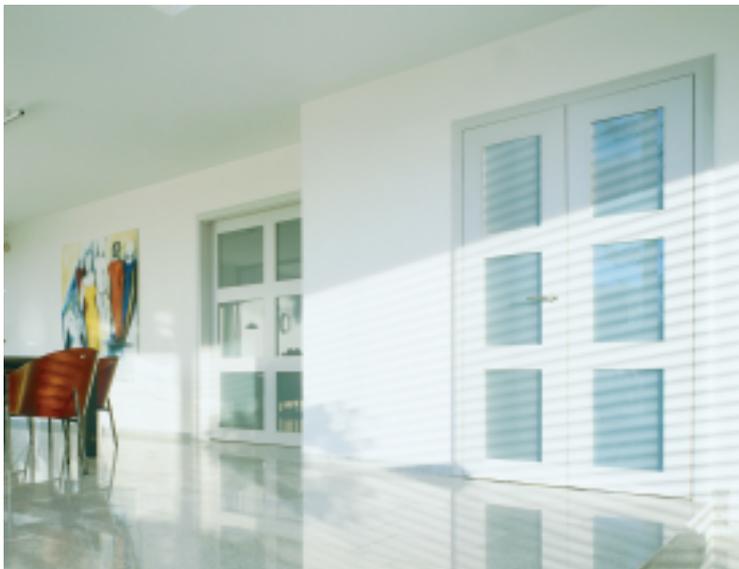




TECTUS

The completely concealed hinge system





„It's still design ...

... even if there's nothing to be seen!“

„**TECTUS**“ – This Latin word for „concealed“ signifies SIMONSWERK's newly developed, completely hidden hinge system.

This outstanding hinge system makes it possible, for the first time, to achieve uninterrupted flush-faced surfaces on the hinge side of the door creating a visual, harmonic, overall interior design impression. This becomes of special significance in applications where, in addition to the high performance features of the hinge system, the design aspect plays a more and more important role.

Design meets function: Considering all the potential door fitting requirements was the starting point for SIMONSWERK designers to develop the complete hinge system – **TECTUS**. This unrivalled, award winning hinge is now available for use on un-rebated doors, covering the full range of load capacities from 40 kgs, 60 kgs, 100 kgs and 180 kgs up to 200 kgs.

TECTUS – from SIMONSWERK

More applications – Freedom in design – Complete solutions



„Concealed means using a **TECTUS** system to provide the best possible hinge technology in the smallest amount of space“

TECTUS

The new, completely concealed hinge system
for unrebated premium choice interior doors, high performance and heavy-duty doors.

After the successful introduction of the three TECTUS versions we now launch two further invisible hinges:
The new ones of the completely concealed hinge system are called TECTUS TE 210 3D and TECTUS TE 630 3D. By this enlargement a
full range of application possibilities can be covered.



TECTUS TE 210 3D

for premium choice doors
Load capacity 40 kgs

Pages 4 - 7

TECTUS TE 310 3D

for premium choice doors
Load capacity 60 kgs

Pages 8 - 11

TECTUS TE 510 3D

for high performance doors
Load capacity 100 kgs

Pages 12 - 15

TECTUS TE 610 3D

for heavy-duty doors
Load capacity 180 kgs

Pages 16 - 19

TECTUS TE 630 3D

for heavy-duty doors
Load capacity 200 kgs

Pages 20 - 23

TECTUS

The answer to modern trends and demands of interior design.



TECTUS TE 210 3D

for premium choice doors

Completely concealed hinge system for premium choice doors up to **40 kgs**.

Three-dimensionally adjustable:

Side +/- 3 mm, height +/- 2,5 mm, depth +/- 1,5 mm.

Maintenance-free slide bearings. Right hand and left hand applicable.

For unrebeated doors with wood, steel and aluminium frames.

Finishes available:

Stainless steel effect (galvanised surface)

F1-coloured – powder coated

F2-coloured – powder coated

Technical Data:

Opening angle	180 degree
Load capacity	40 kgs
Size	140 mm
Diameter of cutter	16 mm

TECTUS TE 210 3D

for premium choice doors

Descriptive text:

SIMONSWERK hinge TECTUS TE 210 3D.

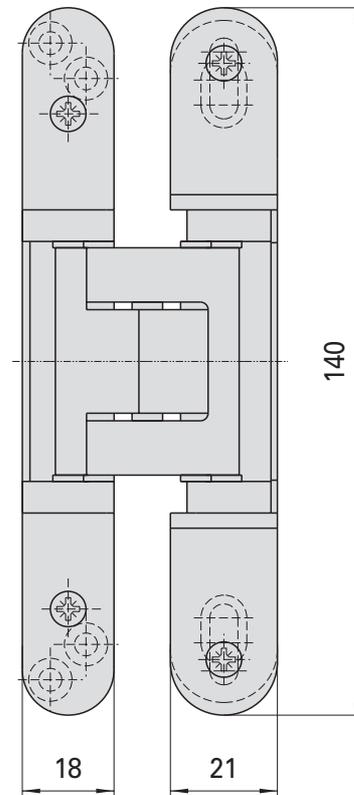
Completely concealed for unrebeated doors with wood, steel or aluminium frames. Opening angle up to 180°, Size 140 mm, right hand and left hand applicable, maintenance-free slide bearings, three-dimensionally adjustable: Side +/- 3 mm, height +/- 2,5 mm, depth +/- 1,5 mm, finish.....

Block Frame: No additional fixing device necessary

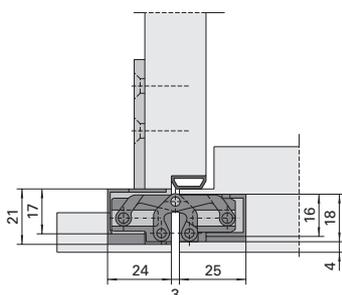
Casing frame: With galvanised fixing plate TECTUS TE 210 3D FZ

Steel frame: With galvanised or stainless steel receiver
TECTUS TE 210 3D SZ

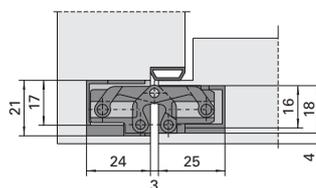
Aluminium frame: With receiver supplied by frame manufacturer



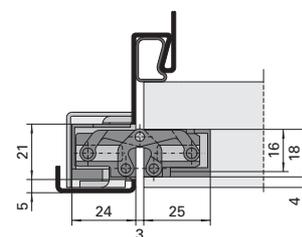
Examples of application:



