

Project Report/May 2023

One-stop shop: StoCretec, Sto und StoDesign for the refurbishment of residential complex

Values are preserved through building with conscience: Together with the owners, the owners' representative, property management Schlag Immobilien GmbH, Hanau (Germany), successfully implemented the major renovation of the residential complex in the north-west of the city. The repair backlog of the past decades was to be cleared and a fundamental modernization had become necessary. Regular water damage to the facade reduced the quality of living. At the same time, with the investments, the company aimed to increase the market value of the property for the owners, which had already been achieved regionally with other projects. The investor's team of specialists opted for the range of services from the Sto Group: concrete repair and balcony coating from StoCretec, facade paint from Sto and colour concept from StoDesign. All from a single source.

StoCretec fast coating system for balcony floors

The StoFloor Balcony Waterproof DL 300 balcony system shows its strengths when things have to be done quickly. It is a directly accessible waterproofing for balconies with a PMMA/PUR material combination. The polyurethane-elasticised material is permanently elastic even under extreme environmental influences. The waterproofing in the StoFloor Balcony Waterproof DL 300 balcony system corresponds to the highest level of the use category according to ETAG 005, e.g. with regard to durability W3 (25 years), climate zones and temperature resistance. The requirements for balcony waterproofing according to DIN 18531-5 for waterproofing systems that can be walked on directly and indirectly are fully met.

An additional benefit is the StoPma DL 300 transparent seal. It enables optical design with coloured StoChips and ensures improved cleaning properties. The seal is UV-stable and weather-resistant.

Properties of StoFloor Balcony Waterproof DL 300

- PMMA waterproofing system for balconies and access balconies

- Waterproofing in accordance with ETAG 005
- On concrete, cementitious screed, and StoCrete PCC mortar substrates
- Verification of durability W3 (25 years)
- Quick-curing
- Slip resistance $\mu = 0,42$ DIN 51131 (StoChips 1 mm across the entire surface + StoPma DL 300 transparent)
- Crack-bridging
- UV- and colour-stable
- High-quality visual characteristics and decorative
- Design options with StoChips 1 mm

A selection of StoCretec repair mortars was used for the reprofiling and repair of the balcony parapets and soffits. E.g., the expert applicator used StoConcrete Repair Prime SM. The system consists of corrosion protection and rapid repair mortar, which are ideally suited for both vertical surfaces and overhead applications. Our mortar system is tailored to and compatible with the StoPma balcony system.

Finally, the StoConcrete Protect V surface protection system ensures the longevity of the renovated balcony parapets. The acrylate coating prevents the absorption of water and carbon dioxide in the concrete and thus protects the parapet from new damage. However, the water vapour permeability is not reduced.

StoDesign Rhein-Main provided the professional colour concept for the construction project. Each concept is created in close consultation with investor and planner and based on their specifications. With the help of a computer-animated rendering, the client can see what the building project, realised with Sto/StoCretec products and systems, will look like before construction begins or during the planning phase.

StoColor Dryonic® G is the Sto facade paint with Dryonic® Technology, a bionic active principle for dry facades thanks to the fastest drying after rain or dew formation. Properties here are the highest degree of whiteness, high colour variety and colour stability, minimal filler breakage (writing effect), very good mechanical resilience, structure-preserving, pure acrylate binder, CO₂ diffusion: Class C1 according to EN 1062-1, very good coverage, water vapor permeable, alkali-resistant, very good adhesion to all common construction substrates, with

StoDesign Rhein-Main rendering of colour concept



(Photos: StoCretec GmbH)











