



## **Master Key Systems with Kaba ACE**

Examples, functions  
and solutions.



Customised access management  
with mechanical key systems

# Table of contents

## **01 Your trustworthy partner for smart access solutions**

- 07 • Mechanical key systems – Keep your keys under control
- 08 • Customised access management – Cleverly organised with master key systems
- 10 • Kaba ACE  
Reversible master key system for personal security and convenience
- 11 • Specification
- 12 • Reference Sites

## **02 Applications**

- 14 • Locking systems for private homes
- 15 • Central locking systems for apartment buildings
- 16 • Business offices and departments
- 17 • Hotel
- 18 • Theatres and cinemas
- 19 • Medical centers / Aged care

## **03 Length information**

- 21 • Single Thumbturn Cylinder – Euro Profile
- 22 • Double and Half Cylinder – Euro Profile
- 23 • Mortise Cylinder and Drawings



**Our brand promise**  
We stand for trust.

With over 150 years' experience and millions of products and solutions installed worldwide – from pushbutton locks and door closers to highly complex, networked access solutions with smartphone access – dormakaba is your reliable partner for secure and flexible access to buildings and rooms.

01





## Your trustworthy partner for smart access solutions

No matter where you need innovative, reliable access and security solutions, we are there for you with our high-quality portfolio: in hotels, shops, sports facilities, medical facilities, at home or in the office.

We are one of the leading companies for access control and security solutions in the global market. We provide everything you need for secure access to buildings and rooms, all from one single source.

More than 16,000 employees and numerous cooperation partners are ready to assist you in over 130 countries. So no matter where you are, you can benefit from our range of future-oriented products, solutions and services that give you a sustainable sense of security.

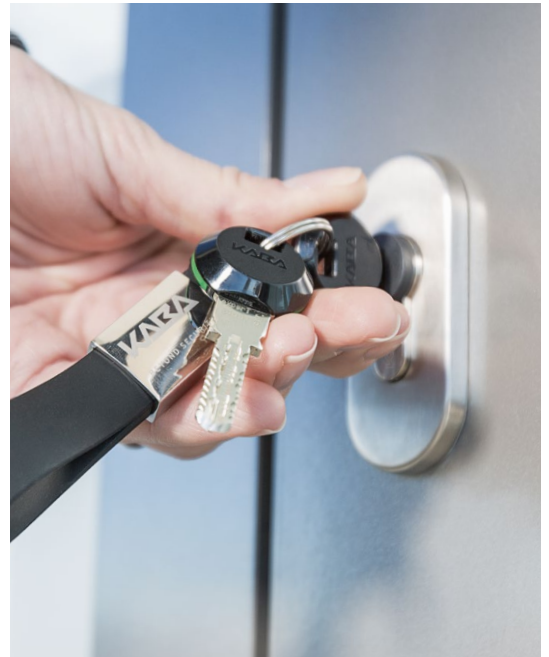
# Mechanical key systems

## Keep your keys under control

With a mechanical key system, you control your keys and access rights, providing quick access to all rooms within the premises and saving key replacement costs.

**As infrastructure grows exponentially, so does the need to support this development with adequate security systems. Increased access points result in multiple locks that require efficient security management. This is where the dormakaba master key systems come in, by enabling access according to our customers' requirements and using entry restrictions to their advantage.**

A master key system is a key plan whereby selected keys can open a number of pre-defined doors. It extensively analyses and assesses our customers' requirements. Moreover, it can deliver solutions for even the most complex access management challenges and helps maintain better control, saves key replacement costs and is convenient, as there are a lower number of keys in circulation. It also provides quick access to all rooms within the premises, e.g. for security staff and management personnel. This is not only convenient but can save lives in case of emergency.



# Customised access management

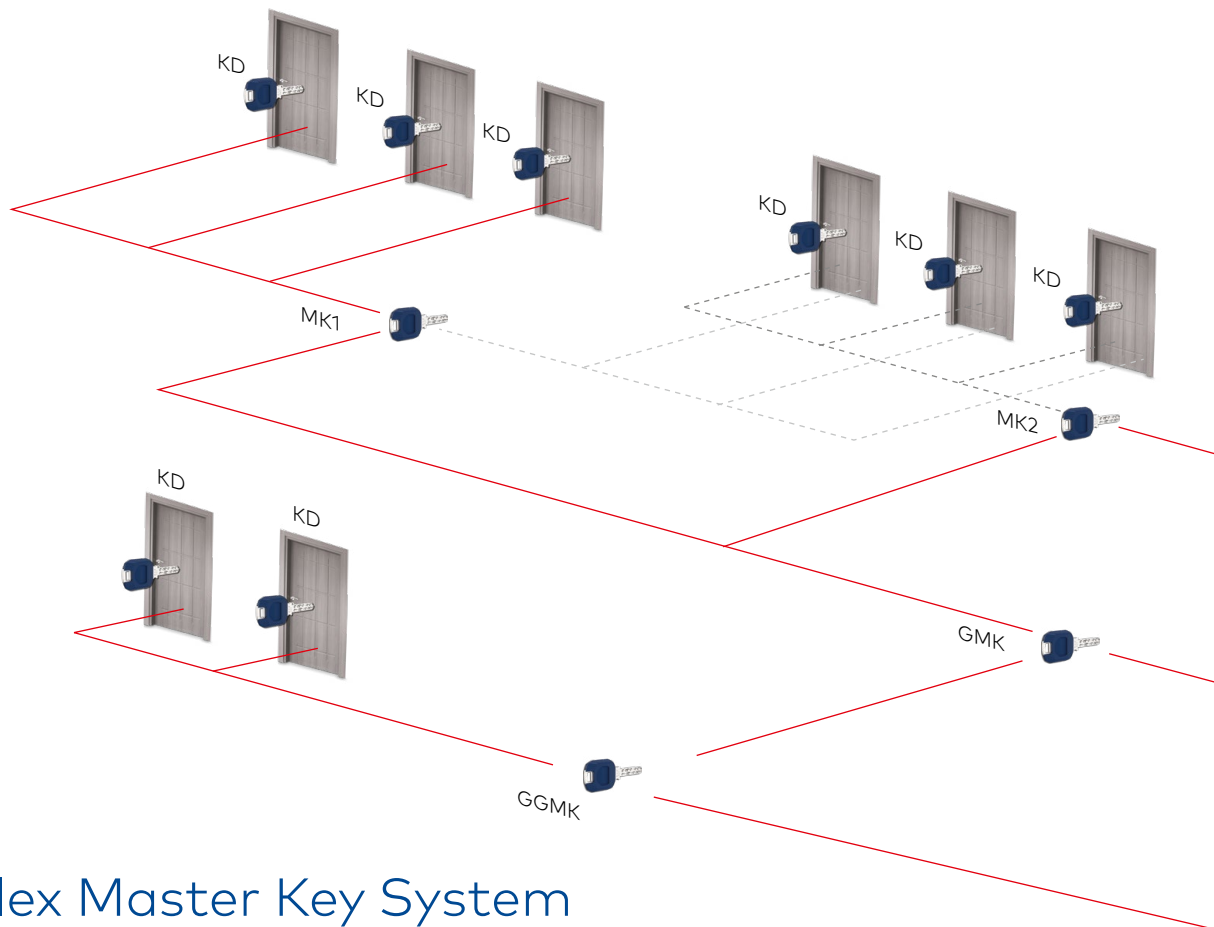
## Cleverly organised with master key systems



