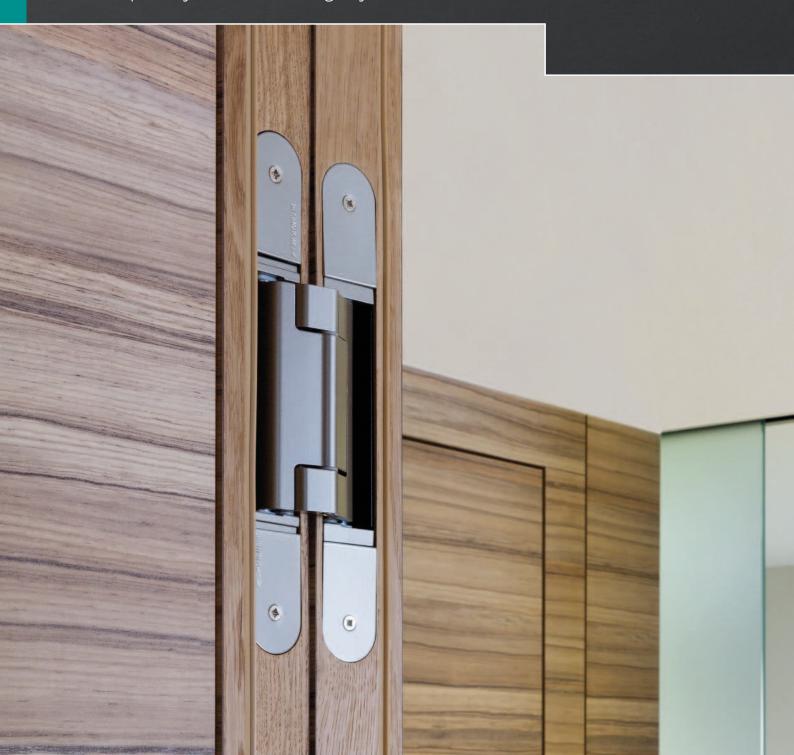
The completely concealed hinge system



# INDEX

### TECTUS® – The completely concealed hinge system

|    |                      |        | Model versions from 40 to 300 kg   |
|----|----------------------|--------|--|
| 5  | TE 240 3D            | 40 kg  | for unrebated and rebated flush residential doors                          |
| 7  | TE 340 3D            | 80 kg  | for unrebated residential and heavy-duty doors                             |
| 3  | TE 526 3D            | 120 kg | made of solid stainless steel for unrebated heavy-duty doors               |
| 9  | TE 527 3D            | 120 kg | made of solid steel for unrebated heavy-duty doors                         |
| 10 | TE 540 3D            | 120 kg | for unrebated heavy-duty doors   |
| 11 | TE 640 3D            | 200 kg | for unrebated high performance heavy-duty doors                            |
| L2 | TE 645 3D            | 300 kg | for unrebated high performance heavy-duty doors                            |
|    |                      |        | Model versions for specific scope of applications                          |
| 16 | TECTUS® Energy       |        | with permanent energy transfer   |
| .8 | <b>TE 541 3D FVZ</b> | 100 kg | for unrebated residential and heavy-duty doors with recessed frame facings |
| 20 | TECTUS® A8           |        | for unrebated heavy-duty doors with claddings up to 8 mm                   |
| 2  | TECTUS® FR           |        | Fire rated with integrated intumescent kit                                 |
| 4  | TE 380 3D            | 60 kg  | for rebated residential doors  |
|    |                      |        | Fixing plates and receivers  |
| 26 | TE 3D FZ             |        | Fixing plate for residential and heavy-duty doors on casing frames         |
| !7 | TE 3D SZ             |        | Receiver for residential and heavy-duty doors on steel frames              |
| 28 | Assembly             |        |  |
|    |                      |        |  |
| 30 | Routing data         |        |  |
|    |                      |        |  |

# TECHNICAL FEATURES

The TECTUS-brand fully concealed hinge system has been an integral part of the SIMONSWERK range since 2002. Thanks to its ongoing development, TECTUS is today more innovative and efficient than ever.

With the TECTUS hinge system, any door, from high-quality interior doors to large, heavy-duty doors, can be integrated into straight-lined and flush-fitting architectural structures. This well-established series has a wide range of applications, such as flush-fitting models for invisible frames, versions with built-in fire protection or designs with integrated energy transfer.

Its ability to withstand loads from 40 to 300 kg, an opening angle of 180 degrees, the use of frames in wood, steel and aluminium, its 3D adjustability, and maintenance-free slide bearings make TECTUS an exceptional hinge solution, both technically and aesthetically.

### **TECTUS® - THE FULLY CONCEALED HINGE SYSTEM**

) for flush-fitting architectural structures ) with a load capacity of 40 to 300 kg

) with an opening angle of 180°

) for unrebated and rebated, flush-mounted doors

) for rebated doors

) for wood, steel and aluminium frames

) with maintenance-free slide bearing technology



# DESIGN MEETS FUNCTION.

### A FULL RANGE OF CONCEALED HINGES

For applications ranging from high-quality interior doors to heavy soundproof doors with special requirements in terms of load and performance, SIMONSWERK has for years provided a comprehensive product range including a wide choice of its fully concealed TECTUS brand.

All the models in the TECTUS-brand fully concealed hinge range for high-quality interior and functional heavy-duty doors have the same technical and visual features, and can be used with wood, steel and aluminium frames. They all have a uniform appearance, with a closed hinge body that hides the milling from view, and are available in a range of materials and attractive surface finishes.



TE 240 3D TE 340 3D

Load capacity up to 40 kg

Load capacity up to 80 kg



TE 526 3D

Load capacity up to 120 kg



TE 527 3D

Load capacity up to 120 kg



TE 540 3D

Load capacity up to 120 kg



TE 640 3D

Load capacity up to 200 kg



TE 645 3D

Load capacity up to 300 kg

6 | TECTUS®

# **TECTUS®**

# TE 240 3D

for unrebated and rebated flush residential doors

| up to 40 kg |
|-------------|
|             |

### **Product features**

- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebated and rebated flush residential doors
- sideways closed hinge body for a homogeneous mortise appearance
- with comfortable 3D adjustment (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.5 mm)
- maintenance-free slide bearings

### **Technical Data**

| Load capacity i 2 hinges per door | eaf (1x2m) 40.0 kg |
|-----------------------------------|--------------------|
| Overall length                    | 155.0 mm           |
| Width (frame)                     | 21.0 mm            |
| Width (door)                      | 18.0 mm            |
| Cutter diameter                   | 16.0 mm            |
| Opening angle                     | 180°               |

