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## **Facts about the refurbishment of Frederik VIII's Palace**

### **1. Introduction**

The last fundamental refurbishment and modernisation of the palace took place in 1934 in connection with the moving in of the then Crown Prince couple. After 70 years, the palace greatly needs a sweeping refurbishment.

In the spring of 2004, the Finance Committee of the Danish Parliament approved the commencement of an interior and exterior refurbishment of Frederik VIII's Palace in order to prepare the palace as a residence for the Crown Prince couple and later on as a royal palace. The main objective of the assignment was to restore and renovate Frederik VIII's Palace to provide a modern and well-functioning setting for administrative and representative functions as well as a private residence for the Crown Prince and the Crown Princess.

The decoration of the palace, the choice of materials, etc. took place in the beginning of the project in dialogue with the Crown Prince couple as implied in the document accepted by the Finance Committee of the Danish Parliament in 2004. Special consideration was given to the original palace, the exterior of which represents an exceptionally beautiful example of Rococo construction. The Heritage Agency of Denmark has been deeply involved in the project.

### **2. The exterior refurbishment**

In outline, the exterior refurbishment comprised renovation of all windows, a new roof, the rendering of facades facing the garden and minor sandstone repairs. The renovation of the roof, in particular, was considerably more comprehensive than originally estimated due to extensive dry rot damages to the roof construction.

Insulation was installed wherever possible. The construction of the palace from the 1700s caused certain restrictions – among other things as a consequence of massive and thick walls.

By the end of September 2008, the exterior refurbishment was in the main completed.

The side wings of the Amalienborg Palace complex were restored concurrently with the exterior and interior refurbishment of Frederik VIII's Palace. The side wings are resting on oak piles and this foundation turned out to be insufficient due to a lowering of the groundwater level and other factors which had weakened

the oak piles. The side wings now rest on concrete piles which are pressed into the subsoil beneath the outer walls and load-bearing partition walls. In continuation of this, facades, windows and roof construction were re-established. The foundation work caused a number of consequential damage to the buildings which was also repaired just as a modernisation of certain interior components was required.

### **2.1. Windows**

High priority was given to the preservation of the original windows most of which were the original windows from the 18th and 19th centuries. The quality of windows dating from this era is fantastic and with the proper treatment and maintenance they can theoretically last for an unlimited period of time.

The glass was replaced with old glass or newly made blown glass.

### **2.2. Patio**

A new feature is the patio established on the existing butler's kitchen at the east end of the palace.

## **3. The interior refurbishment**

Frederik VIII's Palace is one of the four Amalienborg Palaces and is an exceptionally beautiful example of a Rococo construction in both Danish and European contexts.

Throughout the history of the palace, a number of sweeping refurbishments have left their mark on the palace. The most distinctive refurbishment was made in the period of 1828-30 where Architect Jørgen Hansen-Koch renewed the palace interior in late-empire style. This refurbishment left a palace which today must be considered an absolute late-empire major work.

### **3.1. The palace then and now**

The original plan arrangement of the palace included great architectural qualities, including the strict, clear sequence of rooms on the ground floor and bel étage, the hierarchical interplay of large and small rooms and the interplay of rooms and facades.

At the beginning of the refurbishment in 2004, it was found that many of the rebuilding projects which had been carried out over the years had undermined the original plan arrangement. As many of the original plan qualities as possible were restored during the refurbishment.

The vestibule is reconstructed as a three-bayed room; the hall in the south pavilion (ground floor) appears re-established; the anteroom north of the

vestibule is now a unified room and the bel étage of the south pavilion appears as a unified room illuminated from all four corners of the world. At the same time, the central lines of sight (enfilades) along both facades are re-established, on both the ground floor and the bel étage.

Moreover, a new stairway in the middle of the palace vertically connects the ground floor, the bel étage and the mezzanine which was cut off in 1828 when the Rococo stairway was closed. Thereby, it is now possible to give a higher priority to the functional significance of the mezzanine in the palace.

### **3.2. Technical qualities**

Most of the technical installations in Frederik VIII's Palace date back to the 1920s and 1930s. Therefore, it was necessary to replace the complete central heating system (heating pipes and radiators) just as the palace is now furnished with new district heating to replace the previous central supply of steam. In some parts of the palace, underfloor heating has been installed. The water supply was also replaced to guard against burst pipes and water damage and to ensure a long durability of the installation works.

The electrical installations were worn out and have been replaced throughout the palace. Likewise, new communication systems, IT (including internet connections), fireproofing and other technical systems were installed.

### **3.3. Materials, etc.**

The existing pine floors in the palace were uncovered from a subsequent layer of oak parquet. In situations where these floors could not be reused, new identical pine floors have been laid. Grey/red Öland floor tiles similar to the existing tiles have been used in the basement and Öland stones in a number of toilets.

Travertine has been used in the other toilets and bathrooms.

All woodwork has been painted with linseed oil paint in one common colour which was also the case when the palace was considerably refurbished in 1828-30. The gilt decorations on the woodwork have been renovated.

Ash was chosen as the wood generally used for new permanent fixtures (bathroom furniture, built-in closets, new stairs, etc.) due to its lovely Nordic appearance and fine qualities. Steel is also used in the large kitchen. Current brands were selected when replacing white goods, fixtures, etc.