Master key systems is a complete product range that provides the most extensive access security solutions, which can be customised for large facilities to smaller solutions for niche customer profiles. The various typologies of dormakaba master key systems are as illustrated below:

### Key to Differ (KD)

Each cylinder can be operated by its own key.



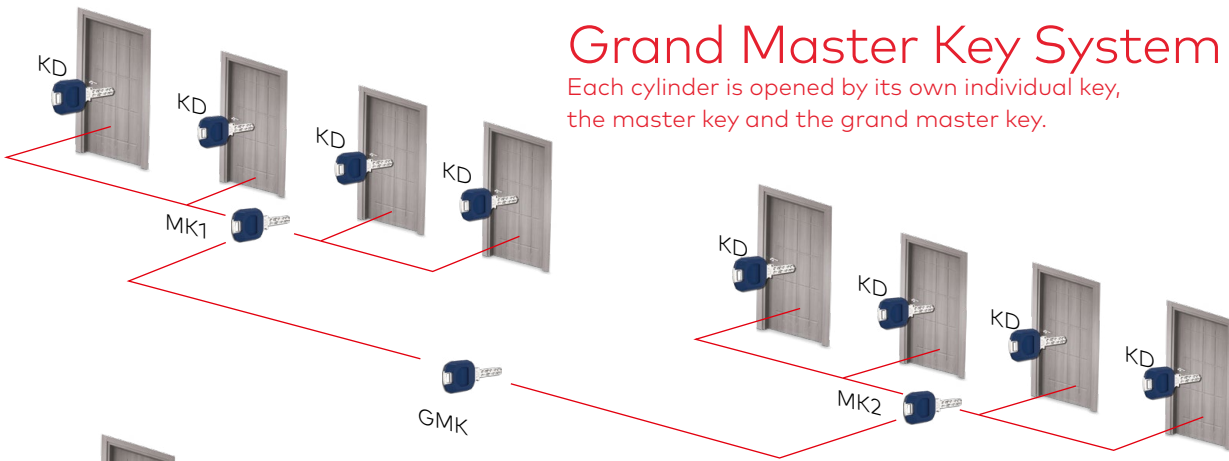
### Complex Master Key System

Individual keys or master keys belonging to different groups of cylinders can open one or more cylinders belonging to other groups and can be extended to the great grand master key system (GGMK).



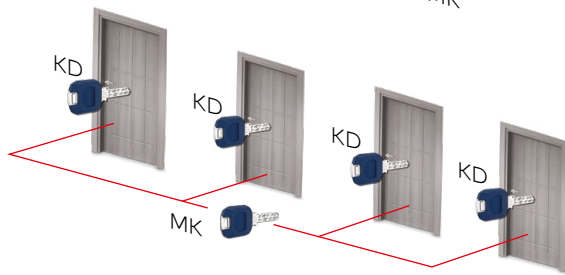
## Grand Master Key System (GMK)

Each cylinder is opened by its own individual key, the master key and the grand master key.



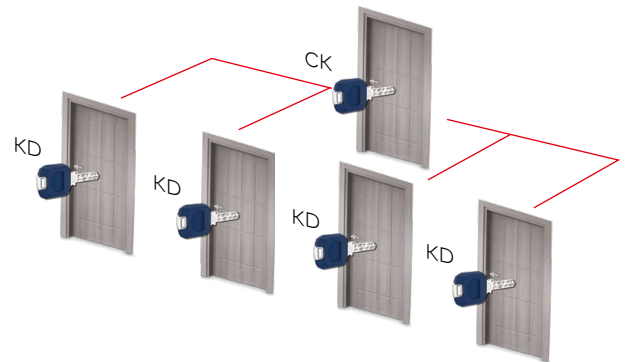
## Master Key System (MK)

Each cylinder is opened by its own individual key and by the master key.



