## Smart Buildings Product Brochure



Reynaers Aluminium

Windows. Doors. Curtain Walls.

Together for better

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#### INTRODUCTION

### Life, more comfortable than ever

Reynaers Aluminium has always been synonymous with quality materials, cutting-edge design and lifelong comfort. With the seamless integration of smart building solutions into our products, we now add top-notch smart technology to the mix to help make life more comfortable than ever.

Our windows and doors are compatible with the industry's leading smart building systems. Together, they provide users with a new level of comfort, security and peace of mind. Thanks to a range of intelligent solutions, our windows and doors do the work for you at the push of a button. No need to worry about keys anymore: the smart system allows users to manage access to their home or building through a fingerprint scanner or app. Moreover, it allows them to check whether doors and windows are properly closed from a distance and to have packages delivered inside safely while they are away.

## **Automated locking** systems for doors

### Opening doors at the touch of a button

Modern living and working requires the highest levels of convenience, energy conservation and security. In the buildings of the future, doors and windows will play an important role in achieving these goals. That is why, together with our partners FUHR and ekey, we now offer some of the industry's most cutting-edge locking and access control systems.

Thanks to the smart fingerprint scanners, keypads and/ or home automation systems, users will never need a physical key again: doors can be opened at the touch of a button for quick and easy access.

## Automated locking systems

#### Automated locking systems for Reynaers Aluminium doors

qualification.

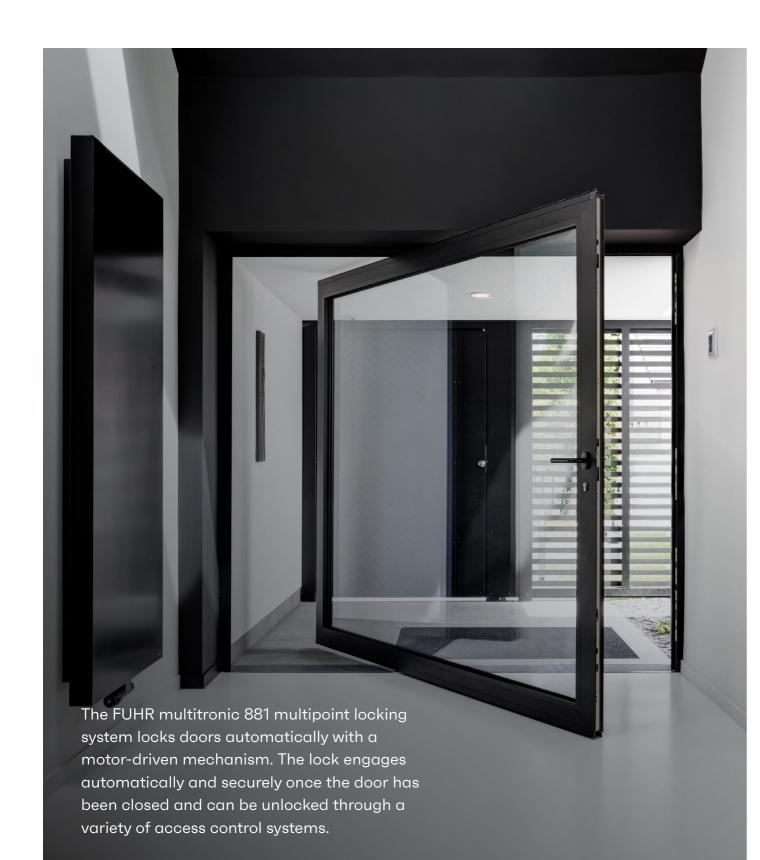
FUHR automated locking systems offer a significant upgrade in terms of convenience, security and sustainability to help make life easier and more comfortable for users and inhabitants.

