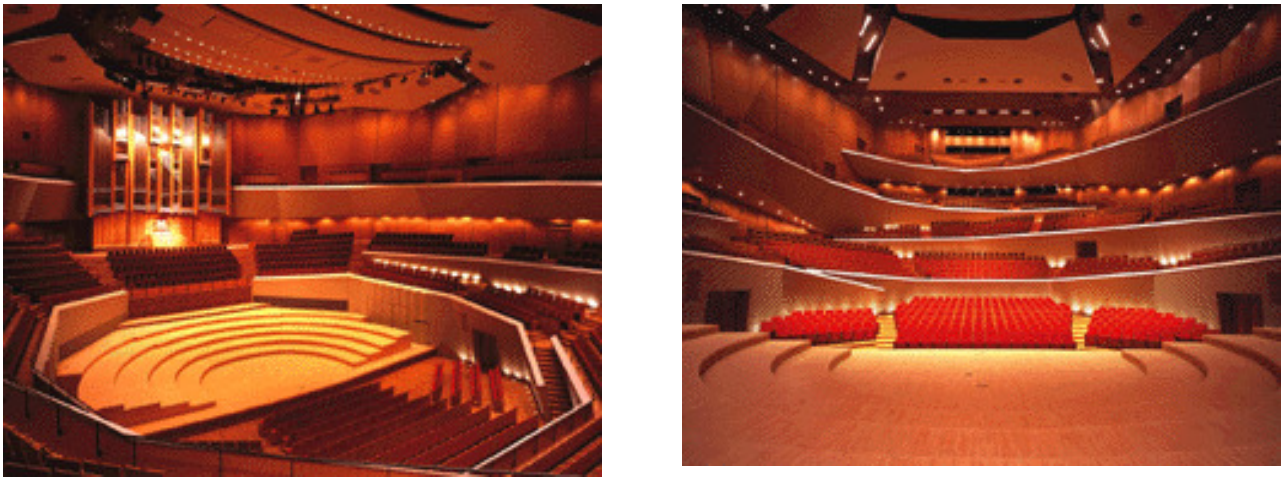
By Akira Ono

On July 1, 2004, MUZA Kawasaki Symphony Hall opened with a gala inauguration concert by its resident orchestra, the Tokyo Symphony Orchestra, under the baton of its long-time conductor, Maestro Kazuyoshi Akiyama. The program featured Mahler’s Eighth Symphony, “The Symphony of a Thousand.”

True to its name, “The Symphony of a Thousand” is a powerfully dramatic composition that rises to a memorable climax at its conclusion, making it seem an appropriate choice for an inauguration. However, because this work requires a large chorus, this program selection necessarily created a difficult challenge for the conductor and performers who were still new to the hall, demanding that they achieve unity of breath and timing in the still unfamiliar venue. A lack of coordination would have been sufficient cause for unfavorable reviews. Nevertheless, at MUZA Kawasaki Symphony Hall’s opening gala, the performers met the challenge superbly and to strong laudatory acclaim. The successful opening left all involved with a happy sense of relief and accomplishment.

Planning the Hall as Part of a Larger Complex

MUZA Kawasaki Symphony Hall is part of a new complex planned as the Kawasaki Station West Redevelopment Project on land at the western exit of the Japan Railroad’s (JR) Kawasaki Station. The public planning commission, which began under the name ”Toshi Kiban Seibi Kodan” (Urban Development Corporation) and is now named “Toshi Saisei Kiko” (Urban Renaissance Agency), retained MHS Planners, Architects & Engineers as the architect for the overall project and ACT Planning for the concert hall’s design.



MUZA Kawasaki Symphony Hall
Stage view (upper) and Audience view (lower)

The redevelopment project included a 27-story office tower and a separate concert hall building connected by a multi-story, glass-enclosed shopping Galleria. A pedestrian deck facilitates access between JR Kawasaki station and the new buildings.

Based on the expected flow of foot traffic to-and-from the train station and through the buildings, and because of other overall project constraints, the project plans located the concert hall building on the train station side of the site. At their closest point, the concert hall building is only 30 m. (33 yards) from the railroad tracks, a distance that makes the building very susceptible to vibration from passing trains.

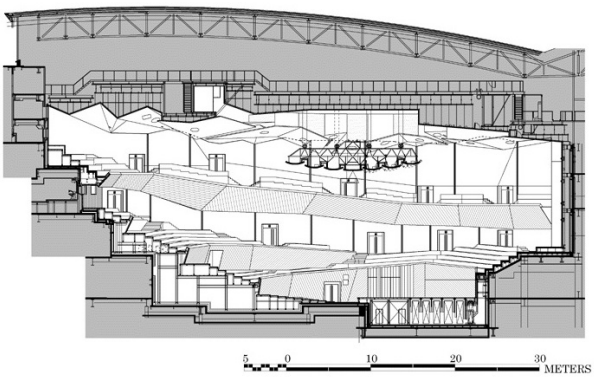


Figure 1: Section of the hall

The Hall's Anti-noise and Anti-vibration Needs

Our anti-vibration strategy for the concert hall building began with the construction technique of adhering rubber panels to the underground frame of the building and included other major structural anti-vibration measures. In addition to the vibration from passing trains, the basement floors of the concert hall include a garage with sliding machinery for stacking parked cars, creating another source of noise and vibration. Isolating the concert hall from this noise and vibration was another key aim of our acoustical design. During our post-construction evaluations, we confirmed that the vibrations and noise from passing trains and the operation of the parking machinery cannot be detected at all by human beings in the concert hall.

