Belimo Safety Solutions are making a significant contribution to the fire protection of a special building.

At the centre of Linz, Austria, the Promenade Galleries are now located on an area of 12,000 m². Here, heritage-protected old buildings are skilfully combined with modern architecture, which offers a contemporary, urban living and working style as well as exclusive housing in all user spaces. For the Promenade Galleries project, six Linz companies have joined forces under the leadership of the electrical installation company ETECH as a joint venture for the entire technical building installation. In addition to the electrical installations, comprehensive networking and control technology, fire protection was also a focal point at the start of planning. In addition to European standards and directives, Austria also complies with state-specific regulations, making it one of the most progressive countries in the world in terms of fire protection. In all buildings with installed fire alarm systems, motorised fire dampers are mandatory and state of the art.

**TYPE OF BUILDING**
Multifunctional

**PROJECT**
Mixed use (offices, apartments, hotel, commercial, event hall, underground car park)

**TRADE**
Fire protection

**PRODUCTS**
- Fire damper actuators
- Smoke control damper actuators
Success Story – Promenade Galleries

The owners of the Promenade Galleries even went one step further: ‘All fire damper actuators have to close the dampers in the evening as soon as the ventilation system is switched off so that fire and smoke cannot spread through the ventilation system in case of emergency’, says Norbert Kaimberger, Project Manager and Authorised Signatory of ETECH. At the same time, regular closing and opening of the fire dampers is logged as a function test of operational readiness, which makes a decisive contribution to the safety of the building.

The mixed use of the building is a challenge

Even at the beginning of the Promenade Galleries project, various specialist authorities were dealing with the different aspects of the trades and optimal networking of all fire protection systems. Coordinated planning early on was therefore of the utmost importance.

In order to uncover network weaknesses and deficiencies in fire protection installations, an integral test was carried out. This cross-system and system-wide test plays a central role when it comes to the safety of buildings and people. Safety-relevant plants and systems are checked with regards to their functions in the overall system, so that cross-trade safety functions perform reliably in normal situations and, above all, in case of an event.

Taking account of different operating times

In order to prevent the spread of smoke and fire through ducts, the corresponding fire dampers close as a precaution in the parts of the building that are not being used at that time. The needs-based control of the total of 500 motorised fire dampers allows the different usage times in the building to be taken into account. For example, the operating times of the Oberösterreichische Nachrichten OÖN newspaper office significantly differ from those of other offices in the same ventilation area.

Saving lives and protecting tangible assets in case of fire.
Safety-oriented fire-protection concept

The fire protection concept of a building defines, among other things, safety targets. The greatest threat to humans and animals in case of fire is toxic smoke development. In order to ensure that escape and rescue routes remain smoke-free, smoke extraction devices are installed in the Promenade Galleries buildings. As soon as the fire alarm system detects smoke, extraction devices trigger automatically and the fire brigade is simultaneously notified.

In addition to the motorised fire dampers, there are six smoke control zones – three in the underground car park, the restaurant and the shopping area respectively. A central fire control system is responsible for the control and monitoring of 500 motorised fire dampers, 40 motorised smoke control dampers and six smoke extraction fans. This system automatically and periodically checks the function of all connected dampers. In addition, the saved test protocols support the technical staff during their regular inspections. Using the system, safety scenarios can be easily and flexibly adapted to new conditions, for example, when rooms are converted.

Proven products and unique service

The partnership with Belimo was clear for Project Manager Norbert Kaimberger from ETECH very early on. “We are now implementing the second project together with Belimo. The first was the construction of our new headquarters. Collaborating with Belimo work very well then like it does today”, says Kaimberger. “If we have any questions, we receive an answer immediately or a competent Belimo specialist will visit us at the construction site. This service and proven products make Belimo the ideal partner”.

IMPRESSIVE ADVANTAGES OF BELIMO SAFETY ACTUATORS FOR FIRE DAMPERS

- Maximum safety through reliable closing and holding of the damper in the safety position.
- Possibility to control scenarios by means of intelligent controls and connection of sensors.
- Infrastructure protection in the event of a power failure by automatic closing of the fire damper using the spring energy of the actuator.
- Reduced maintenance and operating costs.

BENEFITS AND ADVANTAGES OF BELIMO MOTORISED SMOKE CONTROL DAMPERS

- Smoke control dampers are brought into the defined safety position in case of fire and maintain it reliably.
- Escape and emergency routes remain low smoke areas.
- The flashover is delayed or even prevented.
- Fire fighting and rescue work is made significantly easier.
- The building structure and tangible assets are protected.
Belimo as a global market leader develops innovative solutions for the controlling of heating, ventilation and air-conditioning systems. Actuators, valves and sensors represent our core business.

Always focusing on customer added value, we deliver more than only products. We offer you the complete product range for the regulation and control of HVAC systems from a single source. At the same time, we rely on tested Swiss quality with a five-year warranty. Our worldwide representatives in over 80 countries guarantee short delivery times and comprehensive support through the entire product life. Belimo does indeed include everything.

The “small” Belimo devices have a big impact on comfort, energy efficiency, safety, installation and maintenance. In short. Small devices, big impact.

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