Casing frame



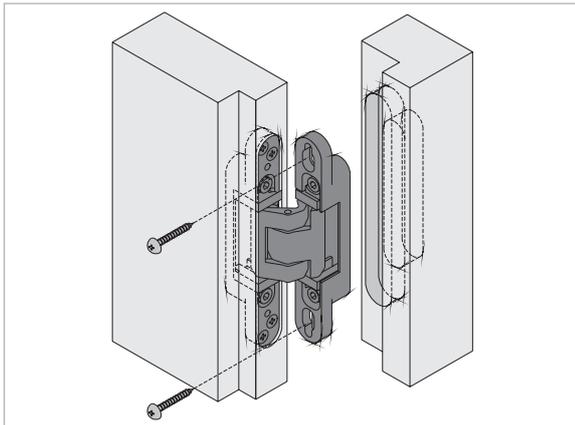
Block frame



Steel frame

Assembly

Installation



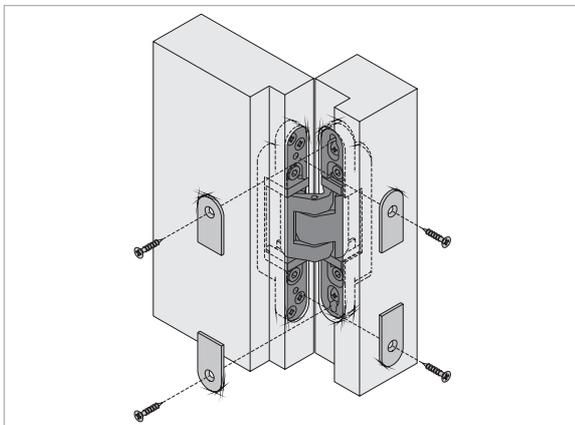
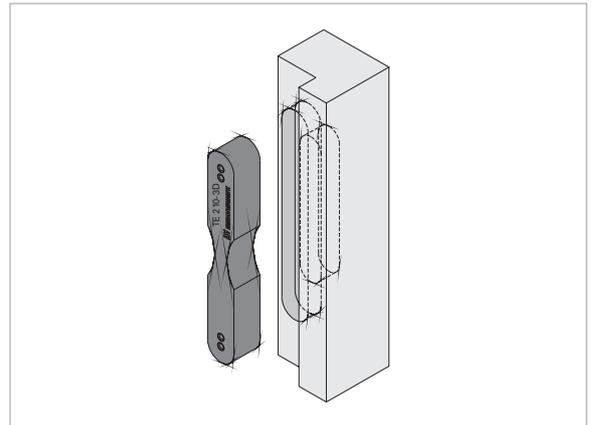
Affix the door part of the hinge by means of wood screws \varnothing 4 mm.

Block frame: Drill the screw holes by using drilling jig TE 210 3D and drill bit \varnothing 3 mm.

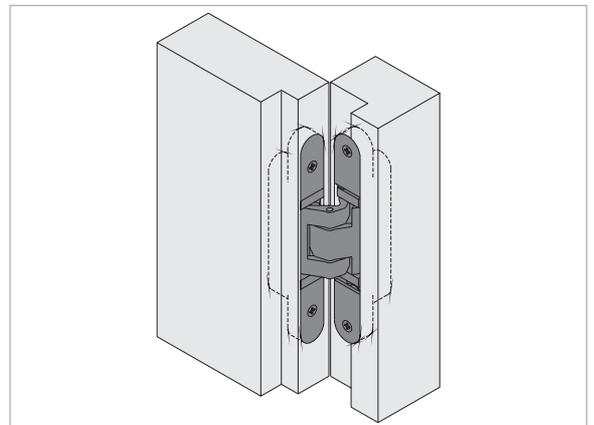
Affix frame part by using enclosed wood screws.

Casing frame: Affix the fixing plate behind the casing, affix frame part by using enclosed screws M 5.

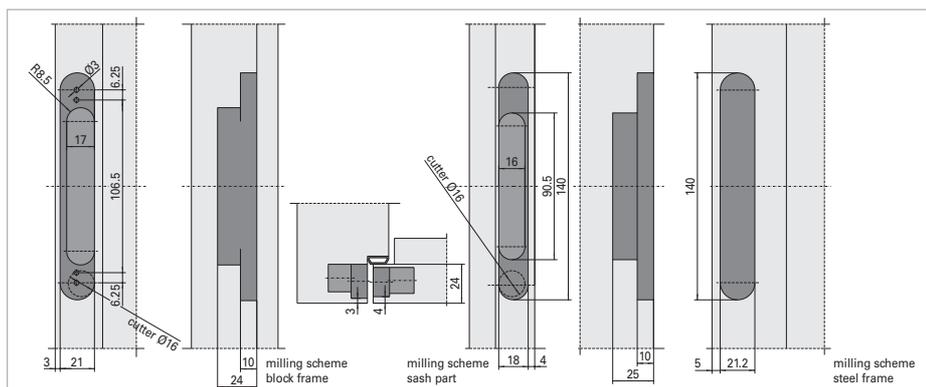
Steel frame: Affix frame part of the hinge with the prepared receiver by using the enclosed screws M5.



Fix cover plates onto frame and door part by using the enclosed screws.



Calculation of the milling width



Mill with cutter \varnothing 16 mm, use collar ring \varnothing 30 mm and select universal milling frame with milling templates No. 5 250663 6 (frame) and No. 5 250664 6 (door).

Drilling jig



Drilling jig
TECTUS TE 210 3D

Fixing plate / Receiver TECTUS



Casing frames
Fixing plate **TECTUS TE 210 3D FZ**
1 Fixing plate galvanised,
spacers (1, 2 and 3 mm)



Steel frame
Receiver
TECTUS TE 210 3D SZ
Finish: galvanised or stainless steel

Adjustment



Side adjustment

1. Adjust the adjusting spindle **1** using Allan key 4 mm.
Twist left - towards hinge (max. 3 mm)
Twist right - towards lock (max. 3 mm)

Height adjustment

1. Wedge the door.
2. Slightly loosen the clamping screws **2**.
3. Bring the door to the correct height.
4. Retighten the clamping screws **2**.

Depth adjustment

1. Slightly loosen clamping screws **3** by using Allan key 4 mm.
2. Put the door into the correct depth.
3. Retighten the clamping screws **3**.



TECTUS TE 310 3D for premium choice doors

Completely concealed hinge system for premium choice doors up to **60 kgs**.

Three-dimensionally adjustable:

Side +/- 3 mm, height +/- 3 mm, depth +/- 1 mm.

Maintenance-free slide bearings. Right hand and left hand applicable.

For unrebeated doors with wood, steel and aluminium frames.

Available finishes:

Stainless steel effect (galvanised surface)

F1-coloured - powder coated

F2-coloured - powder coated

Technical Data:

Opening angle	180 degrees
Load capacity	60 kgs
Size	140 mm
Diameter of cutter	24 mm

TECTUS TE 310 3D

for premium choice doors

Descriptive text:

SIMONSWERK hinge TECTUS TE 310 3D.

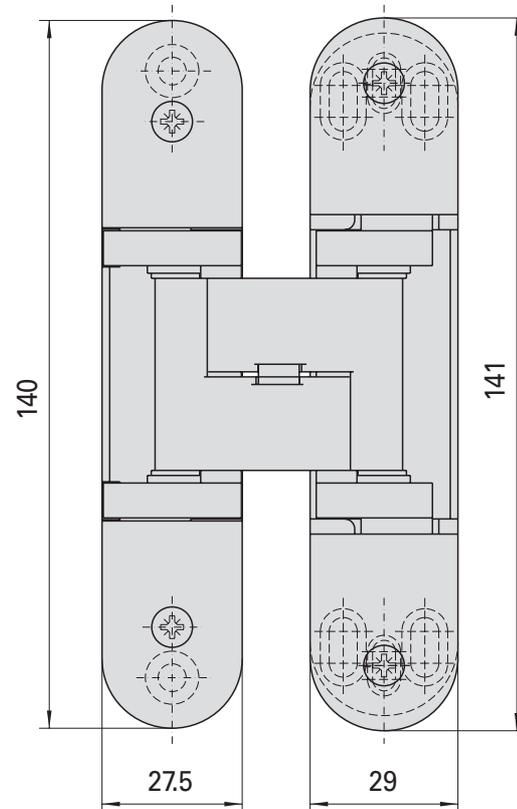
Completely concealed for unrebuted doors with wood, steel or aluminium frames. Opening angle up to 180°, size 140 mm, right hand and left hand applicable, maintenance-free slide bearings, three-dimensionally adjustable: Side and height +/- 3 mm, depth +/- 1 mm, finish.....

