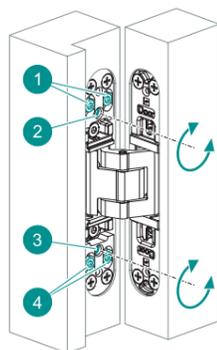


Zubehör / Accessories / Accessoires / Accesorios		BZ	FZ
5 250930 0 <b>DE</b> Universalfräsrahmen / <b>EN</b> Universal milling frame / <b>FR</b> Cadre de fraisage universel / <b>ES</b> Marco universal de fresado		■	■
5 250693 5 <b>DE</b> Frässchablone Stufe 1 / <b>EN</b> Milling template level 1 / <b>FR</b> Gabarit de fraisage niveau 1 / <b>ES</b> Plantilla de fresado nivel 1		■	■
5 250694 5 <b>DE</b> Frässchablone Stufe 2 / <b>EN</b> Milling template level 2 / <b>FR</b> Gabarit de fraisage niveau 2 / <b>ES</b> Plantilla de fresado nivel 2		■	■

**i** Fräsdaten im Produktselektor / Milling data in the product selector / Données de fraisage dans le sélecteur de produits / Datos de fresado en el selector de productos: [www.simonswerk.com](http://www.simonswerk.com)

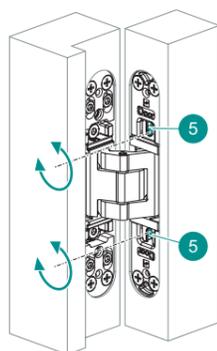
**3D-Verstellung / 3D adjustment / Réglage 3D / Ajuste 3D** » BZ | FZ | SZ | AZ



**Höhenverstellung / Height adjustment / Réglage vertical / Regulación de altura:**

**DE** 1 und 4 mit ¼ Umdrehung lösen > 2 zurückdrehen > mit 3 den Türflügel in passende Position bringen > 1 fest anziehen (8 Nm) > 3 entlasten > 4 fest anziehen (8 Nm). Die Bänder nur gleichmäßig verstellen!  
**EN** Loosen 1 and 4 with ¼ turn > turn 2 in opposite direction > take the door part to the correct position with 3 > tighten 1 (8 Nm) > relieve 3 > tighten 4 (8 Nm). Adjust the hinges uniformly!

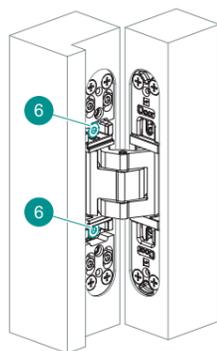
**FR** Desserrer 1 et 4 de ¼ de tour > 2 tourner dans l'autre sens > avec 3 placer la porte dans la position appropriée > 1 bien serrer (8 Nm) > 3 décharger > 4 bien serrer (8 Nm). Régler uniformément les paumelles!  
**ES** Afloje 1 y 4 con un ¼ de vuelta > gire 2 en la dirección opuesta > con 3 ajuste la hoja de la puerta a la posición deseada > apriete 1 (8 Nm) > afloje ligeramente 3 > apriete 4 (8 Nm). Las bisagras se deben ajustar de manera uniforme.



**Seitenverstellung / Side adjustment / Réglage latéral / Ajuste lateral:**

**DE** Mit 5 gleichmäßig den Türflügel in die passende Position bringen. Das Band-Flügelteil darf nicht vorstehen!  
**EN** Take the door part to the correct position uniformly with 5. The hinge door part must not protrude!

**FR** Avec 5, placer uniformément la porte en position appropriée. La partie d'ouvrant de la paumelle ne doit pas saillir!  
**ES** Con 5 ajuste uniformemente la hoja de la puerta hasta alcanzar la posición deseada. La parte de la bisagra para la puerta no debe sobresalir del cuerpo de la bisagra.



