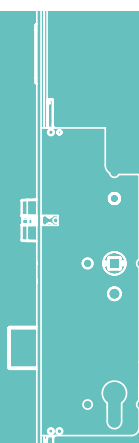
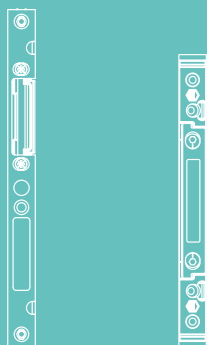




TECHNOLOGY IN MOTION

# MACO PROTECT

DOOR LOCKS



## ASSEMBLY INSTRUCTIONS

Z-TF

Cylinder-Operated 3-Latch Lock MF-HO

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# Important Information

## Introduction

Read these instructions carefully before starting the Z-TF assembly. Mount all hardware parts professionally as described in this manual and observe all safety instructions. Failure to follow these instructions cannot guarantee the proper functioning of the system. In the event of non-compliance, we assume no liability for damage to persons or material.

Match the required fixing material with the building structure and the corresponding load and expand on it if necessary. Any supplied fixing material only meets a part of the requirements.

### Target audience for this guide

This documentation is intended exclusively for specialist companies and certified specialists. The work-steps described herein may only be carried out by certified specialists.

### Retention of documents / briefing

Retain these assembly instructions for later use and maintenance.

Hand over the user manual (downloadable under [maco.eu](http://maco.eu) - Order No. 757585) to the end user and ensure they are briefed.

Please pay attention to your **duty to inform the end user!** The complete delivery of a window or door element also includes the operating and maintenance instructions and, where necessary, a window sticker for different operating modes! We make these available for our customers in the download area of our website ([www.maco.eu](http://www.maco.eu))!

## Installation and operation

Before installation - test doors and safety elements. The integrity and smoothness of the doors must be ensured.

All work (assembly, adjustment, etc.) must be carried out in a powered-down state.

Before installing the drive motor, the current temperature range must be checked for environment suitability.

To fix the hardware, use sufficiently long screws which must extend into the steel reinforcement when using PVC profiles.

Unless otherwise indicated, all measurements are made in millimetres.

All diagrams are only symbolic.

Printing errors, mistakes and changes are reserved.





# Important Information

## Informative note



This indicates important additional information that is important for the error-free assembly of the product.

## Key



Backset DM

FFH Sash rebate height



Distance E

K+ Case dimension top



Handle height GM

K- Case dimension bottom



Profile Front Edge



Important note

MF Multi-function latch

EV End piece

# Important Information

## Intended use

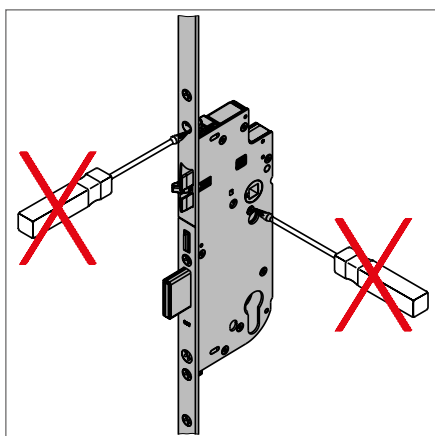
- › The Z-TF is suitable for installation in front doors made of PVC, timber, aluminium and steel in residential housing.
- › Mount all hardware parts professionally as described in this manual and observe all safety instructions.
- › Before installation, ensure that all components are in perfect condition – damaged or faulty components must not be used under any circumstances. Use Z-TF only in a perfect condition.

## Improper use

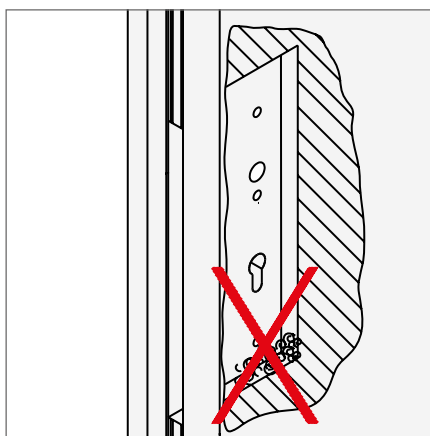
- › The Z-TF is NOT suitable for installation in front doors of public buildings.
- › The Z-TF must NOT be used for escape or panic doors according to EN179 or EN1125.
- › The hardware parts described in this guide are made of stainless steel or galvanised passivated steel and sealed in accordance with DIN EN 12329. They must not be used in environments with aggressive, corrosive air content.
- › Do not use acid-curing sealants, as these can lead to corrosion of the hardware parts.

## Important Information

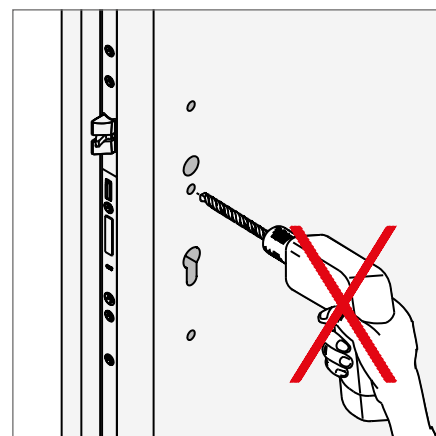
### Improper use



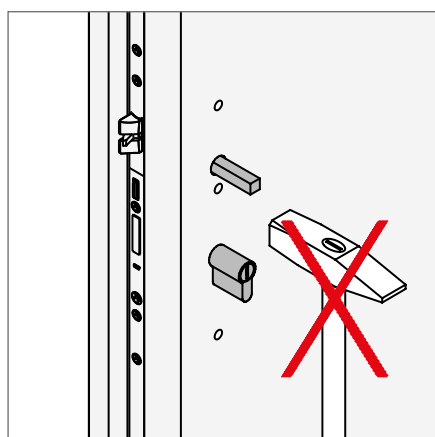
Never open the lock case!



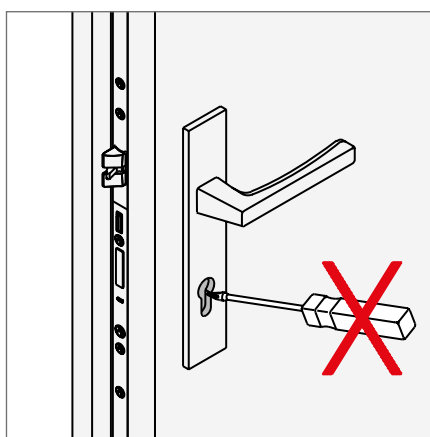
Remove swarf from the routing pockets!



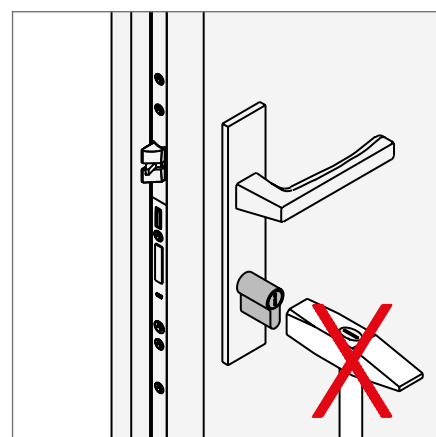
Drill all holes before installation of the lock.



Do not force the handle pin through the lock nut!



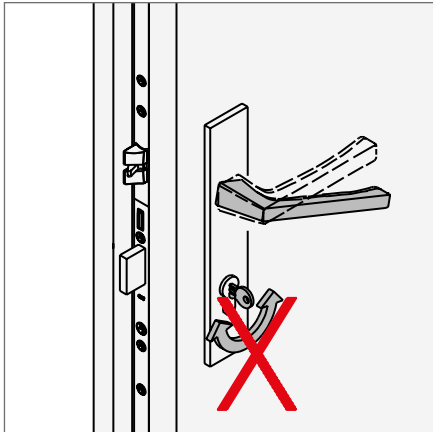
Only close the lock with the corresponding operating key!



Do not use force during the cylinder assembly!

# Important Information

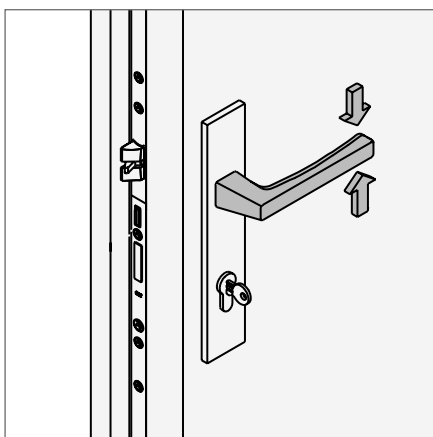
## Improper use



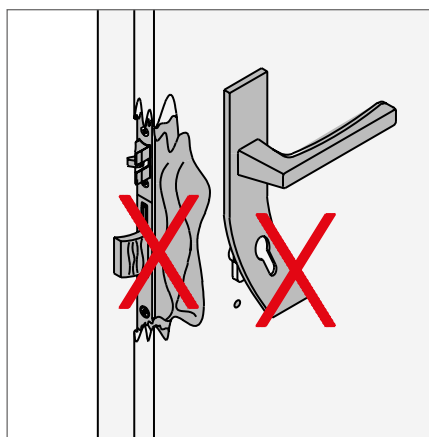
Do not simultaneously press the handle and turn the key!



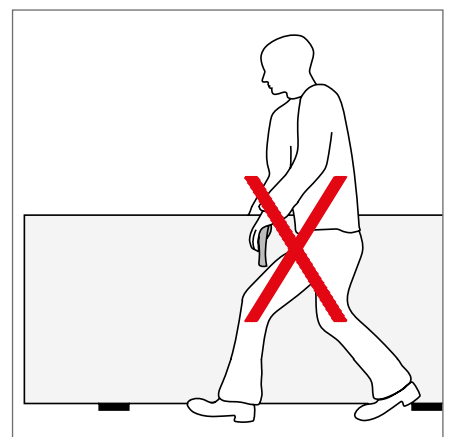
Do not turn the key using force!  
The latch of the main lock must not rub against the striker plate – this also applies to multi-point locks without door acceleration, and all latches of the side locks. For this, use the adjustment option on the striker plates and door hinges. Adjustment of the holes in the striker plates is not permitted.



Only apply load to the handle in the normal direction! Apply a maximum force of 15 kg in the direction of actuation (on the handle).



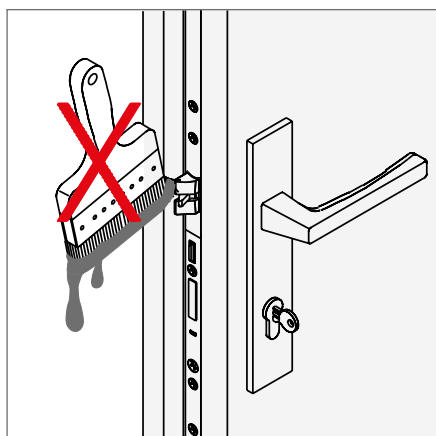
The multi-point lock must be replaced as soon as traces of use of force are visible!



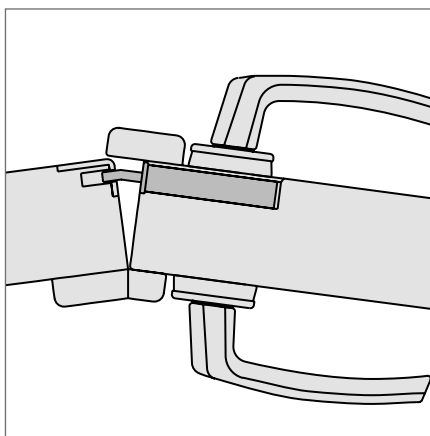
Do not carry the door leaf with the handle!

## Important Information

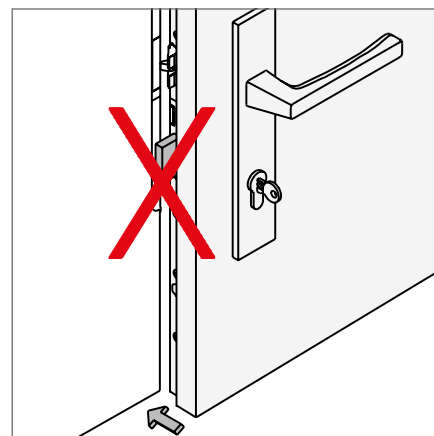
### Improper use



Do not paint or varnish over the padlock bolt or latch!



Double-sash doors must not be forced over the inactive leaf!