Block frame: No additional fixing device necessary

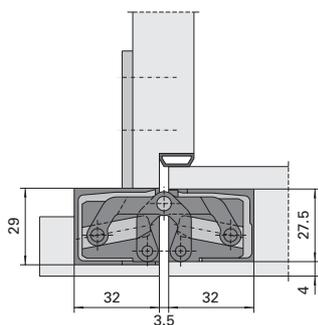
Casing frame: With galvanised fixing plate TECTUS TE 310 3D FZ

Steel frame: With galvanised or stainless steel receiver TECTUS TE 310 3D SZ

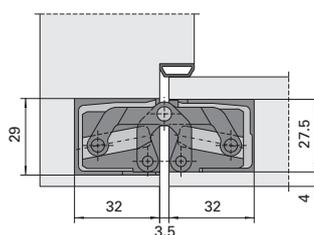
Aluminium frames: With receiver supplied by frame manufacturer



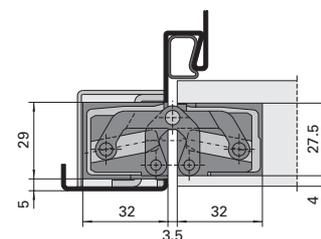
Examples of application:



Casing frame



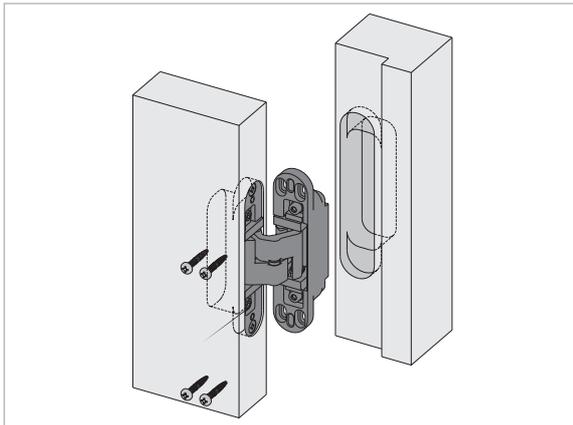
Block frame



Steel frame

Assembly

Installation



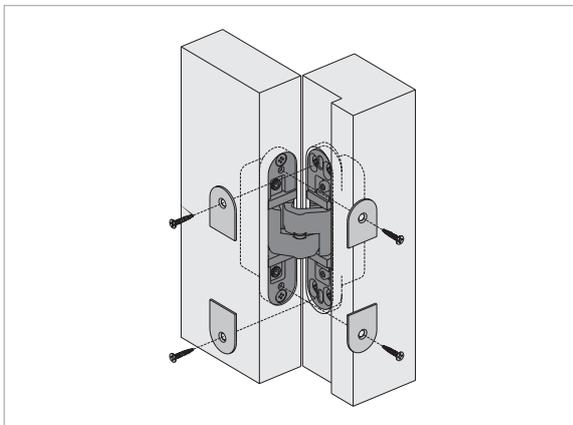
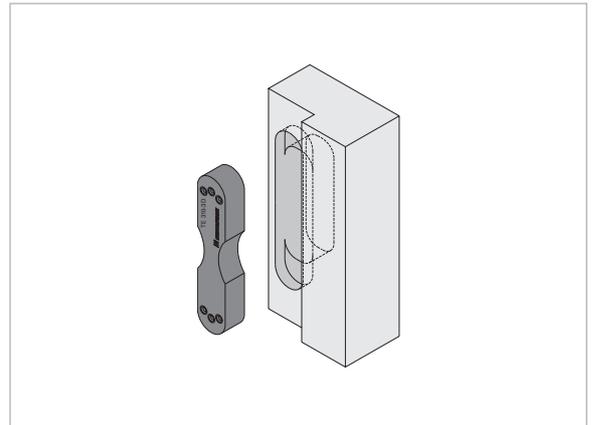
Affix the door part of the hinge by means of wood screws \varnothing 5 mm

Block frame: Drill the screw holes by using drilling jig TE 310 3D and drill bit \varnothing 3 mm.

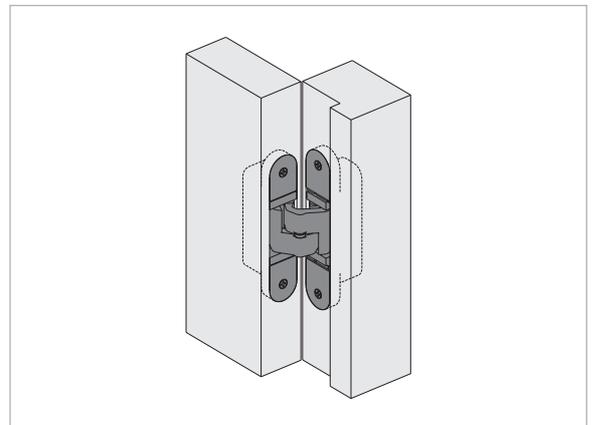
Affix frame part by using enclosed wood screws.

Casing frame: Affix the fixing plate behind the casing, affix frame part by using enclosed screws M 5.

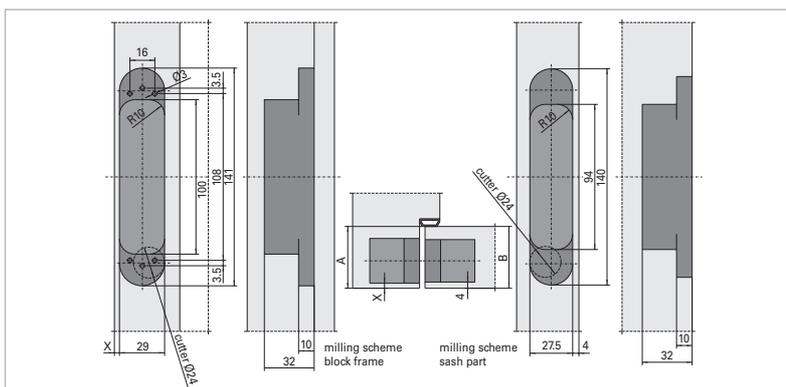
Steel frame: Affix frame part of the hinge with the prepared receiver by using the enclosed screws M 5.



Fix cover plates onto frame and door part by using the enclosed screws.



Calculation of the milling width



Calculation of the milling width:

A = Groove frame width up to sealing level

B = Door leaf thickness, resp. 1. door groove

$A - B + 4 = \text{Measure X}$

The result has to be a measure between 4 and max. 6,5 mm.

(Steel Frame: X = 5 mm)

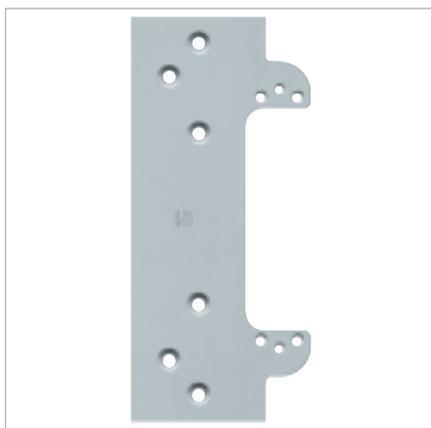
Mill with cutter \varnothing 24 mm, use collar ring \varnothing 30 mm and select universal milling frame with milling templates No. 5 250371 6 (frame) No. 5 250370 6 (door).