### Finish

satin chrome look (F1), satin nickel look (F2), stainless steel look, polished brassed, polished nickelled, bronze metallic, bronze finish, bronze finish light, bronze finish dark, powder-coated, other finishes available upon request

### Combination

| Receiver | Casing frame | TE 240 3D FZ/1 |
|----------|--------------|----------------|
|          | Steel frame  | TE 240 3D SZ   |

### Installation Tools

| Jig   |          | Universal milling frame |
|-------|----------|-------------------------|
| Frame | Template | No. 5 250691 6          |
| Door  | Template | No. 5 250692 6          |

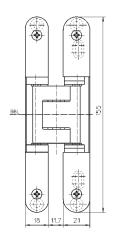
### Note

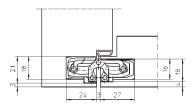
 $\blacksquare$  The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m).

| 2 | 7 | 2 | 0 | 1 | * | 0 | 7 |
|---|---|---|---|---|---|---|---|

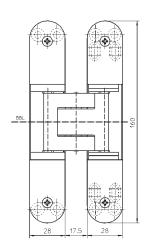
<sup>\*</sup>depending on the finish

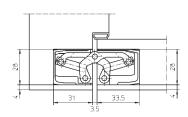












# TE 340 3D

for unrebated residential and heavy-duty doors

| up to 80 kg |
|-------------|
|             |

### **Product features**

- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebated residential and heavy duty doors
- sideways closed hinge body for a homogeneous mortise appearance
- with comfortable 3D adjustment (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.0 mm)
- maintenance-free slide bearings

### **Technical Data**

| Load capacity   | i 2 hinges per door leaf (1x2m) | 80.0 kg  |
|-----------------|---------------------------------|----------|
| Overall length  |                                 | 160.0 mm |
| Width (frame)   |                                 | 28.0 mm  |
| Width (door)    |                                 | 28.0 mm  |
| Cutter diameter |                                 | 24.0 mm  |
| Opening angle   |                                 | 180°     |

### Finish

satin chrome look (F1), satin nickel look (F2), stainless steel look, polished brassed, polished nickelled, bronze metallic, bronze finish, bronze finish light, bronze finish dark, powder-coated, other finishes available upon request

### Combination

| Receiver | Casing frame | TE 340 3D FZ/1 |
|----------|--------------|----------------|
|          | Steel frame  | TE 340 3D SZ   |

### **Installation Tools**

| Jig    |          | Universal milling frame |
|--------|----------|-------------------------|
| Step 1 | Template | No. 5 250693 5          |
| Step 2 | Template | No. 5 250694 5          |

### **Functional** areas

Fire resistance, Smoke resistance, Burglar resistance

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

| 3 | 7 | 4 | 1 | 1 | * | 0 | 11a |
|---|---|---|---|---|---|---|-----|
|---|---|---|---|---|---|---|-----|

<sup>\*</sup>depending on the finish











8 | TECTUS® **SIMONSWERK** 

# **TECTUS®**

# TE 526 3D

made of solid stainless steel for unrebated heavy-duty doors

| up to 120 kg |
|--------------|
|              |

### **Product features**

- Material stainless steel
- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebated residential and heavy duty doors
- 3D adjustable (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.0 mm)
- maintenance-free slide bearings



| Load capacity   | i | 2 hinges per door leaf (1x2m) | 120.0 kg |
|-----------------|---|-------------------------------|----------|
| Overall length  |   |                               | 155.0 mm |
| Width (frame)   |   |                               | 26.0 mm  |
| Width (door)    |   |                               | 26.0 mm  |
| Cutter diameter |   |                               | 24.0 mm  |
| Opening angle   |   |                               | 180°     |

### Finish

Satin brushed stainless steel

### Combination

| Receiver | Casing frame | TE 526 3D FZ/1 |
|----------|--------------|----------------|
|          | Steel frame  | TE 526 3D SZ   |

### **Installation Tools**

| Jig        |          | Universal milling frame       |
|------------|----------|-------------------------------|
|            |          | Drilling jig TECTUS TE 526 3D |
| Frame/Door | Template | No. 5 250547 6                |

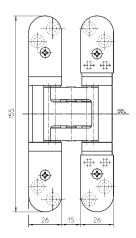
### Functional areas

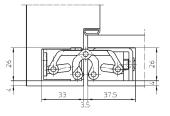
Fire resistance, Smoke resistance, Soundproof, Burglar resistance

### Note

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







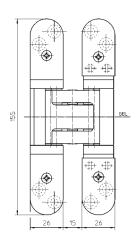


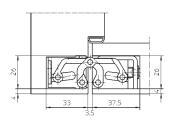












# TE 527 3D

made of solid steel for unrebated heavy-duty doors

| Hinge |  | up to 120 kg |
|-------|--|--------------|
|-------|--|--------------|

### **Product features**

- Material solid steel
- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebated residential and heavy duty doors
- 3D adjustable (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.0 mm)
- maintenance-free slide bearings

### **Technical Data**

| Load capacity   | i 2 hinges per door leaf (1x2m) | 120.0 kg |
|-----------------|---------------------------------|----------|
| Overall length  |                                 | 155.0 mm |
| Width (frame)   |                                 | 26.0 mm  |
| Width (door)    |                                 | 26.0 mm  |
| Cutter diameter |                                 | 24.0 mm  |
| Opening angle   |                                 | 180°     |

### Finish

stainless steel look, other finishes available upon request

### Combination

| Receiver                        | Casing frame | TE 527 3D FZ/1 |
|---------------------------------|--------------|----------------|
|                                 | Steel frame  | TE 527 3D SZ   |
| Intumescent kit on FD door sets |              | 8820           |

### **Installation Tools**

| Jig          |          | Universal milling frame       |
|--------------|----------|-------------------------------|
|              |          | Drilling jig TECTUS TE 527 3D |
| Frame / Door | Template | No. 5 250547 6                |

### **Functional** areas

Fire resistance, Smoke resistance, Soundproof, Burglar resistance

### Note

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











10 | TECTUS® **SIMONSWERK** 

# **TECTUS®**

# TE 540 3D

for unrebated heavy-duty doors

| Hinge |  | up to 120 kg |
|-------|--|--------------|
|-------|--|--------------|

