TECTUS®
The completely concealed hinge system
# TECTUS® – The completely concealed hinge system

## Model versions from 40 to 300 kg

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TE 240 3D</td>
<td>40 kg</td>
<td>for unrebated and rebated flush residential doors</td>
</tr>
<tr>
<td>TE 340 3D</td>
<td>80 kg</td>
<td>for unrebated residential and heavy-duty doors</td>
</tr>
<tr>
<td>TE 526 3D</td>
<td>120 kg</td>
<td>made of solid stainless steel for unrebated heavy-duty doors</td>
</tr>
<tr>
<td>TE 527 3D</td>
<td>120 kg</td>
<td>made of solid steel for unrebated heavy-duty doors</td>
</tr>
<tr>
<td>TE 540 3D</td>
<td>120 kg</td>
<td>for unrebated heavy-duty doors</td>
</tr>
<tr>
<td>TE 640 3D</td>
<td>200 kg</td>
<td>for unrebated high performance heavy-duty doors</td>
</tr>
<tr>
<td>TE 645 3D</td>
<td>300 kg</td>
<td>for unrebated high performance heavy-duty doors</td>
</tr>
</tbody>
</table>

## Model versions for specific scope of applications

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TECTUS® Energy</td>
<td></td>
<td>with permanent energy transfer</td>
</tr>
<tr>
<td>TE 541 3D FVZ</td>
<td>100 kg</td>
<td>for unrebated residential and heavy-duty doors with recessed frame facings</td>
</tr>
<tr>
<td>TECTUS® A8</td>
<td>60 kg</td>
<td>for unrebated heavy-duty doors with claddings up to 8 mm</td>
</tr>
<tr>
<td>TECTUS® FR</td>
<td></td>
<td>Fire rated with integrated intumescent kit</td>
</tr>
<tr>
<td>TE 380 3D</td>
<td>60 kg</td>
<td>for rebated residential doors</td>
</tr>
</tbody>
</table>

## Fixing plates and receivers

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TE ... 3D FZ</td>
<td>Fixing plate for residential and heavy-duty doors on casing frames</td>
</tr>
<tr>
<td>TE ... 3D SZ</td>
<td>Receiver for residential and heavy-duty doors on steel frames</td>
</tr>
</tbody>
</table>

## Assembly

28

## Routing data

30

## Service

35
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.
A FULL RANGE OF CONCEALED HINGES

For applications ranging from high-quality interior doors to heavy sound-proof 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**
Load capacity up to 40 kg

**TE 340 3D**
Load capacity up to 80 kg

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Versions for special applications from page 14.
TEC TUS® | 5

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
TE 240 3D
for unrebed and rebated flush residential doors

Hinge | up to 40 kg

Product features
- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebed 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: 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 F2/Z
Steel frame TE 240 3D S2

Installation Tools
Jig Universal milling frame
Frame Template No. 5 250691 6
Door Template No. 5 250692 6

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

Classification key
| 2 | 7 | 2 | 0 | 1 | * | 0 | 7 |

*depending on the finish
**TE 340 3D**

for unrebated residential and heavy-duty doors

| Hinge | 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**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load capacity</td>
<td>80.0 kg</td>
</tr>
<tr>
<td>Overall length</td>
<td>160.0 mm</td>
</tr>
<tr>
<td>Width (frame)</td>
<td>28.0 mm</td>
</tr>
<tr>
<td>Width (door)</td>
<td>28.0 mm</td>
</tr>
<tr>
<td>Cutter diameter</td>
<td>24.0 mm</td>
</tr>
<tr>
<td>Opening angle</td>
<td>180°</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Casing frame</th>
<th>TE 340 3D FZ/1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel frame</td>
<td>TE 340 3D SZ</td>
<td></td>
</tr>
</tbody>
</table>

**Installation Tools**

<table>
<thead>
<tr>
<th>Step</th>
<th>Template</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No. 5 250693.5</td>
<td>Universal milling frame</td>
</tr>
<tr>
<td>2</td>
<td>No. 5 250694.5</td>
<td></td>
</tr>
</tbody>
</table>

**Functional areas**

Fire resistance, Smoke resistance, Burglar resistance

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

**Classification key**

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

*depending on the finish*
TE 526 3D
made of solid stainless steel for unrebated heavy-duty doors

| Hinge | 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

**Technical Data**
- Load capacity: 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: TE 526 3D FZ/1
- 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**
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: 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
The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m).
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

Technical Data
- Load capacity: 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 S
- Step 2: Template No. 5 250681 S

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 (1x2 m).

Classification key

<table>
<thead>
<tr>
<th>4</th>
<th>7</th>
<th>6</th>
<th>1</th>
<th>1</th>
<th>*</th>
<th>1</th>
<th>13</th>
</tr>
</thead>
</table>

*depending on the finish
TE 640 3D
for unrebated high performance heavy-duty doors

Hinge | up 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 | 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

<table>
<thead>
<tr>
<th>Jig</th>
<th>Universal milling frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>Template</td>
</tr>
<tr>
<td>Step 2</td>
<td>Template</td>
</tr>
</tbody>
</table>

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).

