

TECTUS®



 **SIMONSWERK**
TECTUS®

The completely concealed
hinge system

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It's still design, even if there's nothing to be seen ...

»TECTUS« – This latin word for »concealed« signifies SIMONSWERK's completely hidden hinge system.

Perfection in interior decoration, limitation to the essential, always having an eye for the details – these standards are pursued by demanding manufacturers and planners and especially in applications, where, in addition to the high performance features of the hinge system, the design aspect plays a more and more important role in interior design. The hinge system TECTUS makes it possible for the first time to achieve modern, uninterrupted flush-faced surfaces also on the hinge side creating a visually harmonic overall impression.

This was the start for SIMONSWERK to enlarge the TECTUS hinge system to a complete product range, meeting the high demands of un-rebated premium choice interior doors, high performance and heavy-duty doors with casing, block, steel or aluminium frames. A scope of load capacities of 40kg, 60kg, 100kg up to 200kg allows the specific use of the hinge system. Further interesting solutions offer the optional available concealed cable conduit and a version made of solid stainless steel for the use in climatically demanding environments. Other demands towards the quality and functionality, which are nearly taken for granted, are fulfilled by three-dimensional adjustability, maintenance-free slide bearings, and by efficient assembly.

The multiple design-award winner TECTUS stands for innovative precision in straight interior design.

SIMONSWERK
TECTUS®

TE 210 3D

for unrebated and rebated, flush-faced quality doors

Hinge up to 40 kg

Technical Data

| | |
|---------------------|----------------|
| Load capacity | 40,0 kg |
| Length (leaf/frame) | 140,0/140,0 mm |
| Width (leaf/frame) | 18,0/21,0 mm |
| Diameter of cutter | 16,0 mm |

Descriptive text

SIMONSWERK hinge TECTUS TE 210 3D. Completely concealed for unrebated and rebated, flush-faced quality doors with timber, steel and aluminium frames. CE certified, load capacity 40 kg, opening angle up to 180°, overall length 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. Finishes...

Combination

| | | |
|--------|-----------------|---|
| Fixing | Block frame | Direct screwing |
| | Casing frame | TE 210 3D FZ/1 |
| | Steel frame | TE 210 3D SZ |
| | Aluminium frame | according to specifications of the frame manufacturer |

See pages 10 - 11

To be fitted with

| | |
|----------|---|
| Jig | Universal milling frame Drilling jig TE 210 3D |
| Template | Frame: No. 5 250663 6 Leaf: No. 5 250664 6 |

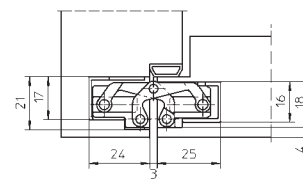
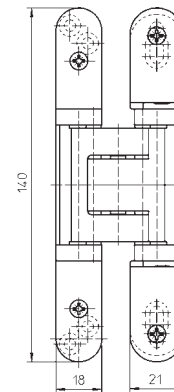
Finishes

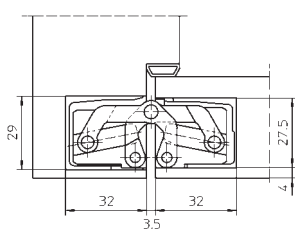
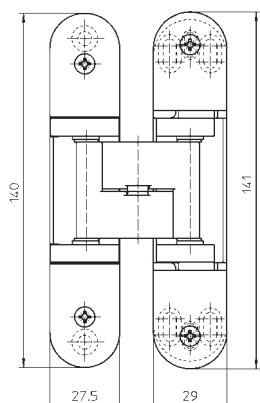
polished brass, polished nickelled, F1-coloured, F2-coloured, stainless steel effect, powder-coated

Note

Reduced risk of injury due to a very small gap between door leaf and frame.