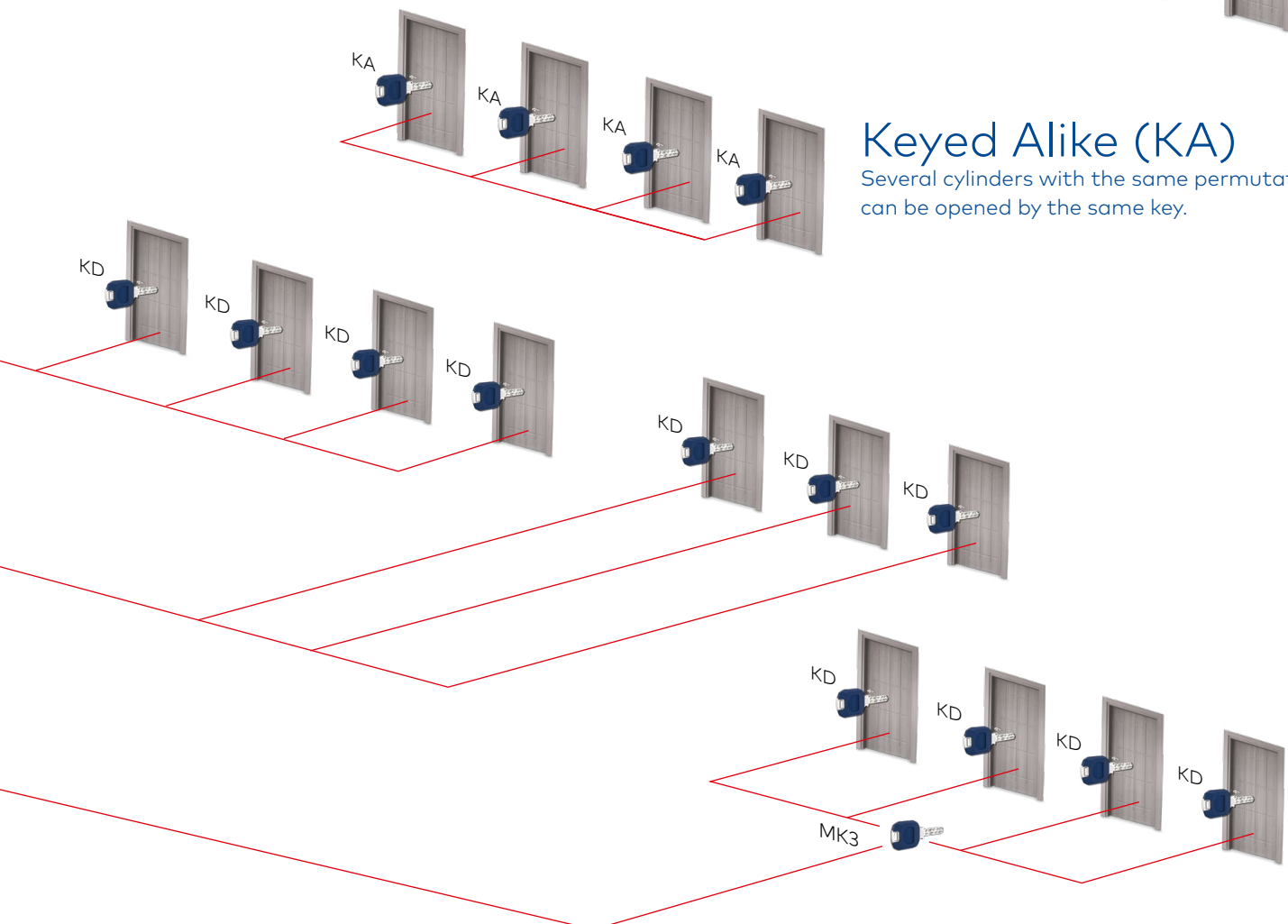
## Common Lock Systems (CK)

Each key opens only its own cylinder and the centrally locking system (e.g. the common entrance in an apartment block).



## Keyed Alike (KA)

Several cylinders with the same permutation can be opened by the same key.



# Kaba ACE

## Reversible master key systems for personal security and convenience



## Different cylinder types according to your requirements are available

### The universal basis for access

Thanks to its versatility, the system can be used in both the private sphere as well as for complex systems.

### Maximum precision meets design

The latest technology and maximum precision are essential to security. Kaba ACE master key systems impress with high-quality design.

### Areas of application

Kaba ACE is a versatile system with almost limitless application options. From a simple key plan for domestic properties or multi-family dwellings up to complex industrial or administration buildings, Kaba ACE offers flexibility in planning and organisation.

Every user is assigned individually defined authorisations within the key plan hierarchy, enabling access at all points with one single key - from the cellar, to mailboxes, to the outside and inside doors.

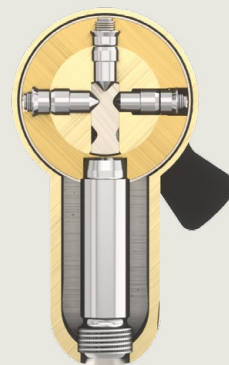
### Areas of application

- Domestic properties, including multi-family dwellings
- Small businesses
- Commercial operations
- Industrial and administrative buildings
- Public facilities such as schools and local authority offices
- Hotels
- Health care centers and aged care facilities

### Advantages at a glance

- Characterised by its versatility, allows complex, individual master key systems to be created
- Fulfills high security requirements, - patented technical features
- Kaba ACE cylinders are modular designed
- Easy upgrading with mechatronic and electronic systems

# Specification



## Reversible Key System

A unique design means the Kaba key is one of the few high security keys that can be inserted either way up. The series of grooves and impressions result in a smooth key insertion and convenience for the user.