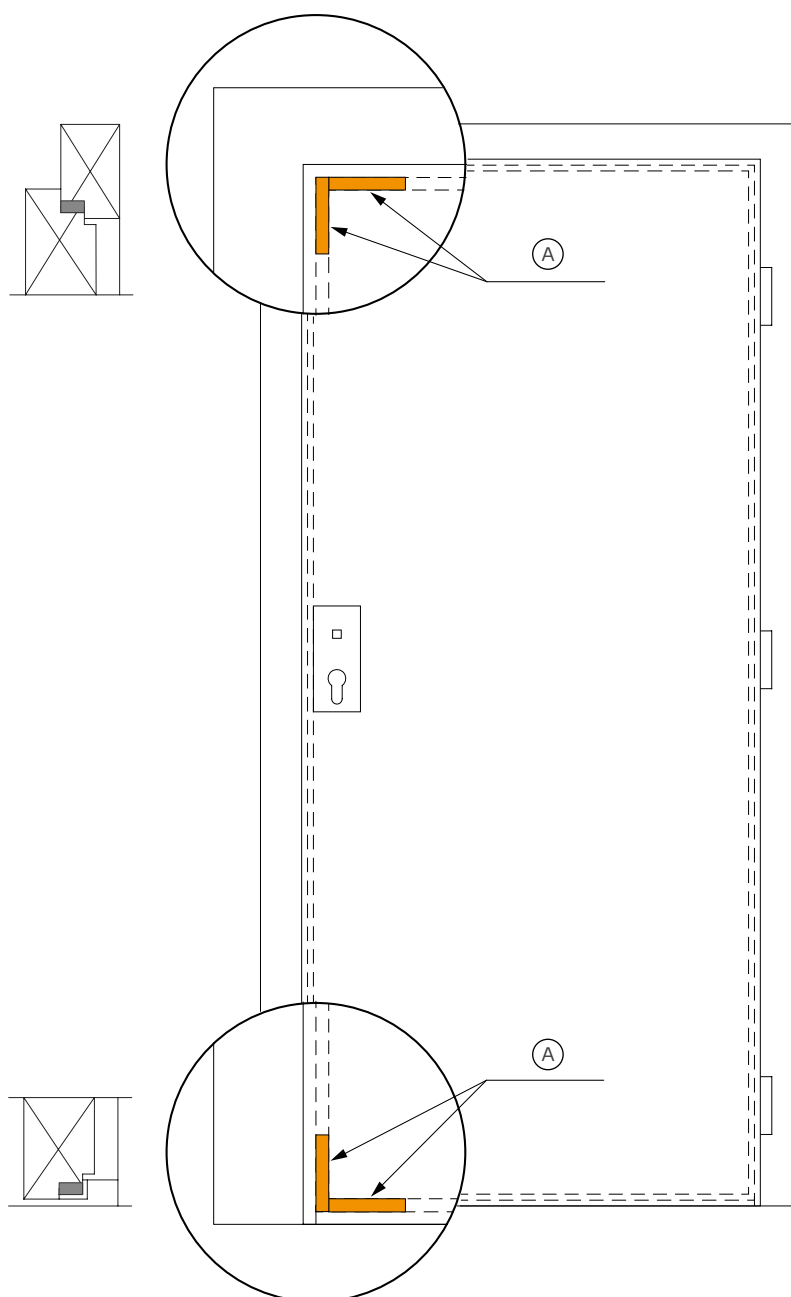
Do not lock the locking bar when the door is open!

# Important Information

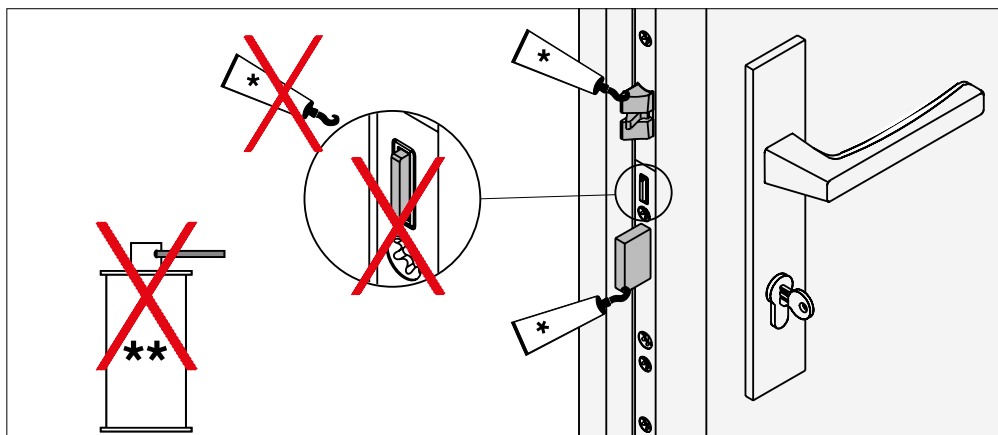
## Use of transportation protection devices

Simple transport protection devices, wedges or blocks ensure a safe transport of the entire door element. Remove only after installation.

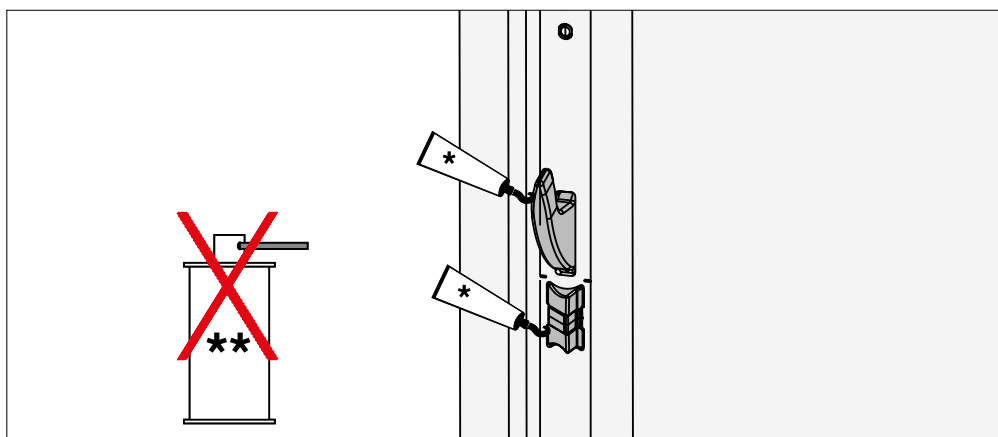
Ⓐ Transport protection device position



## Maintenance



The door lock (lock case) is delivered with an intensive lubrication of high-performance greases and must NOT be relubricated!



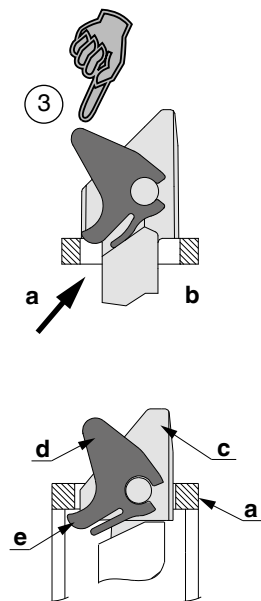
Lubricate the MF-HO locking element 1x annually!



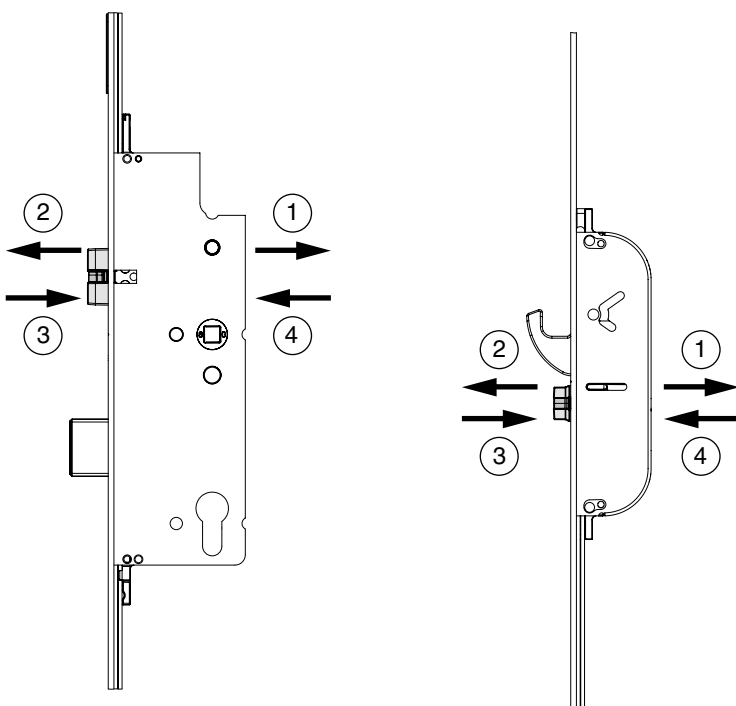
**Do not use any lubricating oils, rust remover, silicone sprays etc!  
Lubricate only with grease or technical petroleum jelly!  
Lubricate the latch and locking bolt 1x annually!**

\* Spray grease (455341), \*\* Rust remover

# Latch adjustment



- a = Faceplate
- b = Faceplate recess
- c = Latch
- d = Latch insert
- e = Insert leg

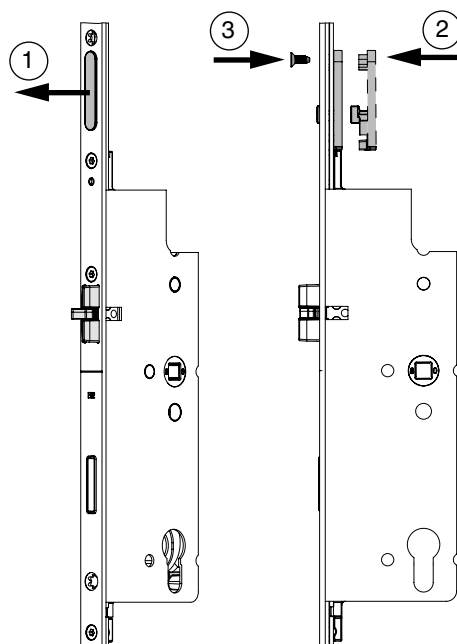


- ① Loosen the screw completely and press forward with a screwdriver!
- ② Remove the latch!
- ③ Turn the latch over and place it on the face plate (a) so that you can press the insert leg (e) of the latch insert (d) under the faceplate recess (b).
- ④ Only then press the latch in completely! Screw in (torque min. 1.5 Nm to max. 2 Nm)!



## Installation instructions

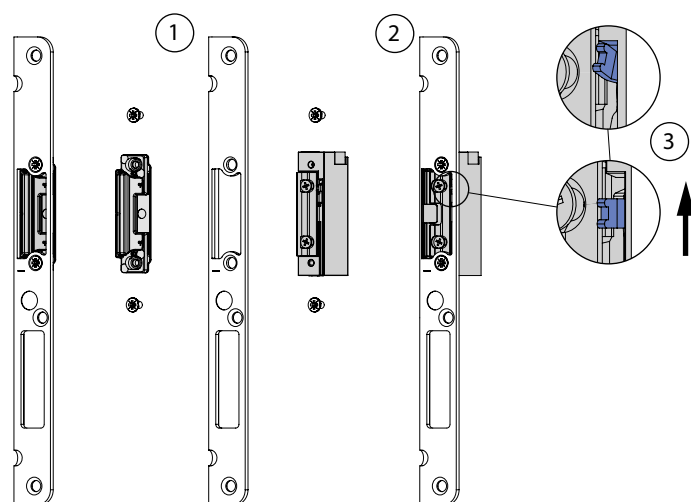
### Day release element assembly on the lock (assembler)



- ① Remove the faceplate cover.
- ② Position the day release element on the back of the faceplate (directly on the latch above the lock case).
- ③ Screw on the day release element with the attached TX20 M4x10 screw on the front of the faceplate!