Quality Marks





TE 310 3D

for unrebated premium choice doors

Hinge **up to 60 kg**

Technical Data

| | |
|---------------------|----------------|
| Load capacity | 60,0 kg |
| Length (leaf/frame) | 140,0/141,0 mm |
| Width (leaf/frame) | 27,5/29,0 mm |
| Diameter of cutter | 24,0 mm |

Descriptive text

SIMONSWERK hinge TECTUS TE 310 3D. Completely concealed for unrebated doors with timber, steel and aluminium frames. CE certified, load capacity 60 kg, opening angle up to 180°, overall length 140/141 mm, right hand and left hand applicable, maintenance-free slide bearings, three-dimensionally adjustable: Side +/- 3 mm, height +/- 3 mm, depth +/- 1 mm. Finishes...

Combination

| | | |
|--------|-----------------|---|
| Fixing | Block frame | Direct screwing |
| | Casing frame | TE 310 3D FZ/1 |
| | Steel frame | TE 310 3D SZ |
| | Aluminium frame | according to specifications of the frame manufacturer |

See pages 10 - 11

To be fitted with

| | |
|----------|---|
| Jig | Universal milling frame Drilling jig TE 310 3D |
| Template | Frame: No. 5 250371 6 Leaf: No. 5 250370 6 |

Finishes

polished brass, polished nickelled, F1-coloured, F2-coloured, stainless steel effect, powder-coated

Note

Reduced risk of injury due to a very small gap between door leaf and frame.

Quality Marks



SIMONSWERK
TECTUS®

TE 510 3D

for unrebated high performance doors

Hinge up to 100 kg

Technical Data

| | |
|---------------------|----------------|
| Load capacity | 100,0 kg |
| Length (leaf/frame) | 180,0/180,0 mm |
| Width (leaf/frame) | 30,0/32,0 mm |
| Diameter of cutter | 24,0 mm |

Descriptive text

SIMONSWERK hinge TECTUS TE 510 3D. Completely concealed for unrebated doors with timber, steel and aluminium frames. CE and UL certified, load capacity 100 kg, opening angle up to 180°, overall length 180 mm, right hand and left hand applicable, maintenance-free slide bearings, three-dimensionally adjustable: Side +/- 3 mm, height +/- 3 mm, depth +/- 1 mm. Finishes...

Combination

| | | |
|------------------|-----------------|---|
| Fixing | Block frame | Direct screwing |
| | Casing frame | TE 510 3D FZ/1 |
| | Steel frame | TE 510 3D SZ |
| | Aluminium frame | according to specifications of the frame manufacturer |
| Accessories | Cable set | TE 510 3D MK |
| See pages 9 - 11 | | |

To be fitted with

| | |
|----------|---|
| Jig | Universal milling frame Drilling jig TE 510 3D |
| Template | Frame: No. 5 250374 6 Leaf: No. 5 250600 6 |

Finishes

polished brassed, polished nickelled, F1-coloured, F2-coloured, stainless steel effect, powder-coated

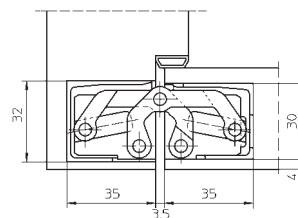
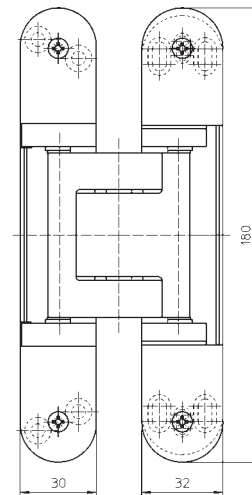
Note

Reduced risk of injury due to a very small gap between door leaf and frame.

Functional Areas

Fire resistance, smoke resistance, soundproof, burglar resistance

Quality Marks





NEW

TE 525 3D

made of solid stainless steel for unrebated high performance doors

| | | |
|--------------|--|---------------------|
| Hinge | | up to 100 kg |
|--------------|--|---------------------|

Technical Data

| | |
|---------------------|----------------|
| Load capacity | 100,0 kg |
| Length (leaf/frame) | 155,0/155,0 mm |
| Width (leaf/frame) | 26,0/26,0 mm |
| Diameter of cutter | 24,0 mm |

Descriptive text

SIMONSWERK hinge TECTUS TE 525 3D made of solid stainless steel. Completely concealed for unrebated doors with timber, steel and aluminium frames. UL certified, load capacity 100 kg, opening angle up to 180°, overall length 155 mm, right hand and left hand applicable, maintenance-free slide bearings, three-dimensionally adjustable: Side +/- 3 mm, height +/- 3 mm, depth +/- 1 mm. Finishes...