These FUHR solutions can be easily and seamlessly integrated into our Reynaers Aluminium door systems. Choose between autotronic - a partially mechanical three-point lock with a burglaryproof RC 2 qualification - and multitronic - a fully electrical seven-point lock with an RC 3



#### FUHR multitronic 881

Automated locking systems



#### The advantages at a glance

- Reliable twin motor: strong and fast locking and unlocking thanks to two parallel high-performance motor drive mechanisms.
- Energy savings: doors always close swiftly and tightly.
- Secure locking of main entrance doors, apartment doors and back doors.
- Suitable for burglary-resistant doors in accordance with EN 1627 RC 2 and RC 3.

High-strength steel deadbolt

High-strength steel deadbolt and transmission elements with sensor-based monitoring of the deadbolt position



Reed switch to monitor position of door leaves



Operational reliability guaranteed by special magnets

Powerful locking at up to seven points for reliable burglar resistance



Optimum energy rating due to permanent draught-proofing thanks to adjustable strike plates and automatic locking

- Compatible with a wide variety of access control systems.
- Plug-and-play: complete kit with preassembled connectors seamlessly integrated into the door.
- Unique lock technology: integrated panic functionality and premium quality steel deadbolt and latch.



Comfortable internal lever handle opening – intuitive and certified



Patented transmission clutch reduces cylinder wear to a minimum



Patented twin-motor concept for fast, powerful locking and unlocking in less than a second, proven by testing to withstand 500,000 operating cycles



Universal connections directly into the motor terminal block

#### **APPLICATION**

#### Multipoint locking: the sustainable solution

Multipoint locking ensures optimal thermal insulation so that heated or cooled air remains inside the building. This way, smart locking systems help ensure energy conservation, cost savings and the creation of a comfortable home or working environment.

Sensory monitoring of the door leaf and bolt position is included as standard. The locking status can be verified and displayed reliably at any time for both residential and commercial buildings. Connection points for alarm systems and/or building management systems are also included as standard, taking door security to the next level.

### Well-equipped to fend off uninvited guests

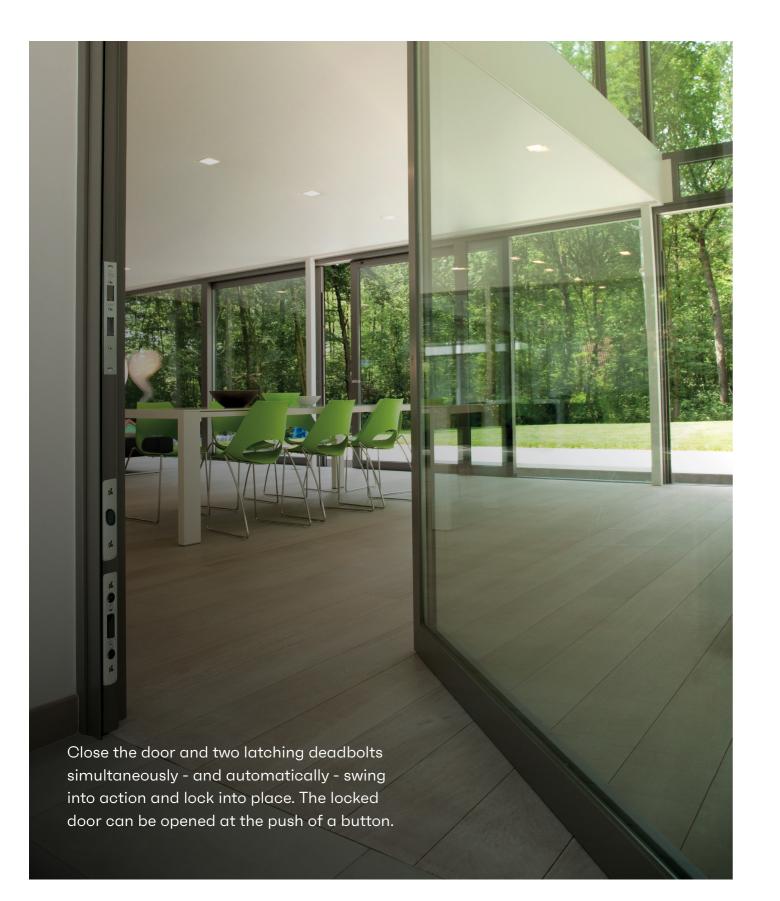
Front doors and side doors offer a point of access not just for invited guests, but for less welcome ones too. Burglars are very aware that many entrance doors are not locked at all or locked insufficiently during the day and often access the building through the door. Enter the multitronic 881: the system automatically locks the door for maximum security.