### **Product features**

- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebated heavy-duty doors
- sideways closed hinge body for a homogeneous mortise appearance
- with comfortable 3D adjustment (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.0 mm)
- maintenance-free slide bearings

|  | l Data |
|--|--------|
|  |        |
|  |        |

| Load capacity i | 2 hinges per door leaf (1x2m) | 120.0 kg |
|-----------------|-------------------------------|----------|
| Overall length  |                               | 200.0 mm |
| Width (frame)   |                               | 32.0 mm  |
| Width (door)    |                               | 32.0 mm  |
| Cutter diameter |                               | 24.0 mm  |
| Opening angle   |                               | 180°     |

### Finish

satin chrome look (F1), satin nickel look (F2), stainless steel look, polished brassed,  $polished\ nickelled, powder-coated, other\ finishes\ available\ upon\ request$ 

### Combination

| Receiver | Casing frame | TE 540 3D FZ/1 |
|----------|--------------|----------------|
|          | Steel frame  | TE 540 3D SZ   |

### **Installation Tools**

| Jig    |          | Universal milling frame |
|--------|----------|-------------------------|
| Step 1 | Template | No. 5 250680 5          |
| Step 2 | Template | No. 5 250681 5          |

### **Functional areas**

Fire resistance, Smoke resistance, Soundproof, Burglar resistance

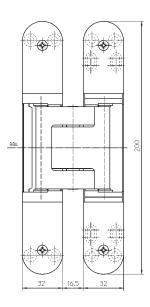
### Note

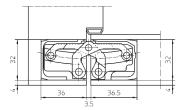
The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m).

| 4 | 7 | 6 | 1 | 1 | * | 1 | 13 |
|---|---|---|---|---|---|---|----|

<sup>\*</sup>depending on the finish

















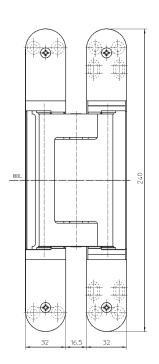


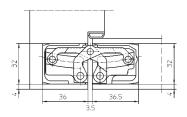












# TE 640 3D

for unrebated high performance heavy-duty doors

| o to 200 kg |
|-------------|
|             |

### **Product features**

- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebated high performance heavy-duty doors
- sideways closed hinge body for a homogeneous mortise appearance
- with comfortable 3D adjustment (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.0 mm)
- maintenance-free slide bearings

### **Technical Data**

| Load capacity   | i | 2 hinges per door leaf (1x2m) | 200.0 kg |
|-----------------|---|-------------------------------|----------|
| Overall length  |   |                               | 240.0 mm |
| Width (frame)   |   |                               | 32.0 mm  |
| Width (door)    |   |                               | 32.0 mm  |
| Cutter diameter |   |                               | 24.0 mm  |
| Opening angle   |   |                               | 180°     |

### Finish

satin chrome look (F1), satin nickel look (F2), stainless steel look, polished brassed, polished nickelled, powder-coated, other finishes available upon request

### Combination

| Receiver | Casing frame | TE 640 3D FZ/1 |
|----------|--------------|----------------|
|          | Steel frame  | TE 640 3D SZ   |

### **Installation Tools**

| Jig    |          | Universal milling frame |
|--------|----------|-------------------------|
| Step 1 | Template | No. 5 250659 5          |
| Step 2 | Template | No. 5 250689 5          |

### **Functional areas**

Fire resistance, Smoke resistance, Soundproof, Burglar resistance

### Note

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

| 4 7 8 1 | 1 | * 1 | 15 |
|---------|---|-----|----|

<sup>\*</sup>depending on the finish













12 | TECTUS® **SIMONSWERK** 

# **TECTUS®**

# TE 645 3D

for unrebated high performance heavy-duty doors

| Hinge |  | up to 300 kg |
|-------|--|--------------|
|-------|--|--------------|

### **Product features**

- completely concealed hinge system
- for timber, steel and aluminium frames
- for unrebated high performance heavy-duty doors
- sideways closed hinge body for a homogeneous mortise appearance
- with comfortable 3D adjustment (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.0 mm)
- maintenance-free slide bearings

| -   |        |        |
|-----|--------|--------|
| IAC | hnical | l Data |
|     |        |        |

| Load capacity   | i 2 hinges per door leaf (1x2m) | 300.0 kg |
|-----------------|---------------------------------|----------|
| Length (door)   |                                 | 280.0 mm |
| Length (frame)  |                                 | 260.0 mm |
| Width (frame)   |                                 | 36.0 mm  |
| Width (door)    |                                 | 34.0 mm  |
| Cutter diameter |                                 | 24.0 mm  |
| Opening angle   |                                 | 180°     |

### Finish

satin chrome look (F1), stainless steel look, other finishes available upon request

### Combination

| Receiver | Steel frame | TE 645 3D SZ |
|----------|-------------|--------------|

### **Installation Tools**

| Jig           |          | Universal milling frame long |
|---------------|----------|------------------------------|
| Frame, Step 1 | Template | No. 5 250945 5               |
| Frame, Step 2 | Template | No. 5 250946 5               |
| Door, Step 1  | Template | No. 5 250947 5               |
| Door, Step 2  | Template | No. 5 250948 5               |

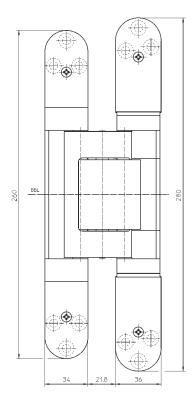
### **Functional areas**

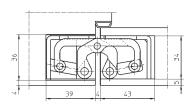
Fire resistance, Smoke resistance, Soundproof, Burglar resistance

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

| 4 | 7 | 9 | 1 | 1 | 4 | 1 | 16 |
|---|---|---|---|---|---|---|----|





















# TECTUS® VERSIONS FOR SPECIAL <u>APPLICATIONS</u>

Special architectural situations, problematic spatial challenges or unusual planning tasks require individual solutions. The solutions presented here by SIMONSWERK complete the TECTUS product range.



**TECTUS®** Energy

Energy with permanent energy transfer, load capacities of 40 to 300 kg



### **TECTUS® FVZ**

for constructions with recessed frame facings, load capacity up to 100 kg



**TECTUS® A8** 

for doors with claddings up to 8 mm load capacities of 100 to 160 kg



# TECTUS® FR

with integrated intumescent kit load capacities of 80 to 200 kg



### TECTUS® rebated

for rebated doors load capacity up to 60 kg

# TECTUS® ENERGY ENERGY TRANSFER: INTEGRATED AND PERMANENT

Energy transfer is crucially important in the installation and operation of electric components in high-quality doors. With TECTUS Energy, the door leaf receives a guaranteed and permanent energy supply from the frame, without weakening the structure of either the door or the frame. The technology provided by TECTUS Energy offers compatibility with all the most popular designs for locks and fittings .