Combination

| | | |
|-------------|-----------------|---|
| Fixing | Block frame | Direct screwing |
| | Casing frame | TE 525 3D FZ/1 |
| | Steel frame | TE 525 3D SZ |
| | Aluminium frame | according to specifications of the frame manufacturer |
| Accessories | Cable set | TE 525 3D MK |

See pages 9 - 11

To be fitted with

| | |
|----------|-------------------------|
| Jig | Universal milling frame |
| | Drilling jig TE 525 3D |
| Template | Frame: No. 5 250547 6 |
| | Leaf: No. 5 250547 6 |

Finishes

Satin brushed stainless steel

Note

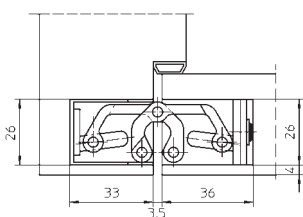
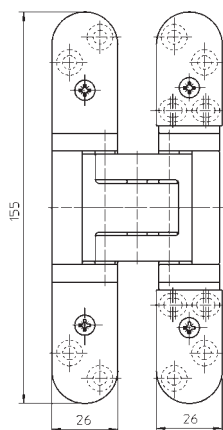
Reduced risk of injury due to a very small gap between door leaf and frame.

Functional Areas

Fire resistance, smoke resistance, soundproof, burglar resistance

Quality Marks

169840



SIMONSWERK
TECTUS®

TE 630 3D

for unrebated heavy-duty doors

Hinge up to 200 kg

Technical Data

| | |
|---------------------|----------------|
| Load capacity | 200,0 kg |
| Length (leaf/frame) | 240,0/240,0 mm |
| Width (leaf/frame) | 28,0/32,0 mm |
| Diameter of cutter | 24,0 mm |

Descriptive text

SIMONSWERK hinge TECTUS TE 630 3D. Completely concealed for unrebated doors with timber, steel and aluminium frames. Load capacity 100 kg, opening angle up to 180°, overall length 180 mm, right hand and left hand applicable, maintenance-free slide bearings, three-dimensionally adjustable: Side +/- 3 mm, height +/- 3 mm, depth +/- 1 mm. Finishes...

Combination

| | | |
|-------------|-----------------|---|
| Fixing | Block frame | Direct screwing |
| | Casing frame | TE 630 3D FZ/1 |
| | Steel frame | TE 630 3D SZ |
| | Aluminium frame | according to specifications of the frame manufacturer |
| Accessories | Cable set | TE 630 3D MK |

See pages 9 - 11

To be fitted with

| | |
|----------|-------------------------|
| Jig | Universal milling frame |
| | Drilling jig TE 630 3D |
| Template | Frame: No. 5 250659 5 |
| | No. 5 250660 5 |
| | Leaf: No. 5 250661 5 |
| | No. 5 250662 5 |

Finishes

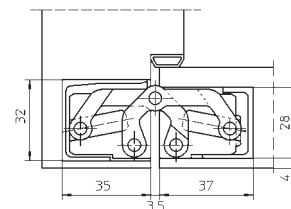
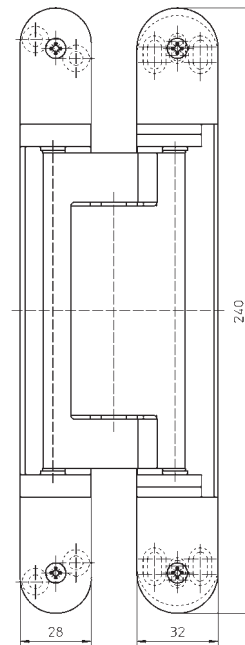
polished brass, polished nickelled, F1-coloured, F2-coloured, stainless steel effect, powder-coated