## Modular design

Thanks to its modular design, it can be quickly and easily modified and adapted to new situations on site.

## International Certificates

### For double-, single- and thumbturn cylinders in Europrofile

- EN 1303 Key Related Security Grade 6

## Legal and technical protection

In view of its special features, the Kaba ACE has patent protection until 2021. Kaba ACE offers technically exceptional security thanks to the 16 pin pairs which can be used at the same time, as well as the unique arrangement of the tumbler pins in relation to the key milling.

## Permutation capacity

3 radially arranged pin rows with up to 16 tumbler pins pairs on up to 32 possible positions yield 369 billion possible keyings. Small to medium complexity master key systems can be realised easily with the Kaba ACE keying system.

## Cylinder types

- Double, single and thumbturn Euro-profile
- ANSI Round threaded
- Padlocks
- Other cylinders by application

## Keys

Kaba reversible keys are made of nickel silver and are extremely wear resistant.

They are available in 4 types.

For regular use:

- SmartKey clip in 12 colours
- LargeKey clip in 12 colours
- SmartKey clip with RFID transponder for electronic access systems

## Key security

Every new Kaba ACE locking system is supplied with a security card which contains all security information about the system. This is used for ordering key copies and for the registration and management of the master data for locking systems.

## Investment protection

Investment protection means security for the future. Kaba master key systems are upward compatible, meaning that customised solutions can be created to offer guaranteed protection of investment, thanks to its high degree of expandability. This means that customers do not need to worry about identifying the right time to make an investment. Kaba ACE can be expanded in the future.

## Technical features

### Dimensions

- Europrofile 17 mm:  
30/30 mm, adjustable in 5 mm increments
- Swiss round profile 22 mm:  
30/30 mm, adjustable in 5 mm increments
- Thumbturn knob: 30 x 30 mm

### Certificates

- Double, single and thumbturn cylinders: EN1303:2015-08

### Service life

- 100,000 cycles (opening and closing)

# References



01



02



03



04



05

**01 Project** : SPRM (MACC)  
**Quantity** : 1500 pieces  
**Completion** : 2017  
**Architect** : Pembinaan Mitrajaya  
 Sdn Bhd (Design & Build)  
**Contractor** : Mitrajaya Bhd

**03 Project** : Parcel F  
**Quantity** : Estimated 1600 pieces  
**Completion** : On going  
**Architect** : Jafri Merican Architect  
**Contractor** : Sunway Construction  
 Sdn Bhd

**05 Project** : IKEA Cheras  
**Quantity** : 300 pieces  
**Completion** : 2017  
**Architect** : TJ Ong Architect  
**Contractor** : McConnell Dowell  
 Malaysia

**02 Project** : Zenith Hotel  
**Quantity** : 350 pieces  
**Completion** : 2018  
**Architect** : aQidea Architect  
**Contractor** : Macru Construction  
 Sdn Bhd

**04 Project** : JAKIM  
**Quantity** : 800 pieces  
**Completion** : 2016  
**Architect** : RSP Architect  
**Contractor** : Pembinaan NSF  
 Sdn Bhd



# Applications

# Locking systems for private homes

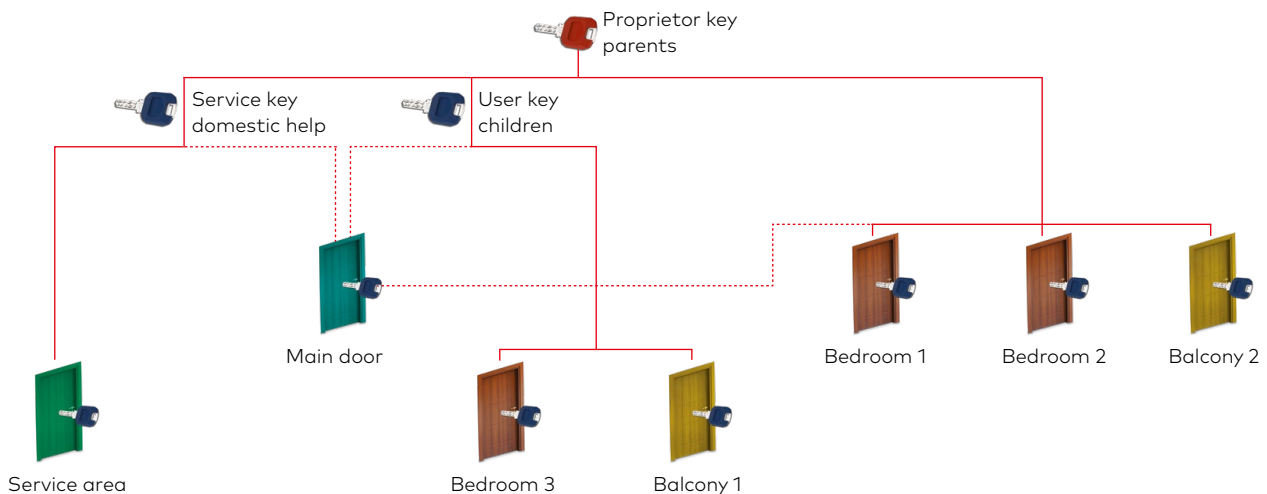
## Convenience and security in one

**Home is where we feel the most secure and a solution that can reinforce that feeling is a boon to families in any part of the world.**

Master key systems can be applied to various residential establishments – from small houses to large apartments or villas and from multistoried mansions to high rise apartment complexes.

In a house, for example, a keyed alike system could be implemented in such a way that the house owners would be able to open all the rooms of the house with one single key. So besides the front door, you can also open your letter box, cellar, garage and many other doors with a single key. The children of the house would be given a key that would only open the front door and their bedrooms.