Classification key

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

*depending on the finish
TE 645 3D
for unrebated high performance heavy-duty doors

Hinge

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

Technical Data

| Load capacity | 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 S |
| Frame, Step 2 | Template | No. 5 250946 S |
| Door, Step 1 | Template | No. 5 250947 S |
| Door, Step 2 | Template | No. 5 250948 S |

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).

Classification key

4 7 9 1 1 4 1 16
MUSIC THEATRE LINZ
ARCHITECT: Terry Pawson, London
SIMONSWERK: TECTUS® TE 640 3D, TECTUS® TE 640 3D Energy
TECTUS® VERSIONS FOR SPECIAL APPLICATIONS

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
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)

**FLAT RIBBON CABLE**
- 16-wire ribbon cable
- integrated permanent energy transfer
- entirely enclosed in the housing (closed system)

**CLIP**
- secure connection between cable and hinge housing
- high functional reliability and fitness for purpose thanks to a 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.
**TECTUS Energy**

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

<table>
<thead>
<tr>
<th>Hinge</th>
<th>Energy transfer</th>
<th>40 – 300 kg</th>
</tr>
</thead>
</table>

**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 mm²
- Max. voltage: 50 V (voltage source acc. SELV DIN EN 61140)
- Max. current: 0.8 A (per wire)
- Opening angle: 180°

**Finish**
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
  - Round cable: 16 x 0.8 A power universal use for all applications cable lengths 3 m or 10 m torsion-proof and snap-fitting connection system
  - Universal adapter: 3 x 3.2 A and 4 x 0.8 A power for direct connection of different power collectors torsion-proof and snap-fitting connection system
  - Adapter 1: 3 x 3.2 A and 4 x 0.8 A power special adapter for connecting FUHR motor locks plug-and-play version torsion-proof and snap-fitting connection system

**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). 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 120 kg
- TE 640 3D A8 Energy: Load capacity up to 160 kg

Detailed information in our PRODUCTSELECTOR at www.simonswerk.com
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.

Load capacity of up to 100 kg for a 14-mm-recessed frame facing
for a surrounding wall without a visible frame
TE 541 3D FVZ
for unrebated residential and heavy-duty doors with recessed frame facings

Hinge

| Load capacity | 2 hinges per door leaf (1x2m) | 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: 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
- Combination: TE 541 3D FVZ SZ

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

Functional areas
- Fire resistance, Smoke resistance, Soundproof

Note
- 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 * 0 12

*depending on the finish
“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.
TECTUS A8
for unrebat ed heavy-duty doors with claddings up to 8 mm

**Hinge**

| Hinge | 100 – 160 kg |

**Product features**
- claddings up to 8 mm
- completely concealed hinge system
- for timber, steel or aluminium frames
- for unrebat ed 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

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

**Combination**
- *e.g. TE 540 3D A8*  
- *e.g. TE 540 3D A8*  
- *e.g. TE 540 3D A8*

**Functional areas**
- Fire resistance, Smoke resistance, Soundproof, Burglar resistance

**Note**

1. 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 |

*depending on the finish

**Available options**
- TE 540 3D A8 Load capacity up to 100 kg
- TE 640 3D A8 Load capacity 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.
TECTUS FR
with integrated intumescent kit for unrebated heavy-duty doors

<table>
<thead>
<tr>
<th>Hinge</th>
<th>Fire resistance</th>
<th>80 – 200 kg</th>
</tr>
</thead>
</table>

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

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

Combination

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Casing frame</th>
<th>Steel frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>TE 3D FZ/1</td>
<td>TE 3D SZ</td>
<td></td>
</tr>
</tbody>
</table>

Functional areas
Fire resistance, Smoke resistance, Soundproof, Burglar resistance

Note
1. 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 | 13 |

*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
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.
TE 380 3D
for rebated residential doors

<table>
<thead>
<tr>
<th>Hinge</th>
<th>up to 60 kg</th>
</tr>
</thead>
</table>

**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**

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load capacity</td>
<td>2 hinges per door leaf (1x2m) 60.0 kg</td>
</tr>
<tr>
<td>Overall length</td>
<td>190.0 mm</td>
</tr>
<tr>
<td>Width (frame)</td>
<td>26.0 mm</td>
</tr>
<tr>
<td>Width (door)</td>
<td>20.0 mm</td>
</tr>
<tr>
<td>Cutter diameter</td>
<td>20.0 mm</td>
</tr>
<tr>
<td>Opening angle</td>
<td>180°</td>
</tr>
</tbody>
</table>

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

**Combination**

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Casing frame TE 380 3D FZ/1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel frame</td>
<td>TE 380 3D SZ</td>
</tr>
</tbody>
</table>