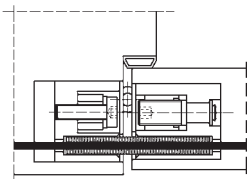
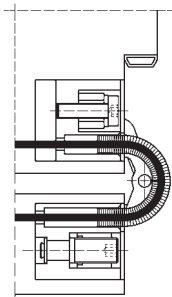
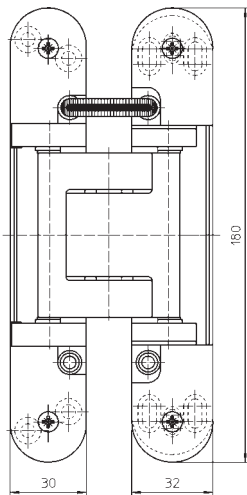
Note

Reduced risk of injury due to a very small gap between door leaf and frame.

Functional Areas

Fire resistance, smoke resistance, soundproof, burglar resistance





Cable set TECTUS

for concealed power line for TE 510 3D, TE 525 3D and TE 630 3D

Accessories

Technical Data

| | |
|--------------------|----------------------|
| No. of wires | 4 Stück |
| Wire cross section | 0,25 mm ² |
| Max. voltage | 48 V |
| Max. current | 4 A |

Descriptive text

SIMONSWERK cable set TECTUS TE ... 3D MK for concealed power line / cable conduit for SIMONSWERK hinge TECTUS TE ... 3D. Includes 5 m cable with cable plug for door leaf, 3 m cable with cable socket for frame, 1 tension spring, 2 compression springs (return springs), strain relief clamps and cable ties as well as cover plates for door leaf and frame section. Finishes...

Combination

| | |
|-------|-----------|
| Hinge | TE 510 3D |
| | TE 525 3D |
| | TE 630 3D |

Finishes

F1-coloured, F2-coloured, stainless steel effect

Note

Please specify the exact hinge and Finishes in your order.

Fixing plate TECTUS series

for unrebated quality and high performance doors with casing frames

| Fixing | Casing frame |
|--------|--------------|
|--------|--------------|

Descriptive text

SIMONSWERK fixing plate TECTUS TE ... 3D FZ/1 for casing frames with hinge TECTUS TE ... 3D for unrebated doors. Finishes...

Combination

| Hinge | |
|-------|-----------|
| | TE 210 3D |
| | TE 310 3D |
| | TE 510 3D |
| | TE 525 3D |
| | TE 630 3D |

Finishes

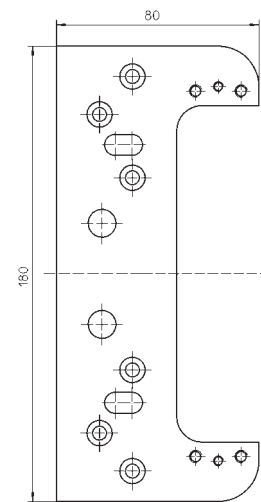
galvanised

Note

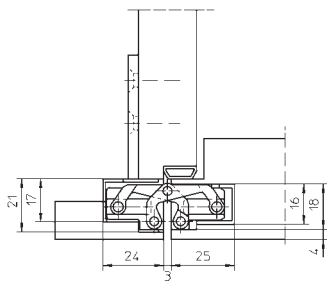
Spacers for casing strengths 22-28 mm are included.
Please specify the exact hinge in your order.