### FUHR autotronic 834

Automated locking systems



#### The advantages at a glance

- Security: the door locks automatically.
- The additional latches become sturdy deadbolts the moment the door is shut.
- Deadlocking latch with 20 mm throw and • counter-pressure device.
- Increased thermal insulation due to the constant gasket compression from three locking points. This results in lower energy



losses and possible door distortion or warping is permanently prevented. Convenient and powerful motorised opening via access control systems. • The modular system makes it suitable for a wide range of Reynaers Aluminium doors. • High-quality materials ensure a long product life.



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Automatically locked when shutting the door

Motorised opening

#### INTELLIGENT LOCKING OPTIONS

Certain situations may require a temporary deactivation of the locking system. Two optional functionalities are available for this purpose. When the **day latch function** is engaged, the door will only be secured by the latch. This daytime solution is ideally suited for frequently used doors in commercial or apartment buildings where controlled access is required. The system can be activated via a timer or a switch.

When the **permanent-open function** is activated, both the latch and deadbolt are permanently retracted. Unimpeded access in both directions is possible without access control. This solution is ideally suited for shops and other buildings frequently visited by the public, or in residential settings where users might want to step outside briefly without locking the door. Looking for more security? With an additional door closer, the door will automatically shut without locking.\*

\* Only needed for Fuhr Autotronic 834.

## **Access control** for automated locks

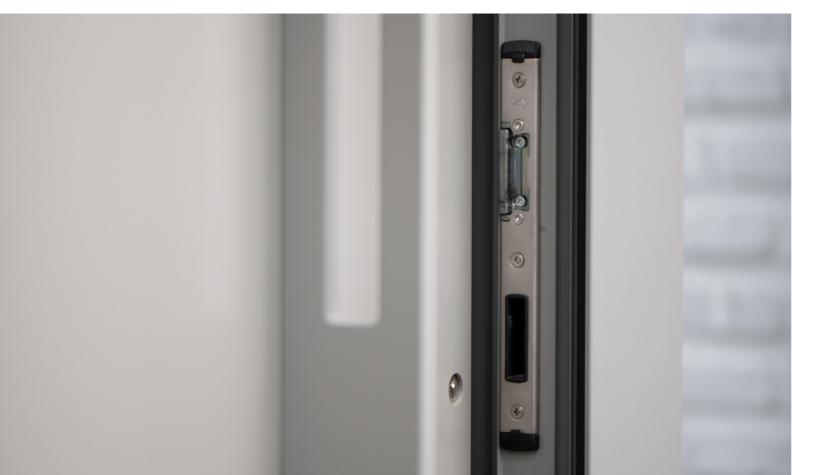
#### Access control for automated locks

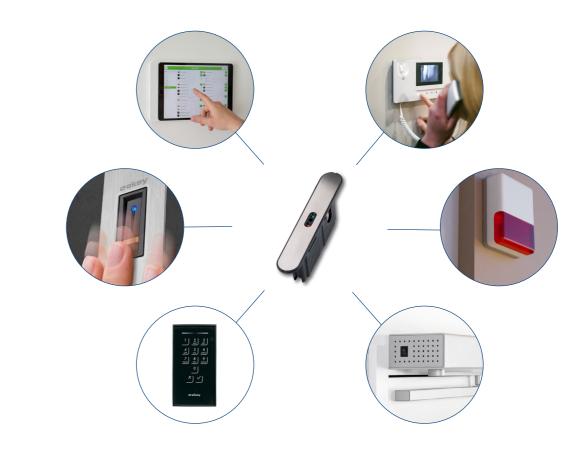
The multitronic 881 and autotronic 834 motorised locking systems are based on intelligent control technology that combines convenience and security effortlessly. It is preconfigured for a range of system requirements perfectly suited for use in residential and non-residential properties where flexibility is a must.

