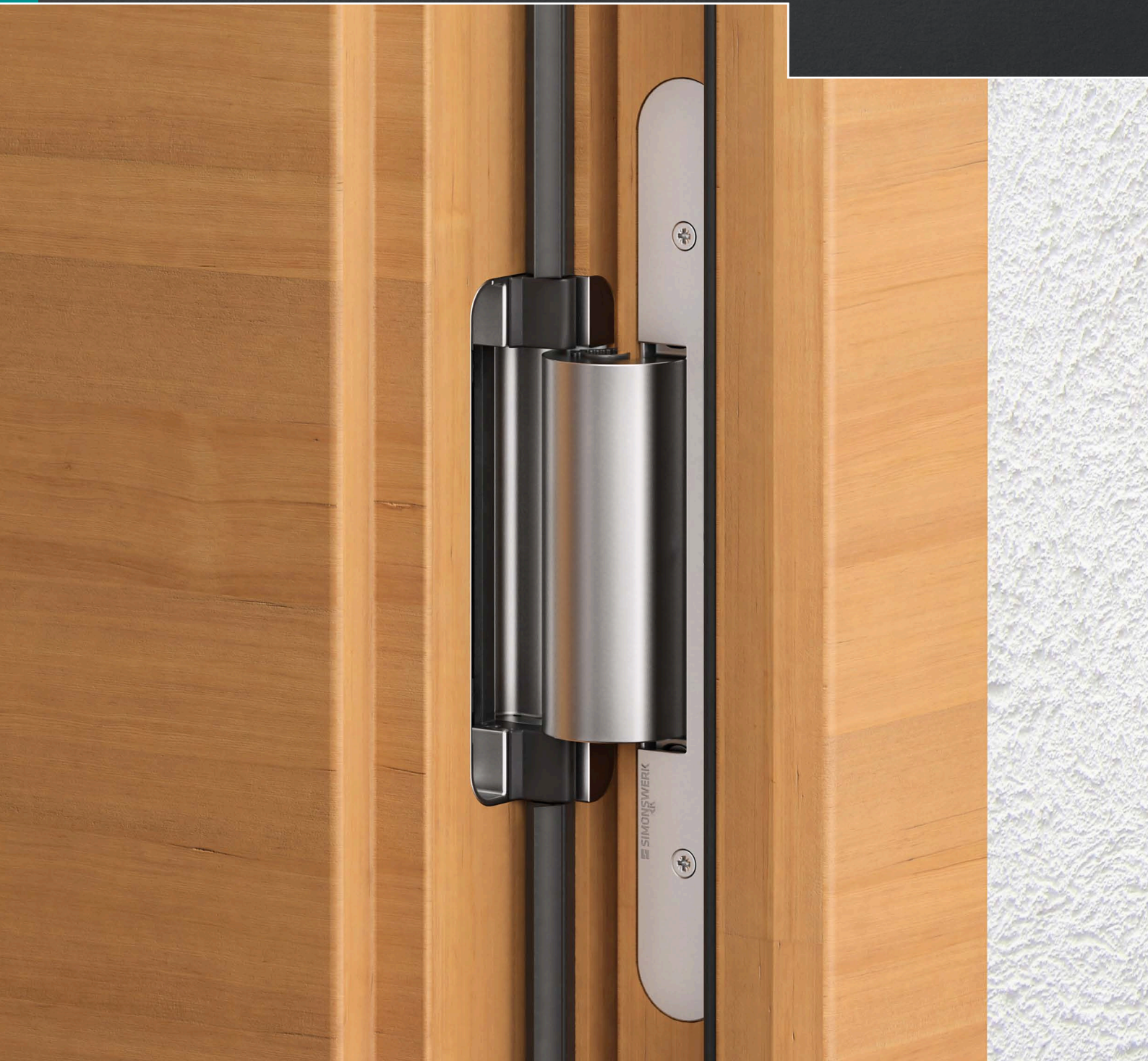


# TECTUS® TE 680 3D FD

The concealed hinge system for timber entrance doors



# INDEX

## **TECTUS® TE 680 3D FD – The concealed hinge system for timber entrance doors**

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4 **Sealing system**

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5 **TE 680 3D FD**                      160 kg              for rebated timber entrance doors

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6 **Application examples  
overlap thickness**

