pextra PXP
System 1two3

Technical Product Brochure

Easy as 1two3
Three lives, before requiring a rekey

The pextra 1two3 system allows an end user to lose their keys three times before requiring a rekey. These rekeys can be built into the cylinder by the locksmith during the assembly stage of the cylinders using the two special wafers.

When the end user loses their first key, the end user would insert the second key into their cylinder. By inserting this key the first wafer is moved into the side of the plug allowing the new key to work, which in turn blocks the first key from working again.

When the end user loses their second key, the end user would insert the third key into their cylinder. By inserting this key into the cylinder, the second wafer is moved into the side of the plug allowing the new key to work, which in turn blocks the second key from working again.

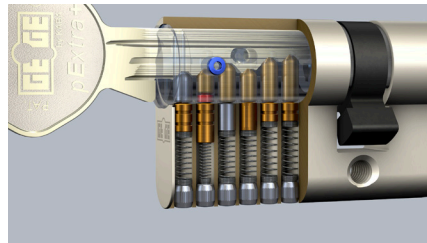**Note:** If Key 3 is used prior to Key 2 being used this blocks Key 2 from working.

Life 1
Key 1 is the first key that is to be used in your cylinder/lock. Key 2 and Key 3 are reserved for the future.
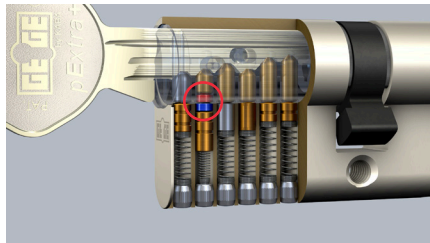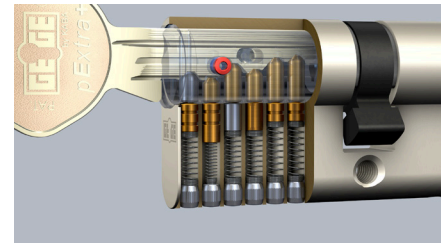
Life 2
If you lose Key 1, you simply insert Key 2 to operate your cylinder. This blocks Key 1 from working again. Leaving Key 3 as a reserve for the future.

Life 3
If you lose Key 2, you simply insert Key 3 to operate your cylinder. This blocks Key 1 and Key 2 from working again.
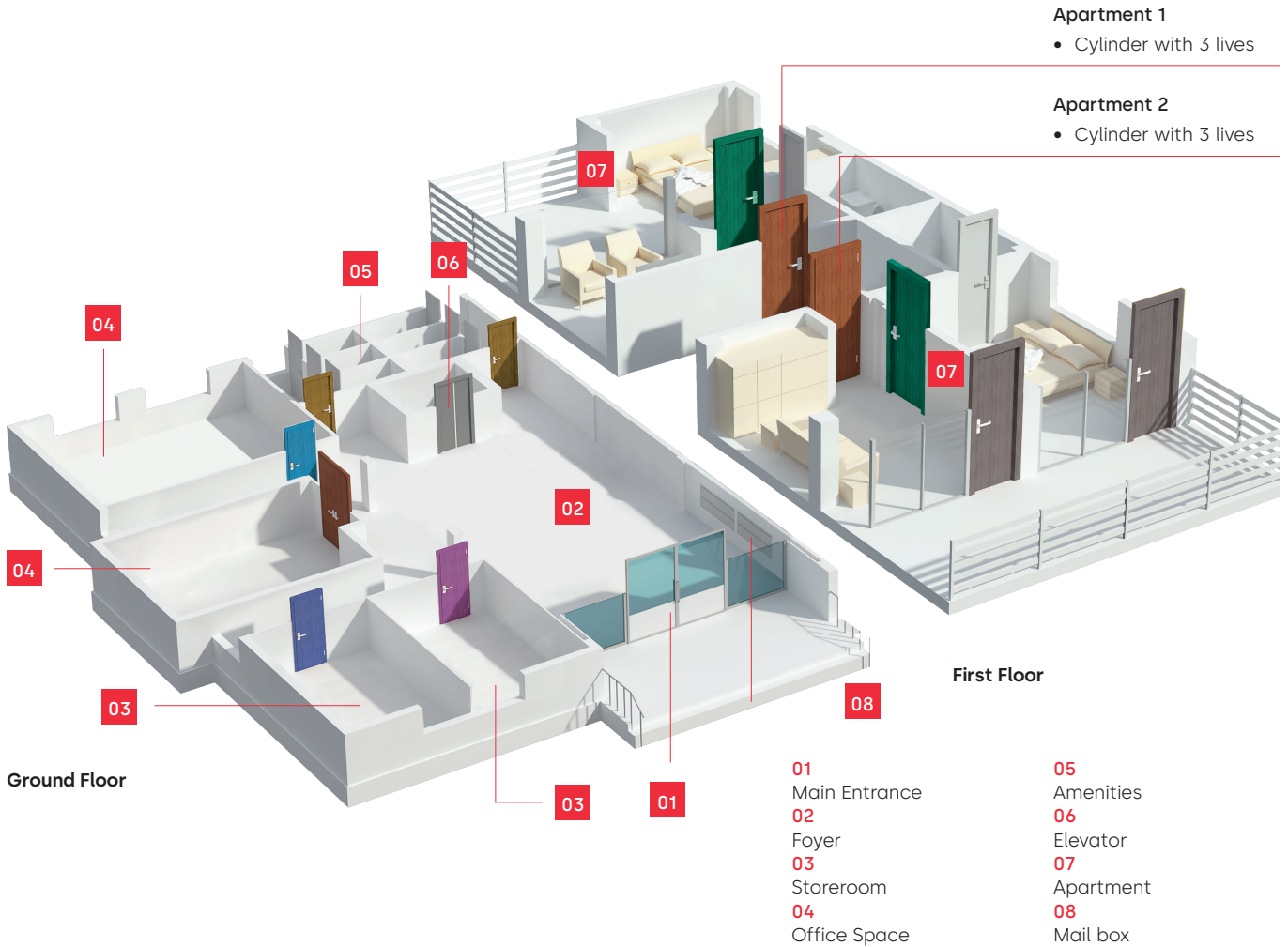