A master key system would ensure an added level of security and greater convenience to granting and restricting access to one's home.

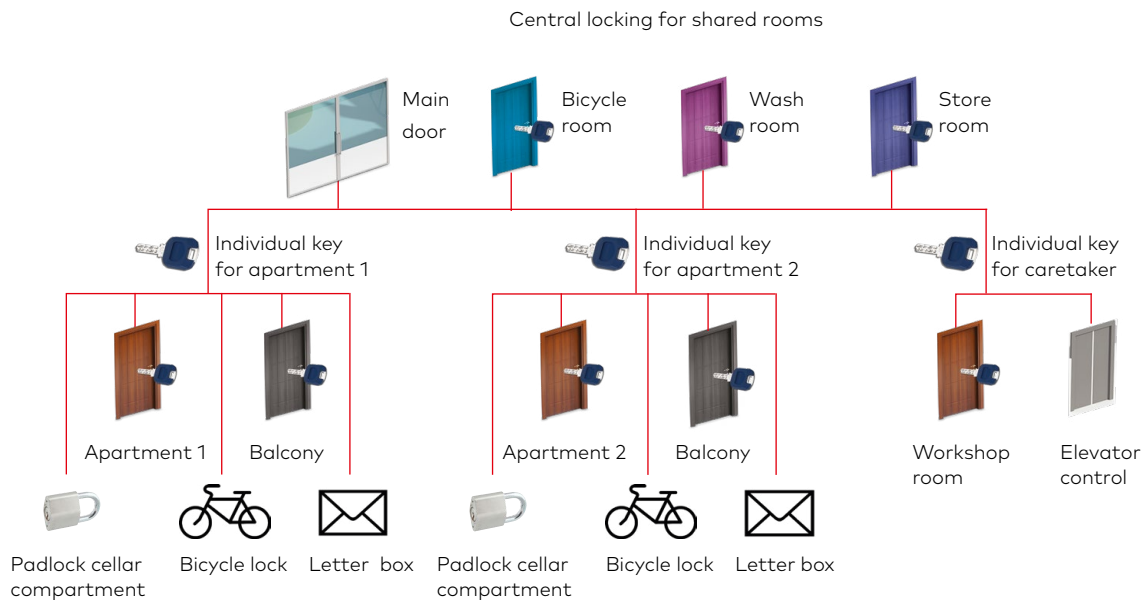


# Central locking systems for apartment buildings

## Security and organisation

Master key systems are used in apartment buildings. Main doors like the entrances to underground car parks and basements can be opened and closed by all tenants with their assigned apartment keys. However no key will open the door of another apartment. Master key systems can be expanded so that letterboxes, basement storage compartments or secure car parking in the communal garage can be assigned to the apartment key, thus reserving access for the respective tenant.

Tenants need carry only one key around with them for all rooms. So caretakers do not have to procure, issue and supervise separate keys for communal doors. And their keys, in turn, only provide relevant access to doors like the main entrance and central communal and maintenance areas.

