

Danish Radio Concert Hall, Copenhagen



Project Report Danish Radio

"Architecture is like music; it is made to move and delight us." Jean Nouvel

Lindner was part of the project to build one of the most modern and momentous concert halls in the world. Our core competence in building studios and concert halls contributed significantly to the new architectural landmark in Denmark: Danish Radio Concert Hall.

Architect: Ateliers Jean Nouvel, Paris Client: Danish Radio, Copenhagen Acoustics: Nagata Acoustics, Tokyo

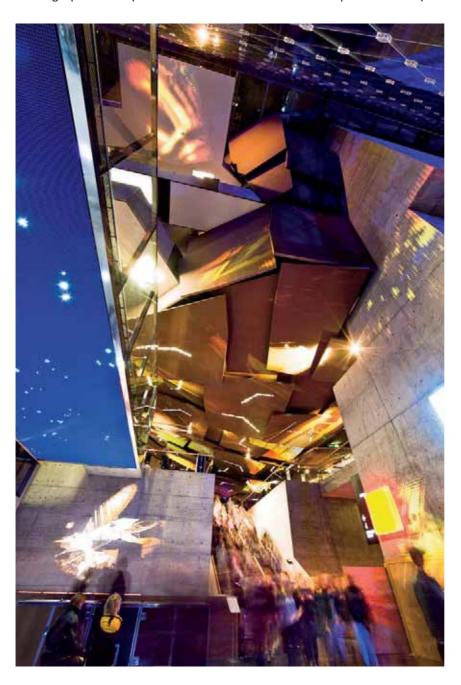


Building new solutions.

Lindner undertakes major worldwide projects in all areas of interior finishes, insulation technology, industrial services and building facades. From pre-planning through to project completion Lindner is your partner of choice.

The Company's extensive manufacturing capability enables quality to be strictly maintained whilst allowing maximum flexibility to meet individual project requirements. Environmental considerations are fundamental to all Lindner's business principles.

Through partnerships with clients Lindner turns concepts into reality.



Entrance Foyer

"The interior is a world in itself, complex and diversified." Jean Nouvel

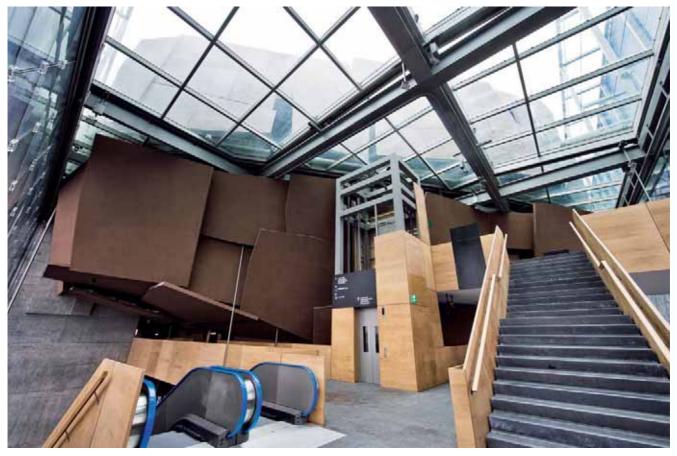


Jean Nouvel's vision of a meteoritic impact on the DR Byen landscape led to this purist and progressive architectural design in the entrance area.

The entire concert hall is enclosed with protective 'scales' which symbolise displaced terrestrial plates. The visitor gets the impression that the concert hall floats a few metres above the audience areas.

Lindner designed and delivered 164 unique ceiling 'scales' with special requirements in terms of surface finish, acoustics and fire rating. Serving as a projection screen together with integrated light effects, these scales form the required mysterious look.

Entrance Foyer



The holistic design runs throughout the foyer and converts simple materials such as plywood or exposed concrete into a stunning architectural feature. Maximum requirements in terms of load bearing, fire rating and acoustics had to be met by Lindner. A detail such as the invisible fixing of the balustrades is only one of the especially designed solutions which we provided.



120 specially designed doors, made out of beech wood and with a fire resistance of BD60, offer a clear opening of up to 3 metres.

