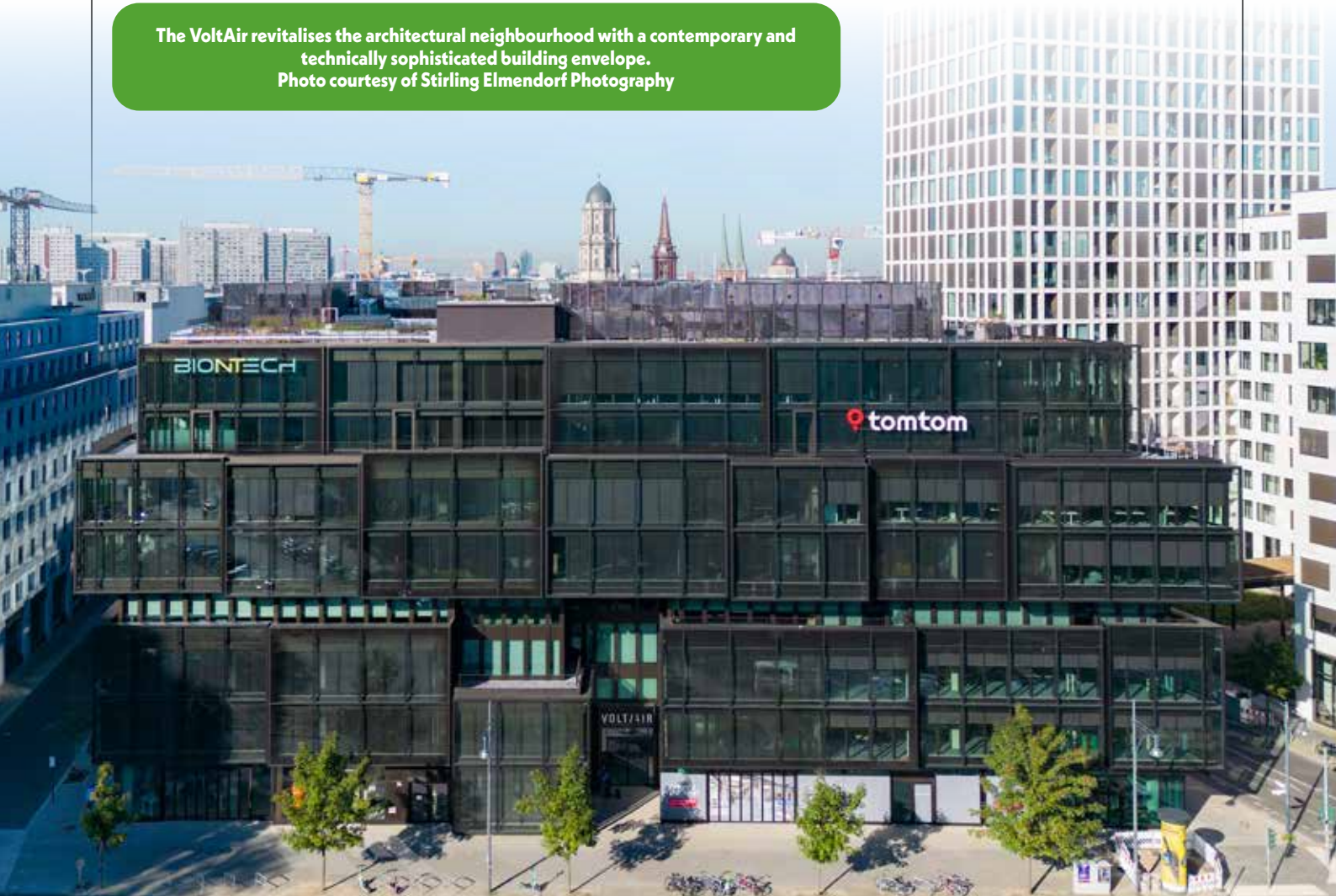
Complex structural glazing, courtesy of BGT BISCHOFF GLASTECHNIK

