



# SIKA SOLUTIONS FOR FENESTRATION REFERENCE PROJECTS WITH STRUCTURALLY BONDED WINDOWS

**BUILDING TRUST**



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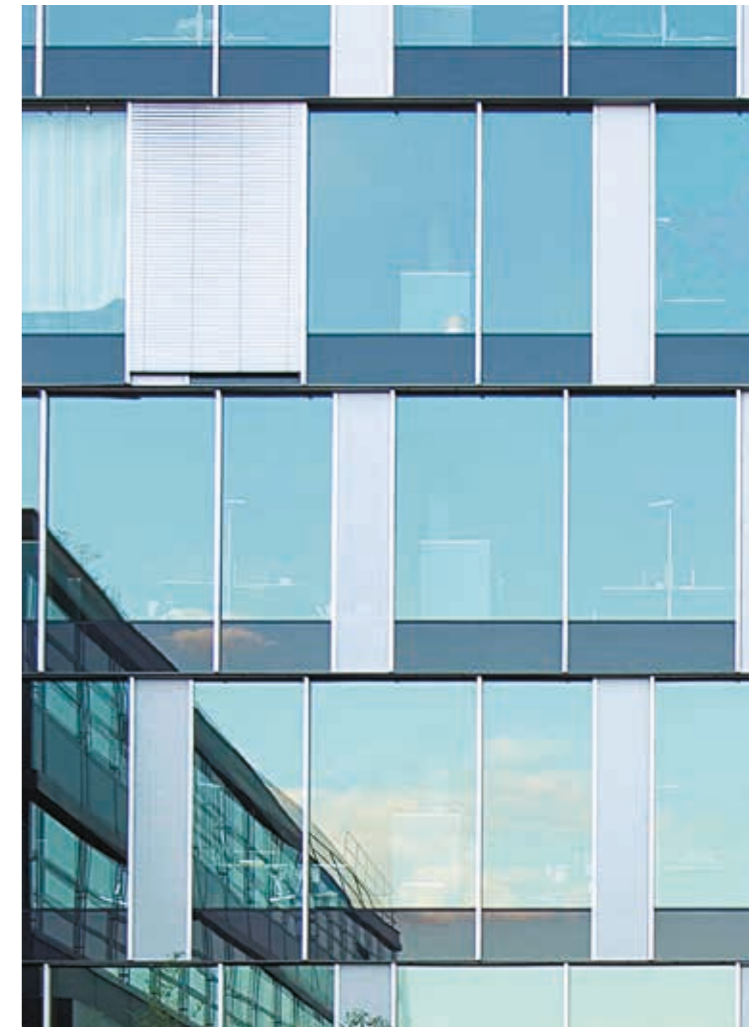
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## WHY CHOOSE BONDED WINDOWS?

**FOR OVER 50 YEARS**, the success of European windows was driven by the development of tilt-and-turn hardware and insulating glass panes. The tilt-and-turn window is now established as one of the leading technologies worldwide.

In 1999, a team of engineers set out to innovate a new generation of windows. Their aim was to boost the attractiveness of wood windows, which were steadily losing market share. At the University of Applied Sciences for Architecture, Wood and Civil Engineering in Biel, Switzerland, scientists and top window manufacturers collaborated closely with Sika on the development of the structurally bonded window.

Bonding technology will now pave the way for new generations of windows that combine high design appeal with supreme technical performance at a reasonable cost.



Structurally bonded windows already have a proven track record for all types of frame material. Since their launch more than fifteen years ago, bonded assemblies have captured a significant market share in central Europe. This is underscored by the 30 million-plus bonded windows now performing to the full satisfaction and delight of their owners.

We at Sika pride ourselves on the fact that our adhesives and sealants are incorporated in most of these products. In developing window adhesives, we are able to draw on our decades of experience with UV- and weather-resistant adhesives for structurally glazed facades.





