

Showroom without boundaries – retractable glass façade for maximum openness

A use case from architecture with ZIMM

ZIMM – lifting technology for moving architecture

A premium showroom opens up across its entire width – threshold-free, quiet, safe. To open, the glass panels are lowered into the floor; to close, they rise, closing seamlessly into the façade level and locking in the end position. Precise synchronisation, low-maintenance, lifetime-lubricated gears and integrated safety functions.

Project at a glance

Showroom of a premium dealer in an inner-city location with event space. Objective: maximum openness and visibility or a flush, securely locked closure as required – without visible posts, without thresholds, with high availability in daily operation.



The challenge

Large glass surfaces, limited installation space

Despite limited installation space, large-format glass surfaces had to disappear into the floor without posts and close without gaps – with precise synchronisation, integrated safety, drainage/shaft heating and connection to the building management system (BMS).



The solution

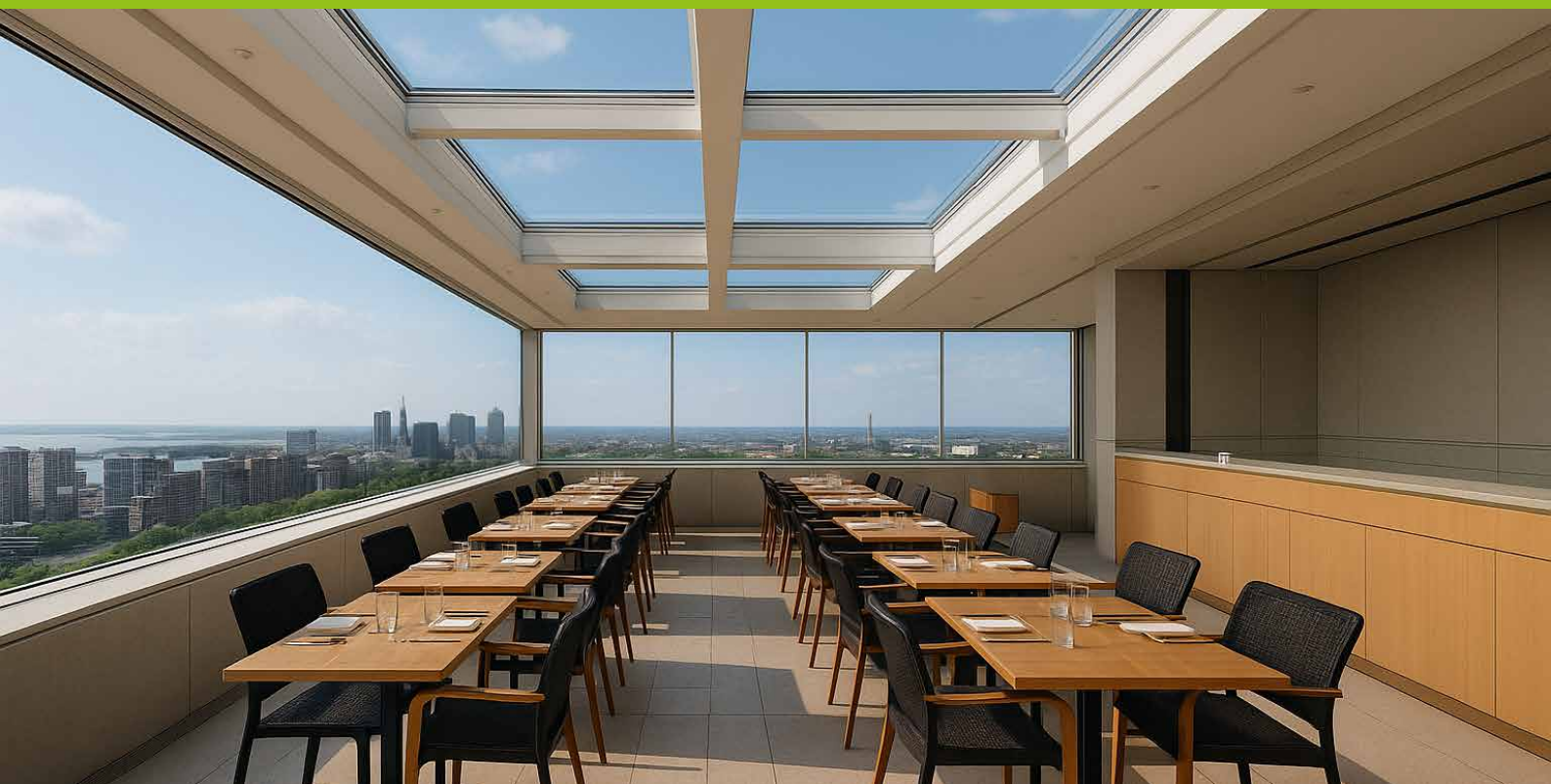
Retractable façade with system

ZIMM implemented a modular lifting system with screw jacks. Trapezoidal or ball screws are selected depending on the priority. Several segments are moved synchronously; end position, position and load monitoring ensure safe operation.

Different arrangements are used depending on the geometry and load case; redundancies are optional. Lifetime-lubricated, sealed gearboxes and unpainted function-relevant surfaces ensure durability. The control system enables smooth starting and braking (ramp) and interfaces to the BMS.

Depending on requirements, the glass panels, walls or gates are lowered into the floor and the opening is released. To close, the elements move back up, close flush with the façade level and lock in the end position. Maintenance and cleaning are carried out from above; drainage and, if necessary, shaft heating ensure winter operation. Emergency operation with safe end position (fail-safe) – e.g. through self-locking spindles, brakes and safety nuts (SIFA).

- + **Maximum openness**, threshold-free transition, gap-free closing
- + **Quiet, precise operation** and **high availability** thanks to robust mechanics
- + **Integrated safety**: crush/overload protection, end position monitoring