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7 **Installation**

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9 **Installation tools**

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11 Service

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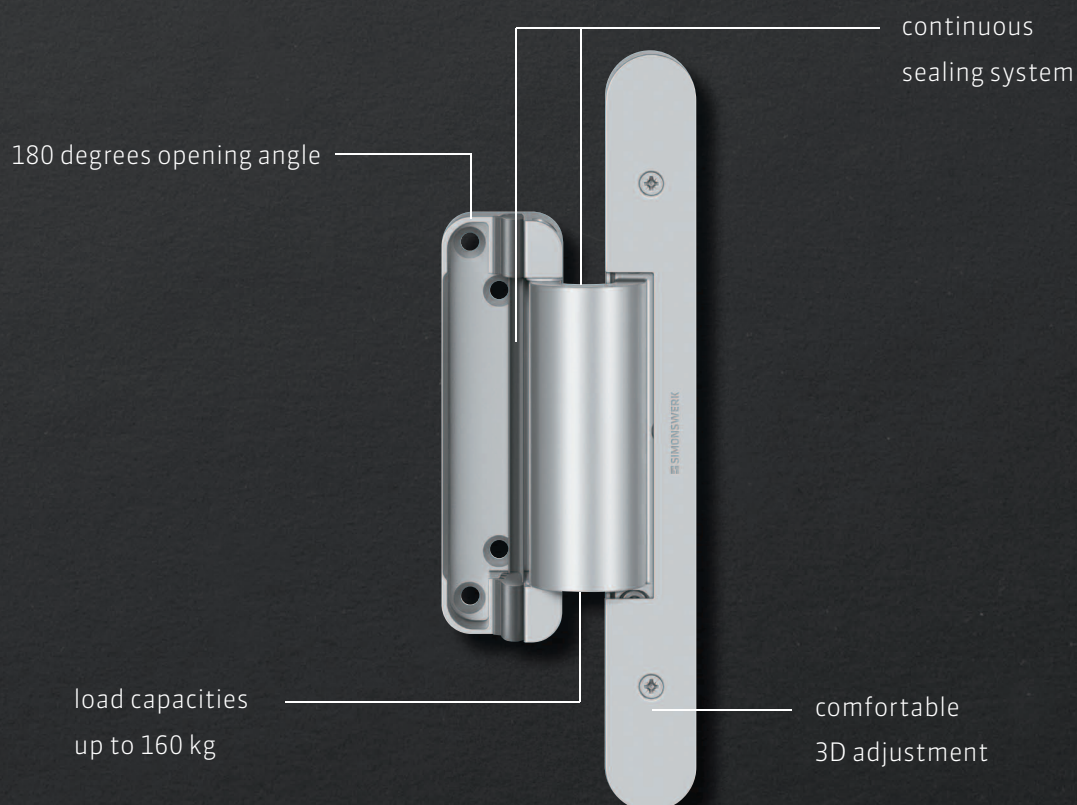
# TECTUS® TE 680 3D FD – THE CONCEALED HINGE SYSTEM FOR TIMBER ENTRANCE DOORS

Making something invisible is also design. The TECTUS hinge system enables unrebated doors to be optimally integrated into straight and flush room structures. This perfected technology has been successfully used in the residential and commercial construction industries for a number of years.

With the product innovation **TECTUS TE 680 3D FD**, SIMONSWERK has successfully further developed the TECTUS product brand, offering this new model version as a solution for conventional, rebated timber entrance doors. Easy mounting and comfortable 3D adjustment make installation easy, while a circumferential seal ensures the required level of impermeability around the hinges. The innovative hinge system for timber entrance doors further impresses with a load capacity of 160 kg.

## APPLICATION AREAS

- › for rebated timber entrance doors up to 160 kg
- › installed with ease
- › overlap thicknesses from 21-27 mm
- › 18 mm overlap width, 5 mm clearance and overlap seal



# SEALING SYSTEM

Requirements regarding the impermeability of entrance doors have steadily increased in recent years. In order for these demands to also be fulfilled when using a hinge in the rebate area, SIMONSWERK developed an integrated double sealing system for TECTUS TE 680 3D FD.

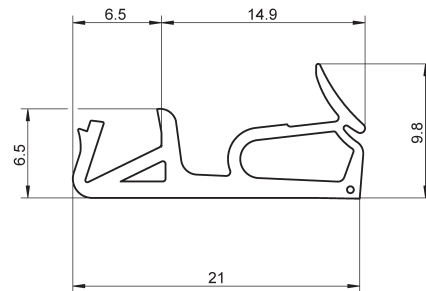
To additionally guarantee optimal sealing behaviour where a hinge has a lower turn-in curve as a result of the pivot point, SIMONSWERK also offers a specific overlap seal – the DS 7435.