### **UNIVERSAL ADAPTER**

- ) compatibility with all the most popular designs for locks and fittings
- three different plug connections (round cable, universal adapter, adapter 1)

### CLIP

- secure connection between cable and hinge housing
- ) high functional reliability and fitness for purpose thanks to a closed system

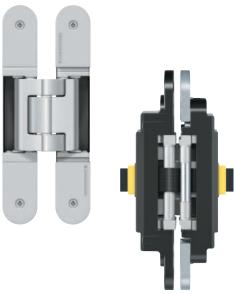
### **FLAT RIBBON CABLE**

) 16-wire ribbon cable

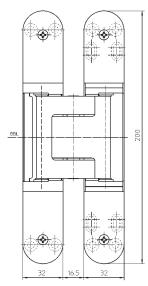
4

- ) integrated permanent energy transfer
- entirely enclosed in the housing (closed system)

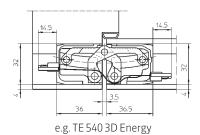
To find out more about TECTUS Energy download the brochure now at www.simonswerk.com. We will also be happy to send it to you by post.



e.g. TE 540 3D Energy



e.g. TE 540 3D Energy



**TECTUS Energy** 

with permanant energy transfer for unrebated doors - with new snap-fitting connection

| Hinge | Energy transfer | 40 – 300 kg |
|-------|-----------------|-------------|
|       |                 |             |

### **Product features**

- with permanent energy transfer
- individual connection adapter options
- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebated heavy-duty doors
- with comfortable 3D adjustment (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.0 mm)
- maintenance-free slide bearings

### **Technical Data**

| No. of wires/wire cross section | 16 pieces/0.14 mm <sup>2</sup>               |
|---------------------------------|--|
| Max. voltage                    | 50 V (voltage source acc. SELV-DIN EN 61140) |
| Max. current                    | 0.8 A (per wire)                             |
| Opening angle                   | 180°   |

satin chrome look (F1), stainless steel look, other finishes available upon request

### Combination

| Receiver    |   | Casing frame TE 3D FZ                           |                                     |  |
|-------------|---|---|-------------------------------------|--|
|             |   | Steel frame                                     | TE 3D SZ                            |  |
| Accessories | i | Round cable                                     | 16 x 0,8 A power                    |  |
|             |   |   | universal use for all applications  |  |
|             |   |   | cable lengths 3 m or 10 m           |  |
|             |   | torsion-proof a                                 | nd snap-fitting connection system   |  |
|             |   | Universal adapter 3 x 3,2 A and 4 x 0,8 A power |                                     |  |
|             |   | for direct conne                                | ction of different power collectors |  |
|             |   | torsion-proof a                                 | nd snap-fitting connection system   |  |
|             |   | Adapter 1 3 x 3,2 A and 4 x 0,8 A power         |                                     |  |
|             |   | special adapter for connecting FUHR motor loc   |                                     |  |
|             |   |   | plug-and-play version               |  |
|             |   | torsion-proof a                                 | nd snap-fitting connection system   |  |

### **Functional** areas

Fire resistance, Smoke resistance, Soundproof, Burglar resistance

 $\blacksquare$  The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m). Please specify accessories when ordering.

### Classification key

| 4 | 7 | 6 | 1 | 1 | * | 1 | 13 |
|---|---|---|---|---|---|---|----|
|   |   |   |   |   |   |   |    |

\*depending on the finish

| Available options   |                            |
|---------------------|----------------------------|
| TE 240 3D Energy    | Load capacity up to 40 kg  |
| TE 340 3D Energy    | Load capacity up to 80 kg  |
| TE 526 3D Energy    | Load capacity up to 120 kg |
| TE 540 3D Energy    | Load capacity up to 120 kg |
| TE 640 3D Energy    | Load capacity up to 200 kg |
| TE 645 3D Energy    | Load capacity up to 300 kg |
| TE 540 3D A8 Energy | Load capacity up to 100 kg |
| TE 640 3D A8 Energy | Load capacity up to 160 kg |

Detailed information in our PRODUCTSELECTOR at www.simonswerk.com

QUALITY MARKS









# TECTUS® FVZ INTEGRATION OF DOOR SET INTO SURROUNDING WALL WITHOUT A VISIBLE FRAME

TE 541 3D FVZ is a new version in which the frame part is offset to the sash part therefore a door with a fully concealed hinge can be integrated into the surrounding wall without any visible frame. The frame facing can be set back by up to 14 mm, to allow the door and wall sets to create a flush-fitting whole.

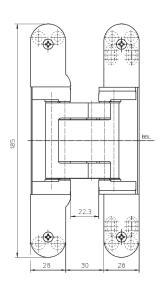


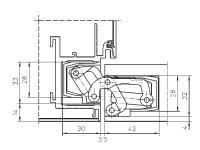
for a 14-mm-recessed frame facing

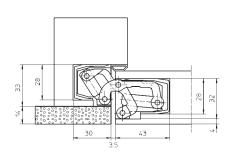
for a surrounding wall without visible frame











# TE 541 3D FVZ

for unrebated residential and heavy-duty doors with recessed frame facings

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

### **Product features**

- FVZ = 14 mm recessed frame facings
- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebated heavy-duty doors
- sideways closed hinge body for a homogeneous mortise appearance
- with comfortable 3D adjustment (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.0 mm)
- maintenance-free slide bearings

### **Technical Data**

| Load capacity   | i | 2 hinges per door leaf (1x2m) | 100.0 kg     |
|-----------------|---|-------------------------------|--------------|
| Overall length  |   |                               | 185.0 mm     |
| Width (frame)   |   |                               | 28.0/33.0 mm |
| Width (door)    |   |                               | 28.0/32.0 mm |
| Cutter diameter |   |                               | 24.0 mm      |
| Opening angle   |   |                               | 180°         |

### Finish

satin chrome look (F1), stainless steel look, other finishes available upon request

### Combination

| Receiver Steel frame TE 541 3D FVZ SZ |          |             |                  |
|---------------------------------------|----------|-------------|------------------|
|                                       | Receiver | Steel frame | TE 541 3D FVZ SZ |

### **Installation Tools**

| Jig           |          | Universal milling frame |
|---------------|----------|-------------------------|
| Frame, Step 1 | Template | No. 5 250942 5          |
| Frame, Step 2 | Template | No. 5 250943 5          |
| Frame, Step 3 | Template | No. 5 250682 5          |
| Door, Step 1  | Template | No. 5 250942 5          |
| Door, Step 2  | Template | No. 5 250943 5          |
| Door, Step 3  | Template | No. 5 250944 5          |