# RESIDENTIAL BUILDINGS

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# SINGLE-FAMILY HOME IN VORARLBERG

Floor-to-ceiling window units with structural glazing look

Project: Single-family home  
Location: Vorarlberg, Austria  
Window manufacturer: Walch  
Window type: Wood with stepped insulating glass  
Glass: Stepped insulating glass with silicone opacifier instead of ceramic screen print



Left:  
Architectural master piece

Top right:  
Balcony door fitted flush  
with glass facade

Bottom right:  
Flowing transition between  
interior spaces and terrace



# SINGLE-FAMILY HOME IN SWABIAN ALPS

Floor-to-ceiling window units with barely noticeable frame component

Project: Single-family home  
Location: Swabian Alps, Germany  
Window manufacturer: Walch  
Window type: Wood with stepped insulating glass  
Glass: Stepped insulating glass with silicone opacifier instead of ceramic screen print

Bottom:  
Heavily constructed building with wood siding

Top right:  
Large sliding doors





# WEST ART ZURICH

Integration of high-end residential development in existing cityscape

Project: Zurich West Art  
Location: Zurich, Switzerland  
Architect: Dutli + Sigrist Architekten  
Window manufacturer: 1a hunkeler AG  
Window type: Wood/aluminum

Left:  
Floor-to-ceiling window units for open  
living environment

Right:  
Northern front overlooking  
river Limmat





# TRIO DIETIKON

Wide balcony doors with heavy acoustical glass in elegantly slender PVC frame

Project: Trio Dietikon  
Location: Dietikon, Switzerland  
Owner: Swiss Life AG  
Architect: SAM Architekten und Partner AG, Zurich  
Window manufacturer: EgoKiefer  
Window type: PVC



Left:  
Acoustical glazing on elevation facing railroad

Top right:  
Use mix with office, Industrial and residential units

Bottom right:  
Floor-to-ceiling glazing in living spaces



# GOLDSCHLÄGI SITE

Modern residential complex with stringent soundproofing requirements

Project: Goldschlägi site  
Location: Schlieren, Switzerland  
Owner: Migros Pension Fund  
Architect: Annette Gigon/Mike Guyer  
Window manufacturer: Baumgartner AG  
Window type: Wood/aluminum



Bottom:  
105 apartments overlooking main Zurich - Bern rail link

Top right:  
Southern facade with glass parapets





# LINIE 7

Wide balcony doors in slender, two-tone PVC frame

Project:	Linie 7
Location:	Lucerne, Switzerland
Architect:	Schärli Architekten AG, Lucerne
Window manufacturer:	1a hunkeler AG
Window type:	Wood/aluminum



Left:  
Integration of building in street plan

Right:  
Doorsets posing a structural challenge



# SUNNY WATT

Homestyle wood/aluminum windows in passive house standard

Project: Sunny Watt  
Location: Watt, Switzerland  
Architect: kämpfen für architektur ag  
Window manufacturer: 1a hunkeler AG  
Window type: Wood/aluminum with triple-glazed IGUs to Minergie-P Eco standard

Left:  
Eco-friendly living environment with wood/  
aluminum windows

Right:  
Wood-framed buildings with high glazing ratio





# SOPHIENHOF

Modern PVC windows in Europe's biggest passive house development

Project: Sophienhof  
Location: Frankfurt/Main, Germany  
Architect: FAAG Technik AG, Frankfurt/Main  
Window manufacturer: Internorm  
Window type: PVC  
Glass: Triple-glazed IGU  
Special features: passive house standard



Bottom:  
Modern passive house in big city

Top right:  
149 apartments in high living environment



# RESIDENTIAL DEVELOPMENT, EBIKON

Renovated housing with slender-framed window units

Project: Residential development  
Location: Ebikon, Switzerland  
Architect: Cerutti Partner Architekten AG  
Window manufacturer: 1a hunkeler AG  
Window type: Wood/aluminum

Left:  
Improved daylighting after renovation thanks  
to slimmer frames

Right:  
Partially glazed balconies as extension to living  
space







# COMMERCIAL BUILDINGS

- 26** Baar Hospital  
Double-skin facade with large wood/aluminum tilt-and-turn windows

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- 28** Hotel AVIVA, St. Stefan am Walde  
Extra-wide balcony, doors with two-tone PVC frame

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- 30** Leutschentower, Zurich  
18-story high-rise with 3000 large wood/aluminum tilt-and-turn windows units