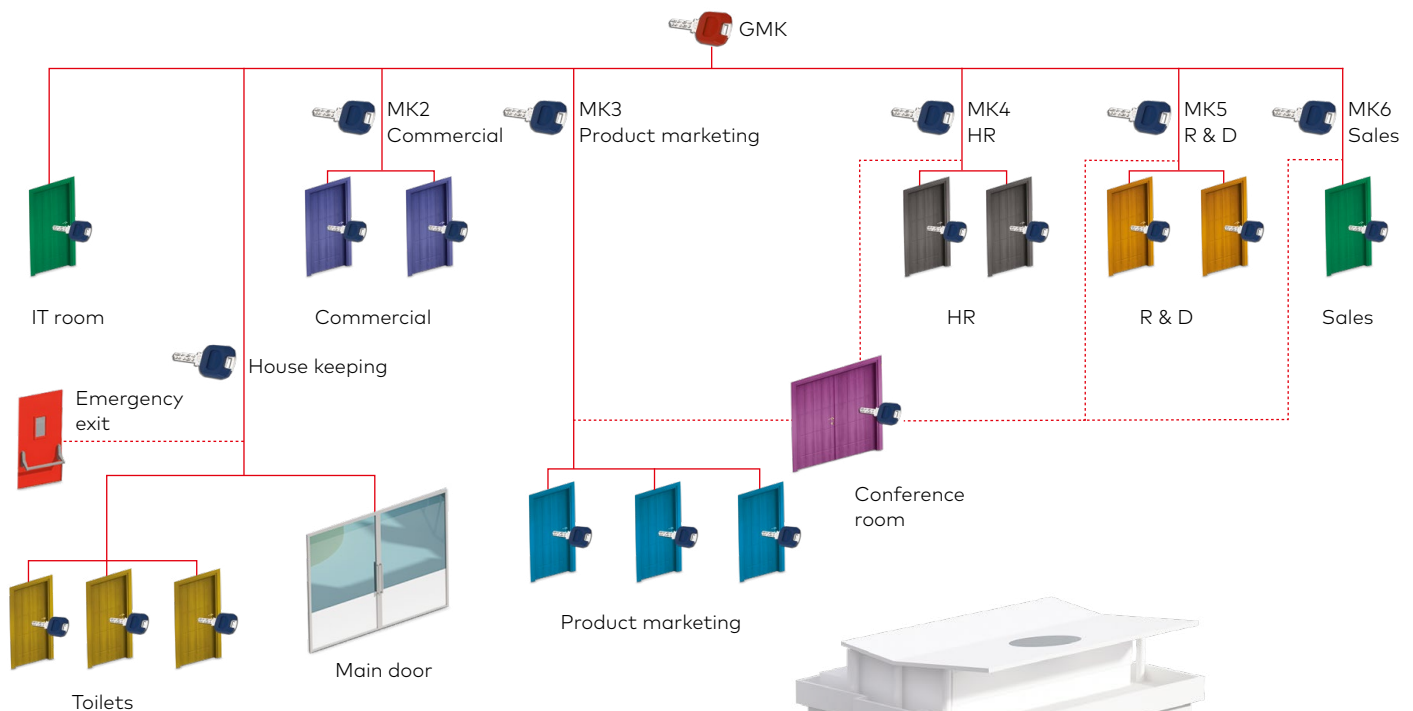


# Business offices and departments

## Increased security with master key systems

Master key systems are ideal for offices and can be successfully applied in any commercial or private office space regardless of its size. A master key system not only increases security but also grants greater access convenience to the shared spaces between various departments. For example, each department in the office would need common access to the conference room door as it's a shared space. However the R & D room would be opened by a single masterkey held only by the head of the department owing to the extra security requirements of the department. This means that role-based access rights can be assigned for each employee with just one key.

Master key systems can efficiently exclude and include entry according to a carefully prepared plan that enhances the working processes, access convenience and security protocols. Massive signature working environments in almost every corner of the world have substantially benefitted from our master key systems.





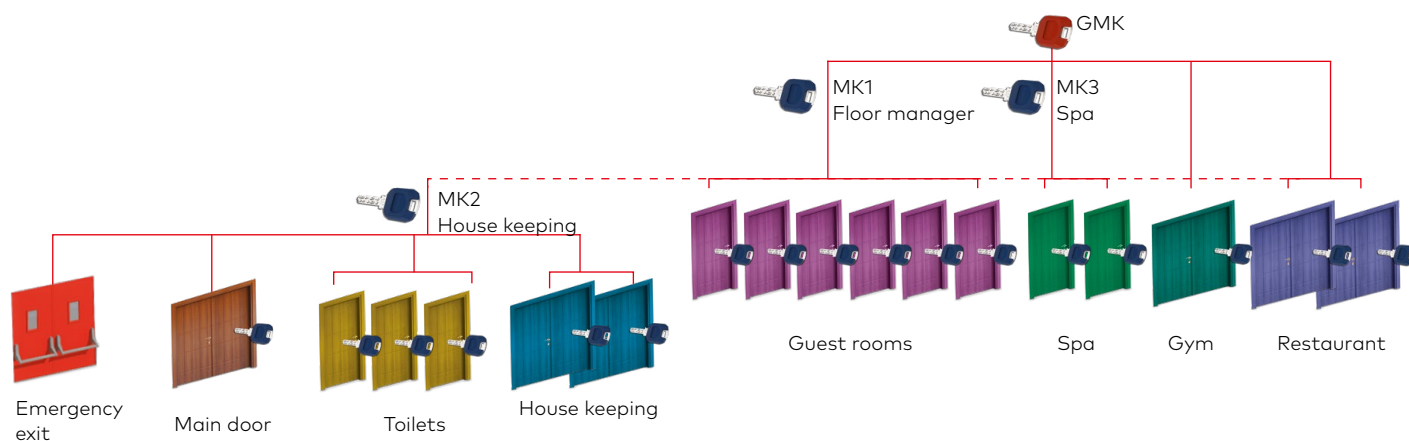
# Hotel

## Safe temporary home

A guest might select a hotel based on their preference for luxurious amenities, ambience or culinary reputation. But every time they walk into a hotel, a temporary home in a foreign land, the most important assurance sought is security, both of space – the room, and of personal information. A master key system can provide total security and convenience for both the guest and the hotel operator. Typical “back of house” hotel applications require secure locking in operational areas such as Food & Beverage management, Housekeeping as well as delivery zones. These areas are where valuable provisions and equipment needs to be securely managed. Guest Services and Financial Management areas are also where both valuable personal and financial information are processed and stored.

Staffing in hotels is very dynamic with multiple shifts across any given day necessitating locking systems which offer high levels of security, functionality and ease of management. High staff turnover means the locking system needs to be able to provide the operator with secure unauthorised key copy protection and key management systems.

Master key systems with the dormakaba “Smart” keys can also work in concert with electronic door access cards and time in attendance systems. Its expandability, as the facility grows, means that for hotel and resort owners they can be confident their future plans can be accommodated with ease.