### **Functional** areas

Fire resistance, Smoke resistance, Soundproof

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

| 4 | 7 | 5 | 1 | 1 | * | 0 | 12 |
|---|---|---|---|---|---|---|----|

<sup>\*</sup>depending on the finish

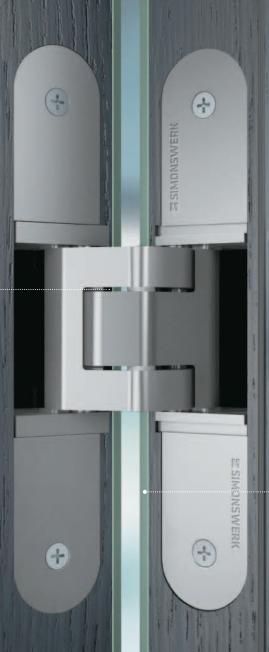




# TECTUS® A8 CLADDING ON THE DOOR AND FRAME CONSTRUCTION

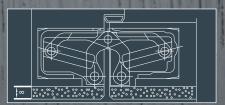
"A8" versions provide new application possibilities as they can accommodate cladding of up to 8 mm on the door and frame construction. This gives the designer more scope when integrating the door set into the overall interior design concept.

Load capacity of up to 100 kg



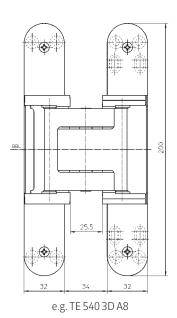
for claddings on door and frame of up to 8 mm

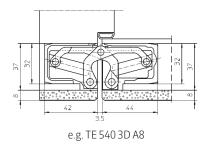
The use of different materials such as wood, glass, etc are possible within door and frame construction





e.g. TE 540 3D A8





# **TECTUS A8**

for unrebated heavy-duty doors with claddings up to 8 mm  $\,$ 

| Hinge |  | 100 – 160 kg |
|-------|--|--------------|
|-------|--|--------------|

### **Product features**

- claddings up to 8 mm
- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebated heavy-duty doors
- sideways closed hinge body for a homogeneous mortise appearance
- with comfortable 3D adjustment (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.0 mm)
- maintenance-free slide bearings

satin chrome look (F1), satin nickel look (F2), stainless steel look, polished brassed, polished nickelled, powder-coated, other finishes available upon request

### Combination

| Receiver    | Casing frame    | TE 3D FZ                |
|-------------|-----------------|-------------------------|
|             | Steel frame     | TE 3D A8 SZ             |
| Accessories | Cover plate set | TE 540/640 3D A8 radius |

### **Functional** areas

Fire resistance, Smoke resistance, Soundproof, Burglar resistance

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

### Classification key

| 4 7 5 1 1 * 1 12a |
|-------------------|
|-------------------|

<sup>\*</sup>depending on the finish

| Available options |                            |
|-------------------|----------------------------|
| TE 540 3D A8      | Load capacity up to 100 kg |
| TE 640 3D A8      | Load canacity up to 160 kg |

Detailed information in our PRODUCTSELECTOR at www.simonswerk.com









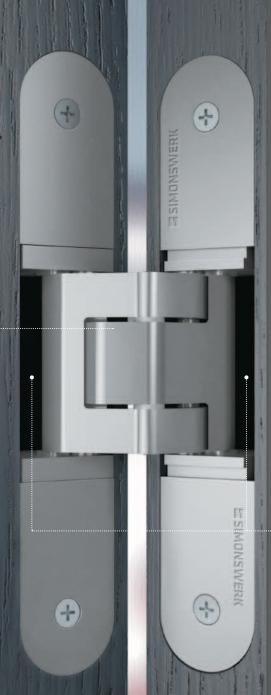




# TECTUS® FR FIRE RATED WITH INTEGRATED INTUMESCENT KIT

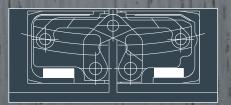
The TECTUS hinge system with integrated intumescent kit protects against fire and smoke escaping into a neighbouring room. In case of a fire or the production of smoke, the intumescent kit swells, sealing the door around the hinges.

Load capacity of 80 - 200 kg

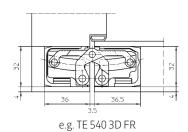


with integrated intumescent kit

The intumescent kit seals the hinge mortise in case of a fire.







e.g. TE 540 3D FR

# **TECTUS FR**

with integrated intumescent kit for unrebated heavy-duty doors

| Hinge | Fire resistance | 80 – 200 kg |
|-------|-----------------|-------------|
|       |                 |             |

### **Product features**

- with integrated intumescent kit
- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebated heavy-duty doors
- sideways closed hinge body for a homogeneous mortise appearance
- with comfortable 3D adjustment (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.0 mm)
- maintenance-free slide bearings

satin chrome look (F1), stainless steel look, other finishes available upon request

### Combination

| Receiver | Casing frame | TE 3D FZ/1 |
|----------|--------------|------------|
|          | Steel frame  | TE 3D SZ   |

### **Functional areas**

Fire resistance, Smoke resistance, Soundproof, Burglar resistance

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

### **Classification key**

| 7 / 3 1 1 1 13 | 4 | 7 | 5 | 1 | 1 | * | 1 | 13 |
|----------------|---|---|---|---|---|---|---|----|
|----------------|---|---|---|---|---|---|---|----|

<sup>\*</sup>depending on the finish

| Available options |                            |
|-------------------|----------------------------|
| TE 340 3D FR      | Load capacity up to 80 kg  |
| TE 540 3D FR      | Load capacity up to 120 kg |
| TE 640 3D FR      | Load capacity up to 200 kg |
| TE 540 3D A8 FR   | Load capacity up to 100 kg |
| TE 640 3D A8 FR   | Load capacity up to 160 kg |

Detailed information in our PRODUCTSELECTOR at www.simonswerk.com









Load capacity up to 60 kg

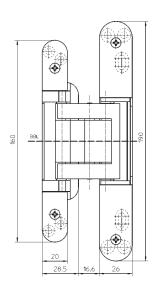
# **TECTUS® REBATED**FOR REBATED RESIDENTIAL DOORS

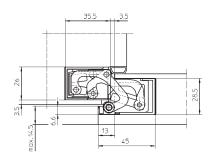
SIMONSWERK also offer within the TECTUS brand a solution for rebated door leaves. The concealed hinge system is completely invisible when the door is closed. The hinge joint's special geometry allows for installation in the rebated door leaf with a receiver in the wood, steel or aluminium frame.