**Andruckverstellung / Depth adjustment / Réglage de la compression de joint / Ajuste de profundidad:**

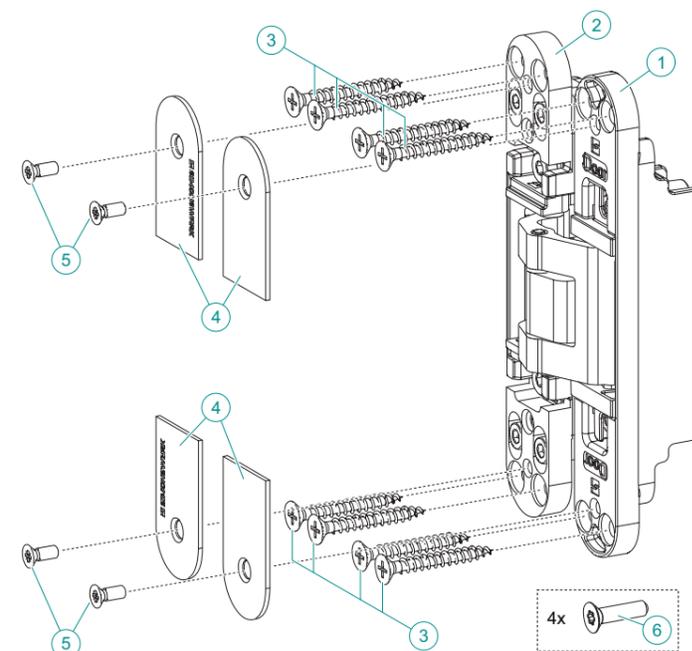
**DE** 6 leicht lösen > den Türflügel gleichmäßig in passenden Andruck bringen > 6 fest anziehen (8 Nm).  
**EN** Slightly loosen 6 > take the door part into the correct depth uniformly > tighten 6 (8 Nm).

**FR** Desserrer 6 légèrement > placer la porte uniformément à la bonne compression > 6 bien serrer (8 Nm).  
**ES** Afloje 6 ligeramente > ajuste uniformemente la hoja de la puerta hasta alcanzar la profundidad necesaria > apriete 6 (8 Nm).

<b>DE</b> Montageanleitung	<b>EN</b> Assembly instructions	<b>FR</b> Instructions de montage	<b>ES</b> Instrucciones de montaje
Nur für Fachpersonal!	Only for specialist personnel!	Uniquement pour le personnel spécialisé !	¡Sólo para personal especializado!

**TECTUS TE 340 3D**

<b>DE</b> Bandsystem für ungefälzte Wohnraum-/ Objektüren	<b>EN</b> Hinge system for unrebated residential/heavy-duty doors	<b>FR</b> Système de paumelle pour portes d'intérieur/de locaux industriels sans feuillure	<b>ES</b> Sistema de bisagras para puertas para proyectos y puertas de paso no solapadas
---	---	--	--



**Belastungswert / Load capacity / Valeur de charge / Valor de carga**

< 80 kg

**3D-Verstellung / 3D adjustment / Réglage 3D / Ajuste 3D**

±3 mm    ±3 mm    ±1 mm

**Lieferumfang / Scope of supply / Livraison / Material incluido**

<b>DE</b> Bandsystem / <b>EN</b> Hinge system / <b>FR</b> Système de paumelle / <b>ES</b> Sistema de bisagras			
1x			1 2 4
8x	5x40 mm	+	3
4x	M4x10 mm	+	5
4x	M5x20 mm	+	6

**Notwendiges Werkzeug / Tools required / Outil nécessaire / Herramienta necesaria**



**i Hinweise**

**DE** Technische Informationen auf Webseite oder im Produktkatalog berücksichtigen.  
Für passgenauen Sitz des Bandes bei verwendeter Materialart wird eine Probefräsung empfohlen.  
Belastungswert bezieht sich auf Verwendung von 2 Bändern pro Türflügel von 1 x 2 m.  
**Band niemals ölen, es kann dadurch beschädigt werden! Band ist wartungsfrei.**

**i Notes**

**EN** Observe technical information on the website or in the product catalogue.  
A trial milling is recommended for the correct fit of the hinge on the material type used.  
Load capacity refers to the use of 2 hinges per door part of 1 x 2 m.  
**Never oil the hinge, this can result in damage! The hinge does not need maintenance.**