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- 32** Sika R&D Centre, Zurich  
Windows with interior natural wood finish integrated in modern curtain wall

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- 34** D4 Center Z5, Root  
Modern facade composition punctuated by frameless windows

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- 36** Hotel Victoria, Basel  
Faithful renovation of historic building in old city core

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# BAAR HOSPITAL

Double-skin facade with large wood/aluminum tilt-and-turn windows

Project: Baar Hospital  
Location: Baar, Switzerland  
Owner: Canton of Zug  
Architect: Burckhardt + Partner AG, Zurich  
Window manufacturer: Baumgartner AG  
Window type: Wood/aluminum

Left:  
Opening window behind curtain wall

Right:  
Southern front of Baar Hospital





# HOTEL AVIVA

Extra-wide balcony doors with two-tone PVC frame

Project: Hotel AVIVA  
Location: St. Stefan am Walde, Austria  
Architect: Architekturbüro Arkade, Linz  
Window manufacturer: Internorm  
Window type: Aluminum-faced PVC window



Left:  
Special feature: all rooms with south facing balcony

Top right:  
PVC windows with color aluminum facing

Bottom right:  
Brightly lit rooms thanks to down-to-floor glazing



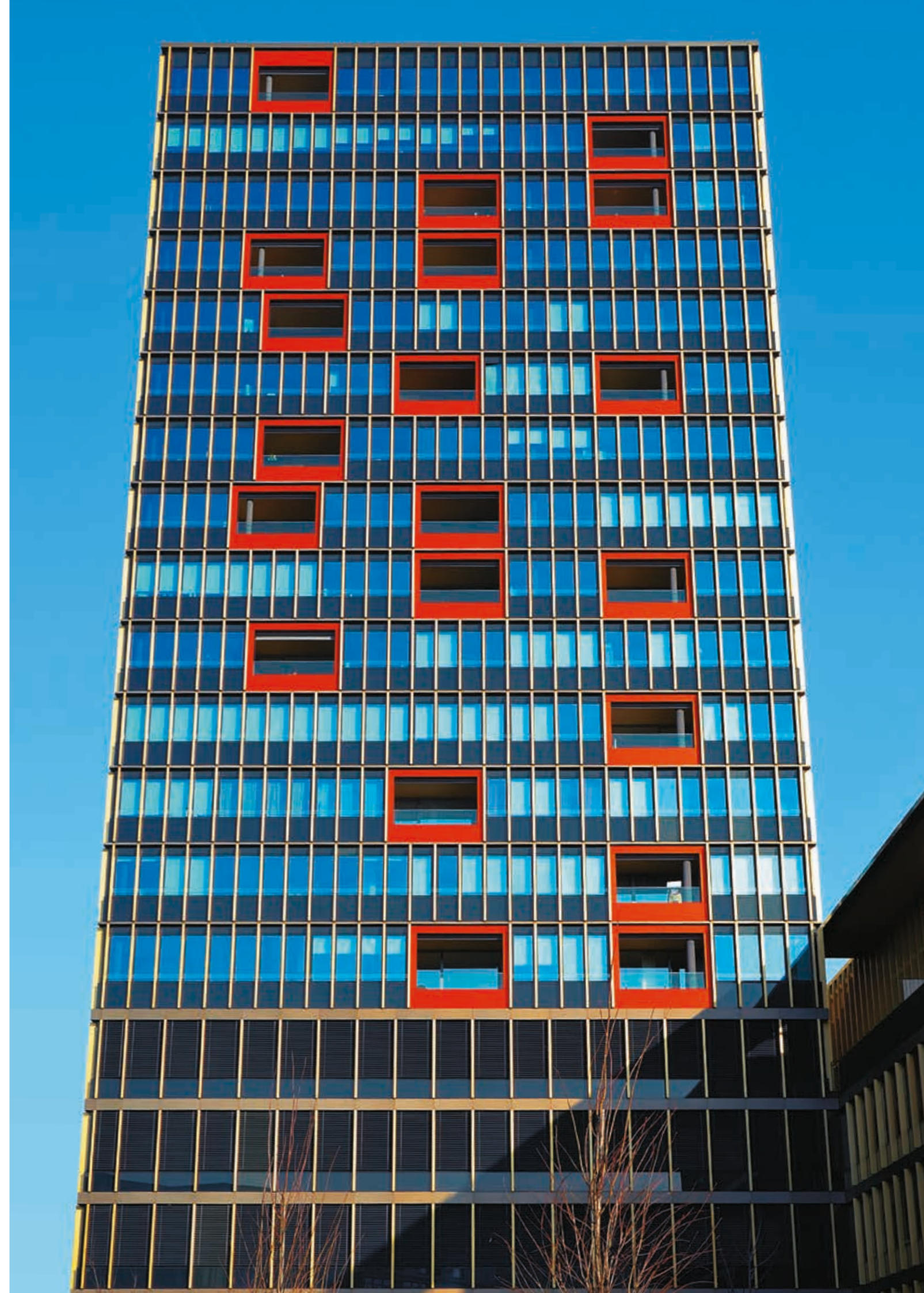
# RESIDENTIAL AND COMMERCIAL LEUTSCHENTOWER

