

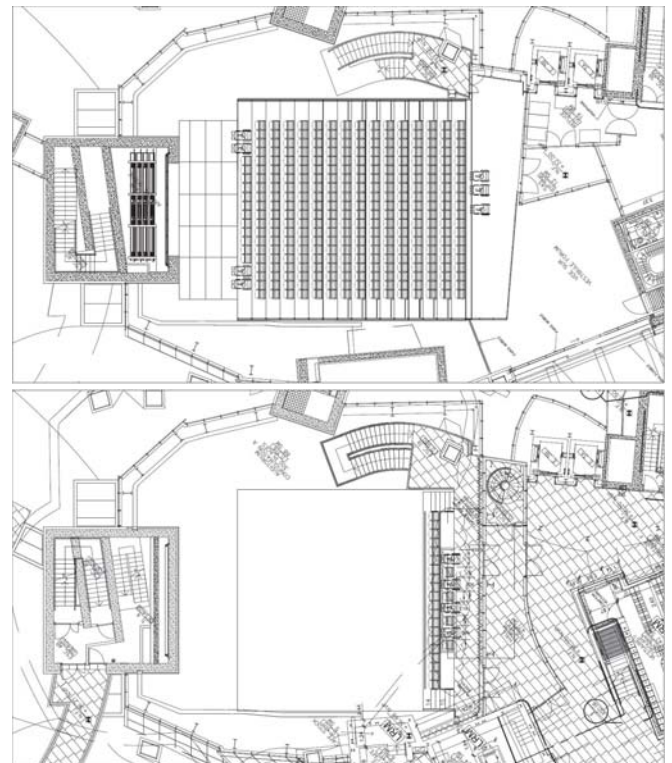
Acoustic Consultant:	Nagata Acoustics (<i>room acoustics</i>) Lamoureux Acoustics (<i>sound isolation & noise control</i>)
Architect:	Gehry Partners, LLP
Owner:	Fondation Louis Vuitton
User:	Fondation Louis Vuitton

Fondation Louis Vuitton, founded in 2006 by LVMH group, is an art museum located at the western edge of Paris, in Bois de Boulogne park. Its main goal is to promote and support contemporary art for French and international audiences. The museum has 11 exhibition spaces of varying sizes and an Auditorium, and was designed by American architect Frank Gehry. Nagata Acoustics served as acoustical consultant for the room acoustical design of the Auditorium.

The Auditorium serves as a multipurpose performing space. It is equipped with movable seating rows to adjust the seating rake and capacity, as well as deployable acoustical banners and black-out curtains. Since the project also required that the space be suitable for live classical music performances without the use of any electronic sound enhancements, the acoustical design focused primarily on the room shape and the choice and placement of interior materials.

The abundance of glazed surfaces posed one of the main challenges to the acoustical design of the space. Smooth and flat glass surfaces were limited to the upper portion of the space, while curved glass panels were introduced in the lower portions to diffuse direct sound reflections. Massive movable sound reflectors, made of thick cast aluminum, project the sound from the stage and improve acoustical communication on stage. The walls and ceiling alternate reflective and absorptive panels behind an acoustically transparent grid unifying the visual aspect of surfacing and creating sound diffusion.

PLANS



BUILDING DETAILS AND ACOUSTIC DATA

Location : 8 avenue du Mahatma Gandhi
75116 Paris, France

Building Size : 11,700 m²

Seating Capacity : 350

Room Volume : 6,000 m³

Reverberation Time (500Hz Octave Band)

Unoccupied : 1.3 sec (0.7sec w/ curtains)

