Galerie de Peintures

Location : Château de Chantilly

Architect : Agence PAG, Pierre-Antoine Gatier (ACMH)

Client : Fondation pour la sauvegarde et le développement du Domaine de Chantilly

Package : Glazed roof

Scope : Technical design and assistance for construction site supervision

Date : 2014–2015

The reconstruction of the Château de Chantilly—destroyed during the French Revolution—was completed in 1885 under the direction of architect Honoré Daumet for Henri d'Orléans, Duke of Aumale, to house his collections of paintings and rare books. A member of the Académie Française, he bequeathed the Chantilly estate and its collections to the Institut de France, on the condition that the presentation of the collections remain unchanged.

At the heart of the château, the painting gallery of the Musée Condé holds the most significant collection of Old Master paintings in France after the Louvre, displayed in a museography characteristic of the 19th century. This historic collection is housed in a gallery naturally lit by a large overhead glass roof and a glazed ceiling.

The glass roof consists of a glazed structure supported by a metal framework, while the ceiling incorporates glass panels held by a metallic structure between the trusses. The framework features riveted steel arches. T/E/S/S is responsible for the restoration of the glazed ceiling and the replacement of the roofing system. As the structure is classified as a Historic Monument, the technical challenge of the project is to reconcile restoration, conservation of the architectural integrity, and the reuse of original materials. Additionally, the objective is to restore the quality of natural light within the gallery, improve the thermal performance of the glazing, and facilitate future maintenance.

The ceiling's structure consists of an intricate assembly of steel angle bars supporting the glazing. The glass panels are frosted at the center and engraved with a decorative frieze pattern around the edges. The restoration includes the lamination of the historic decorated glass panels and the renewal of their supporting framework to enhance visitor protection. Furthermore, the ceiling incorporates rack-and-pinion opening mechanisms for gallery ventilation, which are being restored to full operation.

The overhead glass roof is being entirely replaced by a structure similar in size to the existing framework. The primary framework supporting the glazing is undergoing restoration. The new infill consists of double glazing with integrated solar and thermal control layers. Additionally, a silk-screened pattern replicates the original striated glass design, which also helps reduce solar heat gain in the attic space above the gallery. The renewed glass roof provides significantly improved waterproofing and thermal performance.