The position is always adjusted relative to the frame and door so that the pivot point is optimally positioned in the overlap.

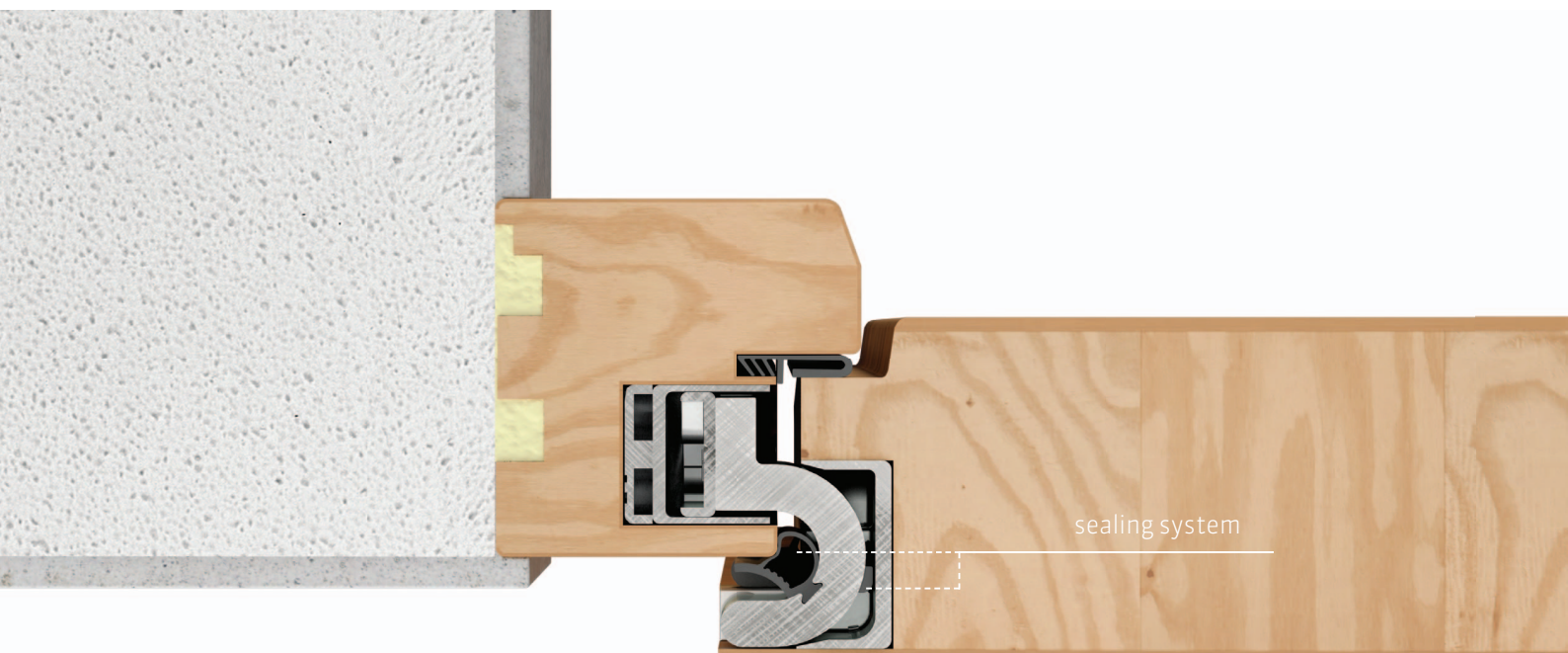
Thanks to the integrated double sealing system, the respective structure also remains sealed in the hinge area.

## sealing system DS 7435

Overlap seal for doors with a flat turn-in angle



The sealing is available in 1 piece (50 m).