Main Concert Hall

To build the amazing interior of the Danish Radio Concert Hall Lindner

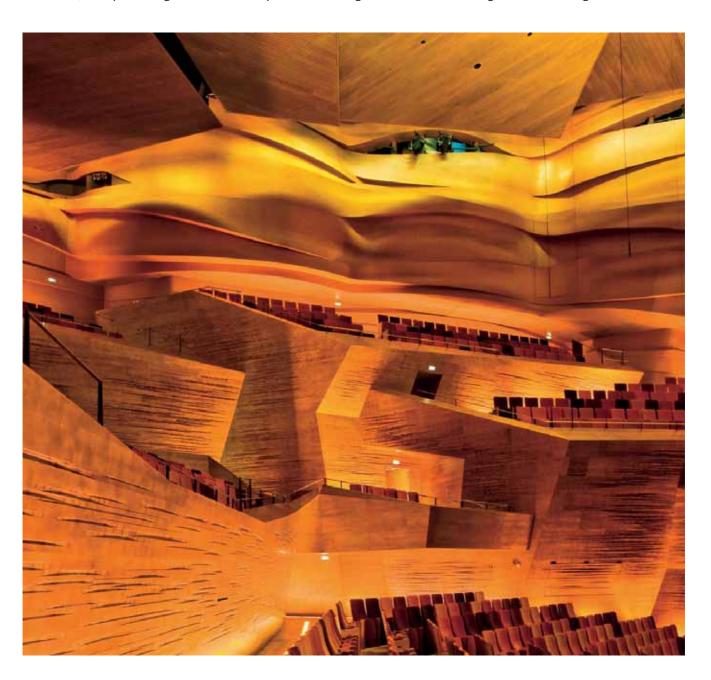
- worked in peak periods with up to $250\,\mathrm{people}$ on site
- had up to $25\,\mathrm{CAD}$ designers working on about $1,000\,\mathrm{design}$ drawings
- designed an integrated structural concept
- implemented the acoustical concept of Nagata Acoustics for the rooms with a volume of $28,000\,\mathrm{m}^{_3}$
- delivered about 2,500 tons of material to site
- provided 2 to 3 shifts up to $24\,$ h per day
- worked together with a church restorer and a dress maker on some of the special surfaces
- showed its international experience by building all solutions fully compliant with the standards of the Danish market







Everybody entering the main concert hall is met with the fascinating finished effect of many different materials, many working hours and many different design details - all resulting in one amazing concert hall.







Main Concert Hall

"The architecture asserts itself through details - doors, lighting, ceilings, and staircases - a testimony of respect for the buildings' visitors, concertgoers, and artists." Jean Nouvel

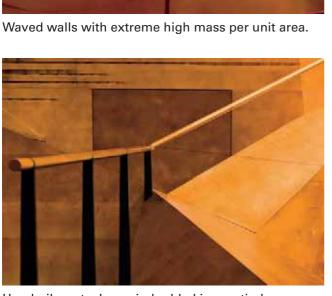


Prefabricated wall panels; each piece uniquely microshaped.

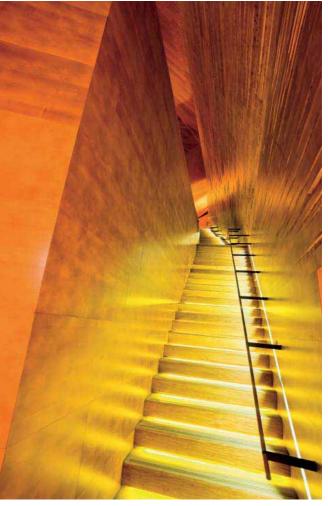


Custom-made fire-rated doors.

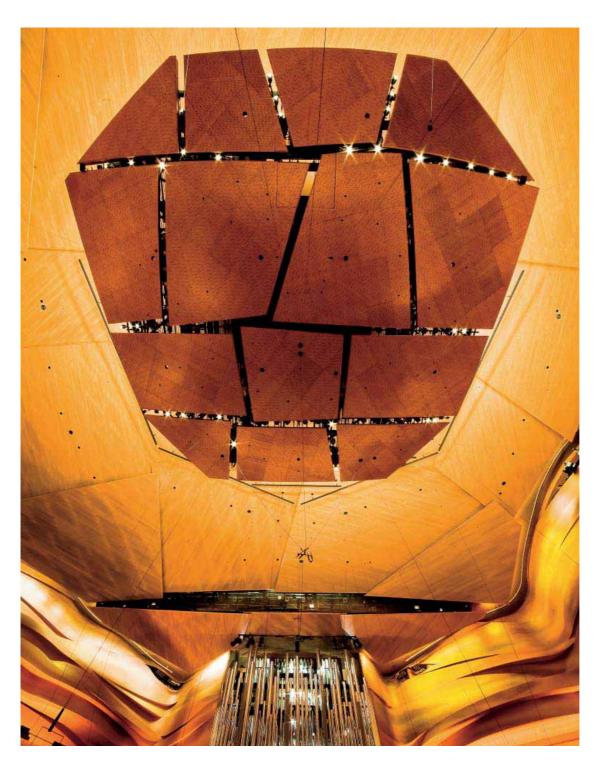




Handrails - steel core imbedded in raw timber.



