

The Black Diamond

BUILDER:

Ministry of Culture Denmark

PROFESSIONAL ADVISOR:

The Directorate for Building of the Ministry of Science, Innovation and Higher Education

ARCHITECT & LANDSCAPE ARCHITECT:

Architects, MAA, Schmidt, Hammer & Lassen K/S

CONSULTING ENGINEERS:

Moe & Brødsgaard A/S: structures, civil works, heating, water and sanitation

SPECIAL AREAS:

Hansen & Henneberg A/S: electricity

Hostrup-Schultz & Sørensen A/S: harbour facilities

Anders Chr. Gade: acoustics

RENOVATION:

The "Hansen" section approx. 6,200 square meters

NEW BUILDINGS:

"The Fish" and "The Black Diamond" approx. 21,500 square meters

SCALE OF WORK:

Approx. 23,000 net square meters / gross square meters

TOTAL COST OF CONSTRUCTION:

DKK 462.1 million (in 1998 prices) - DKK 389.3 million (in 1998 prices) at the beginning of the construction and DKK 72.8 million (in 1998 prices) in supplementary appropriations.

BUILDING PROCESS:

1993: European architectural competition with 179 participants. Winners: Schmidt, Hammer, & Lassen

1993-95: Design phase. First and second bidding rounds, project- and budget adjustment

1995-99: Building construction is carried out by 52 trade contracts selected in public tender

1996: Groundbreaking, foundation stone laid on 7 October

1997: Opening of The Fish on 21 August. Topping-out ceremony at the Black Diamond on 19 September

1999: Opening of the Black Diamond on 7 September. Reopening of the Slotsholmen complex for the public on 15 September

THE BLACK DIAMOND: FIGURES AND MATERIALS

- 20,733 square meters with 450 rooms and 800 doors with key-locks distributed on eight floors
- The façade is clad in 2,500 square meters of Absolute Black granite, quarried in Zimbabwe, cut and polished in Northern Italy. Each stone weighs 75 kg
- The glass façade of the Atrium is supported by one large steel girder, which weighs 1 metric ton/m and is held in place by the steel supports shaped like the number 7. The steel work was produced in Poland.
- The sloping pre-stressed exterior glass in the Atrium consists of a system of struts and tensile cables – there is a stress of 10 metric tons in one vertical system alone.
- The undulating walls of the Atrium are computer calculated. More than 10,000 coordinates form the basis of the formwork of the concreting operation
- The distance from the floor in the Rotunda to the glass ceiling of the Atrium is 29 m
- The glass walls of the reading rooms, produced in Germany, consist of panes, which are 6 meters high, 2.4 meters wide and 16 mm thick. Each pane weighs 576 kg
- The flooring on the balconies and footbridges is oiled maple and Blue Oyster sandstone from Spain in other areas
- The furniture and equipment, custom-made for the library, is made of American maple, leather, stainless steel, black rubber and sandblasted glass
- The base of the water fountain in front of the main entrance is made of azobé wood

THE QUEEN'S HALL / DRONNINGESALEN

Live music productions based on the library's sheet music collection as well as concerts performed by various ensembles

- 5,600 cubic metres. Approximate measures: width: 20 m, length: 30 m height: 10 m
- 384 seats (stage area 150 square meters)
- 480 seats (stage area 88 square meters)
- 600 seats (stage area 35 square meters)
- Price: DKK 35 million
- The reverberation time in the concert hall can be adjusted from 1.1 to 1.9 seconds by using the walls' adjustable sound panels.
- Walls and ceiling panels are clad in maple veneer
- The stage curtains (3.7 m x 36 m and 2.5 m x 27 m) were produced by textile artists Mathilde Aggebo and Julie Henriksen. The motif is an adaptation of Hans Christian Andersen's handwriting from the introduction to the fairytale "The Princess and the Pea" (Quote: once upon a time (there was) a prince") printed with grey and white carbon print. The original manuscript is preserved in the library's collection of manuscripts. The curtains were produced in Statens Værksteder for Kunst og Håndværk (Danish Art Workshops), Gammel Dok Pakhus 1997/1998. Gift from the Hielmstjerne-Rosencroneske Foundation

THE CEILING MURAL

on the landing bridge was made by Per Kirkeby

- Size 210.8 square meters

- Painted on 144 MDF boards

THE FISH / FISKEN

The Fish houses Kvininfo (Danish Centre for Information on Gender, Equality and Diversity), Danish Folklore Archives, and the Society for Danish Language and Literature.

EXHIBITIONS

Exhibition rooms range from 60 square meters to 1,000 square meters.

THE MONTANA HALL (200 square meters) on level B and the COLUMN HALL (SØJLEHALLEN) (300 square meters) on level K show temporary exhibitions about history, culture and topics of current interest usually based on the library's own collections. Some of these exhibitions are also produced in parallel as touring poster exhibitions that are shown across Denmark.

THE NATIONAL PHOTOMUSEUM (520 SQUARE METERS)

was established in 1996 and contains approximately 25,000 photographic works produced from 1839 to the present, containing a broad cross-section of both Danish and international photo history.

THE MUSEUM OF DANISH CARTOON ART

The museum of Danish cartoon art is an integrated part of The Royal Library. It came into existence on the initiative of The Independent Institution for the Promotion of The Museum of Danish Cartoon Art in the summer of 1998 and was inaugurated by Her Majesty Queen Margrethe 2 on 7 October 2000.

THE LIBRARY at Slotsholmen in rough figures before and after the expansion

READING ROOMS

Increased from one to six reading rooms

SEATS AND STUDY AREAS

Increased from 100 to 486 seats

- Information hall: from 46 to 60 seats
- Reading Room East (newspapers and journals): 131 seats
- Reading Room West (The Research Reading Room): 163 seats including 12 study cells
- Reading Room North (Centre for International Studies): 96 seats
- Centre for Manuscripts and Rare Books: 24 seats
- Centre for Maps and Pictures: 26 seats
- Centre for Music and Theater: 17 seats
- Centre for Orientalia and Judaica: 17 seats

REFERENCE COLLECTIONS

Increase from 45,000 to 191,000 volumes on the opening in September 1999. Total capacity for 221,000 volumes of reference works, journals and microfilm shelved on 9,500 running metres in the Information Hall, reading rooms and centres.

- Reading Room East:
 - Reference and thesis collection: 10,500 volumes
 - Newspaper microfilms: 80,000 reels
 - Journals: latest 3 years of 4,000 titles (3,200 foreign and 800 Danish, including the 750 titles which are indexed in bibliotek.dk)
- Reading Room West: from 25,000 to 65,000 volumes
- Reading Room North:
 - Reference books, statistics, law reports, treaty collections, etc. published by international organisations
 - Journals published by organisations: approximately 350