# TECTUS®



## TE 680 3D FD

for rebated timber entrance doors

<b>Hinge</b>		<b>up to 160 kg</b>
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### Product features

- concealed hinge system
- for rebated timber entrance doors
- sideways closed hinge body for a clean mortise appearance
- comfortable 3D adjustment (side +/- 3,0 mm, height +/- 3,0 mm, compression +/- 1,5 mm)
- continuous sealing system
- 18 mm overlap width
- maintenance-free slide bearings

### Technical details

load capacity	<b>i</b> 2 hinges per door leaf (1x2m)	160.0 kg
overall length		250.0 mm
width (frame)		30.0 mm
width (door)		40.5 mm
cutter diameter		20.0 mm
opening angle		180°

### Finish

Satin Chrome Look (F1), other finishes available upon request

### Combination

accessories	sealing	DS 7435
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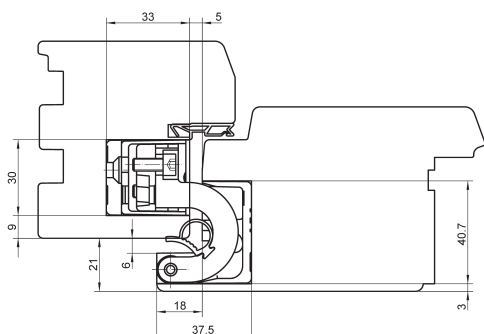
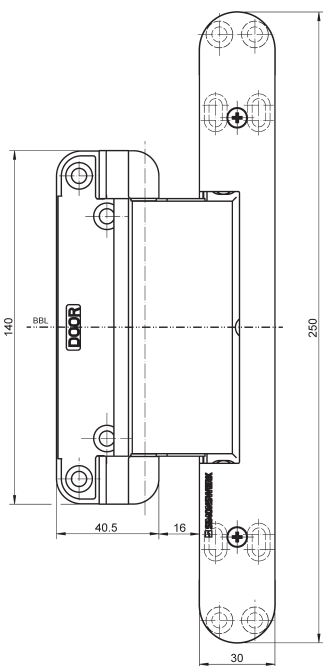
### Installation tools

jig	routing jig TE 680 3D (FD)
	ball bearing location drilling jig TE 680 3D (FD)
see page 9	

### Note

**i** The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m).

With an opening position of 180° the door may have to be fixed additionally.

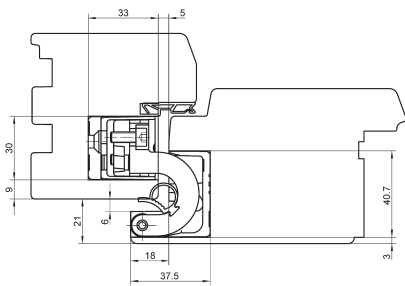


Example overlap thickness 21 mm

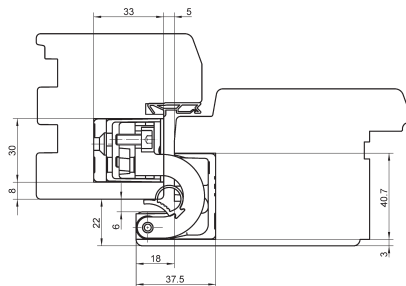
# APPLICATION EXAMPLES WITH DIFFERENT OVERLAP THICKNESSES

The position is always adjusted relative to the frame and door so that the pivot point is optimally positioned in the overlap.

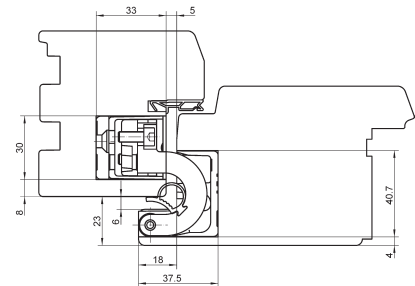
Thanks to the integrated double sealing system, the respective structure also remains sealed in the hinge area.