Drilling jig



Drilling jig
TECTUS TE 310 3D

Fixing plate / Receiver TECTUS



Casing frames
Fixing plate **TECTUS TE 310 3D FZ**
1 Fixing plate galvanised,
spacers (1, 2 and 3 mm)



Steel frames
Receiver
TECTUS TE 310 3D SZ
Finish: galvanised or stainless steel

Adjustment



Side adjustment

1. Adjust the adjusting spindle **1** using Allan key 4 mm.
Twist left - towards hinge (max. 3 mm)
Twist right - towards lock (max. 3 mm)

Height adjustment

1. Wedge the door.
2. Slightly loosen the clamping screws **2**.
3. Bring the door to the correct height.
4. Retighten the clamping screws **2**.

Depth adjustment

1. Slightly loosen clamping screws **3** by using Allan key 4 mm.
2. Put the door into the correct depth.
3. Retighten the clamping screws **3**.



TECTUS TE 510 3D

for high performance doors

Completely concealed hinge system for unrebated doors up to **100 kgs**.

Three-dimensionally adjustable:

Side +/- 3 mm, height +/- 3 mm, depth +/- 1 mm.

Maintenance-free slide bearings. Right hand and left hand applicable.

For unrebated doors with wood, steel or aluminium frames.

Accessories: **cable set** TECTUS TE 510 3D optional for cable conduction.

Available finishes:

Stainless steel effect (galvanised surface)

F1-coloured - powder coated

F2-coloured - powder coated

Technical Data:

Opening angle	180 degrees
Load capacity	100 kgs
Size	180 mm
Diameter of cutter	24 mm

TECTUS TE 510 3D

for high performance doors

Descriptive text:

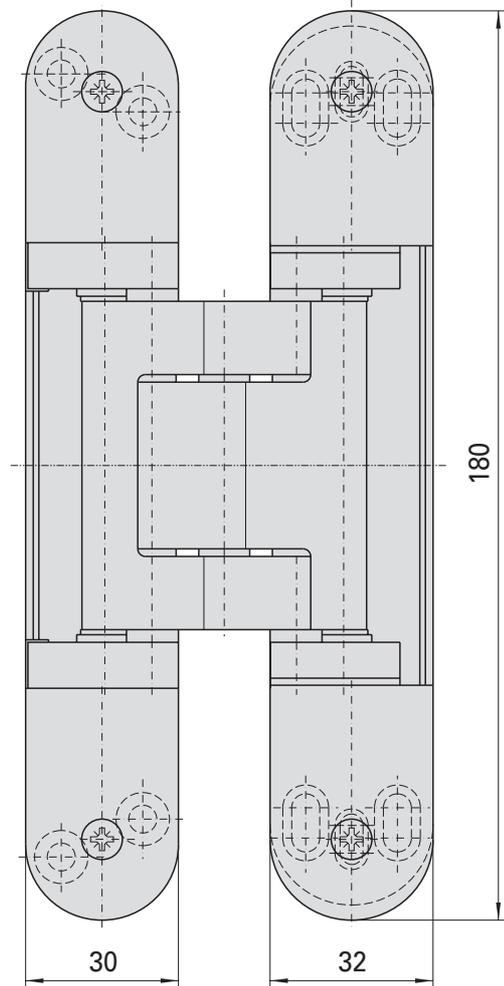
SIMONSWERK high performance hinge TECTUS TE 510 3D. Completely concealed for unrebeated doors with wood, steel or aluminium frames. Opening angle up to 180°, size 180 mm, right hand and left hand applicable, maintenance-free slide bearings, three-dimensionally adjustable: side and height +/- 3 mm, depth +/- 1 mm, finish.....

Block frame: No additional fixing device necessary

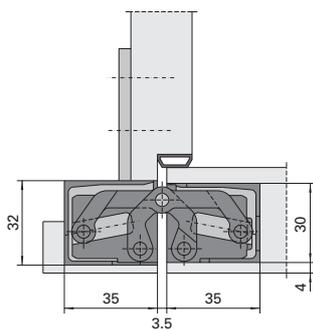
Casing frame: With galvanised fixing plate TECTUS TE 510 3D FZ

Steel frame: With galvanised or stainless steel receiver TECTUS TE 510 3D SZ

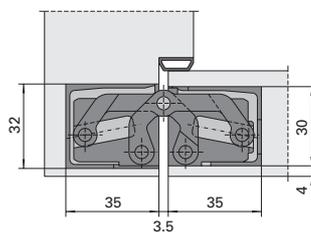
Aluminium frame: With receiver supplied by frame manufacturer



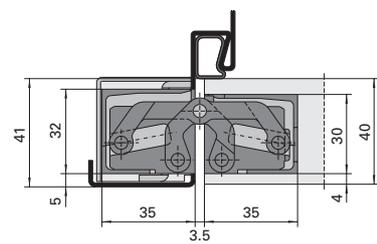
Examples of application:



Casing frame



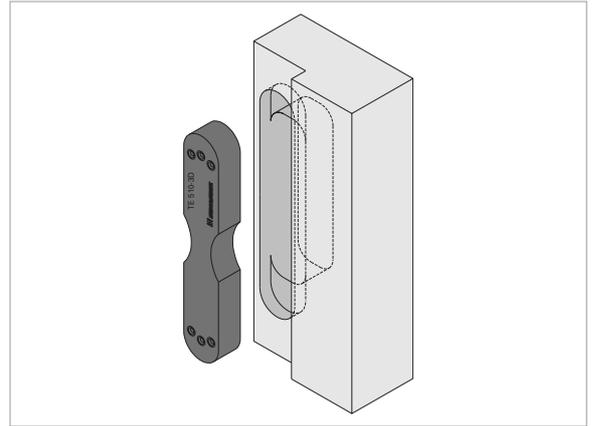
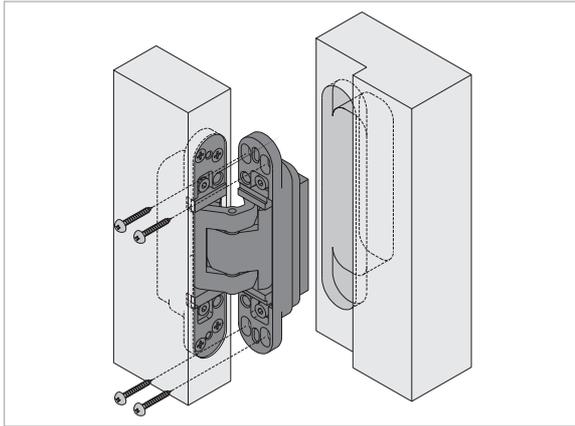
Block frame