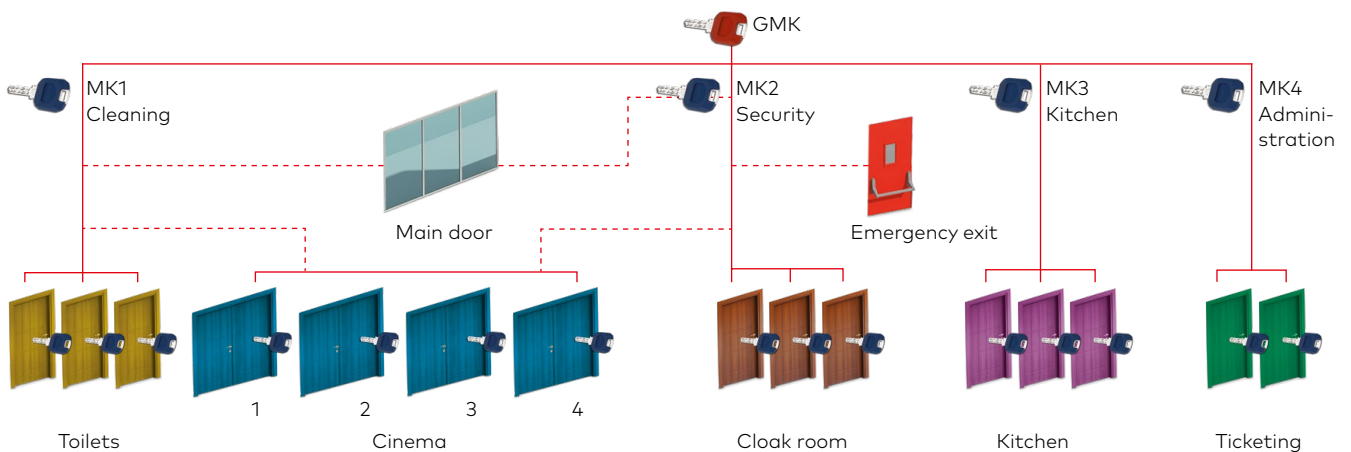


# Theatres and cinemas

## Security in entertainment

Entertainment is arguably one of the fastest growing industries and its avenues are growing at a much faster pace. Multiplexes are mushrooming even in smaller towns and as people flock in growing numbers to these spaces, better security becomes mandatory. The master key system seamlessly integrates the access mechanism for multiple screens at theatre complexes.

Master key systems also very efficiently manage emergency exits at large commercial spaces like these and makes it extremely hassle free for the staff during an emergency situation.

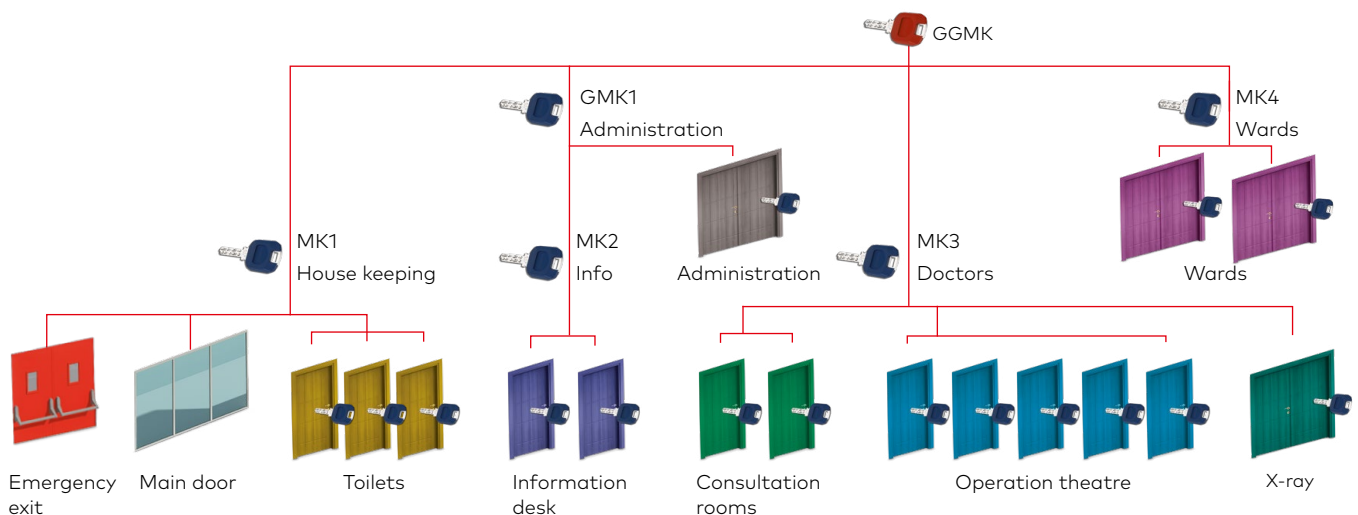


# Medical centers / Aged care

## Secure sensitive areas

Medical care facilities have several highly sensitive areas and hence regulating access becomes critical. In such a busy environment access control has to be made operationally very convenient and at the same time, technically fail proof. Implementation of a master key system to both small clinics as well as large hospitals can increase their efficiency considerably. By applying a master key system, a medical care facility could ensure much faster access to emergency facilities like operation theatres and at the same time strictly restrict access to hazardous areas with radioactive equipment.

Medical care facilities across the globe rely on master key systems from dormakaba to ensure highly safe and secure medical environments for the patients, professionals and people in general.





**Length information**

# Single Thumbturn Cylinder – Euro Profile

Model No	Description	Finish	Total Length A	Length B	Length C	No of Keys
<b>ACE 60 mm (30/30T) SK-SNP</b>	60mm Knob Cylinder	SNP	60 mm	30 mm	30 mm	3 pcs.
<b>ACE 70 mm (35/35T) SK-SNP</b>	70 mm Knob Cylinder	SNP	70 mm	35 mm	35 mm	3 pcs
<b>ACE 75 mm (35/40T) SK-SNP</b>	75mm Knob Cylinder	SNP	75 mm	35 mm	40 mm	3 pcs
<b>ACE 80 mm (40/40T) SK-SNP</b>	80 mm Knob Cylinder	SNP	80 mm	40 mm	40 mm	3 pcs
<b>ACE 85 mm (40/45T) SK-SNP</b>	85 mm Knob Cylinder	SNP	85 mm	40 mm	45 mm	3 pcs
<b>ACE 90 mm (45/45T) SK-SNP</b>	90 mm Knob Cylinder	SNP	90 mm	45 mm	45 mm	3 pcs
<b>ACE 90 mm (30/60T) SK-SNP</b>	90 mm Knob Cylinder	SNP	90 mm	30 mm	60 mm	3 pcs
<b>ACE 90 mm (35/55T) SK-SNP</b>	90 mm Knob Cylinder	SNP	90 mm	35 mm	55 mm	3 pcs
<b>ACE 95 mm (45/50T) SK-SNP</b>	95 mm Knob Cylinder	SNP	95 mm	45 mm	50 mm	3 pcs
<b>ACE 100 mm (50/50T) SK-SNP</b>	100 mm Knob Cylinder	SNP	100 mm	50mm	50mm	3 pcs
<b>ACE 105 mm (45/60T) SK-SNP</b>	105 mm Knob Cylinder	SNP	105 mm	45 mm	60 mm	3 pcs
<b>ACE 110 mm (55/55T) SK-SNP</b>	110 mm Knob Cylinder	SNP	110 mm	55 mm	55 mm	3 pcs