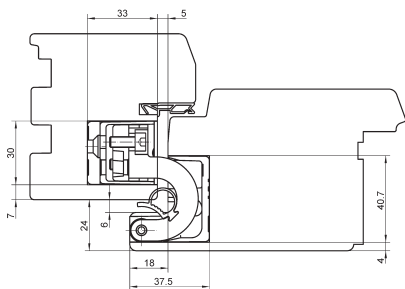
overlap thickness 21 mm



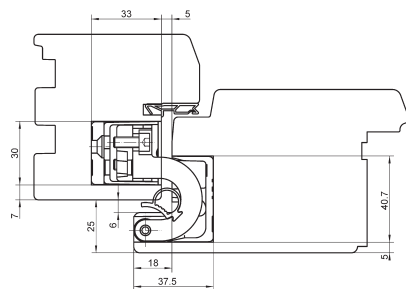
overlap thickness 22 mm



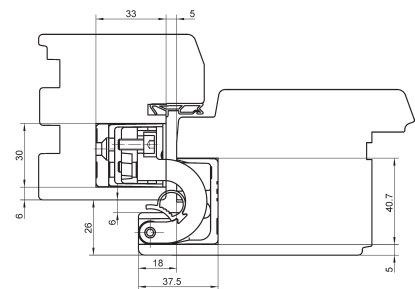
overlap thickness 23 mm



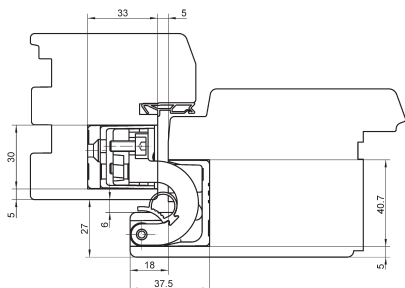
overlap thickness 24 mm



overlap thickness 25 mm



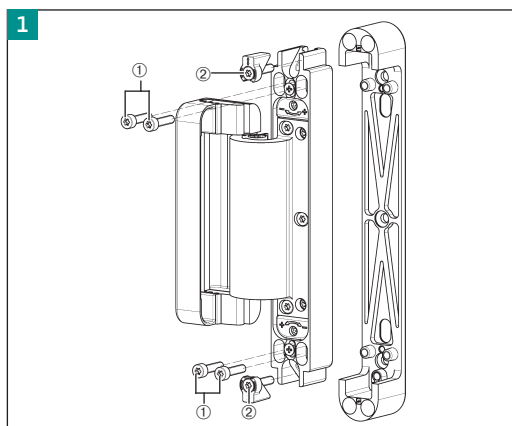
overlap thickness 26 mm



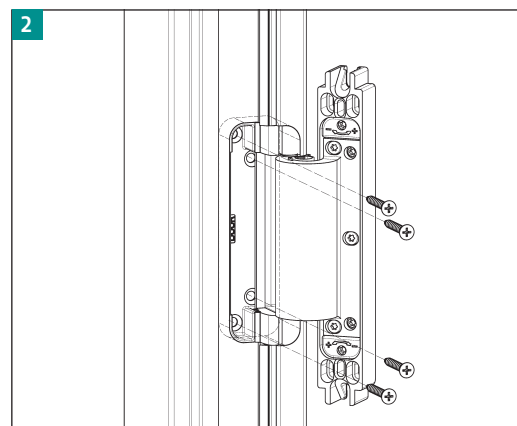
overlap thickness 27 mm

# INSTALLATION

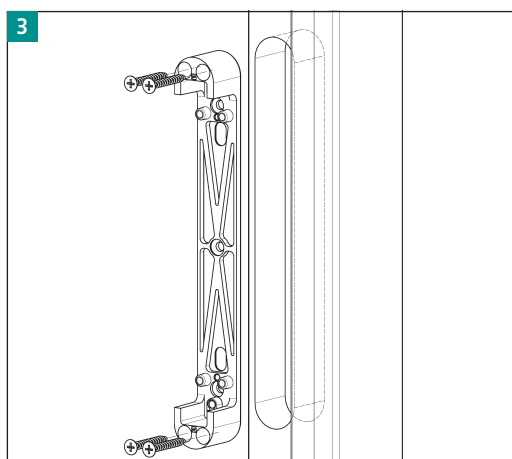
## TE 680 3D FD



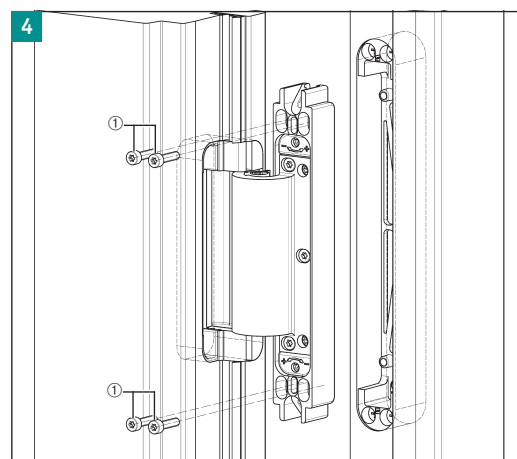
Loosen clamping and height adjustment screws ①+② and dismantle receiver of the frame part.