Steel frame

Assembly

Installation



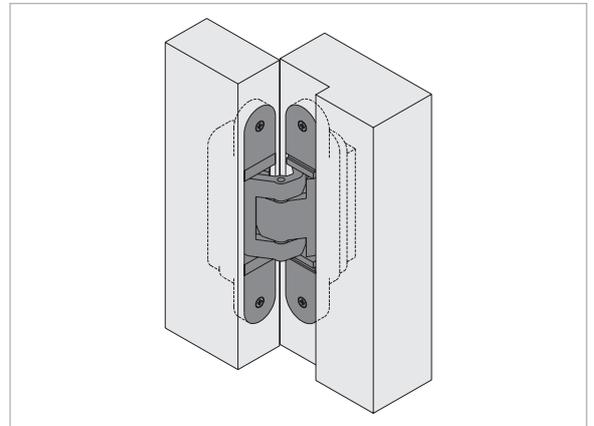
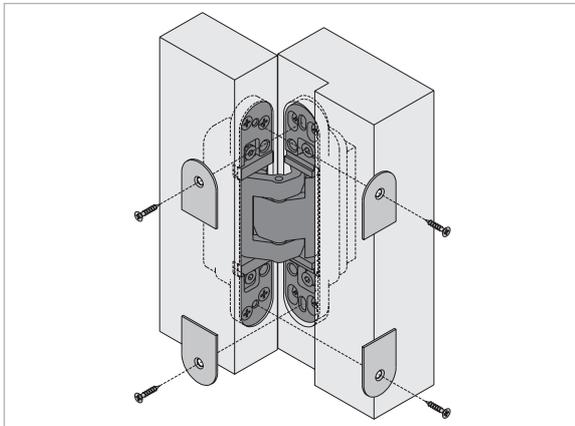
Affix the door part of the hinge by means of wood screws \varnothing 5 mm

Block frame: Drill the screw holes by using drilling jig TE 510 3D and drill bit \varnothing 3 mm.

Affix frame part by using enclosed wood screws.

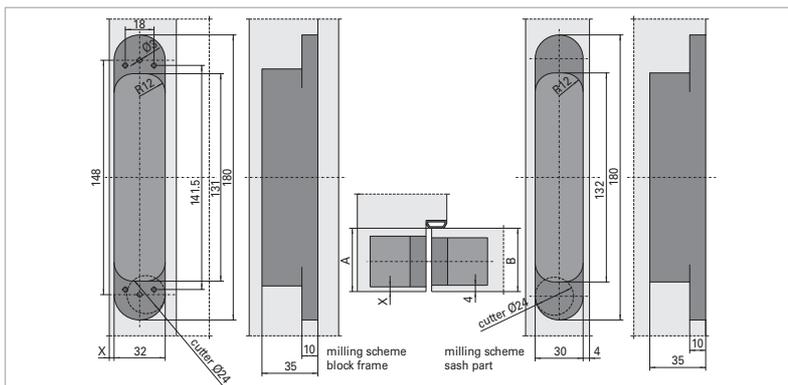
Casing frame: Affix the fixing plate behind the casing, affix frame part by using enclosed screws M 5.

Steel frame: Affix frame part of the hinge with the prepared receiver by using the enclosed screws M 5.



Fix cover plates onto frame and door part by using the enclosed screws.

Calculation of the milling width



Calculation of the milling width:

A = Groove frame width up to sealing level

B = Door leaf thickness, resp. 1. door groove

A - B + 3 = Measure X

The result has to be a measure between 3 and max. 5 mm.

(Steel Frame: X = 5 mm)

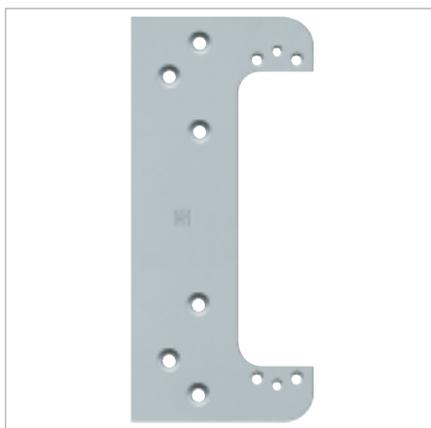
Mill with cutter \varnothing 24 mm, use collar ring \varnothing 30 mm and select universal milling frame with milling templates No. 5 250374 6 (frame) No. 5 250600 6 (door).

Drilling jig



Drilling jig
TECTUS TE 510 3D

Fixing plate / Receiver TECTUS



Casing frames
Fixing plate **TECTUS TE 510 3D FZ**
1 fixing plate galvanised,
spacers (1, 2 and 3 mm)



Steel frames
Receiver
TECTUS TE 510 3D SZ
Finish: galvanised or stainless steel

Adjustment



Side adjustment

1. Adjust the adjusting spindle **1** using Allan key 4 mm.
Twist left - towards hinge (max. 3 mm)
Twist right - towards lock (max. 3 mm)

Height adjustment

1. Wedge the door.
2. Slightly loosen the clamping screws **2**.
3. Bring the door to the correct height.
4. Retighten the clamping screws **2**.

Depth adjustment

1. Slightly loosen clamping screws **3** by using Allan key 4 mm.
2. Put the door into the correct depth.
3. Retighten the clamping screws **3**.



TECTUS TE 610 3D

for heavy-duty doors

Completely concealed hinge system for heavy-duty doors up to **180 kgs**.

Three-dimensionally adjustable:

Side +/- 3 mm, height +/- 3 mm, depth +/- 1 mm.

Maintenance-free slide bearings. Right hand and left hand applicable.

For unrebeated doors with wood, steel and aluminium frames.

Available finishes:

Stainless steel effect (galvanised surface)

F1-coloured - powder coated

F2-coloured - powder coated

Technical Data:

Opening angle	180 degrees
Load capacity	180 kgs
Size	210 mm
Diameter of cutter	24 mm

TECTUS TE 610 3D

for heavy-duty doors

Descriptive text:

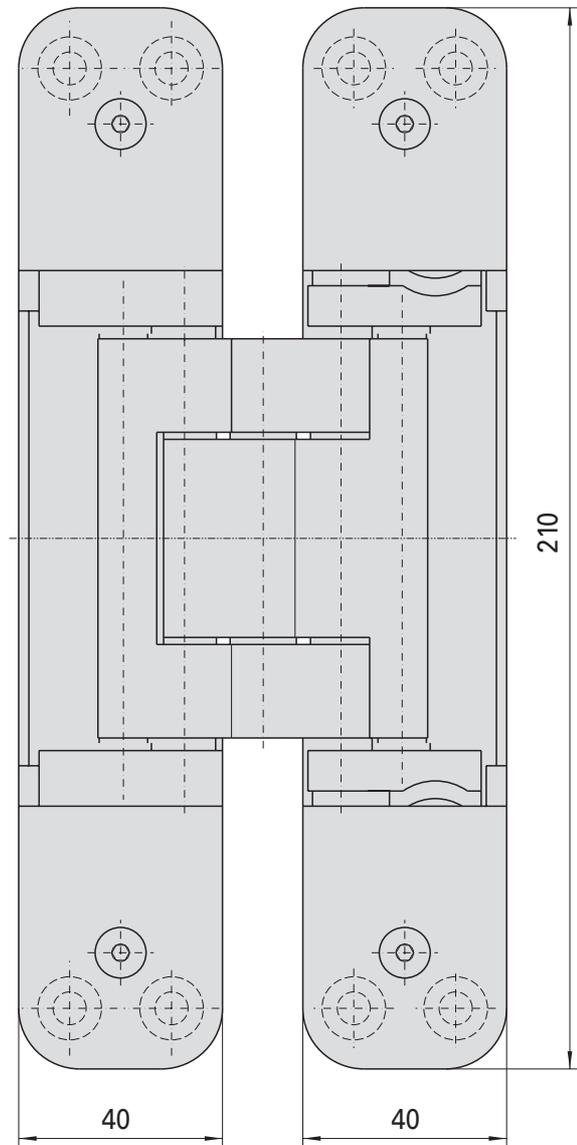
SIMONSWERK heavy-duty hinge TECTUS TE 610 3D. Completely concealed for unrebated doors with wood, steel or aluminium frames. Opening angle up to 180°, Size 210 mm, right hand and left hand applicable, maintenance-free slide bearings, three-dimensionally adjustable: side and height +/- 3 mm, depth +/- 1 mm, finish.....