### **3.4. Colours**

The walls are covered with taut canvas as originally. Body paper has been applied to the canvas and painted with distemper.

In Denmark, painted ceilings and coloured panels, inspired by the contemporaneous archaeological finds in Pompeii, were widely used during the

Empire period. Studies of the palace show that most of the ceilings were painted in at least two colours and usually more – up to ten colours in the Banqueting Hall. These colours had completely disappeared from the ceilings after numerous wash downs and coats of paint, however, have now been re-created in connection with the refurbishment.

### **3.5. Energy improvements**

Large parts of the reconstruction of Frederik VIII's Palace will benefit the climate and reduce the royal heat consumption. The Palaces and Properties Agency is insulating the floors, ceilings and roof space, e.g. installing state-of-the-art heating and repairing the windows of the palace. This will result in a considerable reduction in the amount of energy used for heating.

### **3.6. Lighting**

In principle, lighting is not part of the construction project but will be managed by the Royal Family when the Crown Prince and Princess move in. This does not include permanent lighting in wet rooms (bathrooms and toilets), permanent lighting in the basement, certain archive rooms without daylight and in a number of rooms at the mezzanine floor where the low ceiling requires installation of ceiling spotlights.

The existing chandeliers, which belong to the state, have been cleaned and electrical components have been replaced wherever necessary.

## **4. Use**

The idea is that Christian IX's Palace and Frederik VIII's Palace should in future function as royal palace and palace in turns for the heir to the Throne respectively. Christian VII's Palace underwent a sweeping refurbishment and restoration in the 1990s and still functions as a palace for official purposes and Christian VIII's Palace comprises the Amalienborg Museum and offices and residential premises for several members of the Royal Family.

Frederik VIII's Palace is furnished for the purpose of functioning as residence for the Crown Prince couple, as a workplace for the couple and for their employees and associated representative functions. The palace is organised in such a way that it may function as royal palace in time.

## **5. Art decoration**

As part of the refurbishment of the future residence of the Crown Prince couple at Amalienborg, the Realdania foundation commissioned an art project where new Danish art for Frederik VIII's Palace is created.

### **5.1. Selection of artists**

Ten Danish artists are selected: Olafur Eliasson, Signe Guttormsen, Morten Schelde, John Kørner, Eske Kath, Katrine Ærtebjerg, Kasper Bonnén, Tal R, Erik A. Frandsen and Jesper Christiansen.

The artists were selected by the Crown Prince and the Crown Princess in compliance with the advice from Poul Erik Tøjner, Museum Director of the Louisiana Museum of Modern Art; Mikael Andersen; Poul Schüleïn, Architect; Arkitema and Per Thornit, Chief of the Court. The choice of artists and the concept for the works of art were presented to and accepted by the Heritage Agency of Denmark and the Palaces and Properties Agency.

When the palace and works of art are ready, the palace will open to the public for a period of three months. Upon completion of the palace, the architecturally integrated works of art will be donated to the state.

Sketches produced in connection with the project will be donated to KØS – Museum of Art in Public Places, so that the project may also be presented to the public. The decoration will primarily concern the non-private premises of the palace.

### **5.2. New gardens**

Landscape Architect Jacob Fischer will design the future gardens.

### **5.3. Other elements**

Besides the creation of new art for the palace and the new gardens, the restoration and preservation of a number of paintings, chandeliers and tapestries associated with the palace and owned by the state are included.

The donation from Realdania enables the restoration of six tapestries which were hanging in the tapestry hall on the palace ground floor, the restoration and preservation of a line of quite unique paintings by the Danish flower painter J.L. Jensen painted for one of the rooms at the palace bel étage in 1827-28 and the renovation of 26 chandeliers.

Moreover, Realdania contributes to the publication of a book about the refurbishment of the palace and the art project. The book will be published by Realdania and the Palaces and Properties Agency in concert.

## **6. Overall finances**

The budget of the cases relating to Frederik VIII's Palace comprises the following items:

Interior refurbishment: DKK 119.8 million (index 2009)

Exterior refurbishment: DKK 40 million (index 2009)

Refurbishment of side wings: DKK 40 million (index 2009)

Art project (supported by Realdania): DKK 22 million

## **7. Time schedule**

The refurbishment of roof, facades and windows was completed at the end of 2008. The restoration and foundation work of the side wings were completed in the autumn of 2009, and in December 2009, the handover ceremony for the interior refurbishment project was held. This will be succeeded by the opening to the public. The Crown Prince and Crown Princess will take up residence afterwards.

## **8. Opening to the public**

From 27 February to 30 May 2010 the palace will be open to the public. Therefore, it will be possible to see the results of the refurbishment and renovation prior to the Crown Prince couple taking up residence. The opening will include two main floors of the palace – the ground floor and the bel étage – which will be used for representative purposes in the future.

The palace will be open in the daytime and open to pre-booked group tours at the end of the day. Entrance fees will be charged to cover the operating costs at the opening: staff, cleaning, renovations after the opening, etc.

Wheelchair users will have access through the manor and by lift from the basement to the ground floor and the bel étage.