Occupied : 1.2 sec

Finish Materials

Ceiling : MDF+steel / glass wool

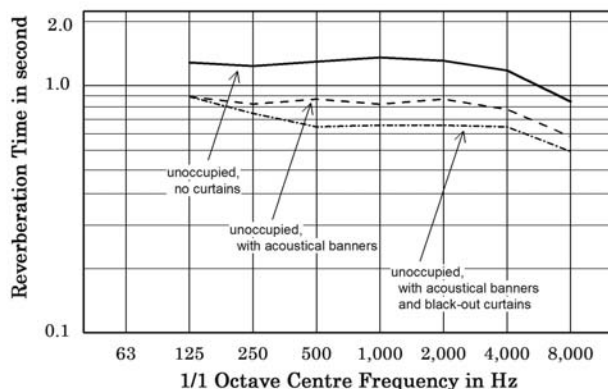
Walls : MDF+steel / melamine foam

Surface finish : Hi-macs open grid

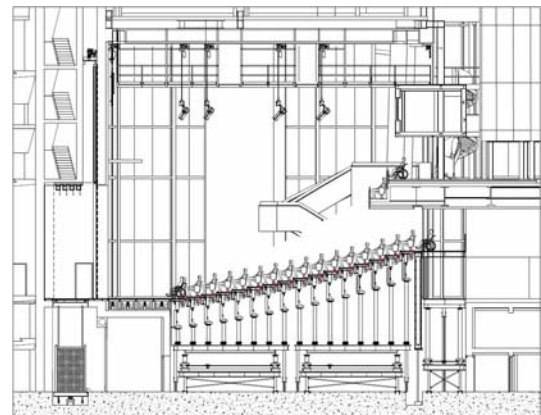
Stage Reflectors : cast aluminium

Glass façade : curved panels at bottom

REVERBERATION TIME



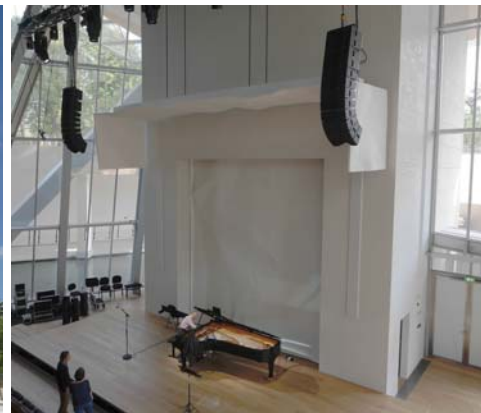
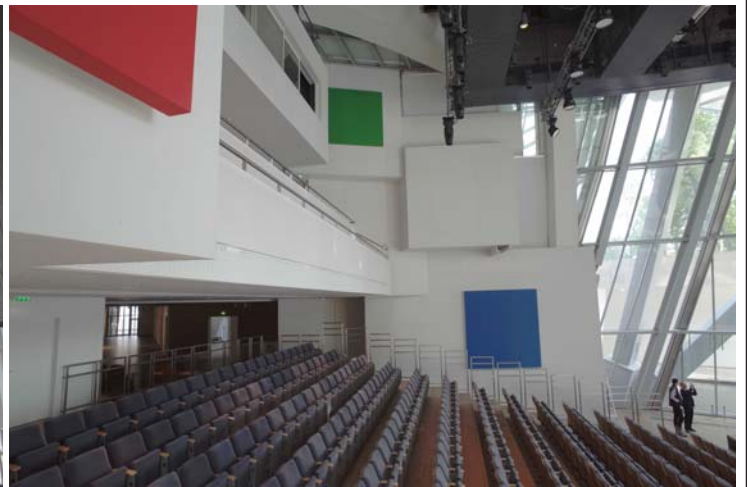
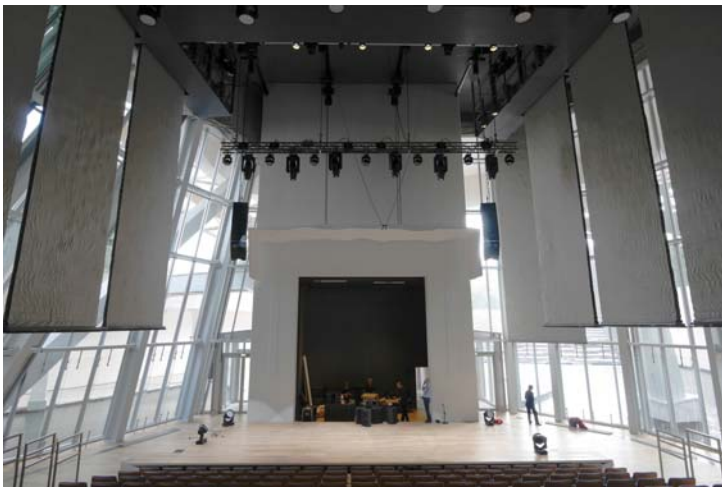
LONGITUDINAL SECTION



AUDITORIUM, FONDATION LOUIS VUITTON

PARIS, FRANCE
2014

NAGATA
ACOUSTICS



Clockwise from top:

- View from balcony
- Balcony and art installation
- Stage tower and reflectors
- Exterior
- Banners deployed