## Installation instructions

### MACO day release opener assembly on the striker plate (assembler)

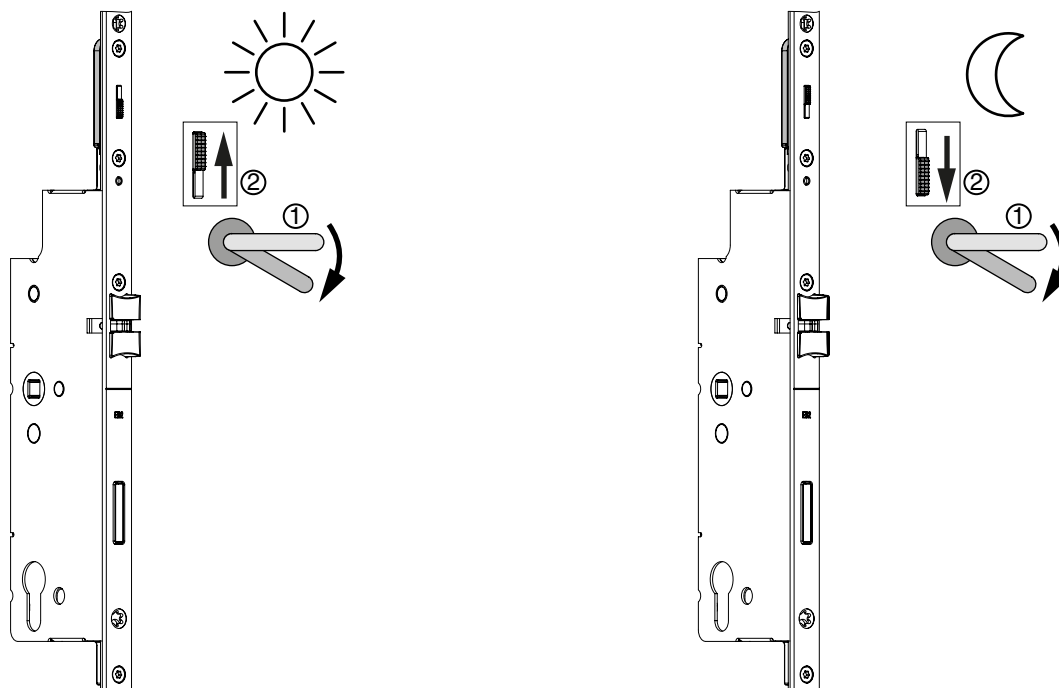


- ① Remove the latch insert.
- ② Assemble the MACO day release opener.
- ③ Activate mechanical release on the day release opener by means of levers\*.

\* Mechanical unlocking can remain activated as the day release function is controlled by the day release slider on the lock (see "Day Release Function" user manual, Page 15).

## Installation instructions

### Operating instructions day release (end customer)



#### Activate day release

- ① Press the handle so that the locking element and the multifunction latch are pulled in.
- ② Slide the day release slider upwards, release the handle!

Day release activated – During this mode of operation, the door is not locked and can be used at any time by all persons!

#### Deactivate day release

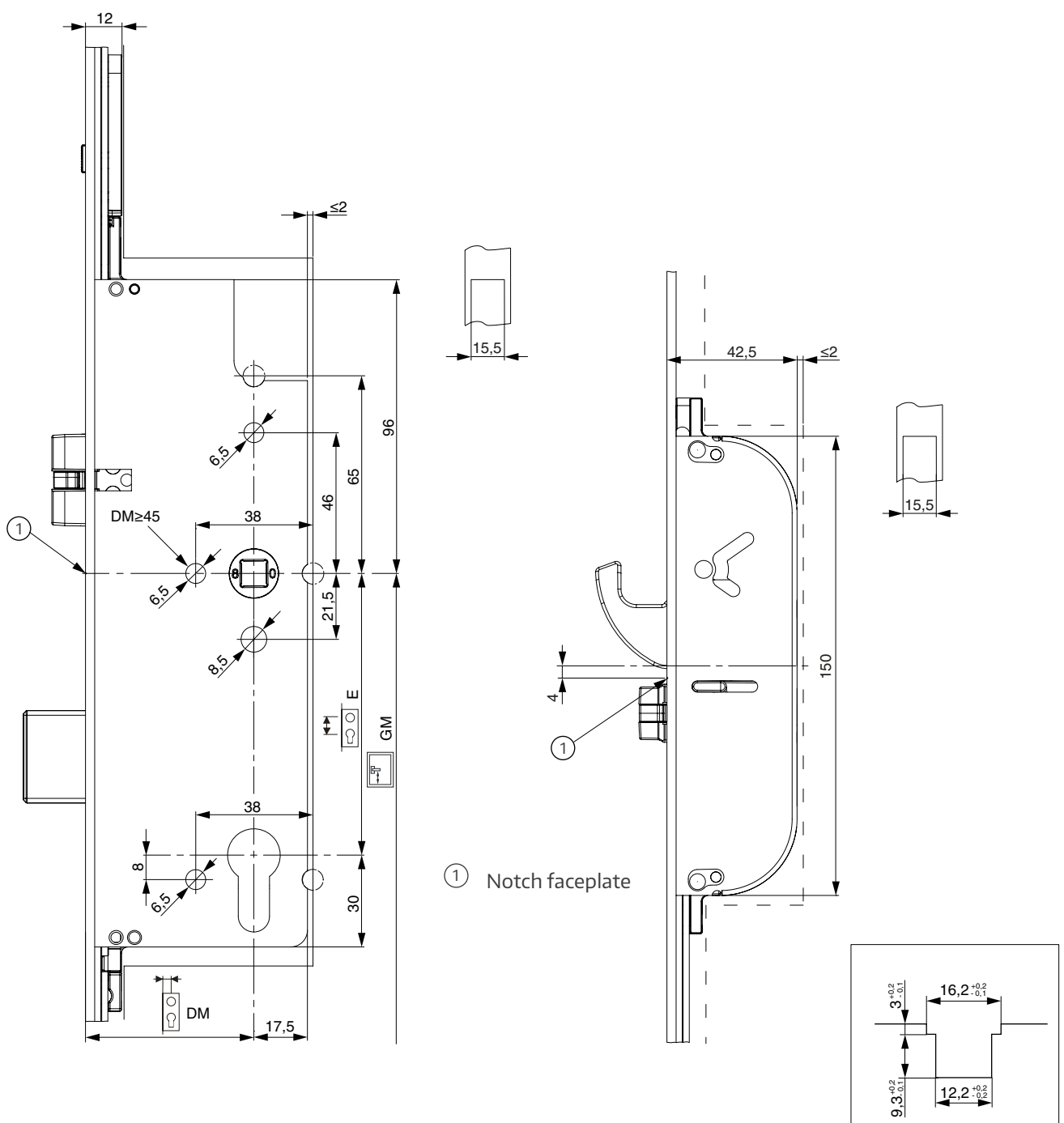
- ① Press the handle so that the locking element and the multifunction latch are pulled in.
- ② Slide the day release slider downwards!

The Z-TF basic function is restored!

# Drilling and routing patterns

## Lock case and multifunction latch with hook lock

When using a Eurogroove with the standard depth of 9.3 mm, the adjusting daytime actuator does not need to be milled

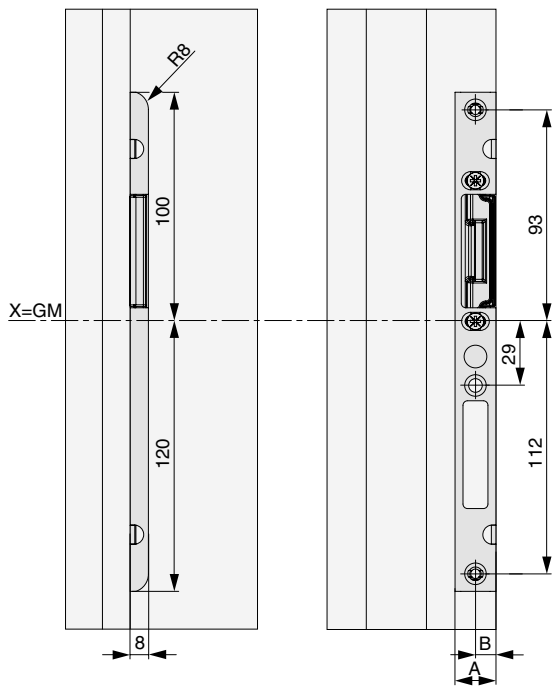
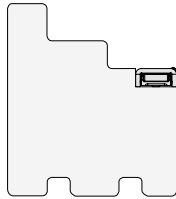


# Drilling and routing patterns

## Latch and dead bolt striker plate 9/10 mm offset

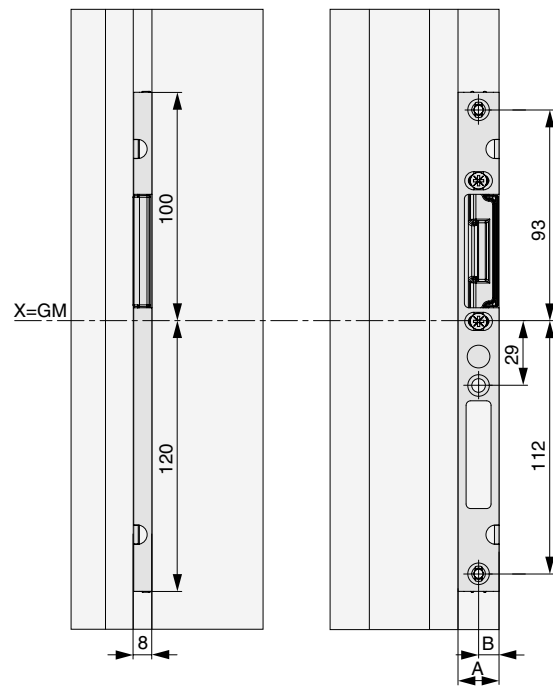
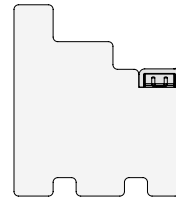
### Timber 4 mm rebate gap

	9V	10V
A	18	20
B	9	10



### Timber 12 mm rebate gap

	9V	10V
A	18	20
B	9	10

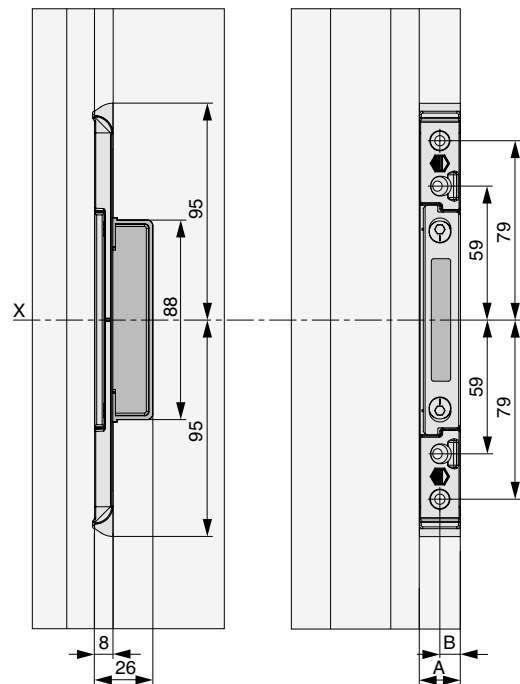
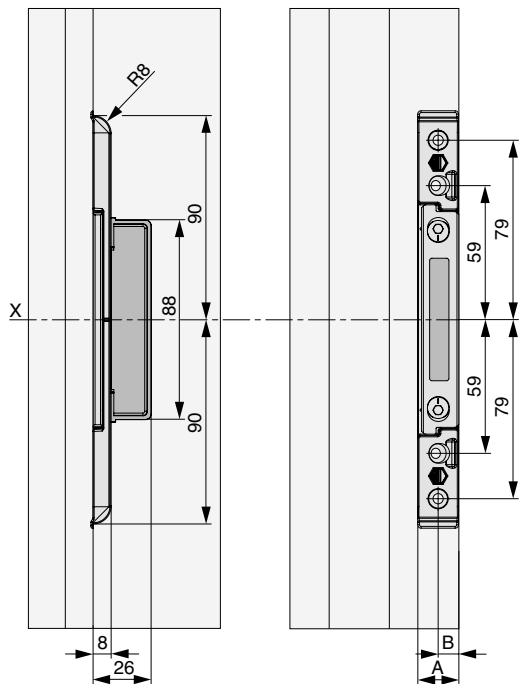
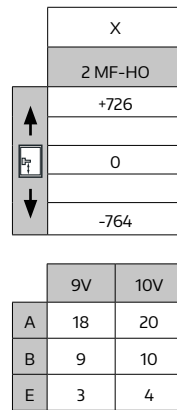
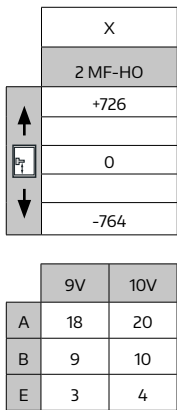


