## **Glittering** crystal in the old harbor

Harpa Reykjavík concert hall and conference centre, Iceland



← A look at the entrance fover of the Harpa.

- Harpa Reykjavík concert hall and conference centre
- Owner: Iceland and the city of Reykjavík (IS)
- Architects: Henning Larsen Architects HLA,
- Copenhagen (DK), and Batteríið Architects, Hafnarfjörður (IS) Facade design: Studio Olafur Eliasson, Berlin (DE),
- Acoustics: Artec Consultants Inc, New York (USA)
- Opened: 8/2011
- Plumber: ÍAV, Reykjavík (IS)
- Geberit know-how
- **Duofix installation system** Mapress piping system



↑ Harpa, Reykjavík's new concert hall. The colors of the glass facade change according to the weather → Structure of the double glass facade.

> Reykjavík has a new landmark: the Harpa concert hall and conference center. The angular building with its gleaming glass facade situated in the harbor reflects a wide variety of lighting atmospheres depending on the weather

In August 2011, a new city symbol whose glittering facade dominates the old harbor was inaugurated in Iceland's capital. The new complex is a concert and conference building and is home to both the Iceland Symphonic Orchestra and the Icelandic Opera. However, its completion was uncertain for a long time. Construction on the symbol of Icelandic art and culture was started by a private investor group in 2007. But the financial crisis in 2008 brought the project to an almost immediate halt. The building shell became public property and was finally taken over by the government.

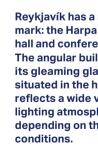
The design of the sculpture-like building is a joint effort of the Danish architecture firm Henning Larsen and the Icelandic Batteríið Architects, who won the 2005 design competition. The name Harpa was also chosen

in a competition to find an Icelandic name that could be easily pronounced in other languages. From the 4,000 entries, the woman's name Harpa (which means "harp" in English) was finally selected.

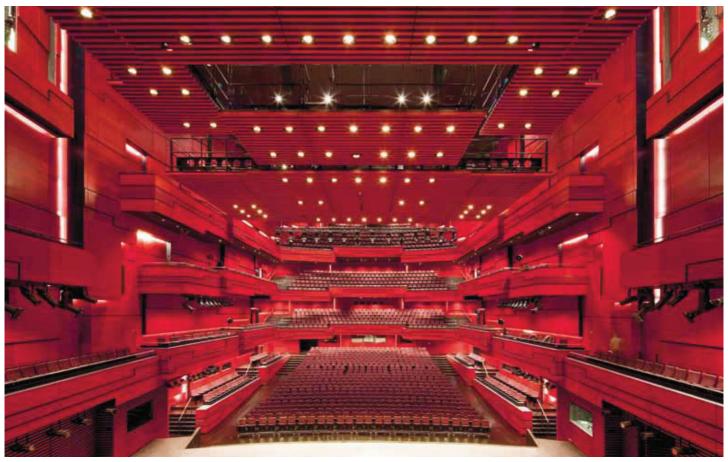
## Block-shaped spaces with sloping edges

The 43-meter-tall building consists of two block-shaped spaces with sloping edges, slightly offset from one another. Inside are a large, 1,800-seat concert hall painted in lava red, three smaller concert spaces and a conference center with interpreter booths for up to nine languages. The US engineering firm Artec Consultants Inc. in New York is responsible for the acoustics of the concert halls, having developed a fully automated system that optimizes the sound of all types of music using, among other things, felt-covered walls and baffles.





## **Focus Scandinavia**



↑ The large concert hall for 1,800 visitors was painted in lava red.

The 28,000-square-meter building also houses a hotel, a bar and a rooftop restaurant with a view over Reykjavík and Tjörnin (The Pond).

The striking, sparkling double facade was designed by Icelandic artist Olafur Eliasson, who was inspired by the different moods of light of his island country. The glass facade envelopes the building and transforms it into an architectural attraction and spectacle. The facade is made of more than 8,000 hexagonal-shaped glass blocks set in steel frames, which refract the daylight and reflect it in different colors and pastel tones.

## Yellow, green and orange color effect glass

As in much of his work, Eliasson has also combined natural beauty with technical so-

phistication in the angular building complex. While the architects focused on the rough, swooping coastal cliffs for the building's shape, the artist based the glass blocks on the basalt columns omnipresent in the treeless, volcanic Icelandic landscape. Thus, no one piece of glass is like any other. Together, however, they create a multifaceted mirror and light-refracting effect. To achieve the glimmering ambiance, special laminated safety glass containing what is called dichroic glass was used. This color effect glass absorbs certain light wavelengths while it reflects others so that the color of the glass changes depending on the weather and viewing angle. Yellow, orange and green glass was used in Harpa. These colors can be seen by looking directly through the glass, while their complementary colors can be seen in the reflection. ←