for rebated residential doors







# TE 380 3D

for rebated residential doors

| Hinge |  | up to 60 kg |
|-------|--|-------------|
|-------|--|-------------|

### **Product features**

- completely concealed hinge system
- for timber, steel or aluminium frames
- for rebated residential doors
- sideways closed hinge body for a homogeneous mortise appearance
- with comfortable 3D adjustment (side +/- 3.0 mm, height +/- 3.0 mm, compression +/- 1.0 mm)
- maintenance-free slide bearings

### **Technical Data**

| Load capacity   | i 2 hinges per door leaf (1x2m) | 60.0 kg  |
|-----------------|---------------------------------|----------|
| Overall length  |                                 | 190.0 mm |
| Width (frame)   |                                 | 26.0 mm  |
| Width (door)    |                                 | 20.0 mm  |
| Cutter diameter |                                 | 20.0 mm  |
| Opening angle   |                                 | 180°     |

### Finish

satin chrome look (F1), stainless steel look, other finishes available upon request

### Combination

| Receiver | Casing frame | TE 380 3D FZ/1 |
|----------|--------------|----------------|
|          | Steel frame  | TE 380 3D SZ   |

### Installation Tools

| Jig           |          | Universal milling frame |
|---------------|----------|-------------------------|
| Frame, Step 1 | Template | No. 5 250955 5          |
| Frame, Step 2 | Template | No. 5 250956 5          |
| Frame, Step 3 | Template | No. 5 250957 5          |
| Door, Step 1  | Template | No. 5 250958 5          |
| Door, Step 2  | Template | No. 5 250959 5          |

### Note

 $\begin{tabular}{ll} \hline \textbf{I} & \textbf{I}$ 

26 | TECTUS® **SIMONSWERK** 

# **TECTUS®**

# Fixing plate TECTUS TE ... 3D FZ

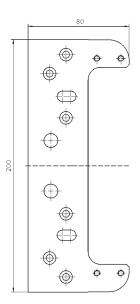
for residential and heavy-duty doors with casing frames

| Receiver                 |                                | Casing frame        |
|--------------------------|--------------------------------|---------------------|
| <b>Finish</b> galvanised |                                |                     |
| Combination              |                                |                     |
| Hinge                    |                                | TE 205 3D           |
|                          |                                | TE 240 3D           |
|                          |                                | TE 305 3D           |
|                          |                                | TE 340 3D           |
|                          |                                | TE 380 3D           |
|                          |                                | TE 526 3D           |
|                          |                                | TE 527 3D           |
|                          |                                | TE 540 3D           |
|                          |                                | TE 640 3D           |
|                          |                                | TE 540 3D A8        |
|                          |                                | TE 640 3D A8        |
|                          | with permanent energy transfer | TE 240 3D Energy    |
|                          |                                | TE 340 3D Energy    |
|                          |                                | TE 526 3D Energy    |
|                          |                                | TE 540 3D Energy    |
|                          |                                | TE 640 3D Energy    |
|                          |                                | TE 540 3D A8 Energy |
|                          |                                | TE 640 3D A8 Energy |
|                          | with intumescent kit           | TE 340 3D FR        |
|                          |                                | TE 540 3D FR        |
|                          |                                | TE 640 3D FR        |
|                          |                                | TE 540 3D A8 FR     |
|                          |                                | TE 640 3D A8 FR     |

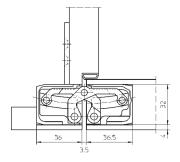
### Note

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

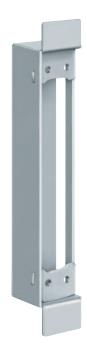




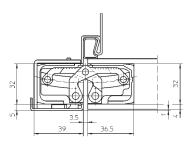
e.g. TE 540 3D FZ



e.g. TE 540 3D with TE 540 3D FZ



# 88.5 333 4 4 4 e.g. TE 540 3D SZ



e.g. TE 540 3D with TE 540 3D SZ

# Receiver TECTUS TE ... 3D SZ

for residential and heavy-duty doors with steel frames

| Receiver            |                                | Steel frame                          |
|---------------------|--------------------------------|--------------------------------------|
| Finish              |                                |                                      |
| galvanised, untreat | ed/raw stainless steel         |                                      |
| Combination         |                                |                                      |
| Hinge               |                                | TE 205 3D                            |
|                     |                                | TE 240 3D                            |
|                     |                                | TE 305 3D                            |
|                     |                                | TE 340 3D                            |
|                     |                                | TE 380 3D                            |
|                     |                                | TE 526 3D                            |
|                     |                                | TE 527 3D                            |
|                     |                                | TE 540 3D                            |
|                     |                                | TE 541 3D FVZ                        |
|                     |                                | TE 640 3D                            |
|                     |                                | TE 645 3D                            |
|                     |                                | TE 540 3D A8                         |
|                     |                                | TE 640 3D A8                         |
|                     | with permanent energy transfer | TE 240 3D Energy                     |
|                     |                                | TE 340 3D Energy                     |
|                     |                                | TE 526 3D Energy                     |
|                     |                                | TE 540 3D Energy                     |
|                     |                                | TE 640 3D Energy<br>TE 645 3D Energy |
|                     |                                | TE 540 3D A8 Energy                  |
|                     |                                | TE 640 3D A8 Energy                  |
|                     | with intumescent kit           | TE 340 3D FR                         |
|                     | with meaning cent int          | TE 540 3D FR                         |
|                     |                                | TE 640 3D FR                         |
|                     |                                | TE 540 3D A8 FR                      |
|                     |                                | TE 640 3D A8 FR                      |
| -                   |                                |                                      |

### Note

Please specify the exact hinge in your order.

28 | TECTUS®

# **TECTUS®**

# **TECTUS** series

ASSEMBLY

### DOOR

Fix door part with enclosed wood screws.

### **FRAME**

### Block frame

Conduct routing according to SIMONSWERK routing data. Use cutter 24 mm  $\emptyset$  (TE 240 3D cutter 16 mm  $\emptyset$ ) and collar ring 30 mm  $\emptyset$ . Affix frame part with enclosed wood screws (5 mm  $\emptyset$ ).

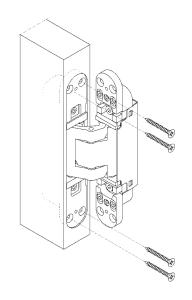
### Casing frame

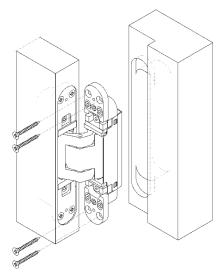
To guarantee a stable mounting the use of an additional fixing plate is required. Affix the fixing plate by means of appropriate screws (not included) behind the casing. Affix the hinge by using enclosed M5 screws.