Renowned architectural firm J.Mayer.H recently showcased its development of a future-oriented commercial property in the eponymous Voltairestrasse, near Alexanderplatz. Here the design centrepiece is its expressive glass façade, which underscores versatile usage of the interior with a projecting, recessed structure. Equipped with state-of-the art technology and a sustainable attitude, the almost 30,000-square-metre building was awarded the LEED Gold certificate. BGT Bischoff Glastechnik supplied an extensive range of insulating and safety glass elements, which has made a major contribution to energy-efficient features of

The VoltAir revitalises the architectural neighbourhood with a contemporary and technically sophisticated building envelope.
Photo courtesy of Stirling Elmendorf Photography



Integrated via an innovative bonding process, the state-of-the-art insulating and safety glass that BGT BISCHOFF GLASTECHNIK provided for the VoltAir project in Berlin significantly enhances the building's energy efficiency and aesthetic appeal - all while contributing to its LEED Gold certification and seamless architectural design.

the property - almost seamlessly becoming part of the building envelope by way of a complex bonding process. Created in a prime Berlin location, the property reacts self-confidently and flexibly to new office work requirements, namely the VoltAir. On a footprint of almost 6,500 square metres, multifunctional office space and high-quality terraced areas were created - all characterised by vertical development options, communicative room solutions and architectural agility. Its ground floor has restaurants that open the VoltAir up invitingly to both street and greened inner courtyard, thereby connecting it with its pulsating urban surroundings. International award-winning architectural firm J.Mayer.H is responsible for the innovative design.