Two wafers are stored in the plug

Construction Keying
Used on site during construction phases of building

If we consider a typical block of apartments:

Apartment 1
- Cylinder with 3 lives

Apartment 2
- Cylinder with 3 lives

First Floor

Ground Floor

01	05
Main Entrance	Amenities
02	**06**
Foyer	Elevator
03	**07**
Storeroom	Apartment
04	**08**
Office Space	Mail box

Phase 1
Construction Stage

A convenient way of providing continued security during the 3 phases of construction is to use pextra Construction keying.

In simple terms, all cylinders are operated by the one key (KA) during the construction phase.

Phase 2
Hand over to the developer/ real estate

At "handover" the next stage key (commonly known as the developer key) is turned in the cylinder, moving the 1st construction wafer, and "changing" the combination of the cylinder to the key that has just been inserted. Blocking the Phase 1 key from working again.

Phase 3
Hand over to the end user

Once the apartment is sold, the owner inserts and turns their key moving the 2nd construction wafer, again "changing" the combination of the cylinder to the final combination, to the owner's key. Blocking the Phase 2 key from working again.

Technical Information
For PXP dealers for Construction Keying

Keys
- If using the Silca Unicode please use card 361
- If using the ITL machine the user determines the card manufacturer number to use and dormakaba will provide the space and depth information upon request.
- The construction wafer is equal to a pextra #3 depth

Plugs/Barrels
- Barrel types that are available with the construction holes are oval (130), PD (107), Padlock (95 series), Rim (121), Adams rite (140), Euro (1415), Cam lock (166), 001 Inner (182N), Knobset (183), Cupboard lock (1881), LIW switch (LIWPXP), 355 Inner (195).
- Barrels are pre-drilled in the 5th chamber on both sides of the barrel to accommodate for both left and right hand doors.
- A minimum of 60 degrees rotation is required for correct operation.
- All top pins are balanced for stack height purposes, please follow the pextra assembly instructions.

Parts required for construction keying in PXP

These components are used only in the 5th chamber when construction keying is required. Please see further instructions for assembly of cylinders, along with the set up instructions for ProMaster Master-Keying when construction keying.

|	Item Code	Article Number	
	CON-WAFER3	9400000001744	PXP CONSTRUCTION WAFER #3 PKT 100
	CON-SPRING	9400000001753	PXP CONSTRUCTION SPRING PKT 100
	CON-TOPPIN	9400000001754	PXP CONSTRUCTION TOP PIN PKT 100