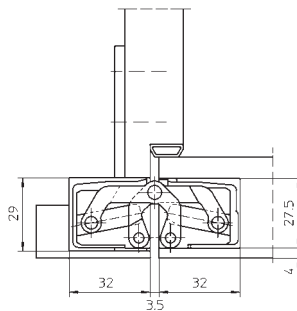
TE 510 3D FZ/1



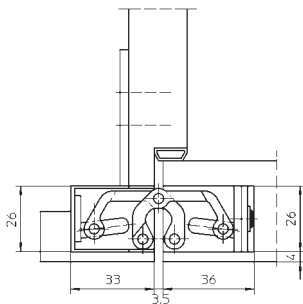
TE 510 3D FZ/1



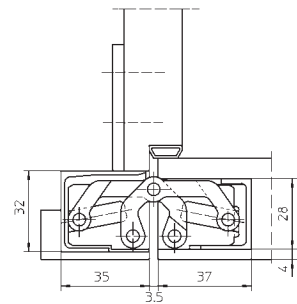
TE 210 3D FZ/1



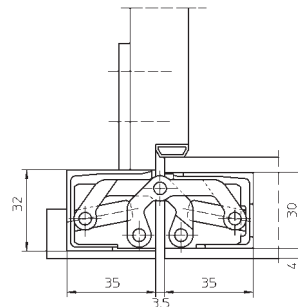
TE 310 3D FZ/1



TE 525 3D FZ/1



TE 630 3D FZ/1



TE 510 3D FZ/1



TE 510 3D SZ

Receiver TECTUS series

for unrebated quality and high performance doors with steel frames

| | | |
|---------------|--|--------------------|
| Fixing | | Steel frame |
|---------------|--|--------------------|

Descriptive text

SIMONSWERK receiver TECTUS TE ... 3D SZ for steel frames with hinge TECTUS TE ... 3D for unrebated doors. Finishes...

Combination

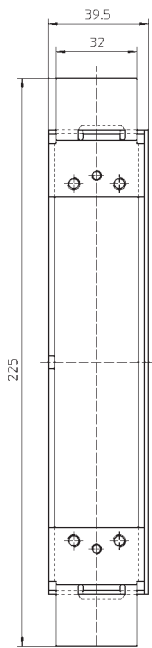
| | |
|-------|-----------|
| Hinge | TE 210 3D |
| | TE 310 3D |
| | TE 510 3D |
| | TE 525 3D |
| | TE 630 3D |

Finishes

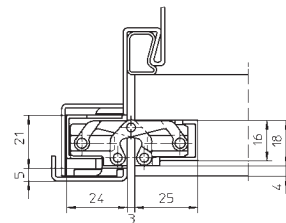
galvanised, untreated/raw Stainless steel

Note

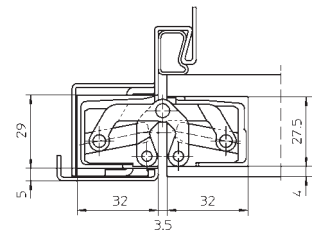
Please specify the exact hinge and Finishes in your order.



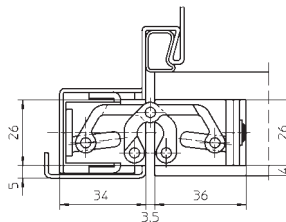
TE 510 3D SZ



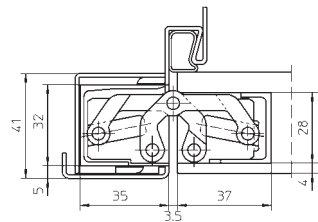
TE 210 3D SZ



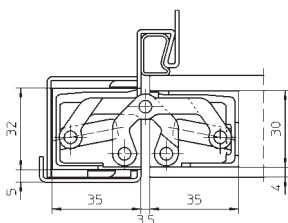
TE 310 3D SZ



TE 525 3D SZ



TE 630 3D SZ



TE 510 3D SZ

ASSEMBLY

TECTUS series**SASH**

Fix sash part with woodscrews.

FRAME

Block frame

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

Affix frame part by using enclosed wood screws.