Block frame: No additional fixing device necessary

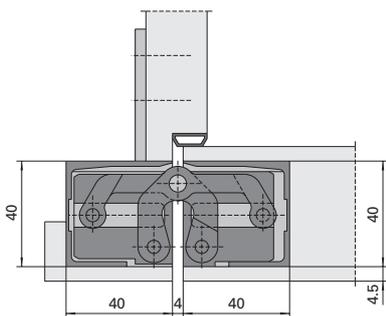
Casing frame: With galvanised fixing plate TECTUS TE 610 3D FZ

Steel frame: with galvanised or stainless steel receiver TECTUS TE 610 3D SZ

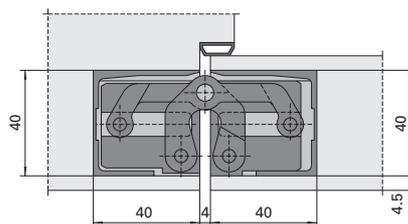
Aluminium frame: With receiver supplied by frame manufacturer



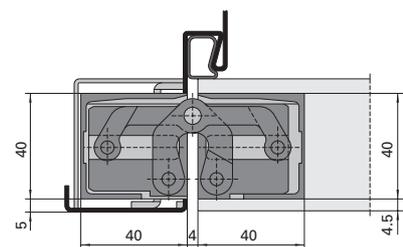
Examples of application:



Casing frame



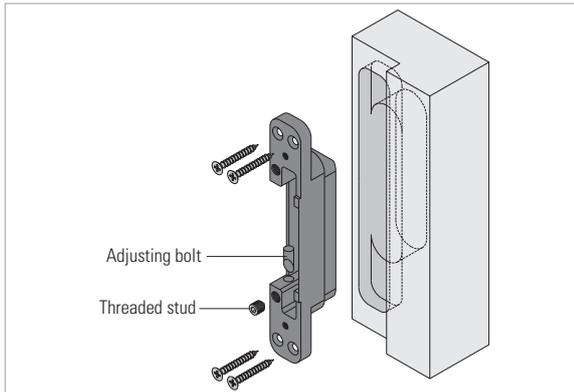
Block frame



Steel frame

Assembly

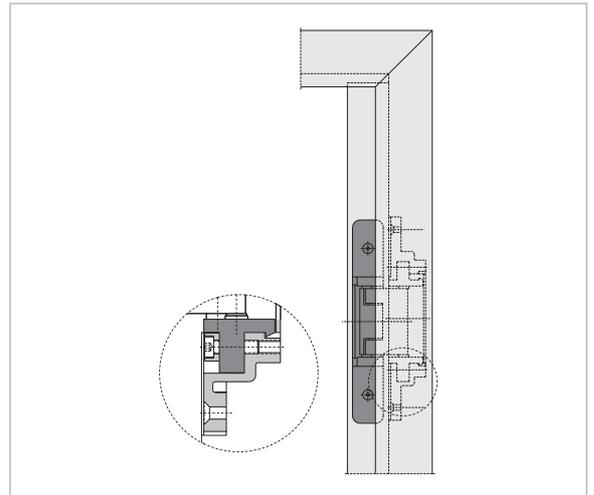
Installation



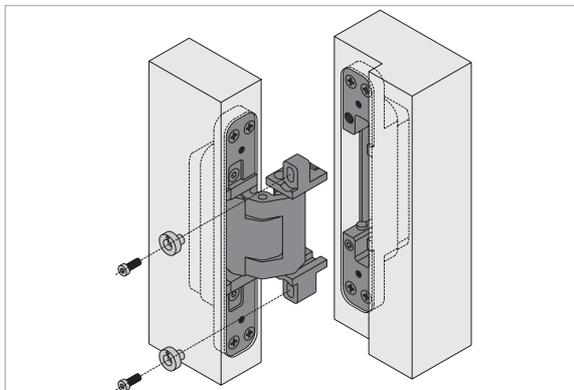
1. Block frame: Affix the sash part of the hinge by means of wood screws \varnothing 6 mm.

Casing frame: Affix the fixing plate behind the casing, affix frame part by using enclosed screws M 6.

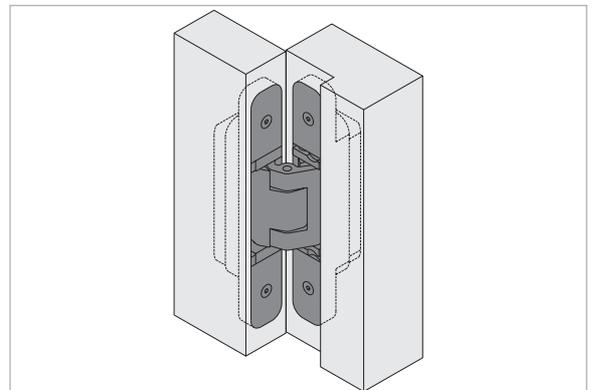
Steel frame: Affix frame part of the hinge with the prepared receiver by using the enclosed screws M 6.



2. Mount the adjusting bolt and the threaded stud at the bottom of the frame construction. Hang the door leaf with the hinge part onto the frame construction. A locking device is of assistance.

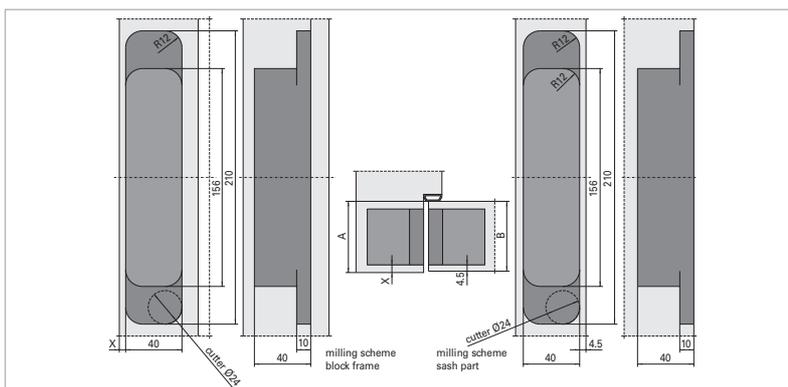


3. Fasten the hinge to the frame construction by means of the enclosed screws and the eccentric adjustment.



4. Adjust and align door with regard to height. Tighten frame screws and screw on cover plates.

Calculation of the milling width



Calculation of the milling width:

A = Groove frame width up to sealing level

B = Door leaf thickness, resp. 1. door groove

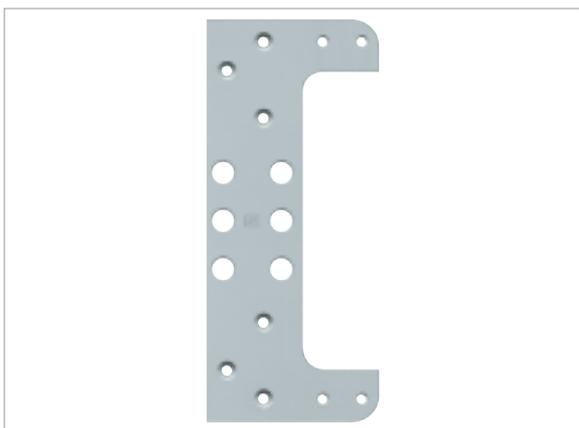
A - B + 4.5 = Measure X

The result has to be a measure between 4.5 and max. 6.5 mm.

