

SAPPORO ART PARK OUTDOOR STAGE

SAPPORO CITY, HOKKAIDO, JAPAN
2004

NAGATA
ACOUSTICS

Acoustic Consultant:	Nagata Acoustics, Inc.
Architect:	Hokkaido Architects & Urbanists
Capacity:	500 chairs + Grass seats
Construction Cost:	6.2 billion yen

In March 2004, the Sapporo Art Park completed the construction of its newest addition, an outdoor stage for music concerts and other performing arts events. Previous to commissioning the building of the outdoor stage, Sapporo City constructed an art museum and Sapporo Concert Hall "Kitara" on the grounds of Sapporo Art Park. The outdoor stage project is considered the coda of the suite of new structures planned by the city for Sapporo Art Park.

<< Overview of the Project Design >>

The roof design of the outdoor stage gives the impression of a soft, billowy cloud floating down to the park from the heavens. The strikingly modern design blends beautifully with the park's natural greenery. The stage is 24 m. (79 ft) wide by 16 m. (52 ft) deep, doubling the stage floor area of the previous, temporary stage and making concerts possible by ensembles with up to 200 players.

At its forward-most point, the roof hangs 18 m. (59 ft) above the ground. The backstage area has nine dressing rooms of assorted sizes, as well as storage space and extra lavatory facilities. These support rooms are available for use by both the Pacific Music Festival performers and by other performers and events.

<< Acoustical Specifications for the Project >>

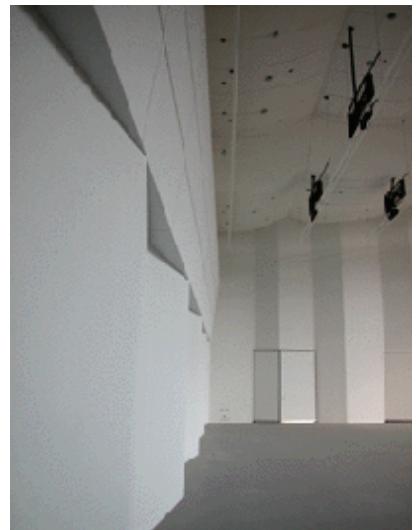
Nagata Acoustics' acoustical design focused on the stage and the 500-person audience seating area under the roof's extended overhang. We provided specifications for the shape of the ceiling and stage's walls.

Concrete is the material the architect chose to build the almost entire structure. For the lower part of the stage rear wall and the side walls, we implemented a "zigzag" pattern of surfaces, shaped like a folding screen that has been partially stretched open. The upper portion of the rear wall of the stage is also not a straight wall. Rather, we specified a horizontally "folded" or "zigzag" pattern, with slits, for this portion of the stage rear wall.

The ceiling of the stage and the overhang were fabricated with sections of poured-on-site concrete to achieve the curved surface we required. In addition, from front to back, we specified several grades or stepped variations.



OUTDOOR STAGE



STAGE SECTION