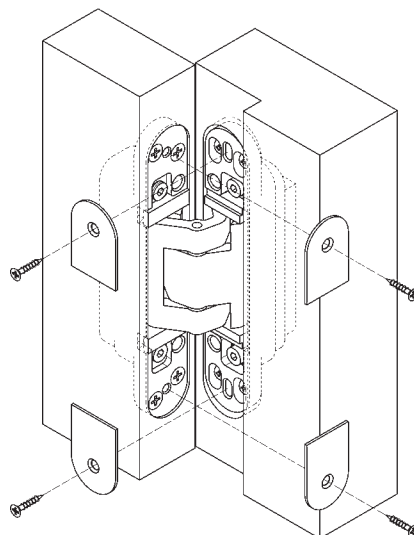
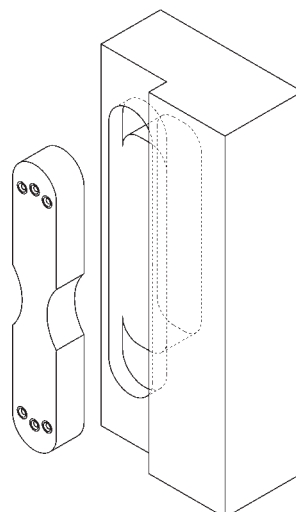
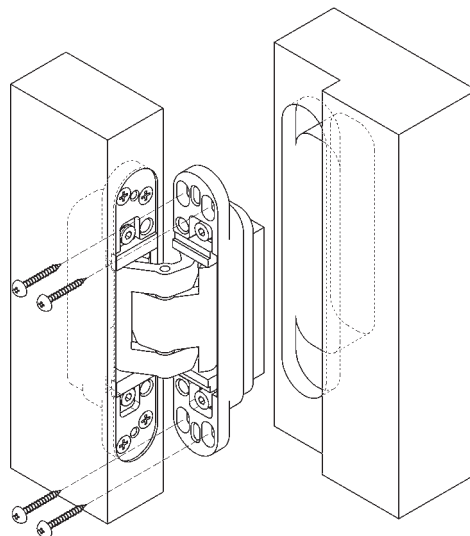
Casing frame

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

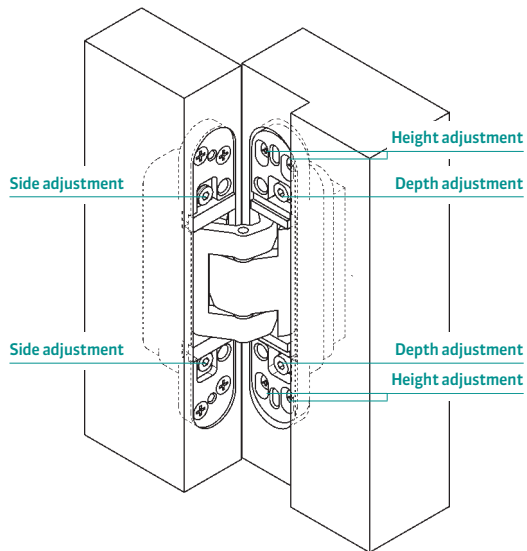
Steel frame

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

Fix cover plates onto sash part with the enclosed screws.



ADJUSTMENT

**TECTUS series****Three-dimensionally, continuously adjustable**

| | |
|--------|------------|
| Side | +/- 3,0 mm |
| Height | +/- 3,0 mm |
| Depth | +/- 1,0 mm |

Side adjustment

- Adjust the adjusting spindle using Allen key SW4.
- Twist left - towards hinge (max. 3 mm)
- Twist right - towards lock (max. 3 mm)

Height adjustment

- Wedge the door
- Slightly loosen the fixing screws
- Put the door to the correct height
- Retighten the fixing screws

Depth adjustment

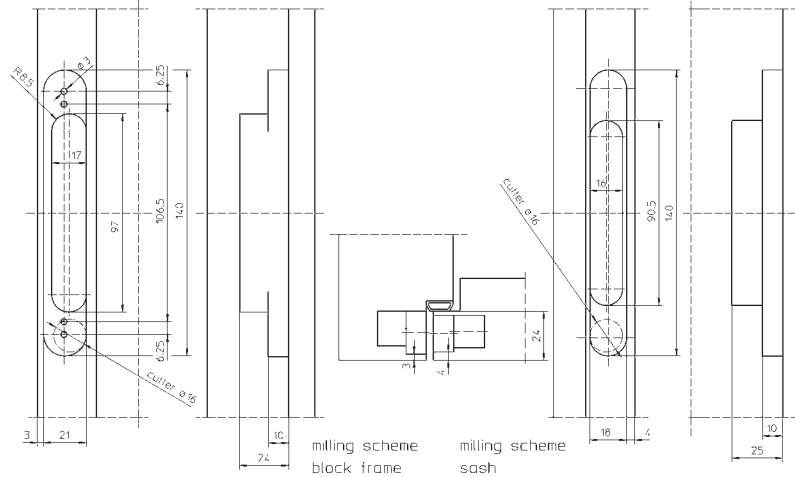
- Slightly loosen the fixing screws
- Put the door to the correct compression
- Retighten the fixing screws

CALCULATION FORMULAS

Calculation of the milling width for timber frames

TE 210 3D

Mill with cutter Ø 16 mm, collar ring Ø 30 mm and universal milling frame with cutting template No. 5 250663 6 (frame) and cutting template No. 5 250664 6 (sash).