(Steel Frame: X = 5 mm)

Mill with cutter \varnothing 24 mm, use collar ring \varnothing 30 mm and select universal milling frame with milling templates No. 5 250372 5 (step 1) and No. 5 250373 5 (step 2).

Fixing plate / Receiver TECTUS



Casing frames

Fixing plate **TECTUS TE 610 3D FZ**

1 Fixing plate galvanised,
spacers (1, 2 and 3 mm)

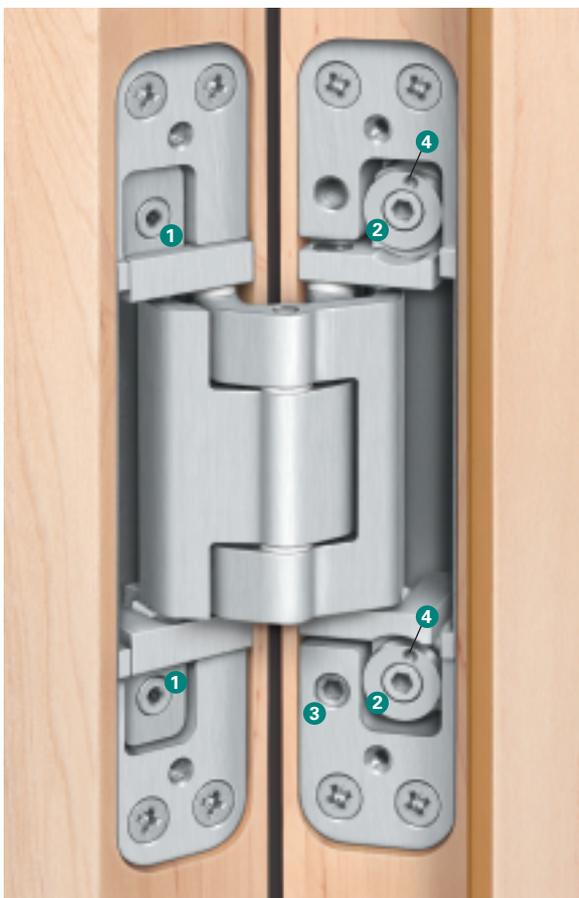


Steel frames

Receiver **TECTUS TE 610 3D SZ**

Finish: galvanised or stainless steel

Adjustment



Side adjustment

1. Adjust the adjusting spindle **1** using Allan key 5 mm.
Twist left - towards hinge (max. 3 mm)
Twist right - towards lock (max. 3 mm)

Height adjustment

1. Slightly loosen the clamping screws **2** by using Allan key 5 mm.
2. Bring the door to the correct height by twisting the adjusting screw **3**.
3. Retighten the clamping screws **2**.

Depth adjustment

1. Slightly loosen clamping screws **2** by using Allan key 5 mm.
2. Put the door into the correct depth by twisting the eccentric **4**
by using Allan key 3 mm.
3. Retighten the clamping screws **2**.



TECTUS TE 630 3D

for heavy-duty doors

Completely concealed hinge system for heavy-duty doors up to **200 kgs.**

Three-dimensionally adjustable:

Side +/- 3 mm, height +/- 3 mm, depth +/- 1 mm.

Maintenance-free slide bearings. Right hand and left hand applicable.

For unrebeated doors with wood, steel and aluminium frames.

Available finishes:

Stainless steel effect (galvanised surface)

F1-coloured - powder coated

F2-coloured - powder coated

Technical Data:

Opening angle	180 degrees
Load capacity	200 kgs
Size	240 mm
Diameter of cutter	24 mm

TECTUS TE 630 3D

for heavy-duty doors

Descriptive text:

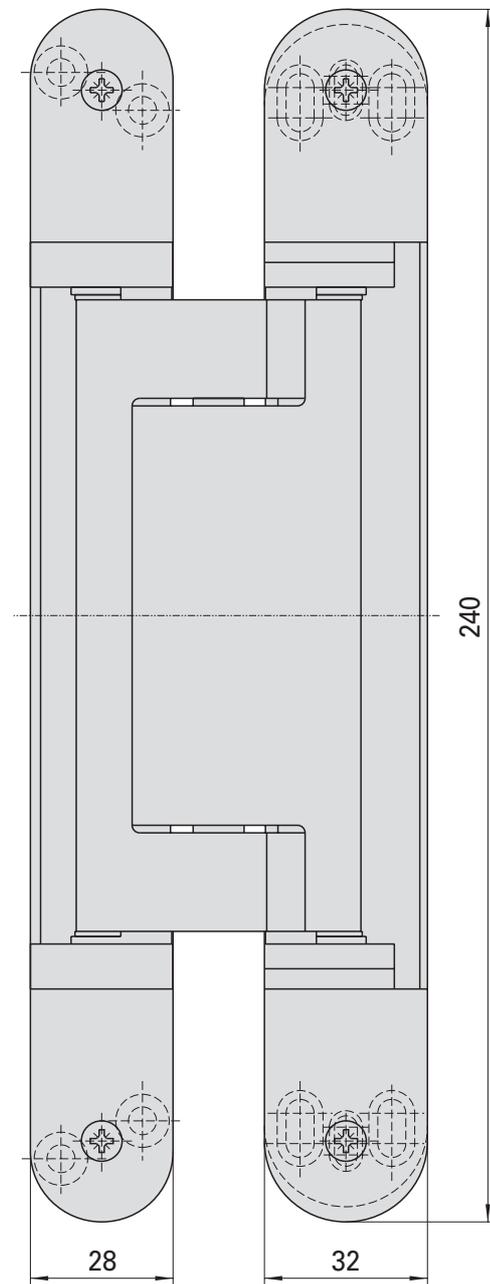
SIMONSWERK heavy-duty hinge TECTUS TE 630 3D. Completely concealed for unrebated doors with wood, steel or aluminium frames. Opening angle up to 180°, Size 240 mm, right hand and left hand applicable, maintenance-free slide bearings, three-dimensionally adjustable: side and height +/- 3 mm, depth +/- 1 mm, Finish.....