18-story high-rise with 3000 large wood/aluminum tilt-and-turn window units

Project: Residential and commercial Leutschentower  
Location: Zurich, Switzerland  
Owner: SwissRe  
Design + project architect: Béatrix Consolascio Architekten AG, Zurich  
Production information: Zwimpfer Partner Architekten AG, Zurich  
Window manufacturer: Baumgartner AG  
Window type: Wood/aluminum with opening lights on all stories  
Glass: All windows with triple-glazed IGUs

Left:  
Daylight-flooded spaces

Right:  
Opening windows on stories





# SIKA R&D CENTRE

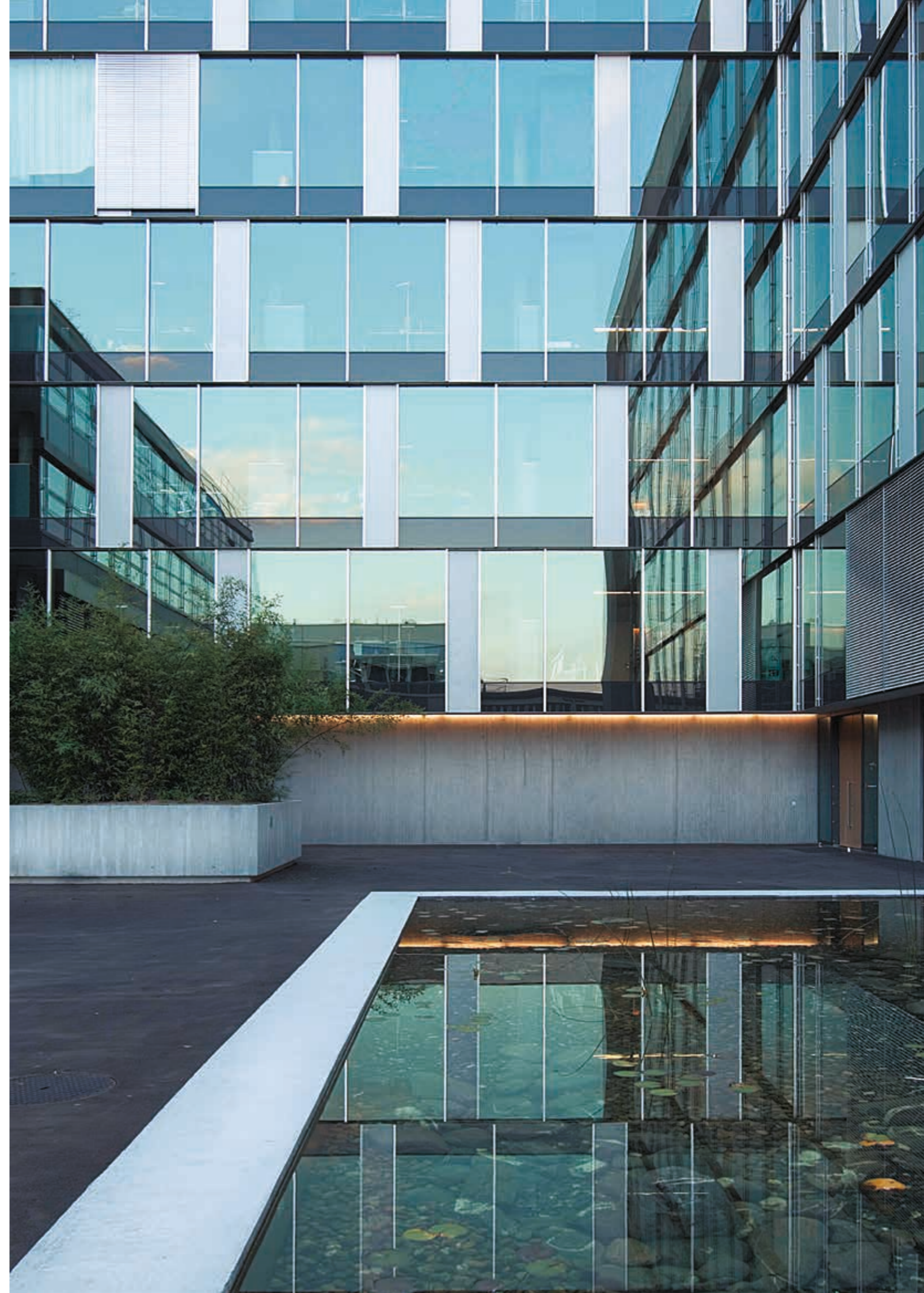
Windows with interior natural wood finish integrated in modern curtain wall

