

SCHOTT
glass made of ideas

Restoration
Schocken Department
Store, Chemnitz

Project Report



Faithful in every detail

The façade of the former Schocken department store in Chemnitz, Germany, was equipped for its conversion to a museum with SCHOTT TIKANA® Restoration glass. The façade glass fulfills the requirements of conservation of monuments and historic buildings, and allows at the same time modern construction solutions.

The background

It is a piece of German company history: In only 30 years, the Schocken company developed into the fourth largest department store chain in Germany with numerous subsidiaries, among them, in Cottbus, Stuttgart, Nuremberg, and Chemnitz.

For the conversion of the Chemnitz department store, originally completed in 1930, which was used as such until 2001, the Schocken Brother owners used the architect Erich Mendelsohn again. He was one of the most important architects of the 20th. Century, and had already planned the Schocken department store in Stuttgart. Mendelsohn planned a 9-storey building with triangular cut-outs in Chemnitz. Characteristics are the dynamic curvature of the main façade, as well as the restored upper three floors with flying roof and rail-like balustrade. The main building above the ground

floor comes forward as a bay window, which is divided by horizontal bands of windows.

Undoubtedly, Mendelsohn founded a new type of department store. Today, the former Chemnitz Schocken department store is one of the most important buildings of the classical modern age in Saxony, and, since 1980, belongs to the historical monuments of the town. The name Schocken is in use to this day by the population of those towns in which there had been a Schocken department store.

The challenge

Today the former Schocken department store is a hub of the state museum for archaeology in Chemnitz – briefly “smac”. Before “smac” could be housed in the building, it had to be rebuilt, at first extensively – but also in an appropriate manner for monuments. The challenge was to carry out the changes

in such a way that the former appearance of the building was retained in light of Mendelsohn’s purposes. On the street-frontage, this concerned the historically correct renewal of the bands of windows in the upper floors, and the window fronts of the lateral stairways. At the same time, solar protection and heat insulation had to be integrated.

The appearance of the historical façade had been disfigured over the 70 years in which the building had been used as a department store, by numerous rebuilding and multiple renovations, including the bands of windows.



Photo: Laszlo Farkas



Photo: Michael Jungblut

The solution

For the authentic glazing for the historical bands of windows of the former Schocken department store, the architects and engineers decided to use TIKANA® restoration glass from SCHOTT. The colourless, machine-drawn glass conforms to historical window glasses. Thus, the glass has, for example, a similarly slightly irregular surface like the windows during Mendelsohn's time. This is not by chance; SCHOTT developed restoration glass especially for the glazing of buildings from the classical modern age and the Bauhaus construction style. TIKANA® shows the typical drawn streakiness of window glasses from this design era.

Other advantages of the special glass: 91 percent of the light passes through, and has 100% colour-rendering. Hence, it is well suited for the glazing of museum windows. Not only this: TIKANA® can be processed in various

ways; contemporary construction functions, like integrated solar protection, are easily realizable.

In Chemnitz, an innovative insulating glass was integrated into the bands of windows. This consists, for example, of a 6 mm-thick outside pane with solar protection coating, a 16 mm-wide spacer, as well as an 8 mm-thick interior float glass pane. In the areas where the insulating glass should protect against burglary, laminated security glass was used instead of float glass. Spaces are filled in both cases with argon.

The historical existing single glazing in the lateral stairways gave way to a TIKANA® – insulating glass, with matte sandblasting and 8 mm-thick spacers. For heat insulation, the space of the panes was filled with krypton.

The company glasfaktor Ingenieure GmbH from Dresden performed the structural analysis of the glass assemblies on the basis of the European Technical Approval ETA-12/0159 for SCHOTT Fourcault glasses.

TIKANA® is drawn using the Fourcault method, a procedure which the Belgian Emile Fourcault patented in 1902. In the construction era from 1920 to 1960, machine-drawn glass was THE material for window and façades glazing. Today, its characteristics are technically production-controlled. Thereby, restoration glass is fine-tuned by SCHOTT to match precisely the desired original glass of Mendelsohn's time.

THE MATERIAL

- TIKANA® | 4 mm and 6 mm thicknesses in insulating glass
- with a sun protection coating
- with matte sandblasting
- various insulating glass constructions



Photo: Roland Halbe

SCHOTT AG

Hattenbergstrasse 10

55122 Mainz

Germany

Phone +49 (0)6131/66-2678

info.architecture@schott.com

www.schott.com/restoration