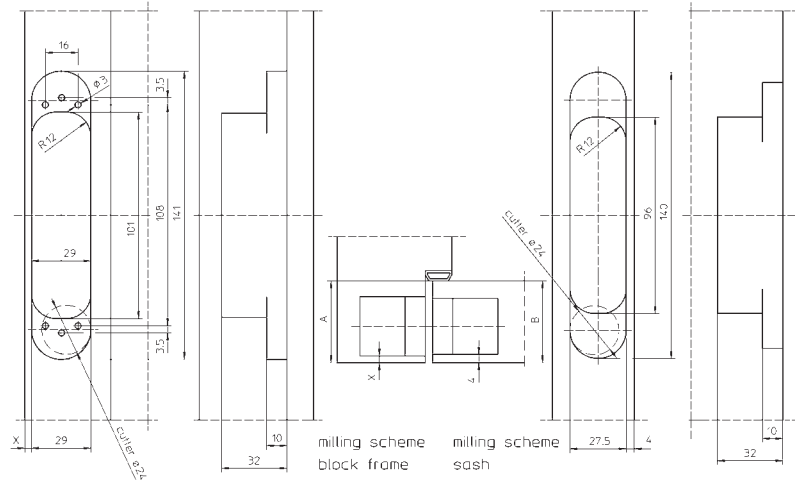


TE 310 3D

A = Depth of frame rebate up to sealing
 B = Thickness of door leaf resp. 1st sash rebate
 $A - B + 4 = \text{Measure X}$

The result has to be a measure between 4,0 mm and max. 6,5 mm. (Steel frame: X = 5,0 mm)

Mill with cutter Ø 24 mm, Collar ring Ø 30 mm and universal milling frame with cutting template No. 5 250371 6 (frame) and cutting template No. 5 250370 6 (sash).

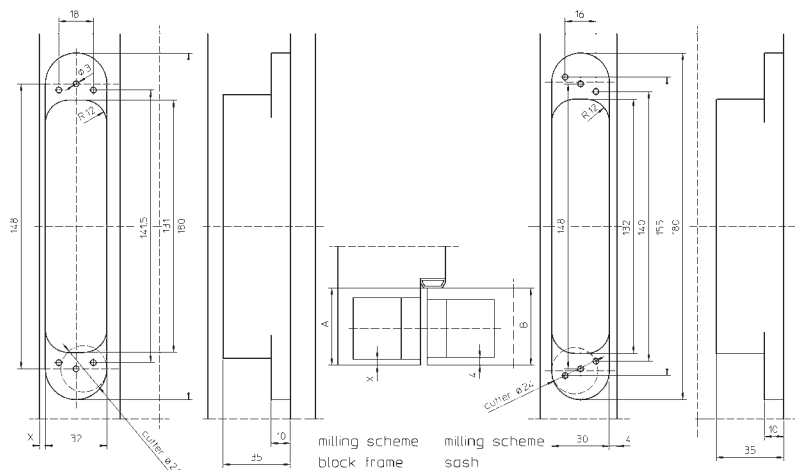


TE 510 3D

A = Depth of frame rebate up to sealing
 B = Thickness of door leaf resp. 1st sash rebate
 $A - B + 3 = \text{Measure X}$

The result has to be a measure between 3,0 mm and max. 5,0 mm. (Steel frame: X = 5,0 mm)

Mill with cutter Ø 24 mm, Collar ring Ø 30 mm and universal milling frame with cutting template No. 5 250374 6 (frame) and cutting template No. 5 250600 6 (sash).