Project: Sika R&D Centre  
Location: Zurich, Switzerland  
Owner: Sika AG  
Architect: Architekturbüro Andrea Roost, Bern  
Window manufacturer: Baumgartner AG  
Window type: Wood/aluminum



Left:  
Daylight for offices

Right:  
Atrium of the building







# D4 CENTER Z5

Modern facade composition punctuated by frameless windows

Project:	D4 Center Z5
Location:	Root, Switzerland
Owner:	Suva (Swiss Accident Insurance Fund)
Architect:	Scheitlin-Syfrig Architekten, Lucerne
Window manufacturer:	1a hunkeler AG
Window type:	Wood/aluminum

Left:  
Contemporary woodwork facade

Right:  
Abundant daylight for offices





# HOTEL VICTORIA

Faithful renovation of historic building in old city core

Project: Hotel Victoria  
Location: Basel, Switzerland  
Owner: Coop  
Window manufacturer: Baumgartner AG  
Window type: Wood/aluminum

Left:  
107 rooms fitted with soundproof windows

Right:  
Triple-glazed IGUs subject to stringent  
soundproofing requirements



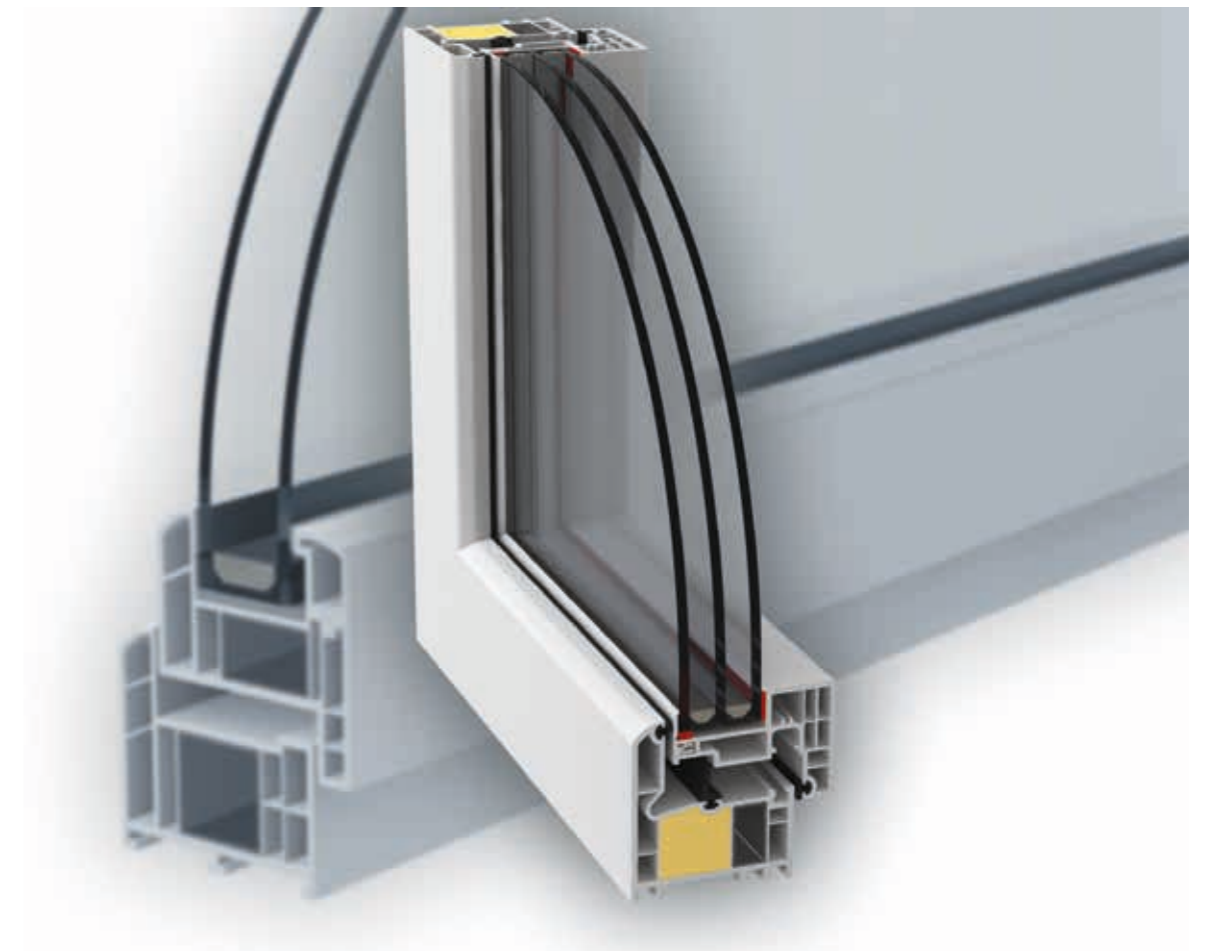