# Drilling and routing patterns

## Multifunction hook striker plate 9/10 mm offset

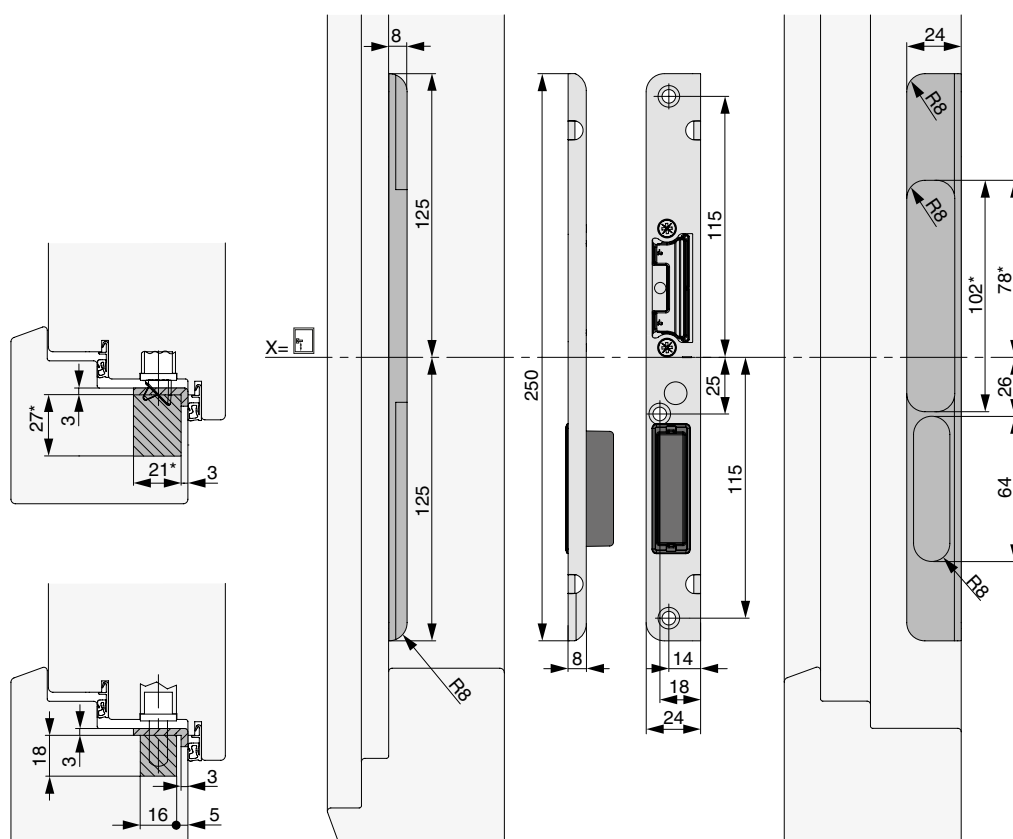
### Timber 4 mm rebate gap

### Timber 12 mm rebate gap



## Drilling and routing patterns

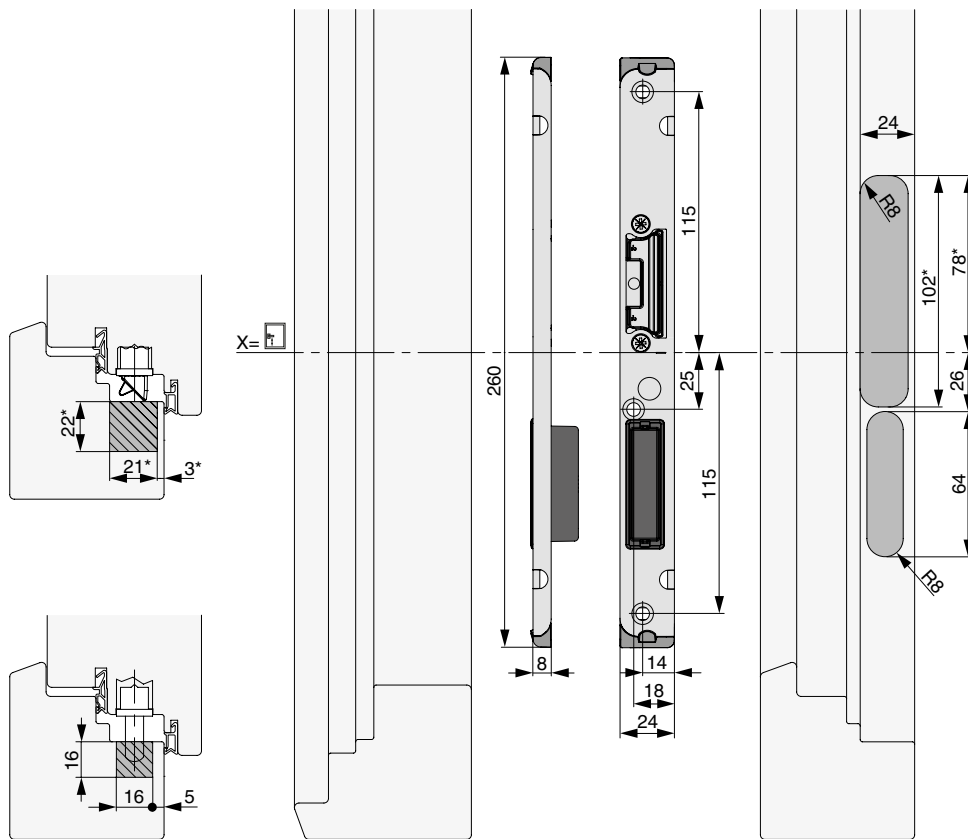
### Latch and dead bolt striker plate 13 mm offset, 4 mm rebate gap



\*Routing pattern E-Opener

# Drilling and routing patterns

## Latch and dead bolt striker plate 13 mm offset, 12 mm rebate gap



\*Routing pattern E-Opener

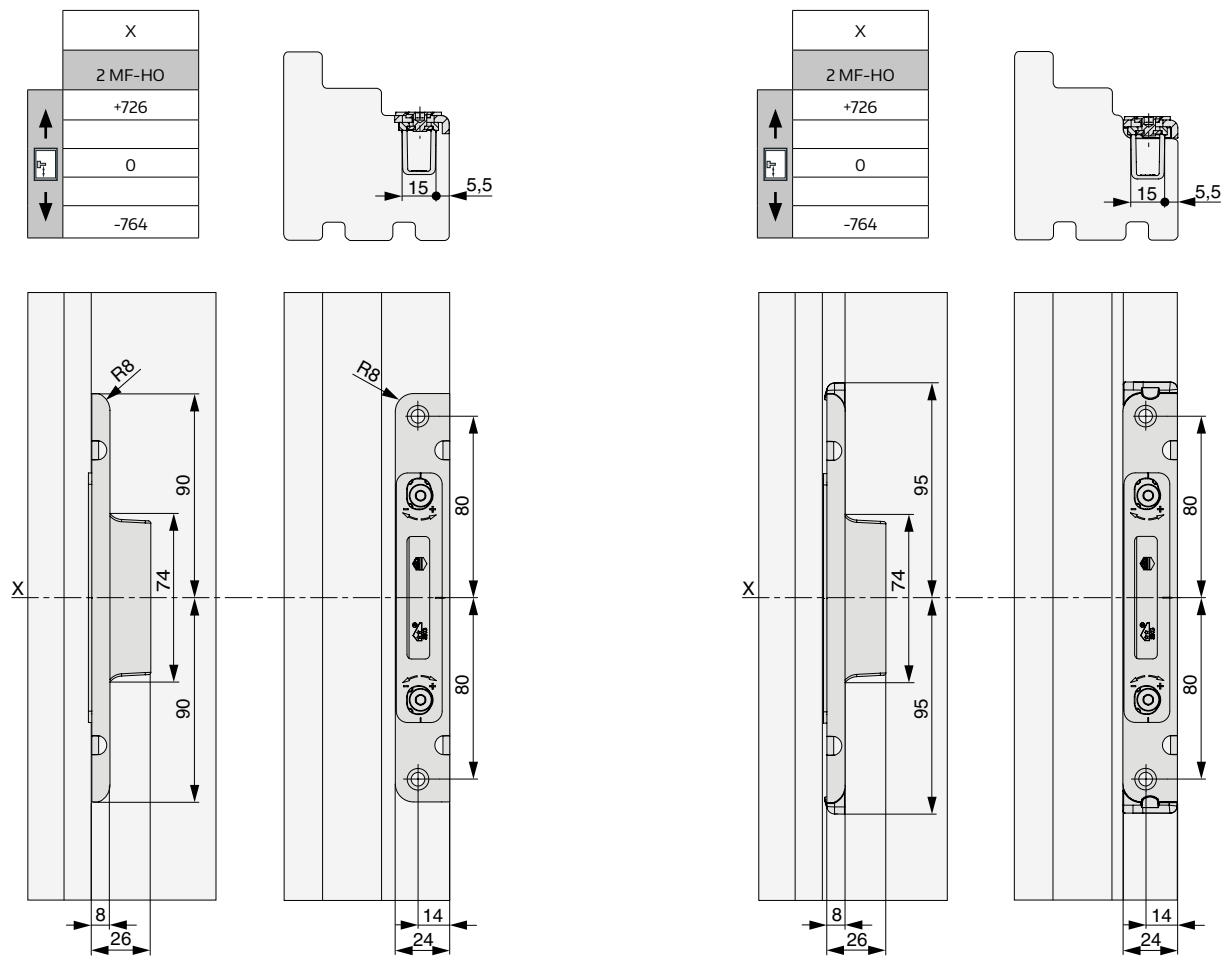


# Drilling and routing patterns

## Multifunction hook striker plate 13 mm offset

### Timber 4 mm rebate gap

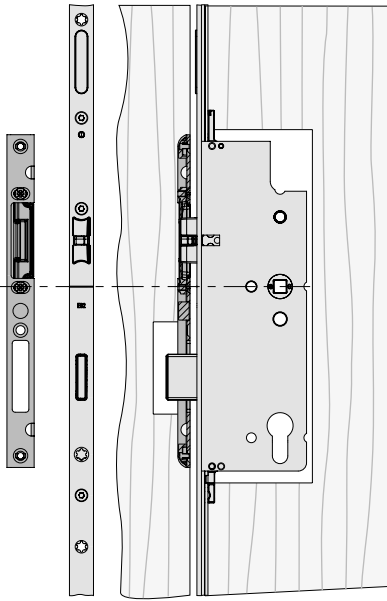
### Timber 12 mm rebate gap



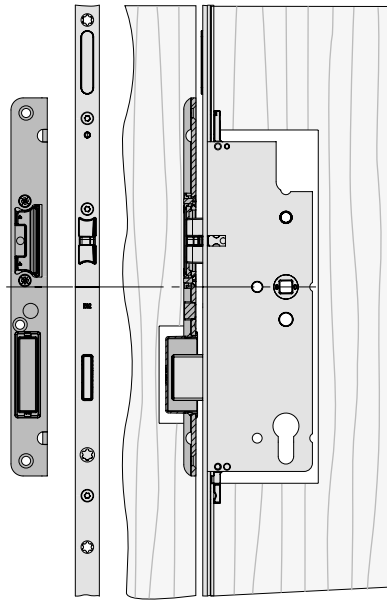
## Positioning of the striker plates

### Position of latch and dead bolt striker plate

4 mm rebate gap, 9/10 mm offset



4 mm rebate gap, 13 mm offset



### Gasket compression adjustment:

+/- 2 mm with latch and dead bolt striker plate

### Gasket compression adjustment:

+/- 2 mm with latch and dead bolt striker plate

Positioning of notch faceplate = notch strike plate

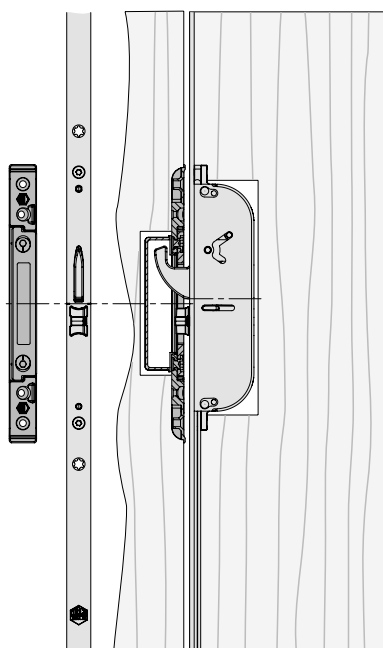


A rebate gap of 2 - 6 mm must be kept in the installed state!