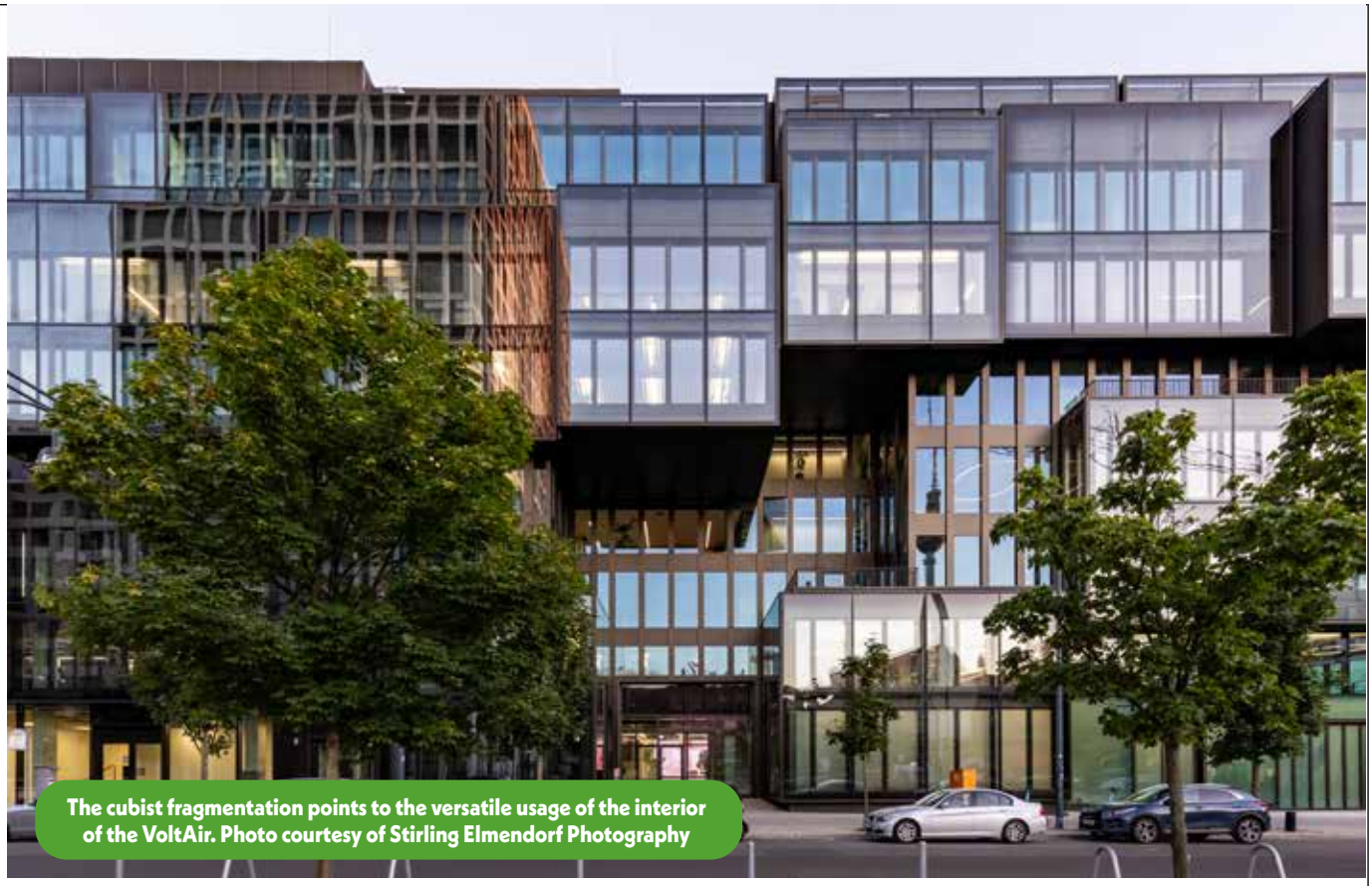
FLEXIBILITY, DISTANCE AND DETAIL

An eye-catching element of the building's appearance is its irregularly accentuated recessed storey which, arranged horizontally, runs through it like a stress crack. At the height of the urban railway viaduct, the reflects the energy of the surroundings as well as the catalytic power of the building complex for New Work. The same aspect is further emphasised by the main design concept of its cubist looking draft, i.e. the projecting and recessed glass façade. This allows a view of the interior, which impresses with mobile space concepts. Nested each within the other, a fusion of smaller and larger work clusters with large window areas experiments with rooms that can maintain a mutual inter-exchange and flexibility of use that stands out. Meeting areas on all floors within the VoltAir promote both community-building and networking.

Complex glass solutions with a bonded construction

The building envelope of the VoltAir, which is implemented as a double-skin facade, impresses both aesthetically and functionally. With their homogeneous, almost floating appearance, its protruding glass boxes are particularly characteristic in terms of design. This optical effect is due to the glued impact-resistant panes, which are up to 2.7 x 5.1 metres in size and make do with joints that are barely visible - and all without distracting emergency holders. Due to the size of the panes, the bonding devi-

Old and new meet aesthetically in the VoltAir. Photo courtesy of Stirling Elmendorf Photography



The cubist fragmentation points to the versatile usage of the interior of the VoltAir. Photo courtesy of Stirling Elmendorf Photography

ates from the technical approval for bonded glass constructions and is unique in Germany. The qualification of this 'Structural Sealant Glazing System' took place on the basis of trials and connected FE modelling as well as the execution of the complete testing process in accordance with the ETAG 002-1 regulations.

Insulating glass units used for the first skin provide efficient thermal insulation in both the cold and warm seasons. A large part of the glazing was provided with the high-performance SILVERSTAR COMBI SELEKT 74/42 T coating. This prevents excessive heating of the interior and, thanks to a selectivity value of up to 1.8, ensures very high light transmission. Added technical highlights of the glass facade include high noise insulation values, which are particularly important in view of the lively neighbourhood. Created in this way, the glass facade not only meets the highest technical standards for office spaces, it also impresses due to its weightless character and timeless aesthetics - both of which underscore the spatial lightness of the VoltAir.

CONSTRUCTION PANEL

Project:	VoltAir Berlin
Location:	Berlin, Germany
Completion:	2022
Owner:	Volt Berlin GmbH & Co. KG, represented by ABG Development GmbH
Architects:	J.MAYER.H GmbH
Facade design:	Knippers Helbig
Products:	Laminated safety glass BI-Combiset Color Insulating glass BI-Therm SILVERSTAR COMBI SELEKT 74/42