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#### The multi-functional controller allows users to control a number of different functionalities:

- Access control systems such as fingerprint scanners and keypads - see page 14
- Intercom •
- Building management systems
- Alarm systems •





Control pulse for electrical swing door openers Day latch function or permanent-open function



#### FINGERPRINT SCANNER AND KEYPAD FOR SMART AND FLEXIBLE ACCESS

Thanks to the ekey product range, fingerprint scanners have taken center stage as an access control mechanism and keys have become superfluous - an innovative approach that offers a number of benefits.

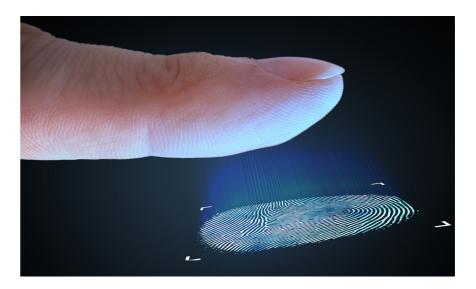
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#### The advantages at a glance

- Users can't lock themselves out, lose keys or get keys stolen
- Highest counterfeit protection through
  live detection
- No transfer of access authorization possible, like with cards or keys
- The ekey software learns with every use, recognizes the growth of children's fingers as well as changed user habits and minor injuries
- Building control systems can recognize who triggers an action through the fingerprint scanner access system



#### Security



ekey guarantees the highest security standards to protect users from misuse and unauthorized access. For example:

- ekey fingerprint scanners are secured against false positives with a false acceptance rate of 1:10 million. This is 1,000 times more secure than a four-digit code
- The ekey fingerprint scanner sensor technology can distinguish between living and dead tissue with RF sensor technology
- ekey fingerprint scanners are equipped with a capacitive line sensor. The detection of the finger requires a pulling movement over the sensor, whereby no fingerprint is left on the device so that it can neither be removed nor reproduced
- ekey fingerprint scanners and ekey control units are connected via an encrypted data connection. Attempts at tampering such as short-circuiting connecting cables do not trigger an opening impulse



### Fingerprint arte

With its elegant stainless steel or black finger guide, the ekey arte fingerprint scanner was specifically designed for easy and seamless integration in Reynaers Aluminium doors and door handles. Thanks to its compact dimensions, the fingerprint scanner can be discreetly integrated into the door itself, the door frame or even the wall.

The ekey fingerprint scanner is equipped with intelligent software that communicates with the control unit through an encrypted data connection. Moreover, it recognizes changes in user habits and learns with every use.



Arte stainless

Arte black



The new integra 2.0 Bluetooth fingerprint scanner combines the advantages of a classic fingerprint scanner with the Bluetooth functionality of modern smartphones and tablets. Possibilities are endless, and the free ekey home app enables users to easily set up all important configurations via their smartphone.

In just a few clicks, users can add new user accounts, edit existing authorizations, edit the user entry to include photos, or update the fingerprint scanner software. Moreover, when required, smartphones can be programmed to function as a remote control that allows users to open the door from a distance.