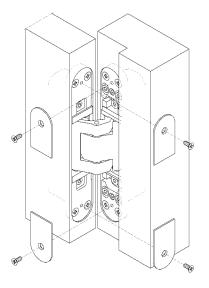
### Steel frame

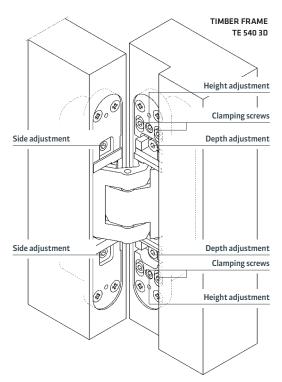
Affix frame part of the hinge with the prepared receiver inside the door frame by using the enclosed M5 screws.

Fix cover plates by means of the enclosed screws.









# **TECTUS** series

**ADJUSTMENT** 

### Three-dimensionally, continuously adjustable

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

### Side adjustment

- Adjust the adjusting spindles using a 4 mm Allen key
- Twist left towards hinge (max. 3 mm)
- Twist right towards lock (max. 3 mm)

### Height adjustment

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

### Depth adjustment

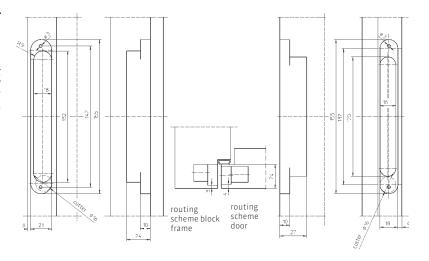
- Slightly loosen the fixing screws
- Put the door to the correct compression
- Retighten the clamping screws

All adjustments to be conducted by means of a 4 mm Allen key

# TE 240 3D

**ROUTING DATA** 

Conduct routing with cutter Ø 16 mm, collar ring Ø 30 mm and universal milling frame with template No. 5 250691 6 (frame) and template No. 5 250692 6 (door) .



# TE 340 3D / TE 340 3D FR

CALCULATION FORMULAS

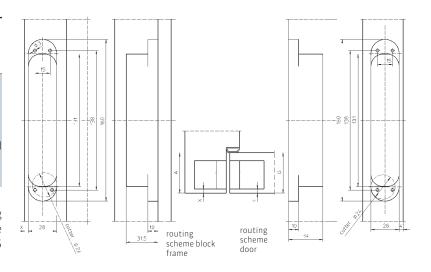
A = Depth of frame rebate up to sealing

B = Thickness of door leaf resp. 1st door rebate

A - B + 4 = Measure X

The result has to be a measure between 4.0 mm and max. 6.0 mm. (Steel frame: X = 5.0 mm)

Conduct routing with cutter Ø 24 mm, collar ring Ø 30 mm and universal milling frame with template No. 5 250693 5 (Step 1) and template No. 5 250694 5 (Step 2).



# TE 526 3D / TE 527 3D

CALCULATION FORMULAS

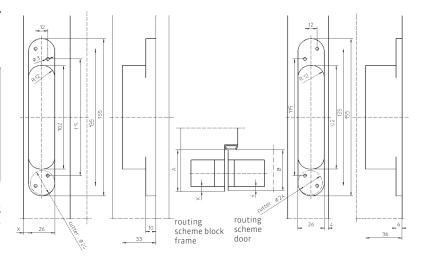
A = Depth of frame rebate up to sealing

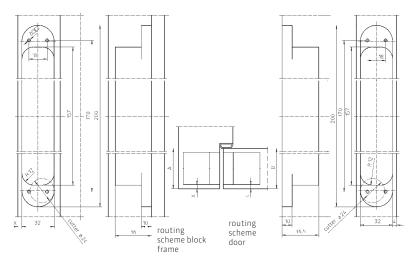
B = Thickness of door leaf resp. 1st door rebate

A – B + 4 = Measure X

The result has to be a measure between 4.0 mm and max. 6.0 mm. (Steel frame: X = 5.0 mm)

Conduct routing with cutter  $\emptyset$  24 mm, collar ring  $\emptyset$  30 mm and universal milling frame with template No. 5 250547 6.





# TE 540 3D / TE 540 3D FR

**CALCULATION FORMULAS** 

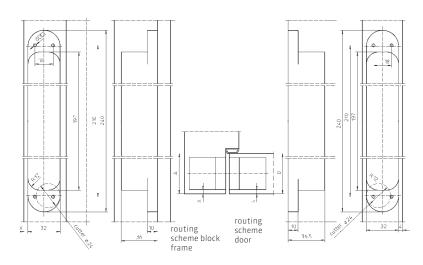
A = Depth of frame rebate up to sealing

B = Thickness of door leaf resp. 1st door rebate

A – B + 4 = Measure X

The result has to be a measure between 4.0 mm and max. 6.0 mm. (Steel frame: X = 5.0 mm)

Conduct routing with cutter Ø 24 mm, collar ring Ø 30 mm and universal milling frame with template No. 5 250680 5 (Step 1) and template No. 5 250681 5 (Step 2).



# TE 640 3D / TE 640 3D FR

CALCULATION FORMULAS

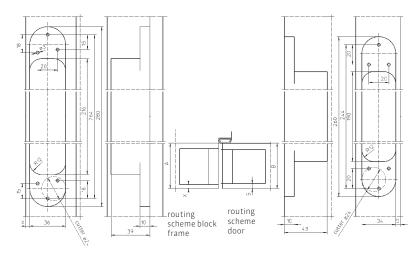
A = Depth of frame rebate up to sealing

B = Thickness of door leaf resp. 1st door rebate

A - B + 4 = Measure X

The result has to be a measure between 4.0 mm and max. 6.0 mm. (Steel frame: X = 5.0 mm)

Conduct routing with cutter  $\emptyset$  24 mm, collar ring  $\emptyset$  30 mm and universal milling frame with template No. 5 250659 5 (Step 1) and template No. 5 250689 5 (Step 2).



### TE 645 3D

CALCULATION FORMULAS

A = Depth of frame rebate up to sealing

B = Thickness of door leaf resp. 1st door rebate

A - B + 4 = Measure X

The result has to be a measure between 4.0 mm and max. 6.0 mm. (Steel frame: X = 5.0 mm)

Conduct routing with cutter  $\emptyset$  24 mm, collar ring  $\emptyset$  30 mm and universal milling frame with template No. 5 250945 5 (frame, step 1), template No. 5 250946 5 (frame, Step 2), template No. 5 250947 5 (door, step 1) and template No. 5 250948 5 (door, step 2).