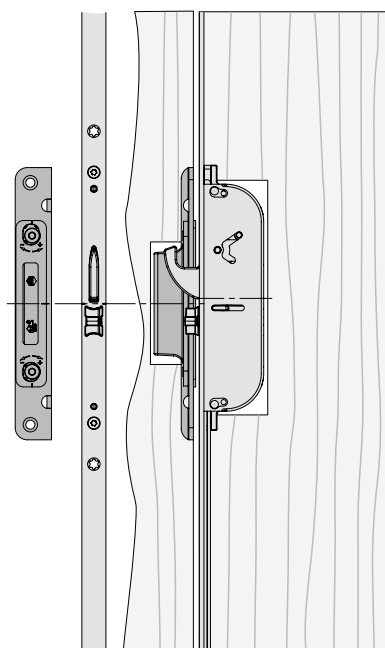
## Positioning of the striker plates

### Position of hook striker plate

4 mm rebate gap, 9/10 mm offset



4 mm rebate gap, 13 mm offset



**Gasket compression adjustment:**

+/- 1 mm with MF-HO striker plate

**Gasket compression adjustment:**

+/- 1.5 mm with MF-HO striker plate

Positioning of notch faceplate = notch strike plate

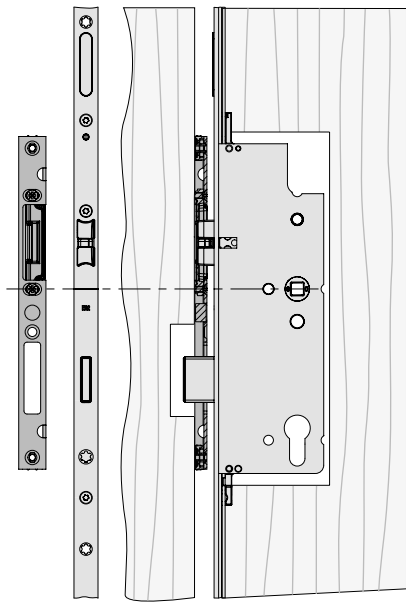


**A rebate gap of 2 - 6 mm must be kept in the installed state!**

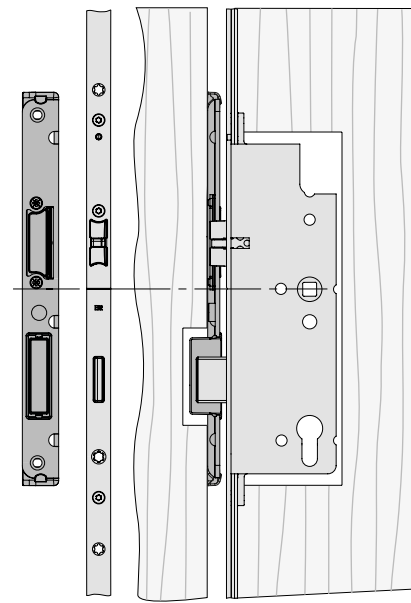
## Positioning of the striker plates

### Position of latch and dead bolt striker plate

12 mm rebate gap, 9/10 mm offset



12 mm rebate gap, 13 mm offset



#### Gasket compression adjustment:

+/- 2 mm with latch and dead bolt striker plate

#### Gasket compression adjustment:

+/- 2 mm with latch and dead bolt striker plate

Positioning of notch faceplate = notch strike plate

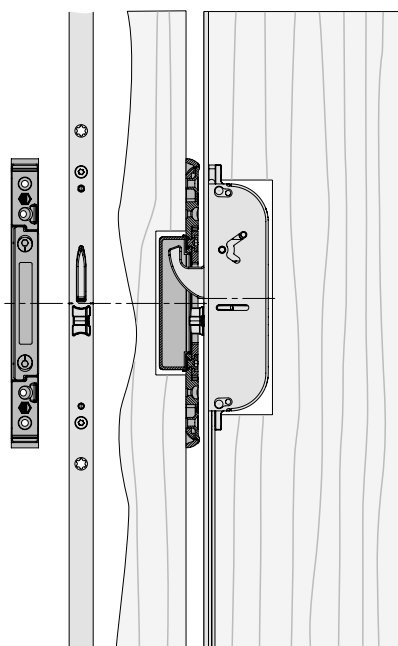


**A rebate gap of 10 - 14 mm must be kept in the installed state!**

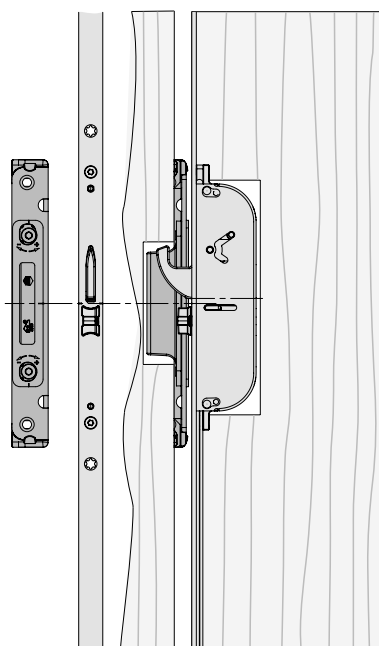
## Positioning of the striker plates

### Position of hook striker plate

12 mm rebate gap, 9/10 mm offset



12 mm rebate gap, 13 mm offset



**Gasket compression adjustment:**

+/- 1 mm with MF-HO striker plate

**Gasket compression adjustment:**

+/- 1.5 mm with MF-HO striker plate

Positioning of notch faceplate = notch strike plate



**A rebate gap of 10 - 14 mm must be kept in the installed state!**

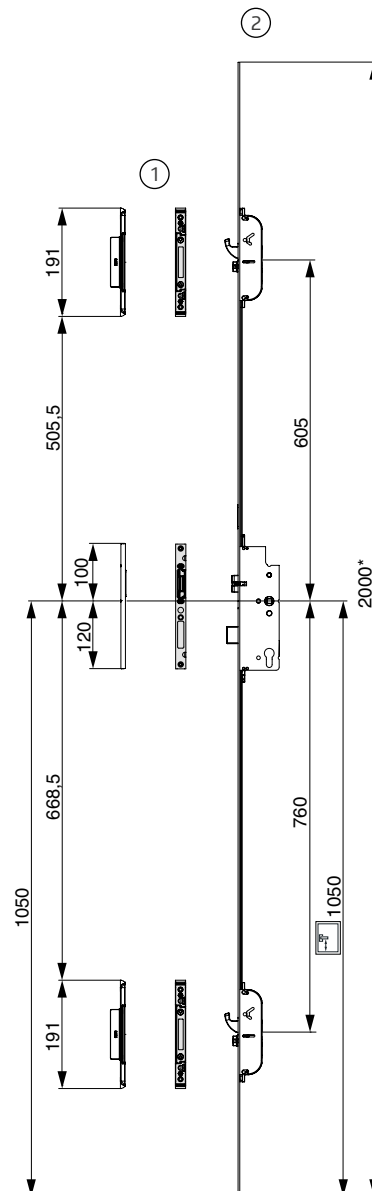
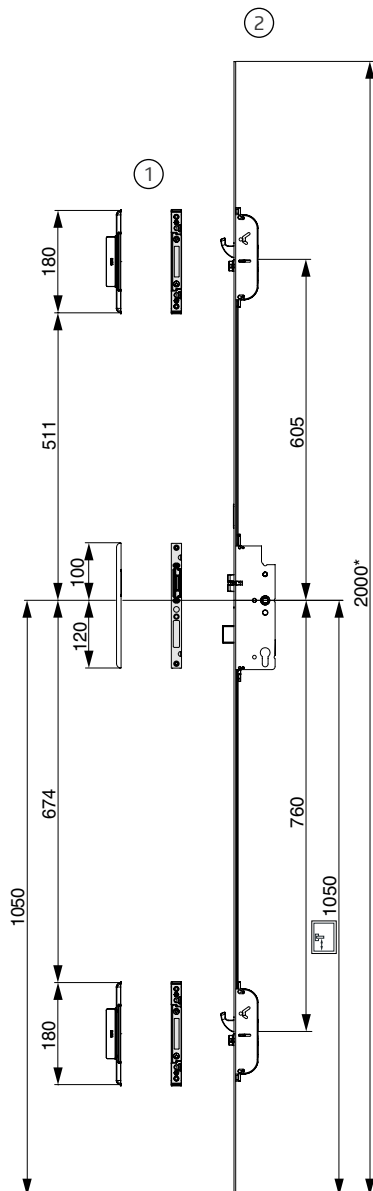
# Positioning of the striker plates

## 2 multifunction latch with hooks, Low K+605

4 mm rebate gap, 9/10 mm offset

12 mm rebate gap, 9/10 mm offset

- ① Single striker plate
- ② Lock



\*Use faceplate strip cover for higher SRH!

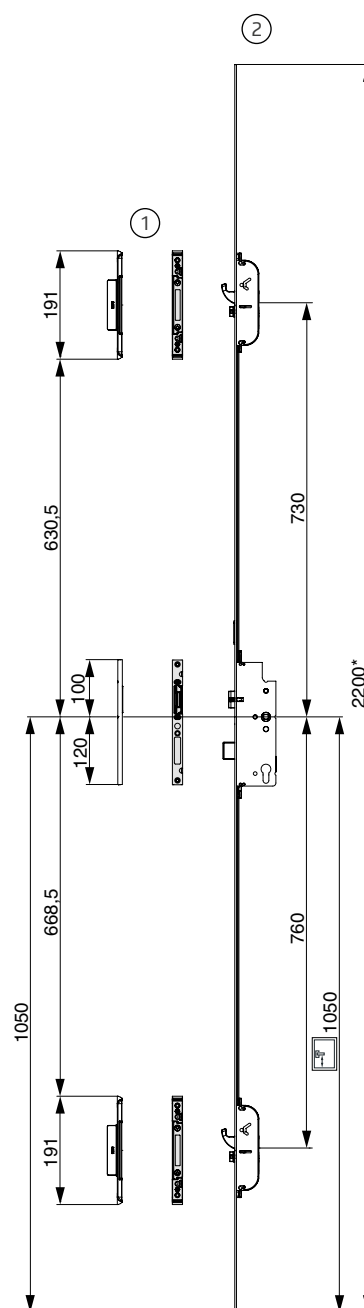
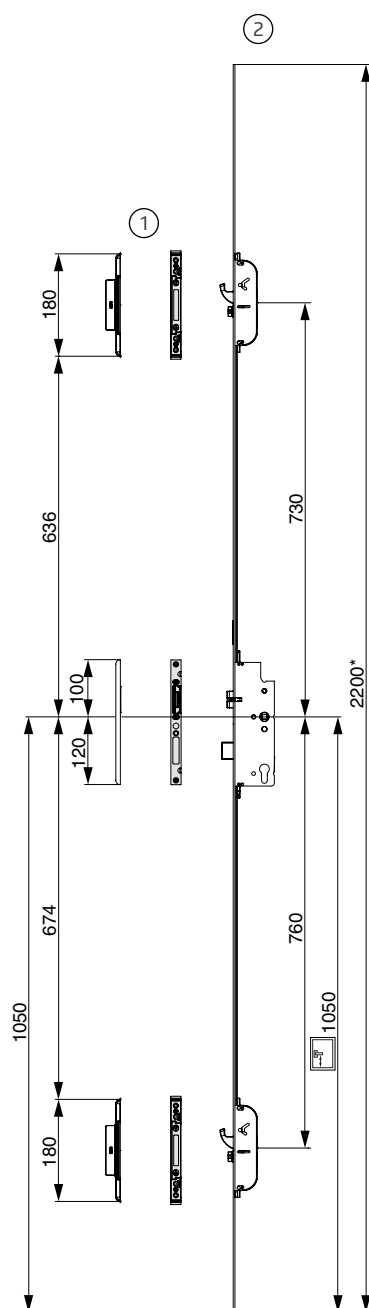
# Positioning of the striker plates

## 2 multifunction latch with hooks, Standard K+730

4 mm rebate gap, 9/10 mm offset

12 mm rebate gap, 9/10 mm offset

- ① Single striker plate
- ② Lock



\*Use faceplate strip cover for higher SRH!