PM8 Instructions
## For Construction/ Wafer Coding
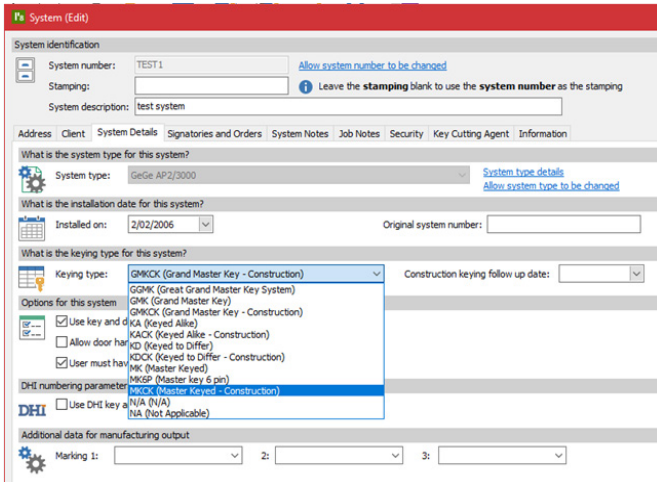
1. Ensure that you have marked your system as a construction keyed system in the keying type when setting the system up, in the system details.
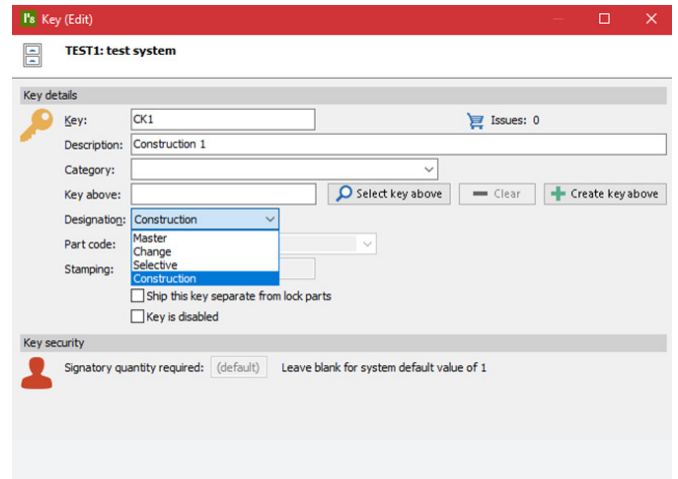
2. Make sure that your construction keys only, have the designation of construction key, this is found when adding keys.
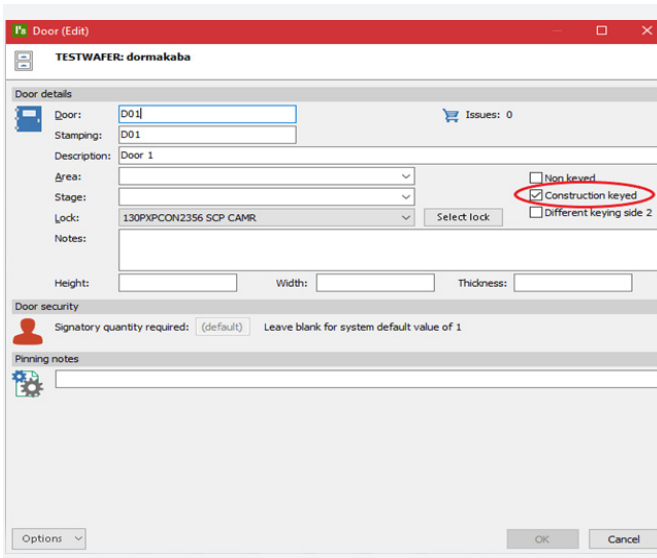

3. Make sure that all doors that are construction keyed are ticked so that the 'b' shows later in the pinning. This is found when adding your doors.
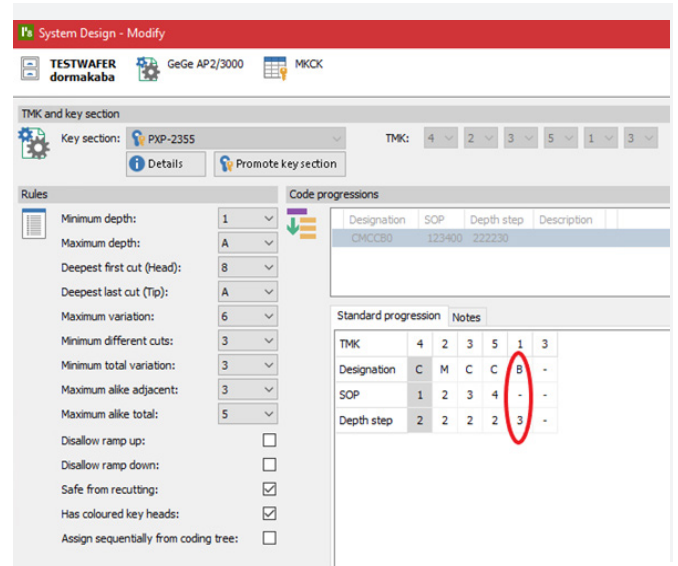
4. Select the chambers that you require for Master Keys and for Change Keys, making sure that you leave the 5th Chamber for your construction keys. In the 5th chamber place a '-' in the order, a 'B' in the designation and a '3' in the depth step. All other chambers are progressed as per a standard inline system. In this example the last chamber is left spare, this is why these fields all have '0's. If there are maisoned doors the set-up required is different to the above.

