

A water tower with a warm future

CALOSTAT® Sandwich enables the renovation of the historic water tower in Bad Segeberg



Photo: Areal Apart Hotel Wasserturm in Bad Segeberg

CALOSTAT® Sandwich

LOCATED NEAR THE KALKBERG – THE HIGHEST POINT IN THE CITY – LIES THE SYMBOL OF BAD SEGEBERG: A BRICK WATER TOWER. Up until 1977, the 200 m³ of water stored here ensured uninterrupted pressure within the water supply system for this town in the German state of Schleswig-Holstein. Now, however, guests can enjoy an uninterrupted night's sleep in a one-of-a-kind hotel.

Project:

Restoration of a historically registered brick water tower in Bad Segeberg, Germany

Property:

Residential hotel with six rooms for twelve guests

Year built:

1907 – 1910

Renovated:

2019

Builder:

Family Hagemann and ARGOS Beteiligungsgesellschaft mbH (Managing Directors Michael Hintz and Dr. Hanno Hagemann)

Brickwork restoration planning:

Technisches Büro Schreiber, Tangstedt, Germany

Construction firm:

Dwuzet Fassadentechnik GmbH, Hamburg

Details:

Use of CALOSTAT® Sandwich MW30 as insulation on all sides of the windows

The tower was built between 1907 and 1910 according to the plans of architect H.T. Teege. Tapering upward from a circular footprint, the single-layer brick walls measure 72 cm at the base and only 48 cm at the top. For over 60 years, the water tower maintained uniform pressure in the city's water supply to deliver water to faucets throughout the system. The tower was designated a historic landmark in 1988. Its first private owner completely gutted the tower in 1997 and converted it into a residential and office building. Not everything that was attempted at the time would meet today's standards of historical preservation.

After the tower stood empty for a few years, the current investor converted it into a hotel at great expense and with an appreciation for what historical preservation requires. The new owner opened the hotel in May 2020. In close collaboration with all of the parties involved, the landmark is now back in shape: both the builder and officials from the historic register sought out experts and partners that could support the project with innovative solutions.



Slim CALOSTAT® Sandwich is perfect for renovating brick façades



A close-up view of the installation site: CALOSTAT® Sandwich is a thin, purely mineral-based insulation panel that even impresses historic preservation authorities

When Technisches Büro Schreiber, an engineering firm from Tangstedt, Germany, planned the restoration of the brickwork, Joachim Schreiber had to look beyond the standard engineering playbook for a number of solutions. “A brick building over 100 years old is always full of surprises,” said the expert in brick façades. Insulating the window joints and soffits posed a special challenge for the team. As Schreiber explains, “There’s not much space available there, and the material has to match the brick.” New CALOSTAT® Sandwich fits the bill perfectly. Oliver Jung, a civil engineer working for Evonik, adds, “Its material properties make CALOSTAT® a great fit here: it insulates well and saves space, it doesn’t burn,

and it’s recyclable.” Officials at the historic register for the Segeberg district gave a green light to the use of CALOSTAT® Sandwich for insulating the window joints. Jung is pleased with the job in Bad Segeberg: “Historic preservation is an area where our high-performance insulation is particularly well-suited to solving problems large and small. CALOSTAT® has also received the innovation award from the Bundesarbeitskreis Altbaurenewerung (BAKA), a national historic preservation committee. We always feel a little bit proud when we can play a part in maintaining beautiful, unique buildings.”

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