Concert Hall Room Acoustical Design

The concert hall's room design is based on staggered blocks of seating placed around the stage in a vineyard configuration. The distinctive feature of the configuration's design is that the staggered blocks of seating rise in a spiral pattern, so that the horizontal plan of the hall is asymmetrical.

We installed large, sound-reflecting acoustical panels above the front portion of the stage and extending out over some of the first floor audience seating. The height of these overhead panels can be controlled electrically to adjust the hall's acoustics. Additionally, the electrical controls enable adjustments to the angle of a portion of the panels.

The spiral shape of the concert hall's walls, the overhead acoustical panels and sound-reflecting surfaces at the ceiling that we shaped to form an envelop around the acoustical panels, together evenly balance the sound reflections and the timing in which the sound reflections reach both the audience and the stage. We achieve the balance in both quantity and timing of the sound reflections through precise control of the shapes and angles of all of the hall's sound-reflecting surface elements.

In addition, we made the hall user-friendly for events other than acoustical musical performances (specifically, events that use sound amplification and require excellent speech intelligibility) by installing acoustical curtains at the rear of the stage. The acoustical curtains are operated electrically.

The Resident Orchestra's Role During Hall Design and Construction

Initially, plans for MUZA Kawasaki called for a multipurpose hall. As more detailed planning progressed, the client entered into discussions with the Yomiuri Nippon Symphony Orchestra with the aim of that orchestra becoming the new hall's resident orchestra. The decision to implement a vineyard configuration concert hall came from the client's expectation that a major Japanese orchestra would enter into a resident-orchestra franchise agreement with the new hall.

However, for reasons that need not concern us here, during the hall's construction phase, the Yomiuri Nippon Symphony Orchestra removed itself from the project and from the franchise discussions. Thereafter, the client (Kawasaki City and the public redevelopment corporation) gave serious consideration to how the vineyard configuration hall could be made usable as a multipurpose hall. The reevaluations of the design included not only the hall's vineyard configuration, but also many elements of the stage details and room acoustical designs that we had incorporated to meet specifications provided by the Yomiuri Nippon Symphony Orchestra. The project proceeded to reconsider and re-work numerous hall requirements.

One of the hall's requirements raised for reconsideration was the modular stage-floor riser mechanism. The client questioned if the riser mechanism should be removed from the scope of the project, since there are many halls that do not have this feature. In order to make a decision, Kawasaki City decided to hold hearings at which it solicited the recommendation of Tokyo's orchestras. (Tokyo is home to more than 10 professional orchestras.) As a result of some discussions and conversations during the hearings, Kawasaki City was able to negotiate a resident-orchestra contract with a different orchestra, the Tokyo Symphony Orchestra.

From our perspective as the project's acoustical consultant, we received the news of the franchise contract with the Tokyo Symphony Orchestra with welcome ears, and we immediately made every effort to adapt our design and specifications to the requests of the Tokyo Symphony Orchestra. The resident orchestra's office, practice room, locker rooms and instrument storage room had already been removed from the building plans. We added them back into the project. We made changes to the modular stage-floor riser mechanism to meet the specific requirements of the Tokyo Symphony Orchestra's players. In our opinion, the adaptation and implementation of the stage-floor riser-mechanism will have a significant influence on the Tokyo Symphony Orchestra's creation of its own unique sound in its new home hall.

The Resident Orchestra's Role during Hall Tuning

Regardless of the unexpected turn of events leading up to a resident orchestra's association with a hall, a resident orchestra's presence makes a significant impact on a hall. The meaning of having a resident orchestra associated with a hall goes far beyond an orchestra's scheduling a series of regular subscription concerts there.

In the case of MUZA Kawasaki Symphony Hall, as soon as the hall's construction was complete, the orchestra began practicing in the hall. With each practice session, the orchestra rotated its conductors and played different works from its repertoire. One could hear the musicians becoming accustomed to the hall and the change in the sound and impression the orchestra produced. One could hear the orchestra's confidence grow as it became convinced that the hall would not disappoint the audience.

After the installation of the hall's Swiss-made Kuhn organ, we adjusted the height and angle of the overhead acoustical panels while listening to comments and opinions from the orchestra's players. At first, the players said they could not hear the other instruments, but with the fine-tuning of the acoustical panels, the ability of the musicians to hear themselves improved dramatically. The musicians' positive attitude as we worked with them to achieve the desired result was evidence of the trust they developed for the hall's ability to provide fine acoustics.

The orchestra is still perfecting its use of the stage-floor risers and will require more experience performing in the hall to achieve the best set-up for each composition and each program. The Tokyo Symphony Orchestra's new musical director, Maestro Hubert Soudant eagerly tests different riser heights when he prepares the orchestra for new compositions and we are certain that his experimentation will be well rewarded as he finds precisely the height he wants for each program.

MUZA Kawasaki's Early Successes

Since MUZA Kawasaki's gala opening concert, the hall's classical music concerts have performed to sell-out and near sell-out audiences. We hear that the hall's subscription concert series is also selling well. Some commentators in Japan asked why a municipal government was spending money on a large-scale concert hall at this point in time. Kawasaki City has a goal to be a City of Music. The new concert hall, with its resident orchestra securely at the helm, surely seems poised to move Kawasaki City towards its self-proclaimed goal. It sounds like this could well be the right answer to the question of why the city funded the MUZA Kawasaki project.

The MUZA Kawasaki website address is https://www.kawasaki-sym-hall.jp/index_e.php.