HARMONY HALL FUKUI

FUKUI, JAPAN 1997



Acoustics Consultant: NAGATA ACOUSTICS, Inc.

Architect: NIKKEN SEKKEI

Owners: Fukui Pref.

Sound & Communications: NAGATA ACOUSTICS, Inc.

Construction Cost: ¥ 9,266 Million JPY

The facilities of The Harmony Hall Fukui are composed of three blocks: the Main Hall Zone, a Recital Hall Zone, and an Administrative Office Zone all on the same level.

Harmony Hall Fukui was constructed on a spacious site of about 67,000 m² located 4 km south of Fukui City.

The Main Hall, which seats 1,456 persons, is designed as a concert hall with a shoebox configuration. Seats behind the stage are also allocated for the chorus, when required. The spaces offer a sense of intimacy and oneness between the stage area and the audience area.

The room shape of the Main Hall was studied using a computer simulation technique during the design stage, and the details of the walls and ceilings were studied by means of 1/10 scale model experiments before starting the construction work. In order to achieve a diffuse sound field both in the early reflections and reverberant sound, rib form elements with irregular pitch were installed on the side and rear walls.

In Japan, public concert halls in regional cities are often used for miscellaneous programs such as meetings, ceremonies and lectures. In order to obtain good speech articulation in the sound system, a sound absorbing curtain system hanging from the ceiling and covering the side and back balconies around the stage was introduced.

The Recital Hall is designed as a small hall seating 610 persons. The seats surround the stage with staggered balconies, creating what may be call a "mini arena" configuration.

BUILDING DETAILS AND ACOUSTICS DATA

Location 40-1-1 Imaichimachi Fukui-City

Fukui Prefecture

Tel 0776-38-8280
Seating Capacity 1,456 seats
Room Volume 19,800CM
Surface Area 6,000SM
Stage Area 275SM
Reverberation Time (Mid-Frequency)

Unoccupied 2.2 sec Occupied 2.0 sec

Finishing Materials

Ceiling : GRC panel Sidewall : artificial wood

Rear wall: acoustically transparent grid

+glass fiber wool

Floor : flooring block
Seat : Upholstered

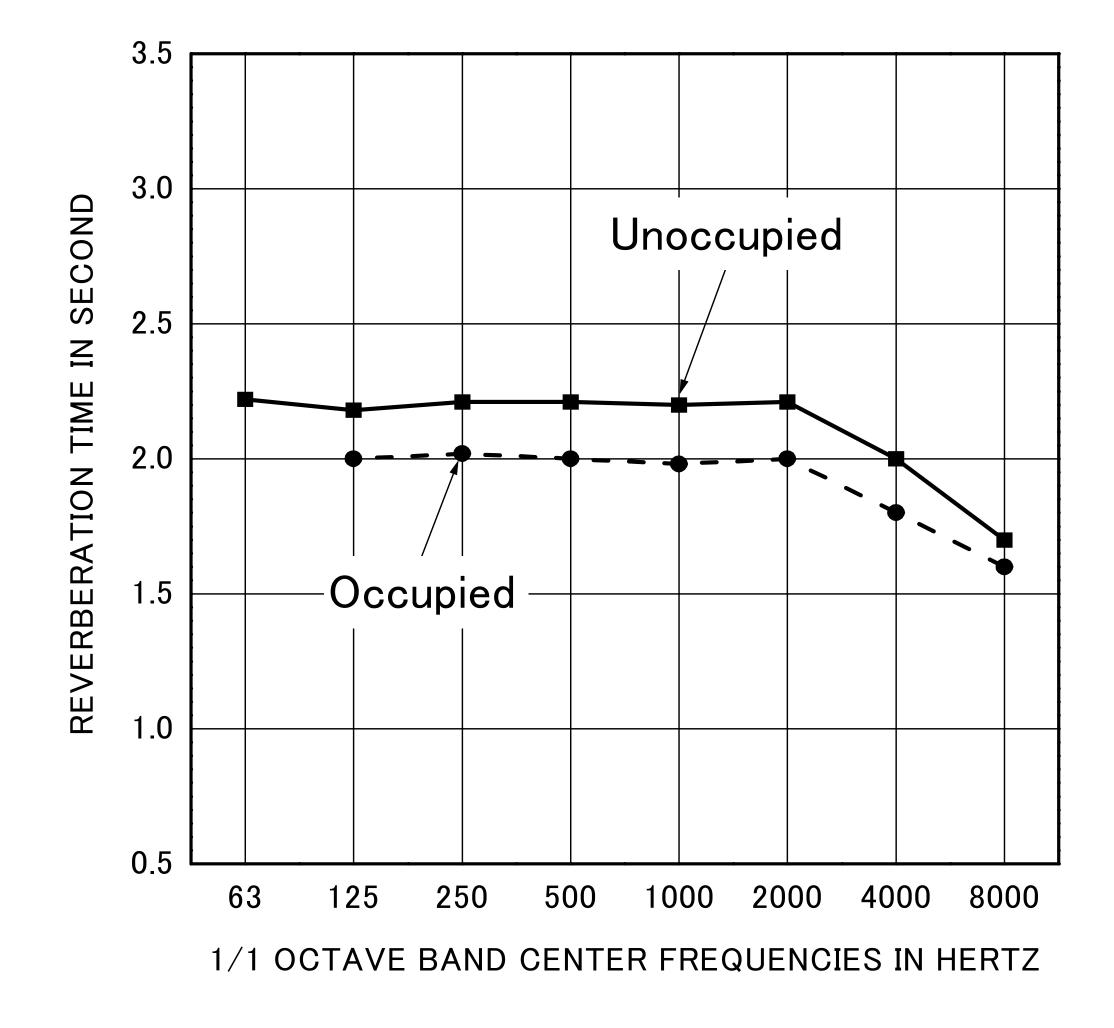
Miscellaneous : acoustic curtain Organ : will be installed in future.