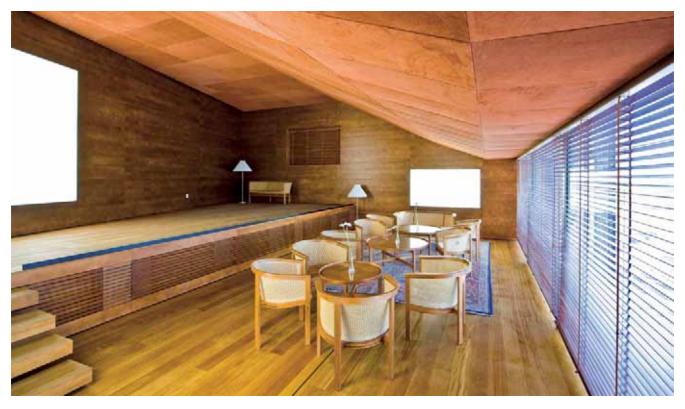
Specially designed staircases with illuminated steps.



With a total weight of 75 tons and covering an area of 250 m² the moveable ceiling scale over the stage ensures maximum sound performance.

The position of the ceiling can be adjusted depending on the number of people attending the concert. All technical accessories, such as lighting, loudspeakers and microphones are integrated. Lindner solved the special challenge by combining acoustics with iregular wooden surfaces (rated B1).

Queen's Lounge

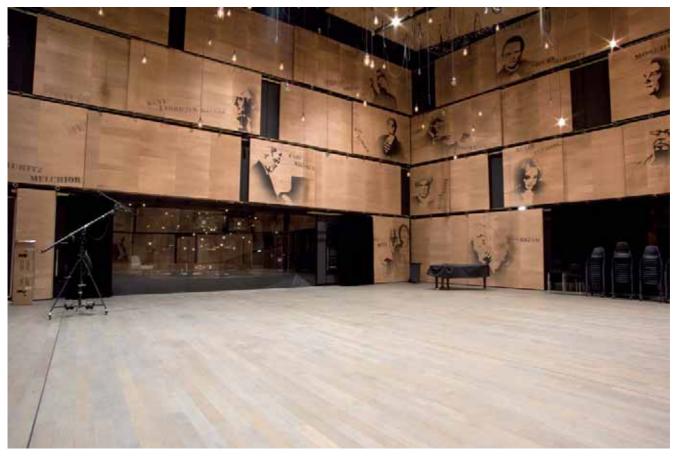


The interior design of the Queen's Lounge is highly sophisticated. A special feature is the ceiling where each panel is covered with perforated leather supplied by Lindner.



Specially designed doors with custommade door handle sets.

Small Studios



Lindner supplied and installed high-quality wooden floors in the three small studios 2, 3 and 4.



Surrounding Studios



The most modern of techniques are used in the 15 recording and broadcasting studios: glazing meeting acoustic requirements of up to 70 dB, sound absorbing metal wall and ceiling panels, guaranteeing fire resistance of up to 60 minutes. The doors also have extremely high sound insulating values.



Rooms with wooden flooring, wooden cladding and a sound absorbing wooden ceiling provide the right atmosphere for musicians to prepare before a concert.



The raised floor systems with metal surfaces are installed in the passageways and contribute to the aesthetic effect and the technical requirements.

Office areas

In the office areas Lindner products create the right working atmosphere.

More than 1,000 m² of perforated chilled plaster ceiling covered with a specially printed membrane is installed in this area. Indirect lighting and integrated fire detectors contribute towards the homogenous and aesthetically pleasing ceiling finish.

Glazed partitions create light and open rooms. Their soundproofing properties allow for an undisturbed and peaceful work environment - ideal conditions for offices.





Various flooring systems were installed, for example:

- 1,000 m² raised floor systems NORTEC
- 1,000 m² hollow floor system CAVOPEX
- 100 m² hollow floor system FLOOR and more[®] comfort
- 300 m² special floor construction for switch rooms



We can do it all for you.

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- Clean Rooms and Laboratories
- Airports and Airlines
- Railways and Tunnels
- Studios and Concert Halls
- Interior Fit-out and Furnishings
- Cruise Liner and Ship Fit-out
- Hotels and Resorts
- General Contracting

Lindner Products:

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- Ceiling Systems
- Lights and Lighting Systems
- Partition Systems
- Doors
- Floor Systems
- Heating and Cooling Technologies
- Dry Lining Systems

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- Research and Development
- Delivery
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- Maintenance
- Public-Private Partnership (PPP)

Lindner

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