**i Consignes**

**FR** Tenir compte des informations techniques figurant sur le site Internet ou dans le catalogue de produits.  
Pour un positionnement précis de la paumelle, nous vous conseillons de procéder à un fraisage d'essai sur le type de matériau utilisé.  
Les charges sont indiqués sur une base de deux paumelles pour une porte de 1 x 2 m.  
**Ne jamais graisser la paumelle, elle risque de s'endommager ! La paumelle ne nécessite aucun entretien.**

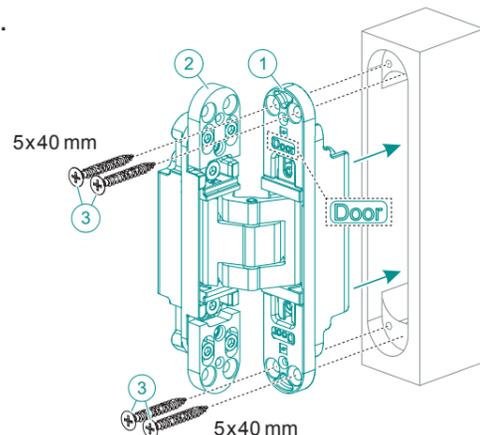
**i Notas**

**ES** Tenga en cuenta las informaciones técnicas que se encuentran en la página web o en el catálogo de productos.  
Se recomienda utilizar una plantilla de fresado para ajustar perfectamente las bisagras en el material utilizado.  
Los valores de carga hacen referencia al uso de 2 bisagras por hoja de puerta de 1 x 2 m.  
**¡No engrase nunca las bisagras, ya que pueden sufrir daños! Las bisagras no precisan de mantenimiento.**

Montage / Assembly / Montage / Montaje

Blockzarge / Block frame / Bloc porte / Marco macizo

1.



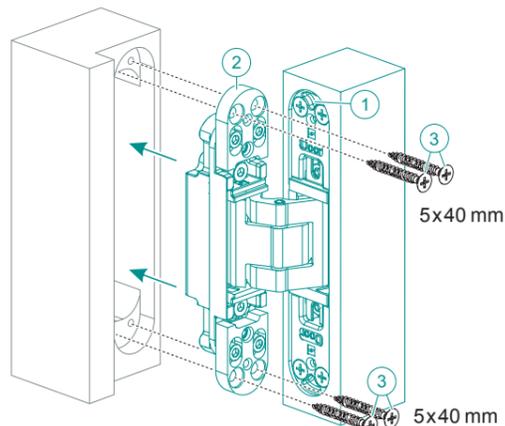
**DE** Das Band-Flügelteil ① in den Türflügel einsetzen, den Türflügel vorbohren und das Band-Flügelteil mit den 4 Schrauben ③ befestigen.

**EN** Insert the hinge door part ① into the door part, pre-drill the door part and fix the hinge door part with the 4 screws ③.

**FR** Placer la partie d'ouvrant de la paumelle ① dans la porte, percer un avant-trou dans la porte et fixer la partie d'ouvrant de la paumelle avec les 4 vis ③.

**ES** Coloque la parte de la bisagra para la puerta ① en la hoja, realice las perforaciones en la hoja y fije la parte de la bisagra para la puerta con los 4 tornillos ③.

2.



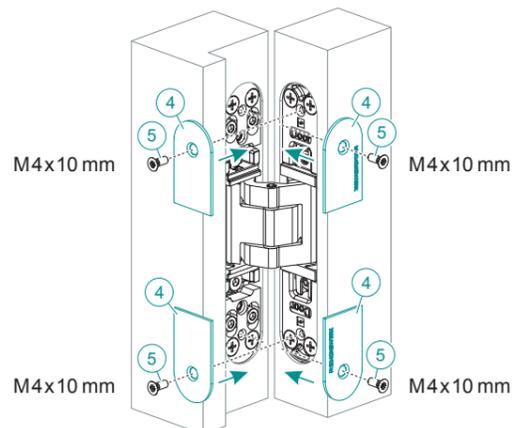
**DE** Das Band-Rahmenteil ② in die Zarge einsetzen, die Zarge vorbohren und das Band-Rahmenteil mit den 4 Schrauben ③ befestigen.