Noise Level: NC-15

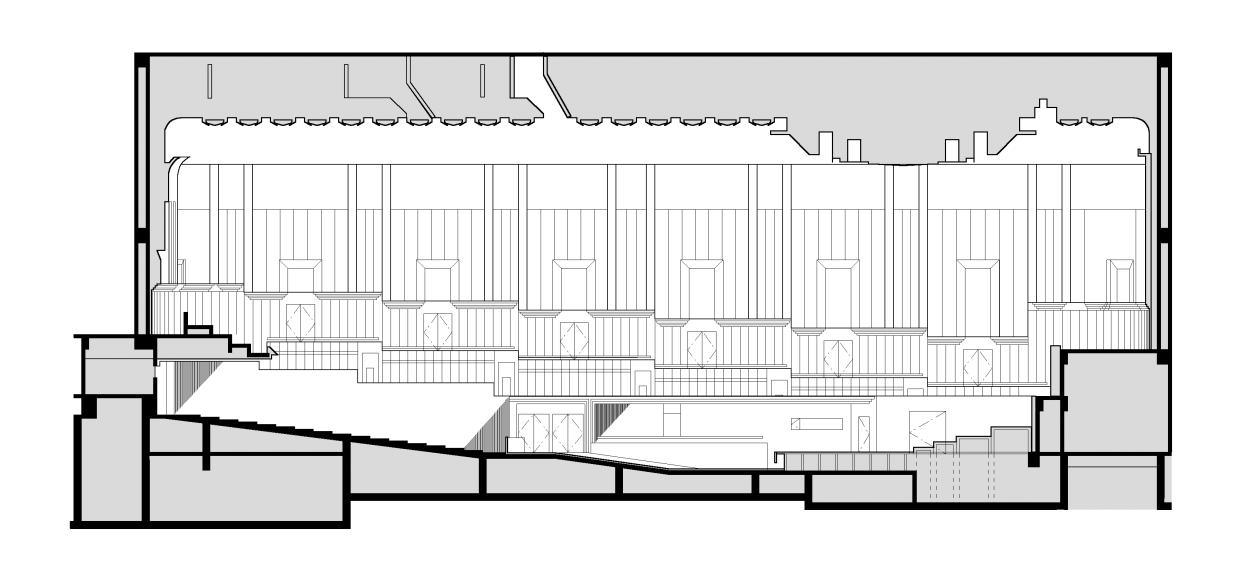
Other Facilities: Small for chamber music