PM8 Instructions
One Level Construction/ Wafer Keying set up

01
Spring special
02
Special top pin
03
1st donut (wafer)
04
Bottom pin
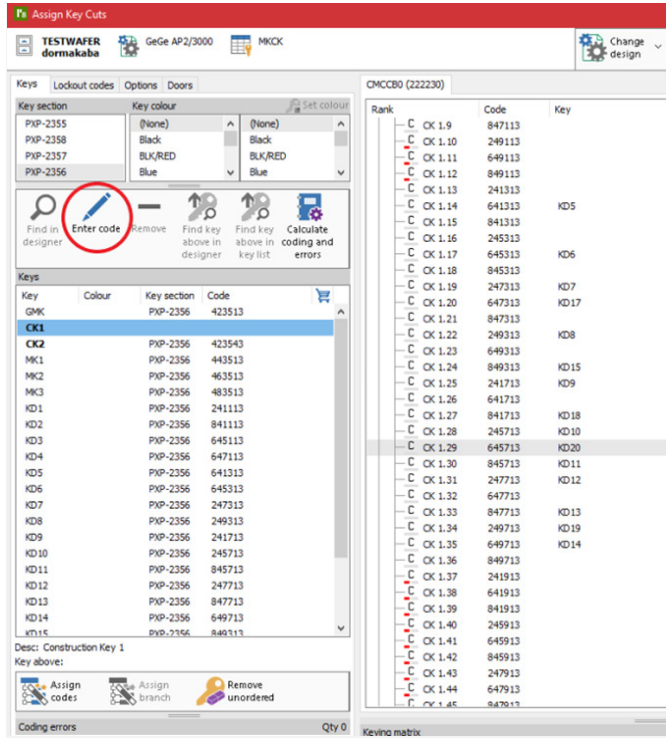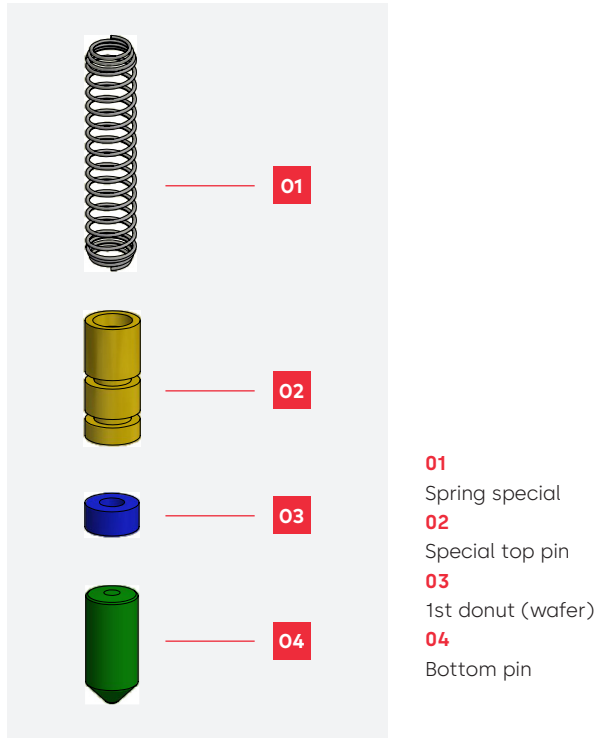
If only one-level construction/wafer keying is required, then you can have any bottom pin number from #1 to #7 depth.

It's important to take care when selecting the GMK code as bad codes may occur like all "inline systems"

Maximum depth variation is 6 in pextra.

When coding the construction key in this example you must manually add the code to accomodate the belowwafer, meaning if your bottom pin in the GMK in the 5th position is a #1 cut, and the wafer is a #3 depth, 1 + 3 = 4. Looking at the example below this means that your key code for the construction key is 423543.