# WINDOW TECHNOLOGY - QUO VADIS

**Windows with L frames achieve an optimum frame factor** due to the fact that the insulating glass unit is wholly supported by the adhesive. Architects appreciate the resulting full-glass exterior, while the superior thermal and sound insulation in conjunction with a low frame-to-glass ratio makes a compelling argument for the entire design team. Owners are equally delighted by the long service life and minimal maintenance requirement for structurally bonded windows. Sika will provide you with detailed information on structurally bonded windows.

We will be glad to refer you to a local window contractor that deploys innovative bonding technology. Please send your e-mails to: [fenestration.team@ch.sika.com](mailto:fenestration.team@ch.sika.com)





# GLOBAL BUT LOCAL PARTNERSHIP

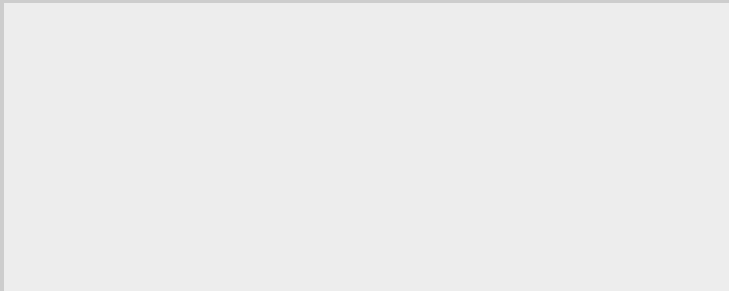


## FOR MORE INFORMATION:



### WHO WE ARE

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika has subsidiaries in 90 countries around the world and manufactures in over 160 factories. Its more than 17,000 employees generated annual sales of CHF 5,6 billion in 2014.



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