Music practice rooms

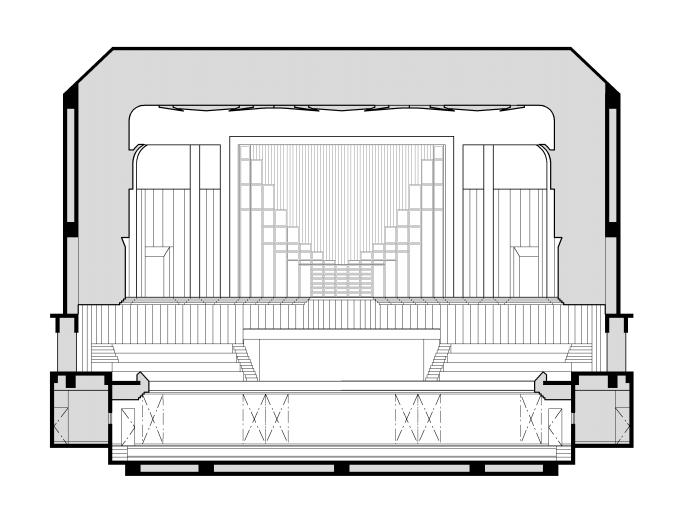
Total Cost: ¥9,266 Million JPY



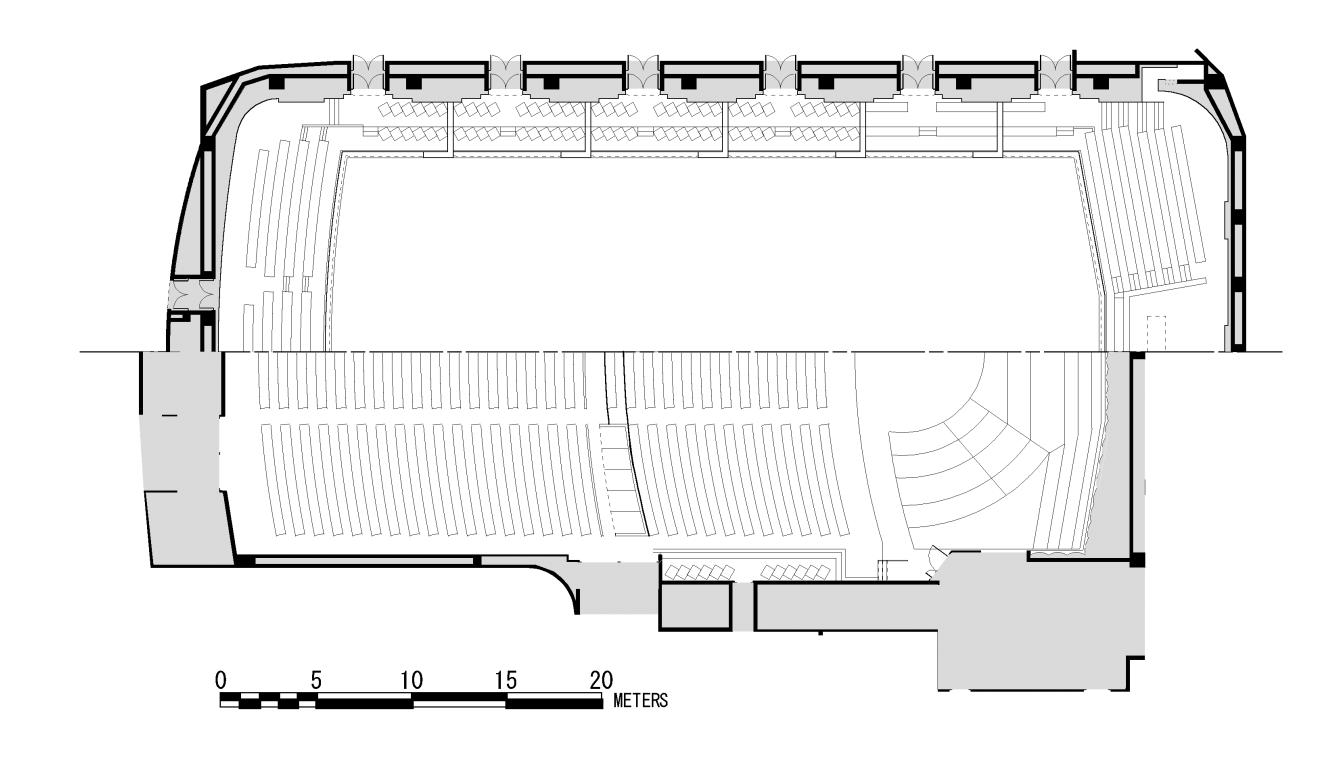
REVERBERATION TIME



LONGITUDINAL SECTION

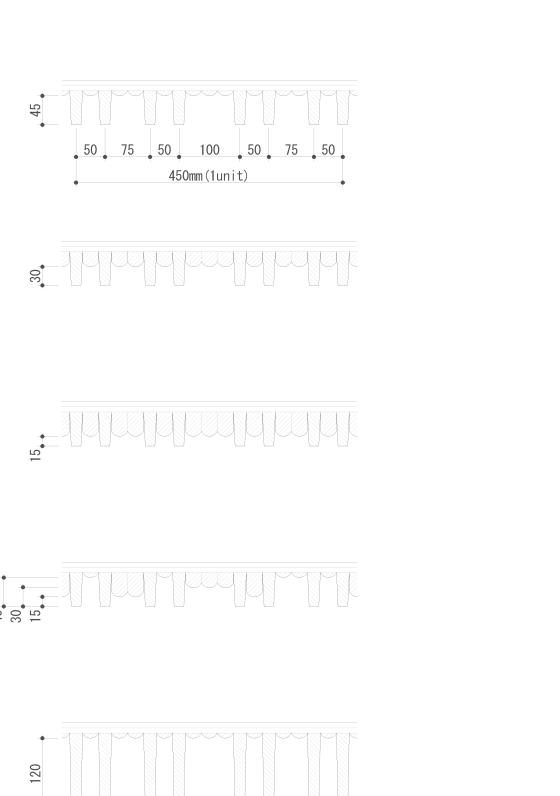


TRANSVERS SECTION



PLAN





DETAIL OF GRID FORM ELEMENT