- + **Compact integration** in the installation space, **low maintenance**
- + **Scalable & modular** for additional segments



Further possible applications

Hospitality

(rooftop/bar/restaurant, catering & hotels)

Retractable balustrades, façades, glass bands and skylights – open when needed, otherwise closed flush; free roof edge, flexible terraces/conservatories, more daylight & natural ventilation; optional drainage/shaft heating, weather sensors & GLT connection.

Flagship retail & malls

Storefronts that open completely or close flush when required – increased footfall, clear zones without posts.

Car dealerships & technology showrooms

Threshold-free vehicle changes and event presentations without gate drop heights.

Event halls & trade fairs

Indoor-outdoor operation, quick conversion, higher space productivity.

Museums and cultural centres

Convertible „display façades“ – climate-stable during operation, open to the piazza in the evening.

Premium residential construction

Conservatories/orangeries and pool houses – completely open in summer, tightly sealed and quiet in winter.

Transport & infrastructure

Temporary guide/protective walls that disappear invisibly when needed – clear routing without disruptive components.

Take your architecture to the next level now – put your trust in ZIMM!

Successful implementations in showrooms, retail and hospitality show that retractable façades increase openness, safety and user experience – aesthetically, quietly and reliably in operation.

Rely on ZIMM as a strong partner for dynamic architecture:

- **Customised solutions** for retractable façades and balustrades
- **Maximum operational safety** (precise synchronisation, pinch/overload protection, fail-safe)
- **Premium aesthetics** thanks to threshold-free, gap-free, clean integration
- **Efficient in operation:** durable, low-maintenance, designed for winter operation
- **Planning expertise** from design to commissioning (GLT interfaces, standards)



With the **ZIMM modular system** and the **online configurator**, you can obtain 3D/2D data including a parts list in just a few steps – precisely tailored to your application. Get started now:
zimm.com/cad-login

Let's rethink spaces together!
Contact ZIMM – and benefit from proven technology and first-class service.

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