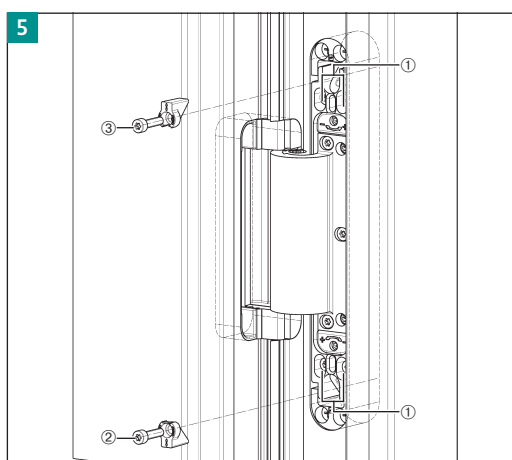
Conduct routing, operation, router  $\varnothing$  20 mm, collar ring  $\varnothing$  30 mm, screw hinge sash part (labelled "Door") with wood screws  $\varnothing$  5 mm.



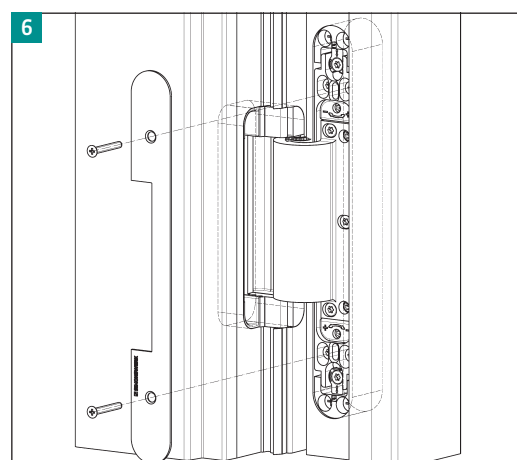
Screw in receiver of the frame part with wood screws  $\varnothing$  5 mm.



Fit door and tighten clamping screws ①. Then loosen clamping screws ① by a 1/4 rotation to adjust the door.



Adjust the vertical position of the door by turning the lower height adjustment screw ②. Screw in the upper adjustment screw ③. Do not tighten! Firmly tighten clamping screws ①.



Screw the cover plate with the enclosed screws on the frame part.

# ADJUSTMENT

## TE 680 3D FD

### Three-dimensional, continuous adjustability

side	+/- 3.0 mm
height	+/- 3.0 mm
compression	+/- 1.5 mm

### Side adjustment

- Adjust adjusting spindle with Torx T25
- counterclockwise - to the hinge side (max. 3 mm)
- clockwise - to the lock side (max. 3 mm)

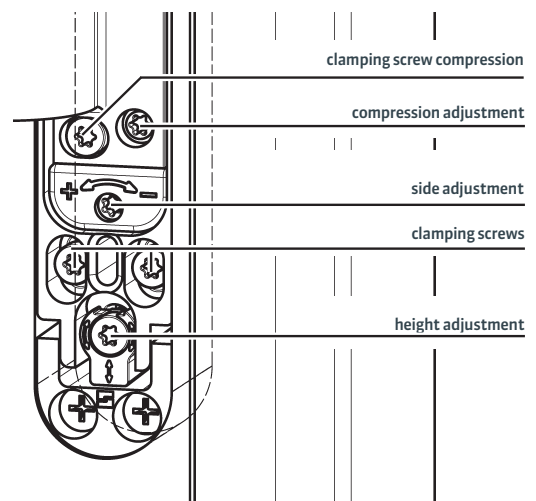
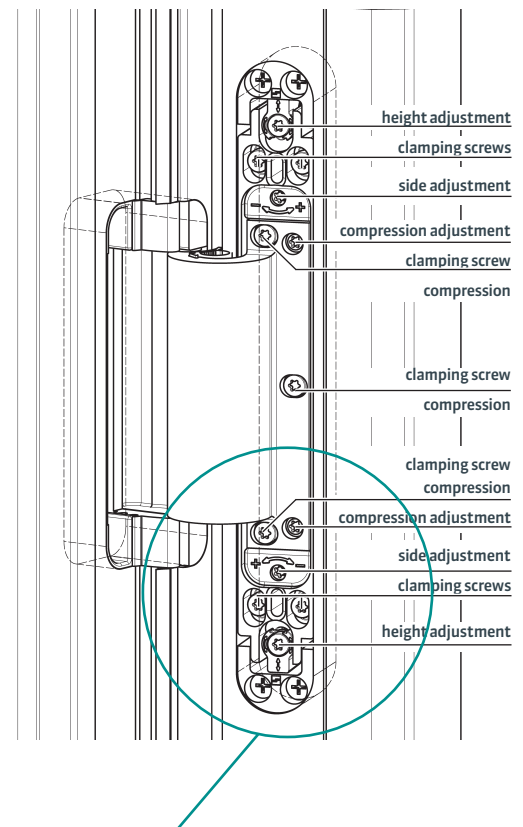
### Height adjustment

- Slightly loosen clamping screws
- Adjust the vertical position of the door by turning the lower height adjustment screw (Turn the upper screw in the opposite direction if necessary)
- Firmly tighten clamping screws

### Compression adjustment

- Slightly loosen compression clamping screw
- Adjust the vertical position of the door by turning the compression adjustment screw
- Tighten compression clamping screw again

All adjustment are made with a Torx T25.