# Positioning of the striker plates

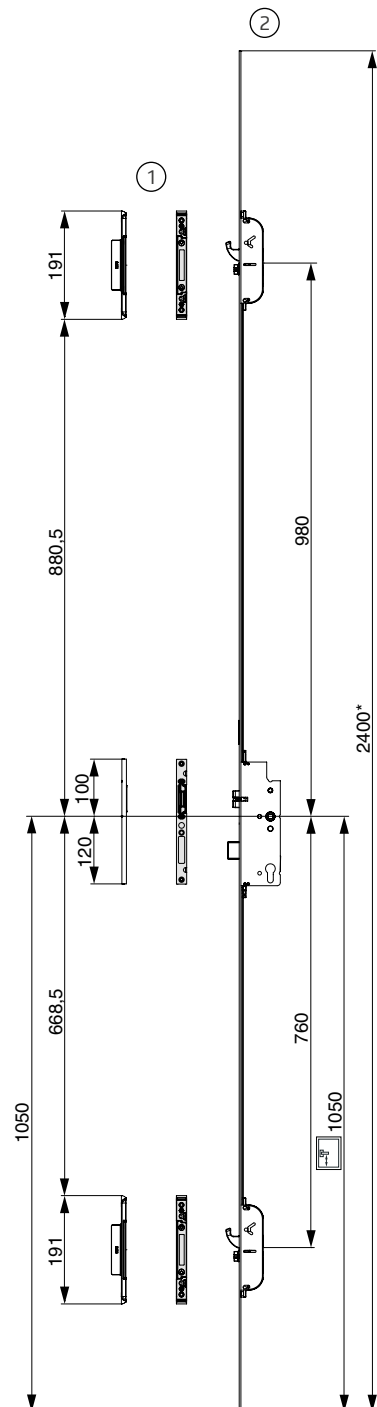
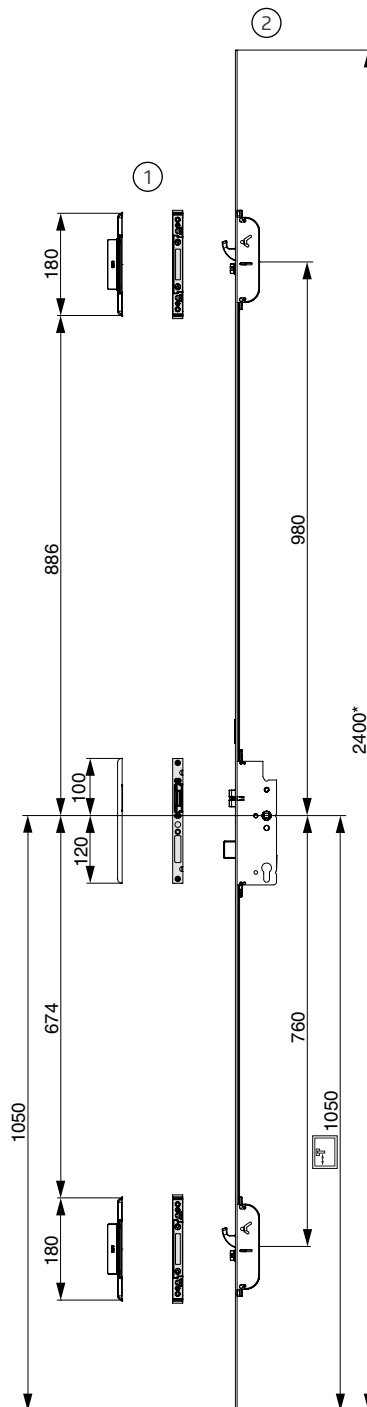
## 2 multifunction latch with hooks, High K+980

4 mm rebate gap, 9/10 mm offset

12 mm rebate gap, 9/10 mm offset

① Single striker plate

② Lock



\*Use faceplate strip cover for higher SRH!

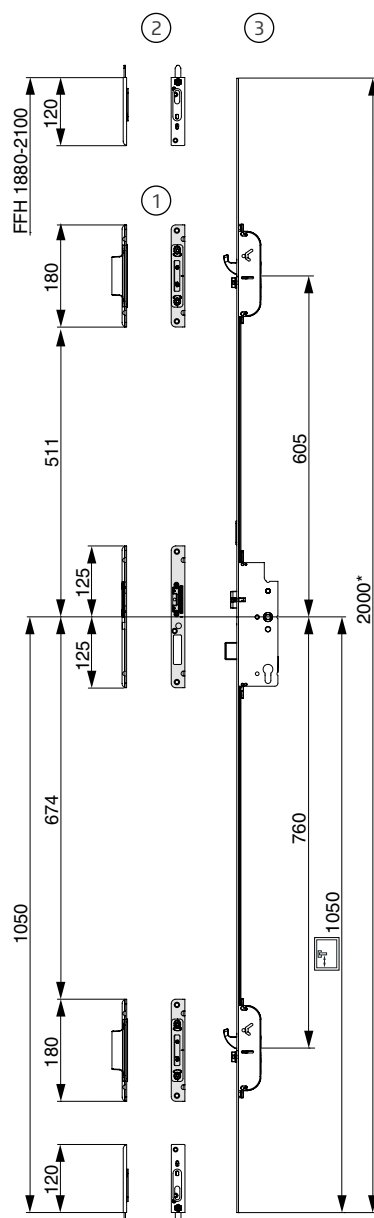


## Positioning of the striker plates

### 2 multifunction latch with hooks, Low K+605, single and double sash

4 mm rebate gap, 13 mm offset

- ① Single striker plate
- ② Finger operated door shootbolt
- ③ Lock



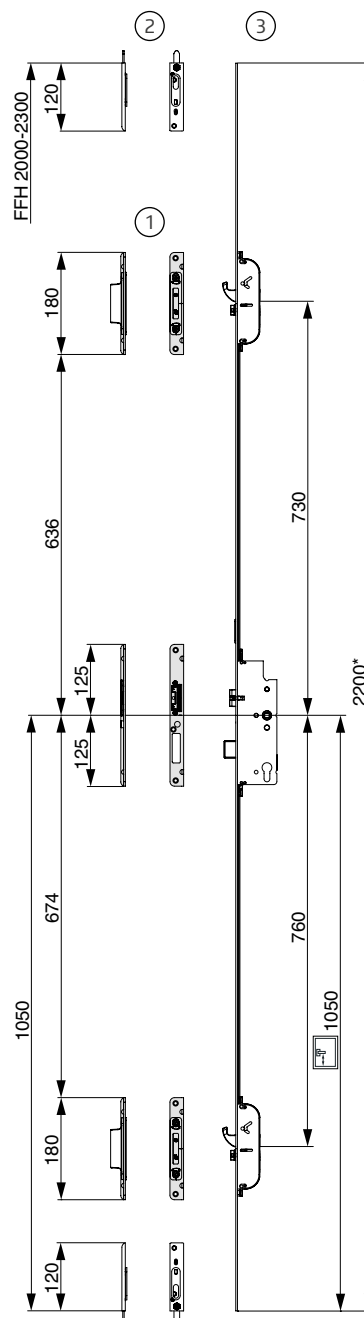
\*Use faceplate strip cover for higher SRH!

# Positioning of the striker plates

## 2 multifunction latch with hooks, Standard K+730, single and double sash

4 mm rebate gap, 13 mm offset

- ① Single striker plate
- ② Finger operated door shootbolt
- ③ Lock



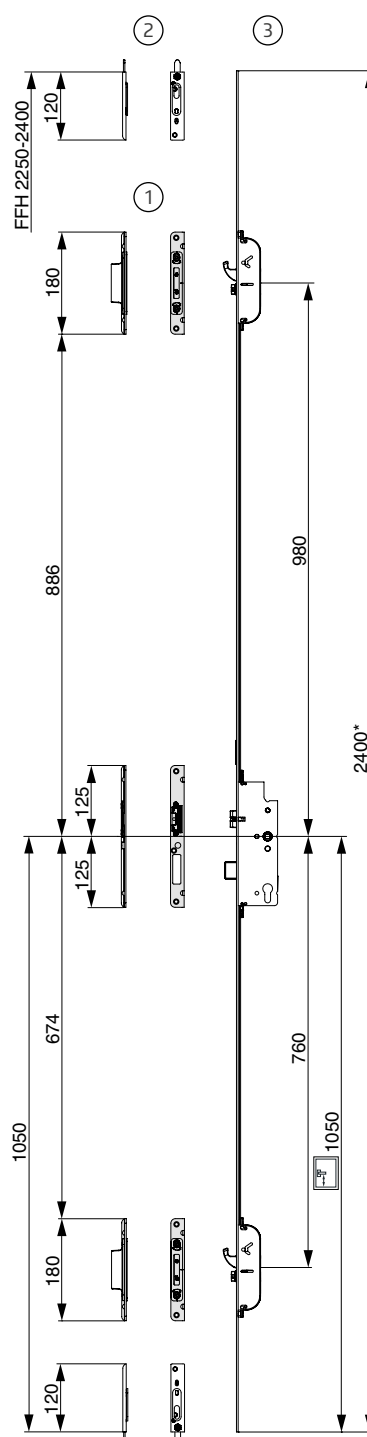
\*Use faceplate strip cover for higher SRH!

## Positioning of the striker plates

### 2 multifunction latch with hooks, High K+980, single and double sash

4 mm rebate gap, 13 mm offset

- ① Single striker plate
- ② Finger operated door shootbolt
- ③ Lock



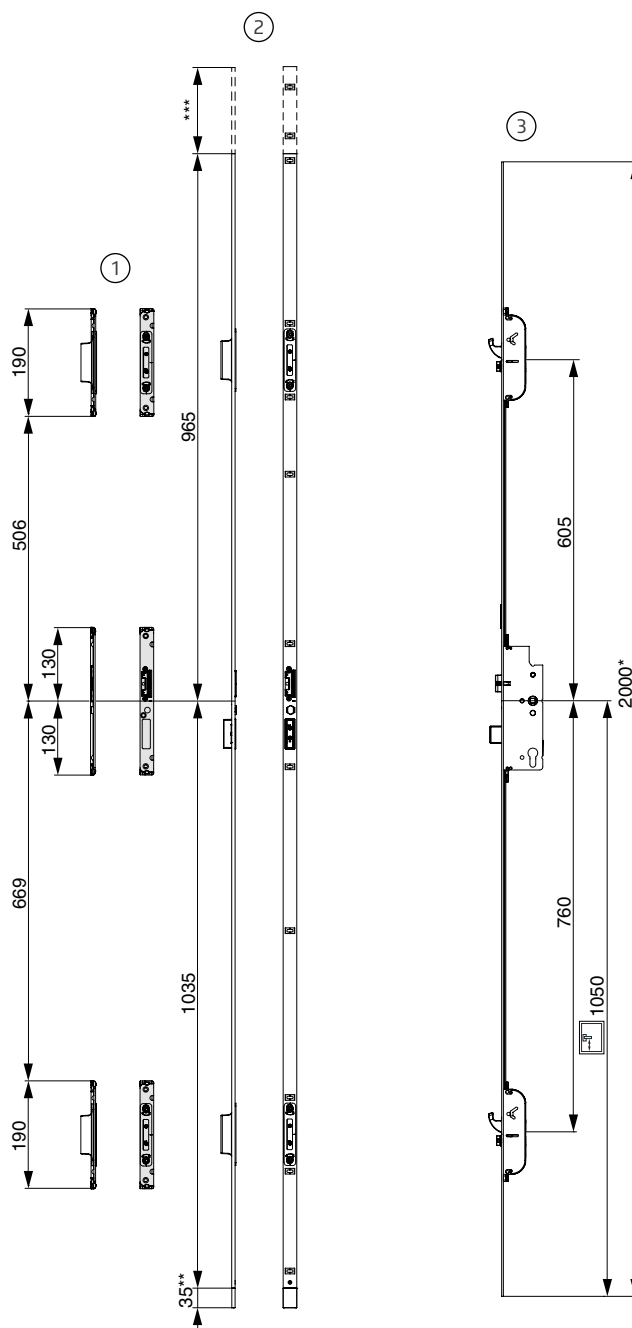
\*Use faceplate strip cover for higher SRH!

# Positioning of the striker plates

## 2 multifunction latch with hooks, Low K+605, single sash

12 mm rebate gap, 13 mm offset

- ① Single striker plate
- ② Single piece door striker
- ③ Lock



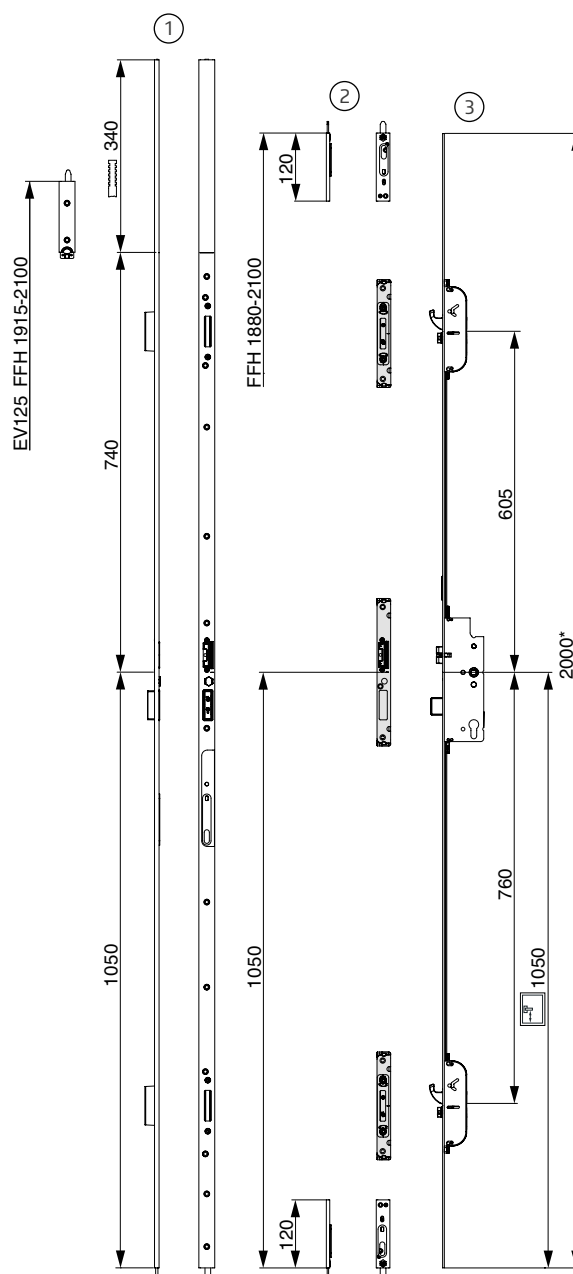
\* Use faceplate strip cover for higher SRH!  
 \*\* Pluggable end for adaptation to threshold  
 \*\*\* Use Article 102852 Extension door striker for higher SRH