**Installation Tools**

<table>
<thead>
<tr>
<th>Tool</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal milling frame</td>
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<td>Frame, Step 1: Template 1</td>
<td>No. 5 250955.5</td>
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<td>Frame, Step 2: Template 2</td>
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<td>Frame, Step 3: Template 3</td>
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<td>Door, Step 1: Template 4</td>
<td>No. 5 250958.5</td>
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<tr>
<td>Door, Step 2: Template 5</td>
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**Note**
The load capacity mentioned above refers to the use of 2 hinges per door leaf (1 x 2 m).
Fixing plate TECTUS TE ... 3D FZ
for residential and heavy-duty doors with casing frames

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Casing frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finish</td>
<td>galvanised</td>
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Combination

Hinge

<table>
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<th>Hinge</th>
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<tr>
<td>with permanent energy transfer</td>
<td>TE 240 3D Energy</td>
</tr>
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<td>TE 340 3D Energy</td>
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<tr>
<td></td>
<td>TE 526 3D Energy</td>
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<tr>
<td></td>
<td>TE 540 3D Energy</td>
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<tr>
<td></td>
<td>TE 640 3D Energy</td>
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<tr>
<td></td>
<td>TE 540 3D A8 Energy</td>
</tr>
<tr>
<td></td>
<td>TE 640 3D A8 Energy</td>
</tr>
<tr>
<td>with intumescent kit</td>
<td>TE 340 3D FR</td>
</tr>
<tr>
<td></td>
<td>TE 540 3D FR</td>
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<tr>
<td></td>
<td>TE 640 3D FR</td>
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<tr>
<td></td>
<td>TE 540 3D A8 FR</td>
</tr>
<tr>
<td></td>
<td>TE 640 3D A8 FR</td>
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</tbody>
</table>

Note
Spacers for casing strengths 22-28 mm are included.
Please specify the exact hinge in your order.
**Receiver TECTUS TE ... 3D SZ**  
for residential and heavy-duty doors with steel frames

<table>
<thead>
<tr>
<th>Receiver</th>
<th>Steel frame</th>
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</thead>
<tbody>
<tr>
<td><strong>Finish</strong></td>
<td>galvanised, untreated/raw stainless steel</td>
</tr>
<tr>
<td><strong>Combination</strong></td>
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<tr>
<td>Hinge</td>
<td>TE 205 3D</td>
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<td>TE 240 3D</td>
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<td>TE 305 3D</td>
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<td>TE 541 3D FVZ</td>
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<tr>
<td></td>
<td>TE 640 3D A8</td>
</tr>
<tr>
<td></td>
<td>with permanent energy transfer</td>
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<tr>
<td></td>
<td>TE 240 3D Energy</td>
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<td></td>
<td>TE 340 3D Energy</td>
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<td>TE 526 3D Energy</td>
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<td>TE 540 3D Energy</td>
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<td>TE 640 3D Energy</td>
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<td>TE 645 3D Energy</td>
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<td>TE 540 3D AB Energy</td>
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<td></td>
<td>TE 640 3D AB Energy</td>
</tr>
<tr>
<td></td>
<td>with intumescent kit</td>
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<tr>
<td></td>
<td>TE 340 3D FR</td>
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<td>TE 540 3D FR</td>
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<tr>
<td></td>
<td>TE 640 3D FR</td>
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<tr>
<td></td>
<td>TE 540 3D A8 FR</td>
</tr>
<tr>
<td></td>
<td>TE 640 3D A8 FR</td>
</tr>
</tbody>
</table>

**Note**  
Please specify the exact hinge in your order.
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 Ø (TE 240 3D cutter 16 mm Ø) and collar ring 30 mm Ø. Affix frame part with enclosed wood screws (5 mm Ø).

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

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Side</td>
<td>+/- 3.0 mm</td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td>+/- 3.0 mm</td>
<td></td>
</tr>
<tr>
<td>Depth</td>
<td>+/- 1.0 mm</td>
<td></td>
</tr>
</tbody>
</table>

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**

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

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**

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

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 250547 6.
**TECTUS®**

**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 Ø 24 mm, collar ring Ø 30 mm and universal milling frame with template No. 5 250659 5 (frame, step 1), template No. 5 250689 5 (frame, Step 2), template No. 5 250947 5 (door, step 1) and template No. 5 250948 5 (door, 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 Ø 24 mm, collar ring Ø 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).
TECTUS®

TE 540 3D Energy
(exemplary illustration)

CALCULATION FORMULAS

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

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 \( \varnothing \) 24 mm, collar ring \( \varnothing \) 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 \( \varnothing \) 24 mm, collar ring \( \varnothing \) 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 \( \varnothing \) 24 mm, collar ring \( \varnothing \) 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).
TE 640 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. S 250659 5 (Step 1), template No. S 250689 5 (Step 2) and template No. S 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. S 250955 5 (frame, step 1), template No. S 250956 5 (frame, step 2), template No. S 250957 5 (frame, step 3), template No. S 250958 5 (door, step 1) and template No. S 250959 5 (door, step 2).
SERVICE – COMPREHENSIVE EXPERTISE FOR YOUR DAILY WORK

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<table>
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