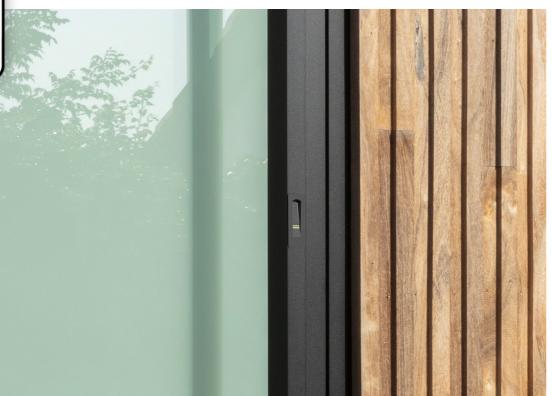


Integra white Integra stainless

The ekey integra home fingerprint scanner with RFID is a biometric sensor terminal for the registration of fingerprints by means of an RF line sensor. Up to 99 fingerprints and 99 cards can be stored. The fingerprint scanner doubles as an RFID terminal that can be used with RFID cards and is used to identify authorized users and subsequently open building doors, workplace doors, garage doors, etc. The fingerprint scanner is intended for use in both domestic and business applications. The ekey integra RFID home fingerprint scanner is designed for fixed mounting on immobile components, such as masonry, and for use in protected outdoor areas.



Thanks to the ekey control unit micro plus, the ekey arte fingerprint scanner can now also be operated through the ekey app. This allows users to open the door with a smartphone via a secure Bluetooth connection and to easily add and manage different fingerprints.



Integra black

#### **Technical overview**

### Keypad integra

The ekey integra keypad is equipped with intelligent software that transmits information to the control panel using encrypted communications. The keypad can easily be mounted next to the door. ekey has placed special emphasis on design and the use of high-quality materials, for an intelligent solution that looks good, too.

The ekey integra keypad code pad offers up to 99 different four- to eight-digit programmable number sequences, meaning that each user in the building gets their own access code. If a user is no longer permitted access to the building, their code can be deleted in seconds.

Because of the integrated backlighting, users can quickly and easily insert their own personal code even in the dark.



Integra keypad black

Integra keypad white

	Arte	Integra Bluetooth RFID	Keypad Integra
False Acceptance Rate	1:10.000.000/FRR 1: 100	1:10.000.000/FRR 1: 100	NA
Dimensions (WxHxD)	25,1 x 52,1 x 12,1 mm	43,6 x 89 x 17,3 mm	51,7 x 97,1 x 21,4
Power consumption	approx. 1W	approx. 1 W	approx. 1 W
Supply Voltage	5V	10-24 VDC	8-24 VDC
IP code	IP54	IP54	IP54
Recommended mounting height	155cm	155 cm	NA
Memory	99 different fingers can be stored, data is retained in the event of a power failure	99 different fingers can be stored, data is retained in the event of a power failure	Up to 99 different 4-to 8-digit codes can be programmed simultaneously
Temperature range	-25° C to 70 °C	-25° C to 70 °C	-25° C to 70 °C
Activated by	Fingerprint, app (with extra control element)	Fingerprint, app, RFID	Code
Colors	Black or stainless	Black, white or stainless	Black or white





# Automated sliding doors

### Opening sliding doors at the touch of a button

Being able to automatically open or close a sliding door boosts the accessibility of any residential or commercial building. At Reynaers Aluminium, we aim to make that process as easy as possible. Next to offering high-quality materials and contemporary designs, we go the extra mile by providing a number of automated solutions that allow users to open and close sliding doors at the push of a button. Thanks to these smart and seamlessly integrated solutions, operating sliding doors has never been easier.

## Concealed **Motorised Solutions**

#### **Concealed Motorised Solutions**

All automated access solutions for sliding doors include concealed motors that can be seamlessly integrated into our windows and doors to safeguard the design of the building. This way, users can both enjoy the unique minimalist designs of our HiFinity and ConceptPatio 155 (-LS) sliding doors, and the added convenience of easy access.



The ultra-slim design of the HiFinity sliding door creates large transparent surfaces with a sleek and elegant design. Looking for the perfect finishing touch? The integration of a concealed motor allows users to open the sashes at the push of a button, or by connecting them to a home or building automation system. A separate manual handle is no longer required: the high-performance motor guarantees optimum convenience during use and offers a safe and reliable access solution.