CALCULATION FORMULAS

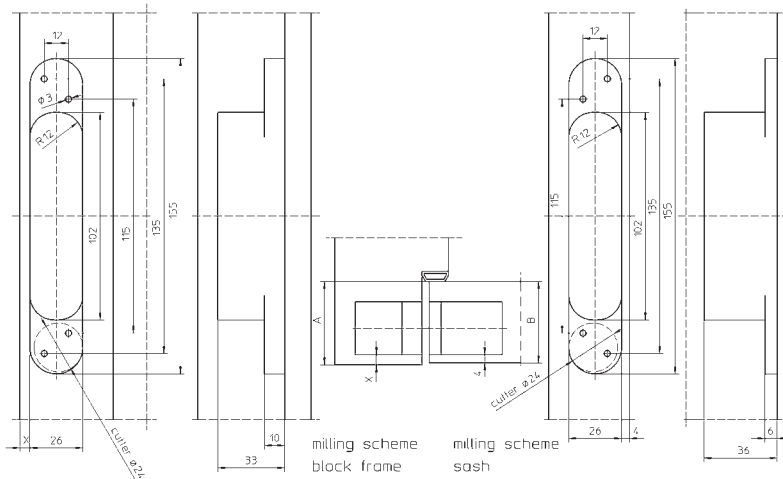
Calculation of the milling width for timber

TE 525 3D

A = Depth of frame rebate up to sealing
 B = Thickness of door leaf resp. 1st sash rebate
 $A - B + 3 = \text{Measure X}$

The result has to be a measure between 3,0 mm and max. 5,0 mm . (Steel frame: X = 5,0 mm)

Mill with cutter Ø 24 mm, Collar ring Ø 30 mm and universal milling frame with cutting template No. 5 250374 6 (frame) and cutting template No. 5 250600 6 (sash).

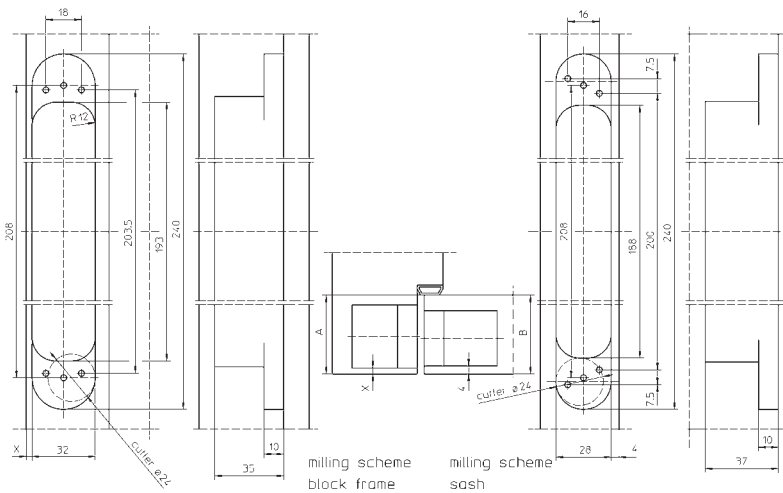


TE 630 3D

A = Depth of frame rebate up to sealing
 B = Thickness of door leaf resp. 1st sash rebate
 $A - B + 3 = \text{Measure X}$

The result has to be a measure between 3,0 mm and max. 5,0 mm . (Steel frame: X = 5,0 mm)

Mill with cutter Ø 24 mm, Collar ring Ø 30 mm and universal milling frame with cutting template No. 5 250659 5 (frame, step 1), No. 5 250660 5 (frame, step 2), No. 5 250661 5 (sash, step 1) and No. 5 250662 5 (sash, step 2).



CONTAINS

 **SIMONSWERK**
TECTUS®

TE 210 3D
TE 310 3D
TE 510 3D
TE 525 3D
TE 630 3D

FURTHER BRANDS MADE BY SIMONSWERK

 **SIMONSWERK**
VARIANT® VX

 **SIMONSWERK**
VARIANT® VN

 **SIMONSWERK**
VARIANT® VG

 **SIMONSWERK**
VARIANT® V

 **SIMONSWERK**
BAKA®

 **SIMONSWERK**
SIKU® 3D

 **SIMONSWERK**
ALPRO®

TECTUS®

Brochure TECTUS®

04/2008
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