**EN** Insert the hinge frame part ② into the frame, pre-drill the frame and fix the hinge frame part with the 4 screws ③.

**FR** Placer la partie dormant de la paumelle ② dans l' huisserie, percer un avant-trou dans l' huisserie et fixer la partie dormant de la paumelle avec les 4 vis ③.

**ES** Coloque la parte de la bisagra para el marco ② en el marco, realice las perforaciones en el marco y fije la parte de la bisagra del marco con los 4 tornillos ③.

3.



**DE** Die 4 Abdeckplättchen ④ mit den Schrauben ⑤ auf dem Band befestigen.

**EN** Fix the 4 small cover plates ④ with the screws ⑤ on the hinge.

**FR** Fixer les 4 plaquettes de recouvrement ④ avec les vis ⑤ sur la paumelle.

**ES** Fije las 4 placas embellecedoras ④ con los tornillos ⑤ en la bisagra.

4.

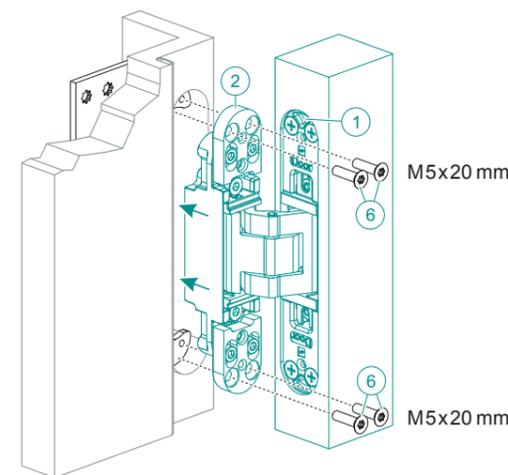
**DE** Nach der Montage alle Klemm- und Befestigungsschrauben auf festen Sitz überprüfen!

**EN** After assembly, check all clamping and fixing screws for tight fit!

**FR** Après le montage, vérifier que toutes les vis de serrage et de fixation sont bien serrées.

**ES** Una vez finalizado el montaje, compruebe que los tornillos de apriete y de fijación estén correctamente apretados.

Holzfutterzarge / Wooden casing frame / Ebrasement chambranle / Marco hueco de madera



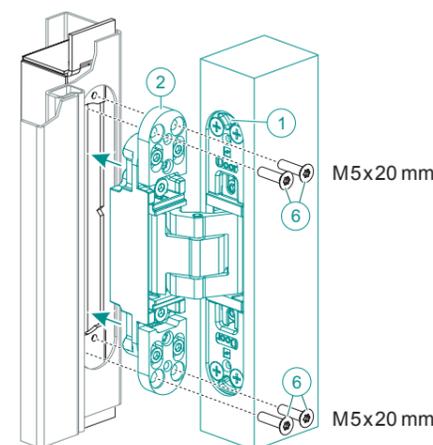
**DE** TE 340 3D FZ rückseitig an der Zarge verschrauben. Je nach Zargenkonstruktion beiliegende Distanzplättchen verwenden. Das Band-Rahmenteil ② mit den 4 Schrauben ⑥ an TE 340 3D FZ befestigen (8 Nm).

**EN** Screw the TE 340 3D FZ on the frame to the rear. Use the small spacer plates supplied depending on the frame construction. Fix the hinge frame part ② with the 4 screws ⑥ to the TE 340 3D FZ (8 Nm).

**FR** Visser la face arrière du TE 340 3D FZ à la huisserie. Utiliser les pièces d'écartement incluses en fonction des éléments d' huisserie. Fixer la partie dormant de la paumelle ② avec les 4 vis ⑥ à TE 240 3D FZ (8 Nm).

**ES** Atornille el TE 340 3D FZ en la parte trasera del marco. En función del diseño del marco, utilice los distanciadores suministrados. Fije la parte de la bisagra para el marco ② con los 4 tornillos ⑥ en el TE 340 3D FZ (8 Nm).

Stahlzarge / Steel frame / Huisserie métallique / Marco de acero



**DE** Die Stahlzarge muss mit TE 340 3D SZ ausgestattet sein. Das Band-Rahmenteil ② mit den 4 Schrauben ⑥ an TE 340 3D SZ befestigen (8 Nm).