## Positioning of the striker plates

### 2 multifunction latch with hooks, Low K+605, double sash

12 mm rebate gap, 13 mm offset

- ① Faceplate drive gear
- ② Finger operated door shootbolt
- ③ Lock



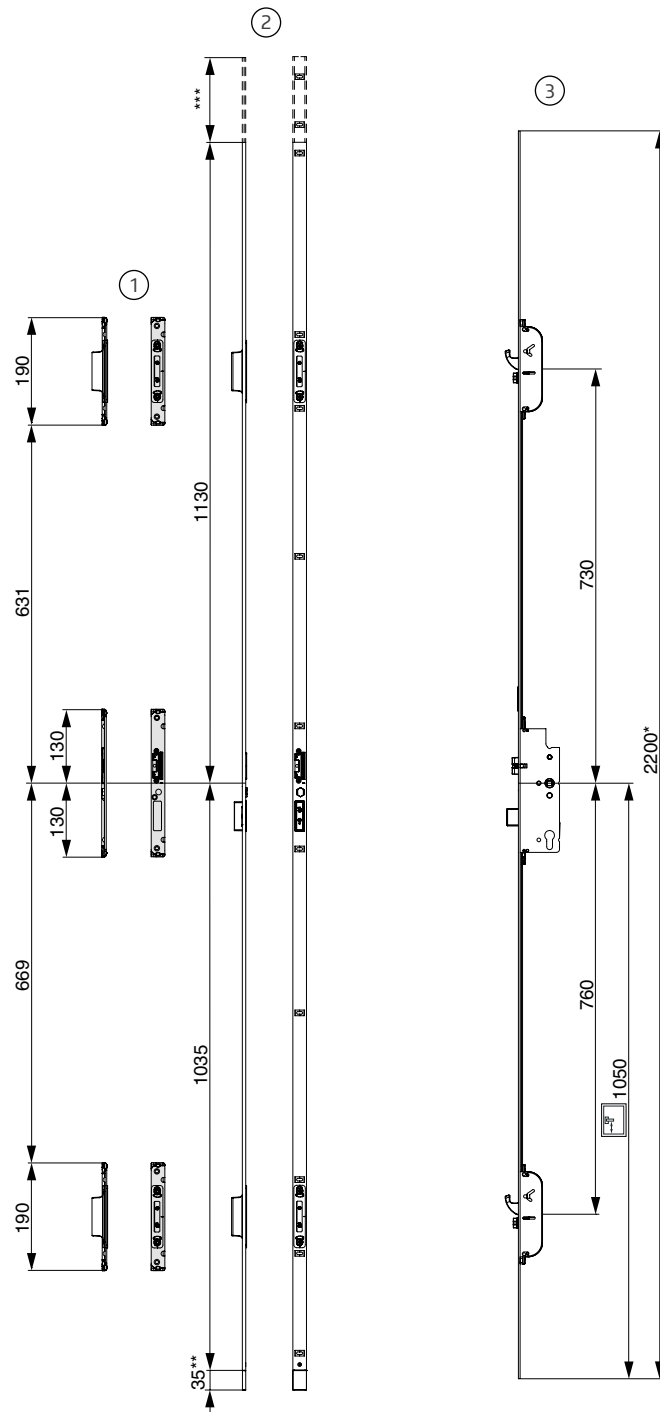
\*Use faceplate strip cover for higher SRH!

# Positioning of the striker plates

## 2 multifunction latch with hooks, Standard K+730, single sash

12 mm rebate gap, 13 mm offset

- ① Single striker plate
- ② Single piece door striker
- ③ Lock



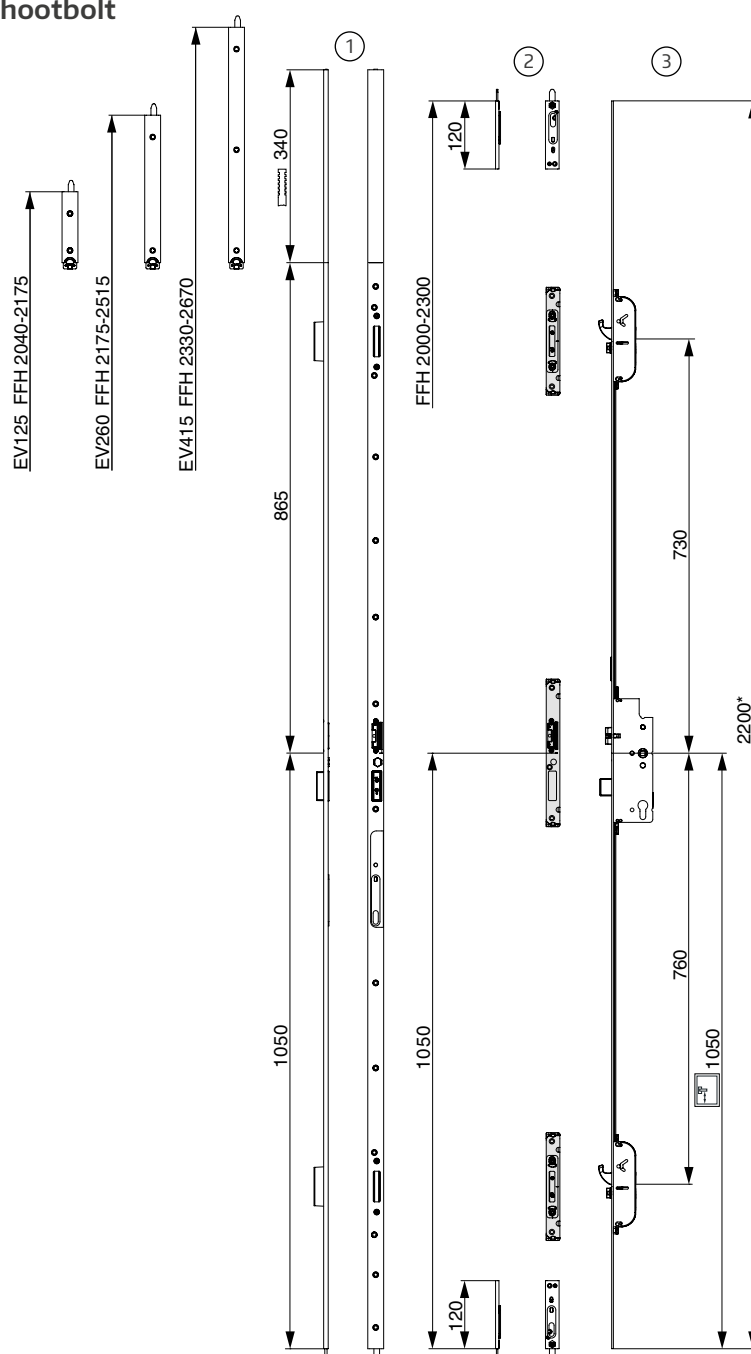
\* Use faceplate strip cover for higher SRH!  
 \*\* Pluggable end for adaptation to threshold  
 \*\*\* Use Article 102852 Extension door striker for higher SRH

## Positioning of the striker plates

### 2 multifunction latch with hooks, Standard K+730, double sash

12 mm rebate gap, 13 mm offset

- ① Faceplate drive gear
- ② Finger operated door shootbolt
- ③ Lock



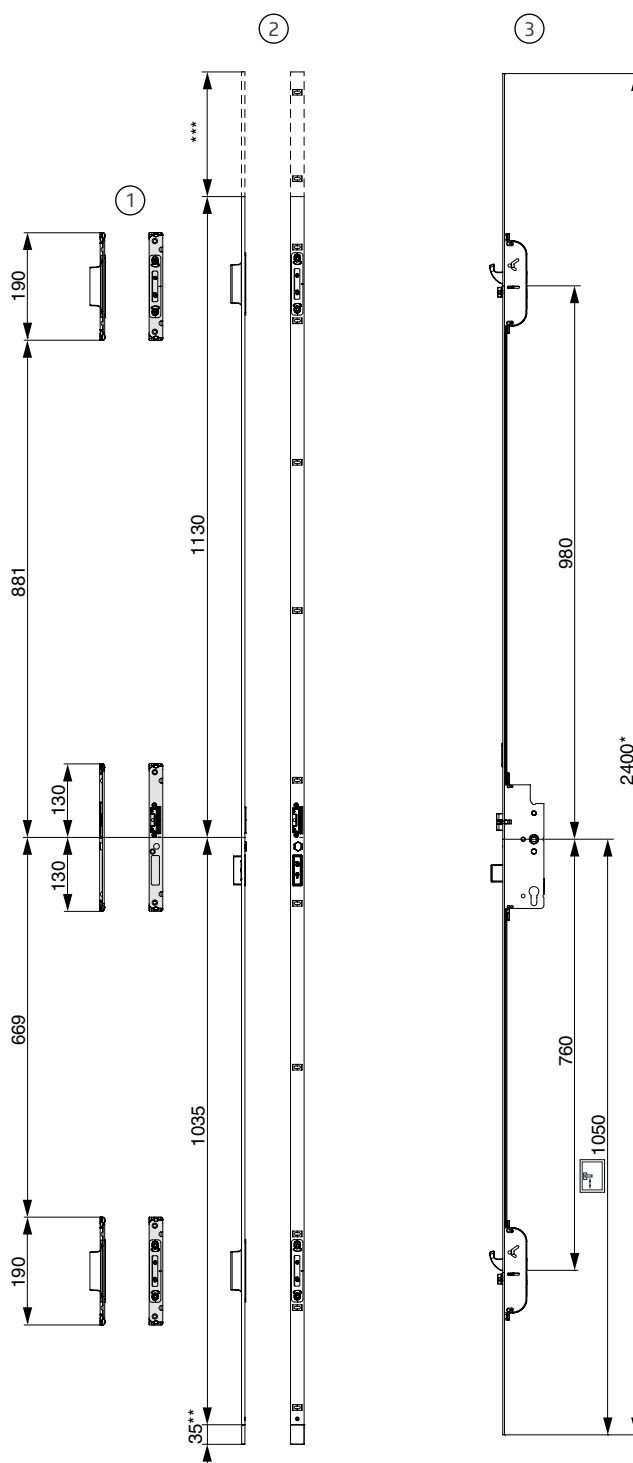
\*Use faceplate strip cover for higher SRH!

# Positioning of the striker plates

## 2 multifunction latch with hooks, High K+980, single sash

12 mm rebate gap, 13 mm offset

- ① Single striker plate
- ② Single piece door striker
- ③ Lock



\* Use faceplate strip cover for higher SRH!

