



Casa da Música Porto, Portugal

Client

Porto 2001
Portugal

Architect

OMA, Rotterdam
ANC, Porto

Acoustics

TNO / DHV

Personal reference: L.C.J. van Luxemburg

Area

20,000 m²

Realization

1999-2005

Project description

In the words of the architect, the new Casa da Música building has “an expressive, rock-like shape”. It stands on the Rotunda da Boavista, a square just outside Porto’s historic city centre. In addition to two concert halls, various rehearsal areas, a recording studio and a restaurant, the design provides for a music shop, a café, a roof terrace and facilities for education and “cyber-music”. The larger concert hall will seat 1,260 people, and the smaller one 350.

Acoustically, the main challenge arises from the fact that the front and back facades are made entirely of glass, to evoke the feeling that the rooms are open to the city. As well as keeping out noise from exterior sources, such as traffic, emergency vehicle sirens and aircraft, these transparent walls have been designed so as to contribute to sound distribution within the hall. Large, acoustically hard surfaces ‘colour’ the sound and are therefore unsuitable for halls where symphonic music is performed. Such surfaces therefore need to be divided into a number of smaller areas that break up and scatter the sound that hits them. With these considerations in mind, the glass walls of the Casa da Música’s concert halls are horizontally wavy structures. Other acoustically challenging features of the development have been the design of the seats, the transparent canopy and the fact that the concert hall is constructed as a box within a box. Finally, both halls are suitable for electronic studio recording of the performances.

Casa da Música is inaugurated on April 14th 2005.