With the HiFinity's electronic lock, users never have to worry about uninvited guests again. The door locks and unlocks using a robust bolt and hook operated by a button or via the smart home or building system. In addition, the integrated alarm feedback helps ensure full peace of mind.

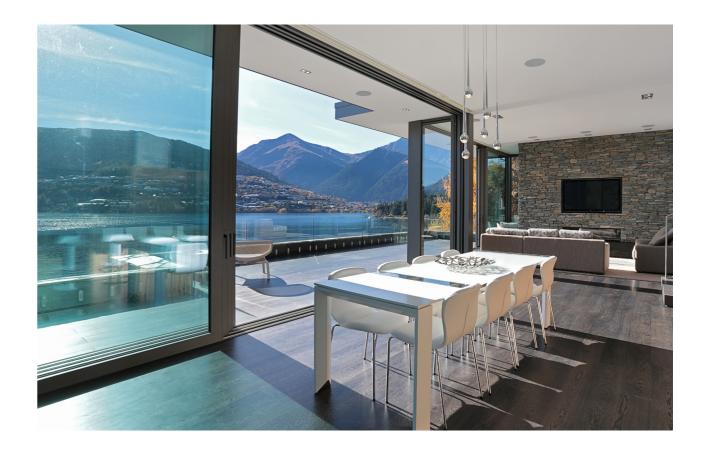
The HiFinity motor is available in a 50W version that can move sashes of up to 425 kg, and a 70W version that supports weights of up to 750 kg.

### ConceptPatio 155 Motorised sliding system

ConceptPatio 155 (-LS) is a premium insulating lift-slide system designed to deliver maximum ease of use. For added convenience, the lift-slide door can be automated with a concealed-motor solution that allows users to open the sashes at a push of a button, or through their smart home or building app.

In the lift-slide version of the ConceptPatio 155, an additional motor is built in to lift the vent. When the sash is closed, it automatically locks with a downward movement.

The 50W ConceptPatio 155 motor can move sashes of up to 400 kg.



Both the HiFinity sliding system and ConceptPatio 155 (-LS) lift-slide system are equipped with pressure-sensitive emergency detection. The doors stop instantly when feeling the slightest resistance and the motor is automatically reversed to free any obstacles. Moreover, a built-in battery pack makes sure sashes can always be opened, even in case of a power failure.



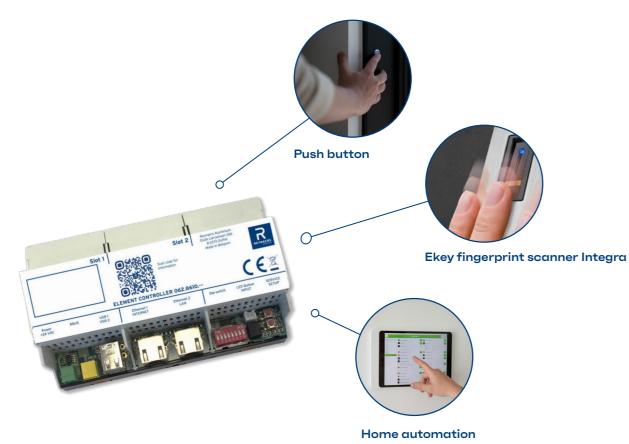
# Access control for sliding doors

#### **Element controller**

With the element controller, it has become easier than ever to fully integrate smart access control for sliding doors into home and building automation systems. The element controller enables easy handling of multiple motorized sashes, and includes several features such as pre-defined sash states, opening specific sashes, opening all sashes at once, etc. The system is easy to control and is designed to set up intuitive control of multiple sliders. This allows users to manipulate motorized vents exactly according to their individual needs. In addition, the system offers the safety of anti-collision control based on real time positioning.

The element controller allows users:

- Safety first: real time position based anti-collision control
- Intuitive control of multiple sliding sashes
- Easy handling of multiple vents by single control point for multiple motorized sashes
- Unified control in home by full integration in home automation systems





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