\*\* Pluggable end for adaptation to threshold

\*\*\* Use Article 102852 Extension door striker for higher SRH

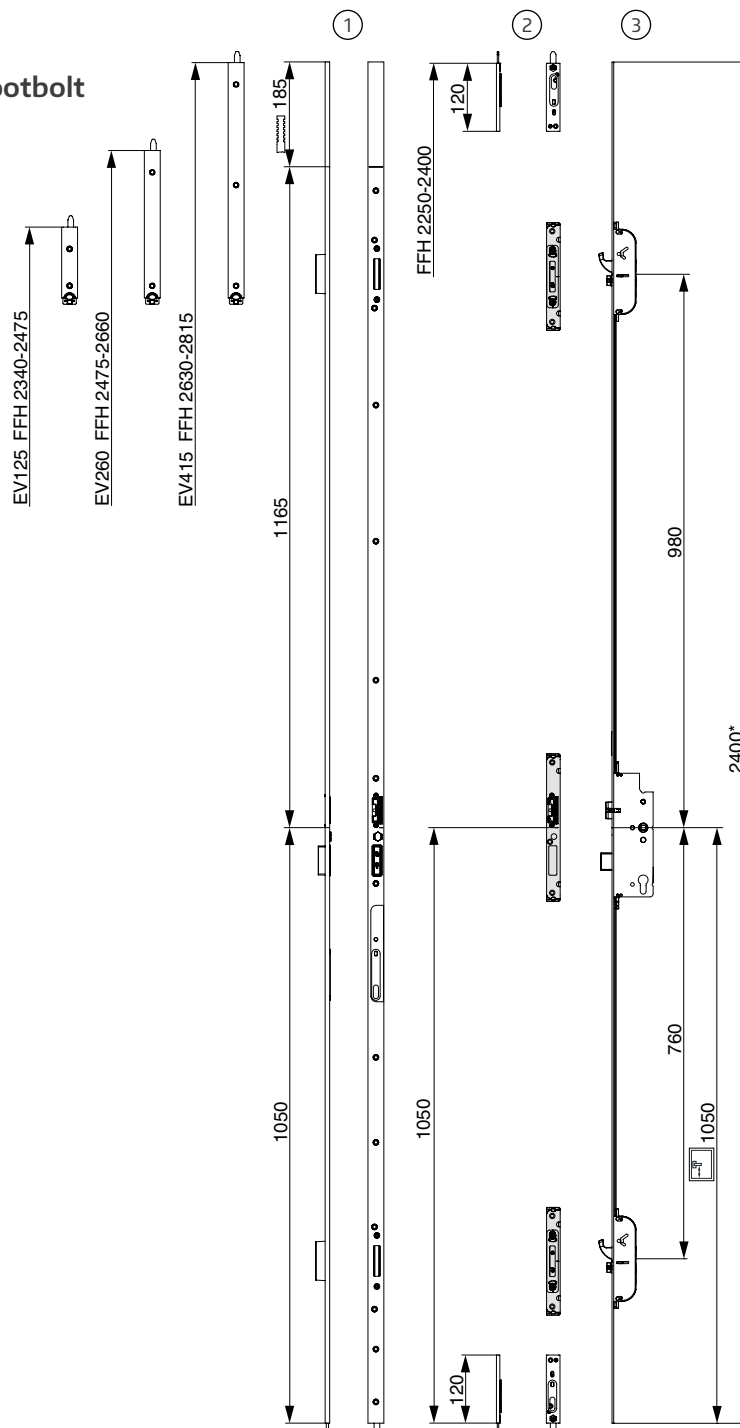


# Positioning of the striker plates

## 2 multifunction latch with hooks, High K+980, double sash

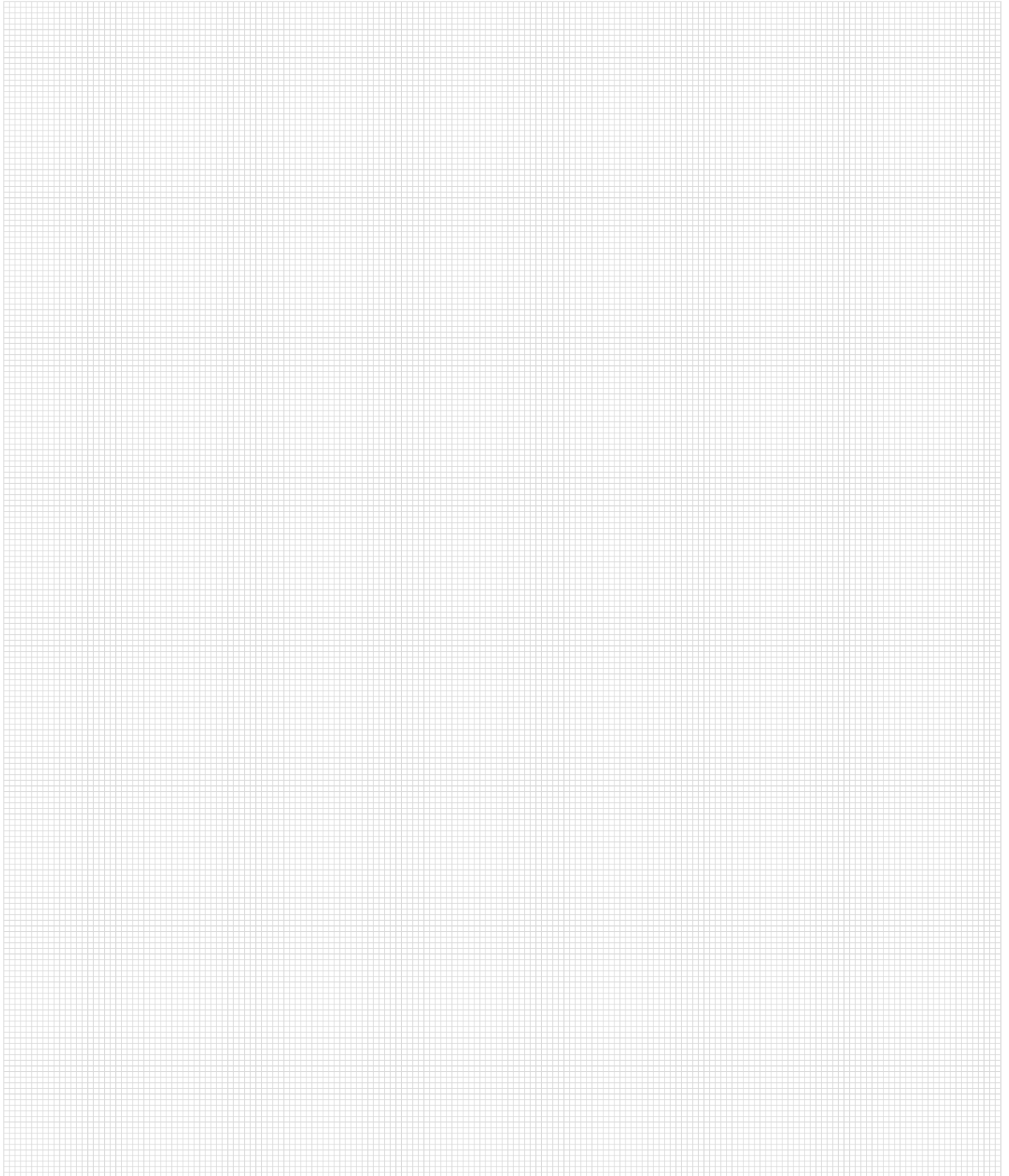
12 mm rebate gap, 13 mm offset

- ① Faceplate drive gear
- ② Finger operated door shootbolt
- ③ Lock



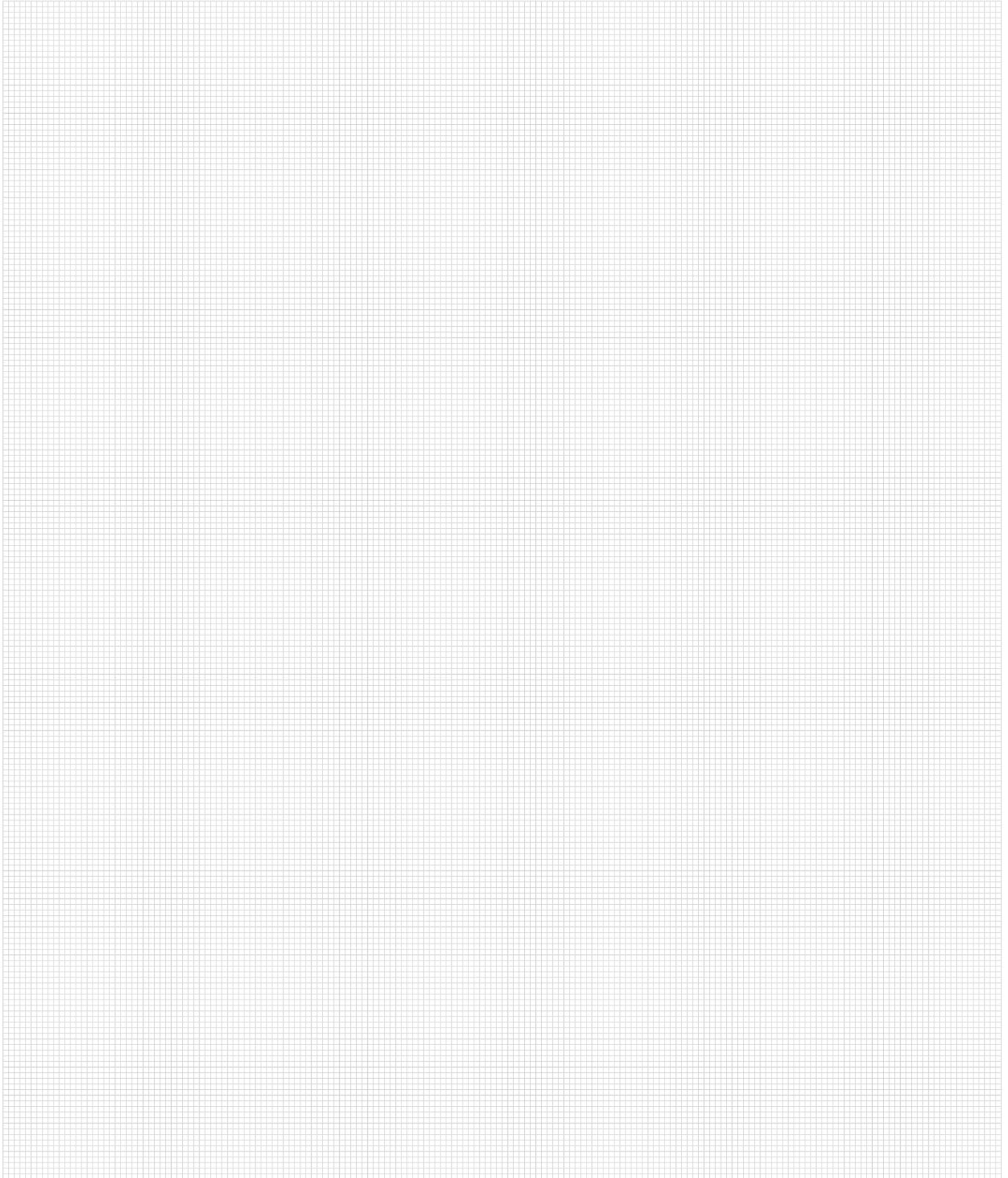
\*Use faceplate strip cover for higher SRH!

## Notes



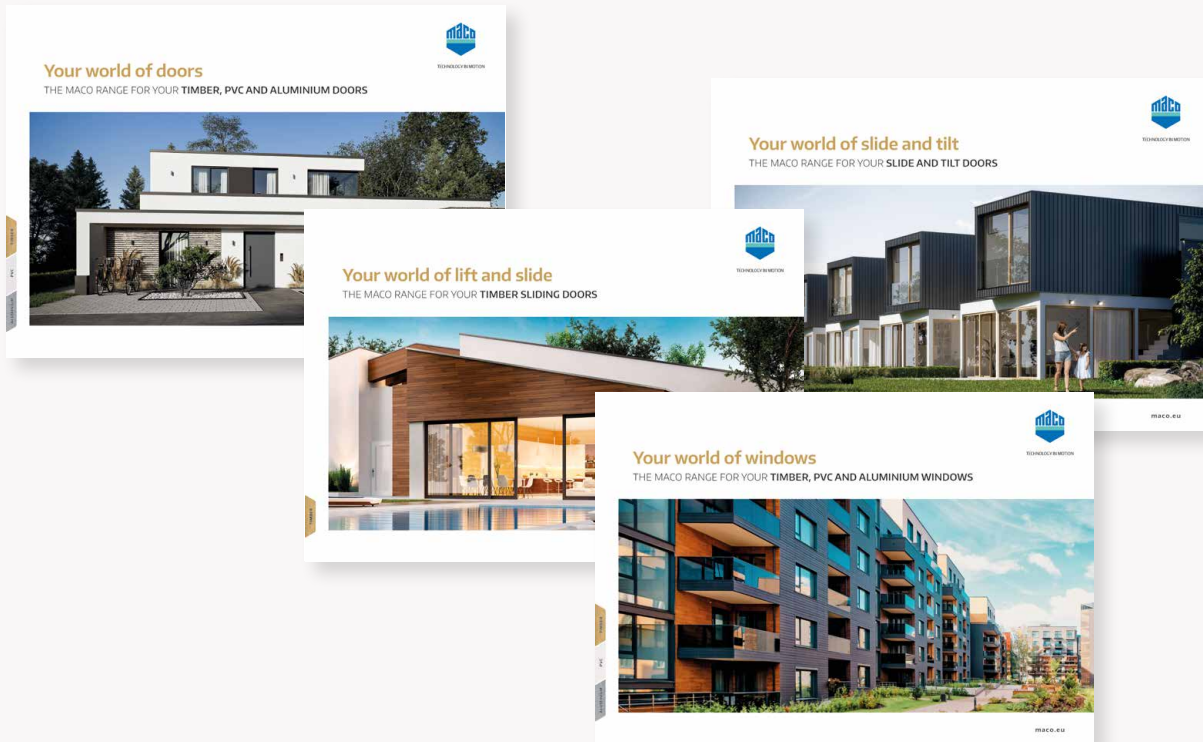


## Notes



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