ProMaster Master-Keying 8 will show a 'b3' in the 5th chamber as per the example below if all your coding is correct and you have followed the above steps to set up the system.


Note: On the door pinning 'Construction Keyed' is shown to indicate to the coder/assembler that this door is construction keyed.

The door must be marked as construction keyed as shown on Page 5 point 3. If the door is not ticked construction keyed then it means that this door will not be construction keyed and will be assembled with master pins instead of a construction wafer.

PM8 Instructions
Two Level Construction/ Wafer Keying set up
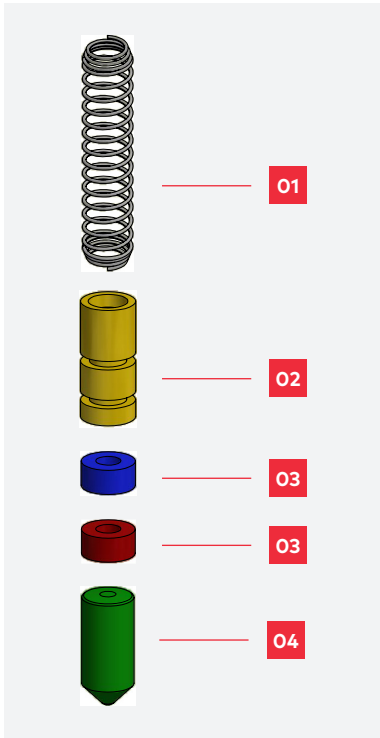
01
Spring special
02
Special top pin
03
1st donut (wafer)
03
2nd donut (wafer)
04
Bottom pin

If a two-level construction/wafer keying system is required then only a number 1,2,3 or 4 bottom pin can be used in the 5th chamber for the GMK. For example, if we were to use a #1 bottom pin in the 5th chamber for the GMK, you have to manually add the code to accomodate the wafer, meaning if your bottom pin in the GMK in the 5th position is a #1 cut and if both #3 wafers are installed, the total chamber build up is a 7.

Your first construction (CK1) key code would be 423573. Once this key is inserted into the cylinder, this '7' cut allows for the #1 bottom pin and both wafers to sit in the plug creating a shear line.

The second construction key (CK2) key code would be 423543. Once this key is inserted into the cylinder the '4' cut on the key in the 5th chamber allows for the #1 bottom pin and a #3 wafer to sit in the 5th chamber of the plug to create a shear line for the plug to turn. Once the construction stage is over and it's time to hand over to the end user the KD1 key is inserted into the cylinder. The #1 cut on the key in the 5th chamber allows the #1 bottom pin in the 5th chamber of the plug to sit flush creating a shear line for the plug to turn. The #1 cut on the key pushes the 2nd wafer up into the top chamber allowing the wafer to drop into the side of the plug to its final position, allowing the KD1 key to work. Blocking all previous construction keys from working.

Seq	Door	Description		Area					Stamping		Door					
1	D01	Door 1								D01		D01				
	Key		Colour	Key section	Cuts	Construction keyed			Driver:	5	5	5	5	3	5
	GMK			PXP-2356	423513	Type:		Cyl	Master:					b3	
	CK1			PXP-2355	423573	Part code:		130PXPCON2356 SCP CAMR	Master:	2	2	2	4	b3	
	CK2			PXP-2355	423543				Bottom:	2	2	1	1	1	3
	MK1			PXP-2356	443513	Keyway:		PXP-2356							
	KD1			PXP-2356	241113										

Note: On the door pinning 'Construction Keyed' is shown to indicate to the coder/assembler that this door is construction keyed.

Providing that the system is set up correctly the pinning will show a 'b' in the construction keyed chamber for a one-level system or two 'b's for a two-level system.
The door must be marked as construction keyed as shown on page 5 point 3. If the door is not ticked construction keyed then it means that this door will not be construction keyed and will be assembled with master pins instead of a construction wafer.

Door Hardware

Entrance Systems

Electronic Access & Data

Interior Glass Systems

Lodging Systems

Mechanical Key Systems

Safe Locks

Services

Our Sustainability Commitment

Our sustainability commitment. We are committed to fostering a sustainable development along our entire value chain in line with our economic, environmental and social responsibilities toward current and future generations. We seek an open, transparent dialogue with all stakeholders to define strategies and actions based on clear targets and continuous improvement, and we actively report on our progress.