## Routing jig TE 680 3D (FD)

for routing on timber entrance doors

### Routing jig

### Suitable for

TECTUS TE 680 3D FD

### Scope of supply

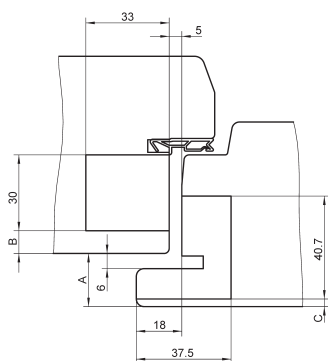
- 1 x routing jig
- 1 x fitting instruction

### Fitting instructions

1. Determine hinge position.
2. Place routing frame on the workpiece and clamp it (Door: screw in support pieces ①).
3. Insert template.
4. Perform routing.

### Note

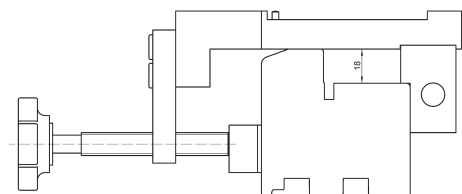
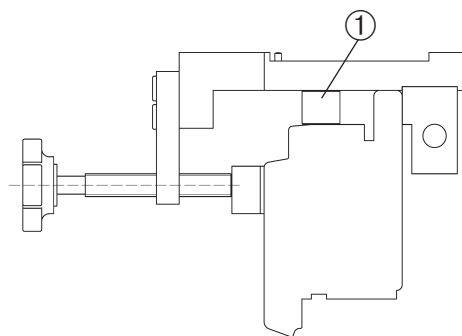
Templates for the following overlap thicknesses must be ordered separately:



A*	B	C	template frame	template door
21 mm	9	3	5 251112 5	5 251109 5
22 mm	8	3	5 251113 5	5 251109 5
23 mm	8	4	5 251113 5	5 251110 5
24 mm	7	4	5 251114 5	5 251110 5
25 mm	7	5	5 251114 5	5 251111 5
26 mm	6	5	5 251115 5	5 251111 5
27 mm	5	5	5 251116 5	5 251111 5

\* Dimensions depending on overlap thickness A (see also drawing)

Routing diameter 20 mm, collar ring diameter 30 mm



# TECTUS®

## Ball bearing location drilling jig TE 680 3D (FD)

for routing on timber entrance doors

### Ball bearing location drilling jig

#### Suitable for

TECTUS TE 680 3D FD

#### Scope of supply

3 x routing jig TE 680 3D (FD)  
1 x square connecting rod  
2 x fixed end stop  
2 x swivelling end stop

#### Fitting instructions

1. Adjust and fix routing jig according to the required routing position.
2. The stops must be set individually to the right and to the left (Fixed stop = frame, swivelling stop = door).
3. Place routing jig on the workpiece and clamp it (Door: screw in support piece ①).
4. Insert template.
5. Perform routing.

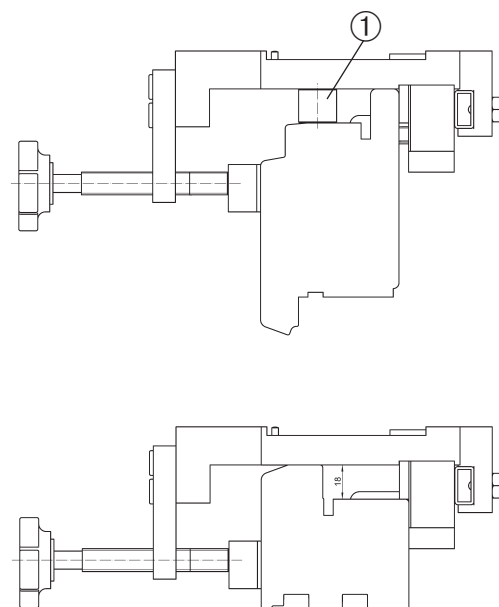
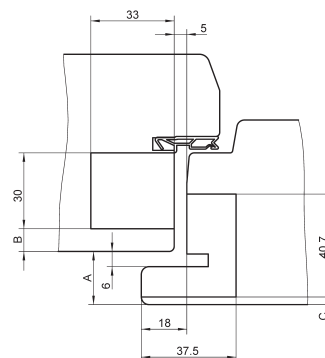
#### Note