Block frame: No additional fixing device necessary

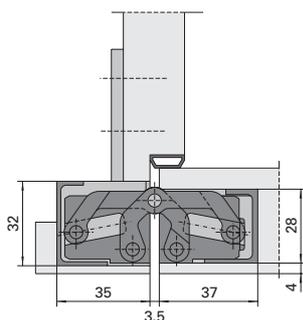
Casing frame: With galvanised fixing plate TECTUS TE 630 3D FZ

Steel frame: with galvanised or stainless steel receiver TECTUS TE 630 3D SZ

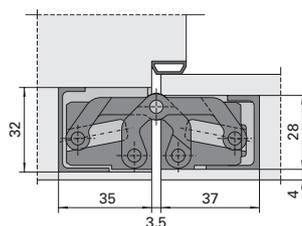
Aluminium frame: With receiver supplied by frame manufacturer



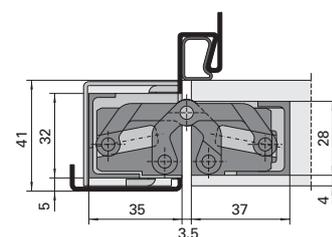
Examples of application:



Casing frame



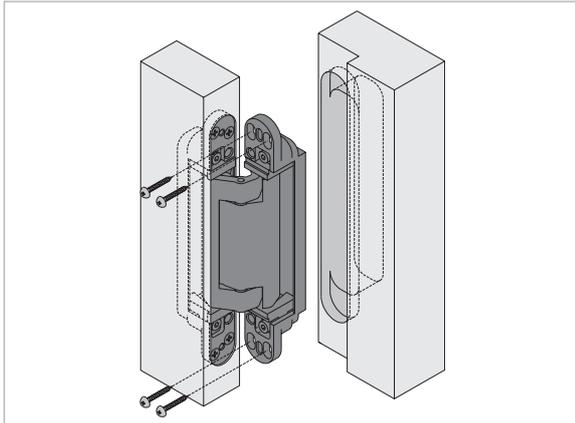
Block frame



Steel frame

Assembly

Installation



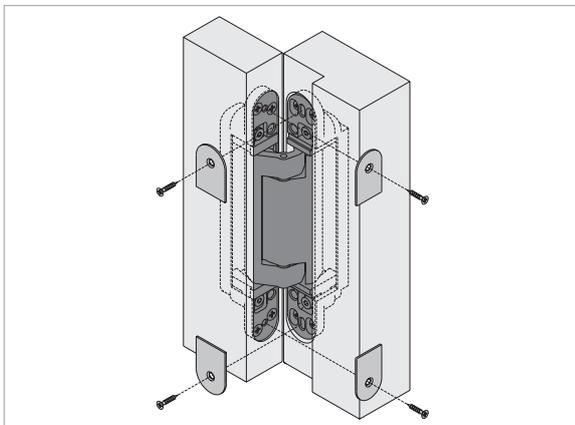
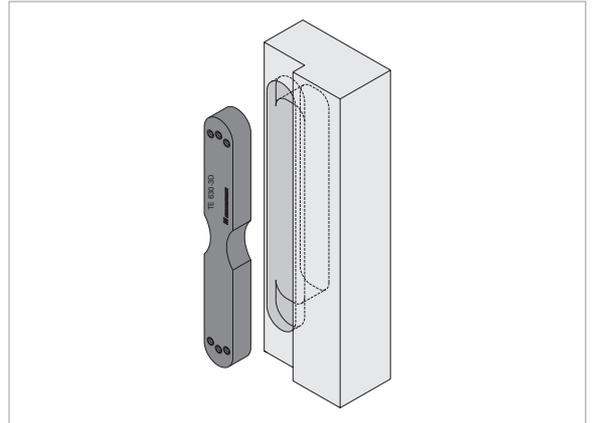
Affix the door part of the hinge by means of wood screws \varnothing 5 mm.

Block frame: Drill the screw holes by using drilling jig TE 630 3D and drill bit \varnothing 3 mm.

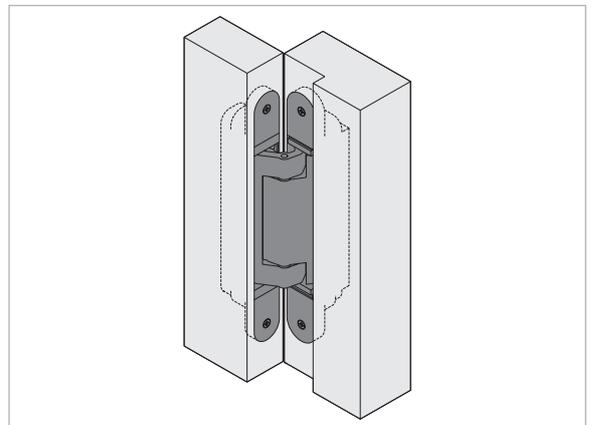
Affix frame part by using enclosed wood screws.

Casing frame: Affix the fixing plate behind the casing, affix frame part by using enclosed screws M 5.

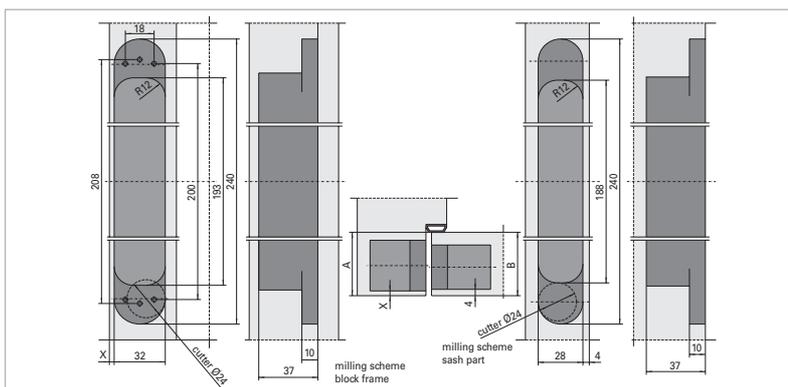
Steel frame: Affix frame part of the hinge with the prepared receiver by using the enclosed screws M 5.



Fix cover plates onto frame and door part by using the enclosed screws.



Calculation of the milling width



Calculation of the milling width:

A = Groove frame width up to sealing level

B = Door leaf thickness, resp. 1. door groove

$A - B + 3 = \text{Measure } X$

The result has to be a measure between

3 and max. 5 mm. (Steel Frame: X = 5 mm)

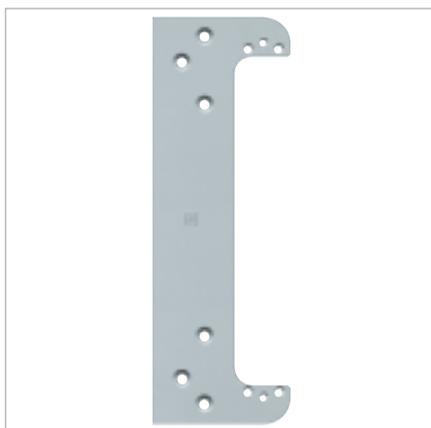
Mill with cutter \varnothing 24 mm, use collar ring \varnothing 30 mm and select universal milling frame with milling templates No. 5 250659 5 (frame, step 1) No. 5 250660 5 (frame, step 2), No. 5 250661 5 (door, step 1), No. 5 250662 5 (door, step 2).

Drilling jig



Drilling jig
TECTUS TE 630 3D

Fixing plate / Receiver TECTUS



Casing frames
Fixing plate **TECTUS TE 630 3D FZ**
1 fixing plate galvanised,
spacers (1, 2 and 3 mm)



Steel frames
Receiver
TECTUS TE 630 3D SZ
Finish: galvanised or stainless steel

Adjustment



Side adjustment

1. Adjust the adjusting spindle **1** using Allan key 4 mm.
Twist left - towards hinge (max. 3 mm)
Twist right - towards lock (max. 3 mm)

Height adjustment

1. Wedge the door.
2. Slightly loosen the clamping screws **2**.
3. Bring the door to the correct height.
4. Retighten the clamping screws **2**.

Depth adjustment

1. Slightly loosen clamping screws **3** by using Allan key 4 mm.
2. Put the door into the correct depth.
3. Retighten the clamping screws **3**.

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