# Double and Half Cylinder – Euro Profile

Model No	Description	Finish	Total Length A	Length B	Length C	No of Keys
<b>ACE 60 mm (30/30) SK-SNP</b>	60 mm Double Cylinder	SNP	60 mm	30 mm	30 mm	3 pcs
<b>ACE 70 mm(35/35) SK-SNP</b>	70 mm Double Cylinder	SNP	70 mm	35 mm	35 mm	3 pcs
<b>ACE 75 mm (35/40) SK-SNP</b>	75 mm Double Cylinder	SNP	75 mm	35 mm	40 mm	3 pcs
<b>ACE 80 mm (40/40) SK-SNP</b>	80 mm Double Cylinder	SNP	80 mm	40 mm	40 mm	3 pcs
<b>ACE 85 mm (40/45) SK-SNP</b>	85 mm Double Cylinder	SNP	85 mm	40 mm	45 mm	3 pcs
<b>ACE 90 mm (45/45) SK-SNP</b>	90 mm Double Cylinder	SNP	90 mm	45 mm	45 mm	3 pcs
<b>ACE 90 mm (30/60) SK-SNP</b>	90 mm Double Cylinder	SNP	90 mm	30 mm	60 mm	3 pcs
<b>ACE 90 mm (35/55) SK-SNP</b>	90 mm Double Cylinder	SNP	90 mm	35 mm	55 mm	3 pcs
<b>ACE 95 mm (45/50) SK-SNP</b>	95 mm Double Cylinder	SNP	95 mm	45 mm	50 mm	3 pcs
<b>ACE 100 mm (50/50) SK-SNP</b>	100 mm Double Cylinder	SNP	100 mm	50 mm	50 mm	3 pcs
<b>ACE 105 mm (45/60) SK-SNP</b>	105 mm Double Cylinder	SNP	105 mm	45 mm	60 mm	3 pcs
<b>ACE 110 mm (55/55) SK-SNP</b>	110 mm Double Cylinder	SNP	110 mm	55 mm	55 mm	3 pcs

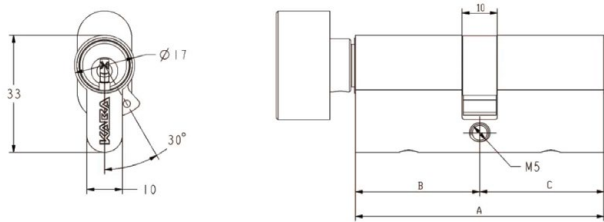
## Half Cylinder

Model No	Description	Finish	Total Length A	Length B	Length C	No of Keys
<b>ACE 40 mm (30/10) SK-SNP</b>	40 mm Single Cylinder	SNP	40 mm	30 mm	10 mm	3 pcs
<b>ACE 45 mm(35/10) SK-SNP</b>	45 mm Double Cylinder	SNP	45 mm	35 mm	10 mm	3 pcs

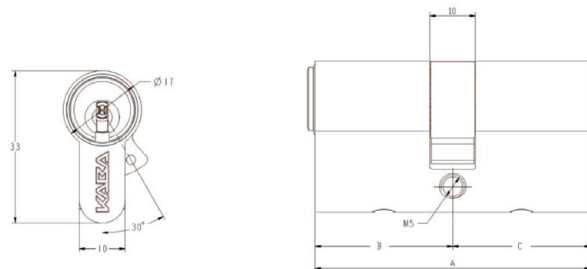
# Mortise Cylinder

Model No	Description	Finish	Total Length A	No of Keys
<b>ACE MC (40 mm) SK-PVD</b>	40 mm Mortise Cylinder	PVD	40 mm	3 pcs
<b>ACE MC (40 mm) SK-AB</b>	40 mm Mortise Cylinder	AB/SNP *	40 mm	3 pcs
<b>ACE MC (45 mm) SK-PVD</b>	45 mm Mortise Cylinder	PVD	45 mm	3 pcs
<b>ACE MC (45 mm) SK-AB</b>	45 mm Mortise Cylinder	AB/SNP *	45 mm	3 pcs
<b>ACE MC (55 mm) SK-PVD</b>	55 mm Mortise Cylinder	PVD	55 mm	3 pcs
<b>ACE MC (55 mm) SK-AB</b>	55 mm Mortise Cylinder	AB/SNP *	55 mm	3 pcs

\* AB/SNP cylinder has AB body and SNP insert finish



## Kaba ACE thumbturn cylinder



## Kaba ACE double cylinder



**Door  
Hardware**



**Entrance  
Systems**



**Electronic  
Access & Data**



**Interior Glass  
Systems**



**Mechanical  
Key Systems**



**Service**

**dormakaba India Private Limited**  
14 Pattullous Road  
CHENNAI,  
India  
T +91 44 42227024  
F +91 44 42227017  
[www.dormakaba.com/in](http://www.dormakaba.com/in)