Templates for the following overlap thicknesses must be ordered separately:

A*	B	C		
overlap thickness	RT	FT	Frame template	Door template
21 mm	9	3	5 251112 5	5 251109 5
22 mm	8	3	5 251113 5	5 251109 5
23 mm	8	4	5 251113 5	5 251110 5
24 mm	7	4	5 251114 5	5 251110 5
25 mm	7	5	5 251114 5	5 251111 5
26 mm	6	5	5 251115 5	5 251111 5
27 mm	5	5	5 251116 5	5 251111 5

\* Dimensions depending on overlap thickness A (see also drawing)

Router bit diameter 20 mm, collar ring diameter 30 mm



# SERVICE – COMPREHENSIVE EXPERTISE FOR YOUR DAILY WORK

We are happy to provide you with all the documentation you need to calculate which is the most suitable hinge system for your requirements. Please contact us: we would be delighted to work with you to choose the best solution – from high-quality standard sets right up to the most complex solutions.

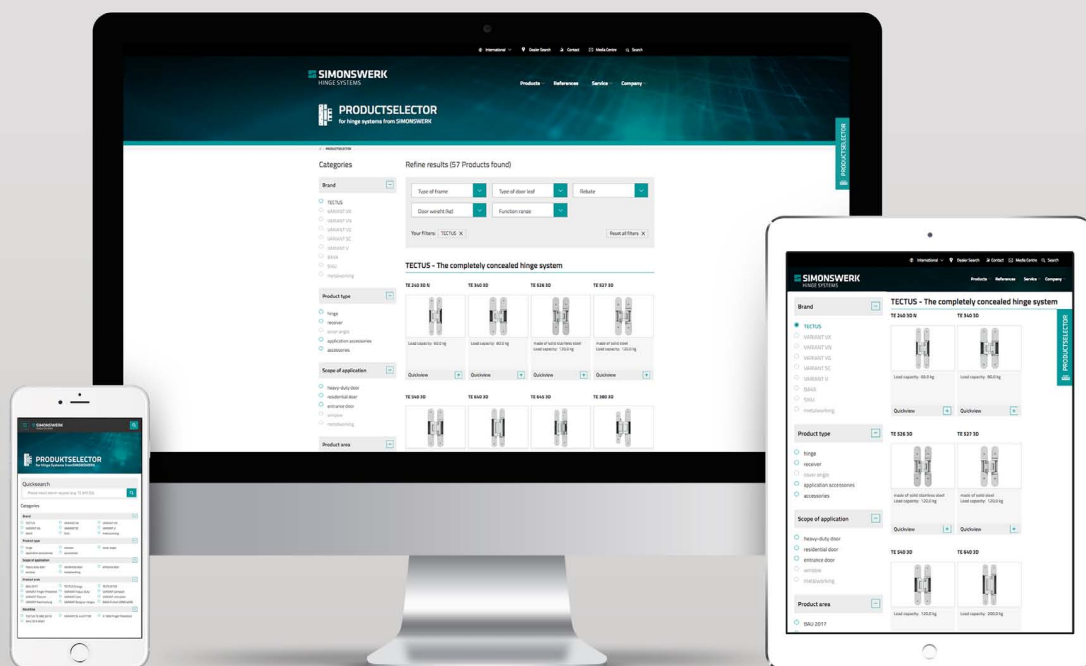
Please visit our home page for any information not included in this brochure. You will find it easy to navigate through our user-friendly website to arrive at the detailed, comprehensive solutions.

All our brochures and data sheets can be requested in a printed version, or you can simply download them on the spot – and the same applies to our fitting instructions and milling data.

[www.simonswerk.com](http://www.simonswerk.com)

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## CONTENT

TE 680 3D FD

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**SIMONSWERK GmbH**

Bosfelder Weg 5  
33378 Rheda-Wiedenbrück  
Germany

Fon +49 (0)5242/413-0  
Fax +49 (0)5242/413-150

info@simonswerk.de  
www.simonswerk.com