# TE 540 3D Energy

(exemplary illustration)

**CALCULATION FORMULAS** 

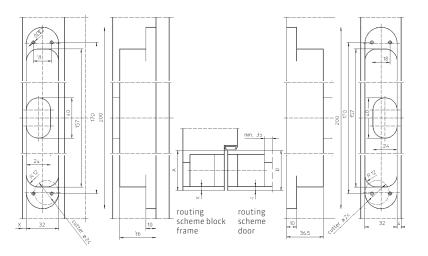
A = Depth of frame rebate up to sealing

B = Thickness of door leaf resp. 1st door rebate

A - B + 4 = Measure X

The result has to be a measure between 4.0 mm and max. 6.0 mm. (Steel frame: X = 5.0 mm)

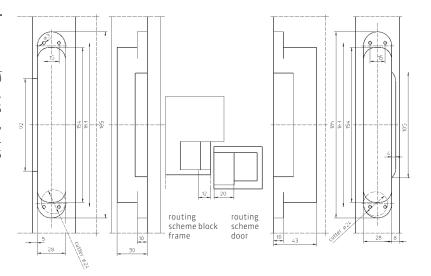
Conduct routing with cutter Ø 24 mm, collar ring Ø 30 mm and universal milling frame with template No. 5 250680 5 (step 1), template No. 5 250681 5 (step 2) and template No. 5 250939 5 (additional routing Energy).



# TE 541 3D FVZ

**ROUTING DATA** 

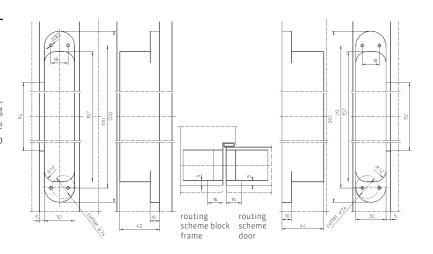
Conduct routing with cutter  $\emptyset$  24 mm, collar ring  $\emptyset$  30 mm and universal milling frame with template No. 5 250942 5 (frame, step 1), template No. 5 250943 5 (frame, step 2), template No. 5 250682 5 (frame, step 3), template No. 5 250942 5 (door, step 1), template No. 5 250943 5 (door, step 2) and template No. 5 250944 5 (door, Step 3).

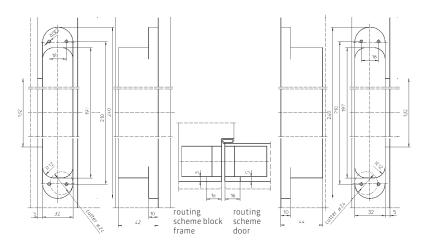


# TE 540 3D A8 / TE 540 3D A8 FR

ROUTING DATA

Conduct routing with cutter Ø 24 mm, collar ring Ø 30 mm and universal milling frame with template No. 5 250680 5 (Step 1), template No. 5 250681 5 (Step 2) and template No. 5 250682 5 (Step 3).

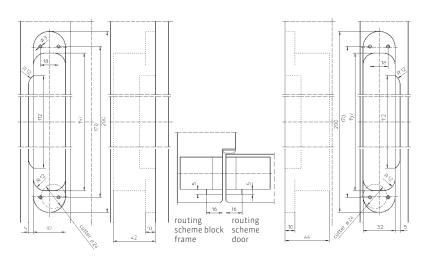




# TE 640 3D A8 / TE 640 3D A8 FR

ROUTING DATA

Conduct routing with cutter Ø 24 mm, collar ring Ø 30 mm and universal milling frame with template No. 5 250659 5 (Step 1), template No. 5 250689 5 (Step 2) and template No. 5 250690 5 (Step 3).



# TE 540 3D A8 (without cladding)

ROUTING DATA

Conduct routing with cutter Ø 24 mm, collar ring Ø 30 mm and universal milling frame with template No. 5 250680 5 (Step 1), template No. 5 250681 5 (Step 2) and template No. 5 250687 5 (Step 3).

34 | TECTUS®

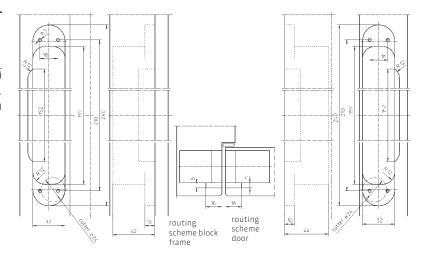
### **SIMONSWERK**

# **TECTUS®**

# TE 640 3D A8 (without cladding)

ROUTING DATA

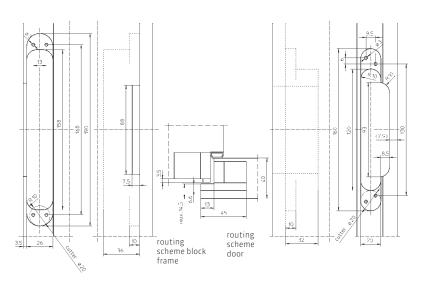
Conduct routing with cutter  $\emptyset$  24 mm, collar ring  $\emptyset$  30 mm and universal milling frame with template No. 5 250659 5 (Step 1), template No. 5 250689 5 ((Step 2) and template No. 5 250688 5 (Step 3).



# TE 380 3D

ROUTING DATA

Conduct routing with cutter Ø 20 mm, collar ring Ø 30 mm and universal milling frame with template No. 5 250955 5 (frame, step 1), template No. 5 250956 5 (frame, step 2), template No. 5 250957 5 (frame, step 3), template No. 5 250958 5 (door, step 1) and template No. 5 250959 5 (door, step 2).



# 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.

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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.

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| topic                             | ٥ |

# scope of application

- heavy-duty door
- nesidential door
- o entrance door
- window
- metalworking

# function range

- ☐ finger protection
- fire resistance, smoke resistance
- soundproof
- burglar resistance

# product type

- ) hinge
- O cover angle
- accessories
- receiver

# type of door

- o timber
- metal
- O glass
- O PVCu
- aluminium

### rebate

- nebated
- orebated flus
- unrebated

# **SIMONSWERK**

### **CONTAINS**

| TE 240 3D | TECTUS® Energy  |
|-----------|-----------------|
| TE 340 3D | TECTUS® FVZ     |
| TE 526 3D | TECTUS® A8      |
| TE 527 3D | TECTUS® FR      |
| TE 540 3D | TECTUS® rebated |
| TE 640 3D |                 |
| TE 645 3D |                 |

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