**EN** The steel frame must be equipped with TE 340 3D SZ. Fix the hinge frame part ② with the 4 screws ⑥ to the TE 340 3D SZ (8 Nm).

**FR** La huisserie métallique doit être équipée de TE 340 3D SZ. Fixer la partie dormant de la paumelle ② avec les 4 vis ⑥ à TE 340 3D SZ. (8 Nm).

**ES** El marco de acero se debe equipar con TE 340 3D SZ. Fije la parte de la bisagra para el marco ② con los 4 tornillos ⑥ en el TE 340 3D SZ (8 Nm).

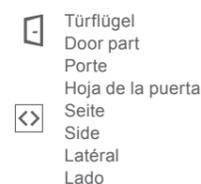
Aluminiumzarge / Aluminum frame / Huisserie en aluminium / Marco de aluminio

**DE** Befestigung an der Aluminiumzarge mit dem Aufnahmeelement des Zargenherstellers.

**EN** Fixing to the aluminum frame with the receiver of the frame manufacturer.

**FR** Fixation à l' huisserie en aluminium avec le carter de réception du fabricant de l' huisserie.

**ES** Fijación al marco de aluminio con el elemento de alojamiento del fabricante del marco.



Türflügel  
Door part  
Porte  
Hoja de la puerta  
Seite  
Side  
Latéral  
Lado



Höhe  
Height  
Hauteur  
Altura  
Andruck  
Depth  
Compresion  
Profundidad



Innensechskant  
Hexagon socket  
Six pans creux  
Llave Allen  
Kreuz  
Cross joint  
Cruciforme  
Tornillo de estrella  
TORX®



BZ Blockzarge  
Block frame  
Bloc porte  
Marco macizo  
FZ Holzfutterzarge  
Wooden casing frame  
Ebrasement chambranle  
Marco hueco de madera



SZ Stahlzarge  
Steel frame  
Huisserie métallique  
Marco de acero  
AZ Aluminiumzarge  
Aluminum frame  
Huisserie en aluminium  
Marco de aluminio

**DE** Verstellhinweise

Nur für Fachpersonal!

**EN** Adjustment instructions

Only for specialist personnel!

**FR** Notice de réglages

Uniquement pour le personnel spécialisé !

**ES** Instrucciones de regulación

¡Sólo para personal especializado!

## TECTUS TE 340 3D

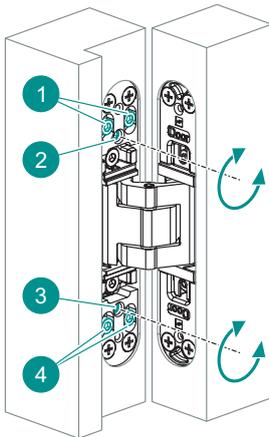
**DE** Bandsystem für ungefälzte Wohnraum-/ Objektüren

**EN** Hinge system for unrebated residential/heavy-duty doors

**FR** Système de paumelle pour portes d'intérieur/de locaux industriels sans feuillure

**ES** Sistema de bisagras para puertas para proyectos y puertas de paso no solapadas

### 3D-Verstellung / 3D adjustment / Réglage 3D / Ajuste 3D



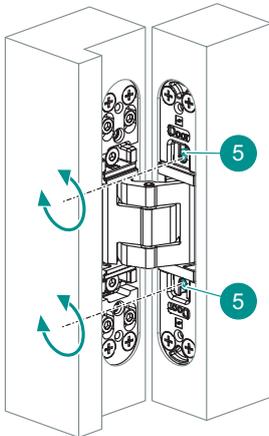
**◇** Höhenverstellung / Height adjustment / Réglage vertical / Regulación de altura:

**DE** ① und ④ mit ¼ Umdrehung lösen > ② zurückdrehen > mit ③ den Türflügel in passende Position bringen > ① fest anziehen (8 Nm) > ③ entlasten > ④ fest anziehen (8 Nm). Die Bänder nur gleichmäßig verstellen!

**EN** Loosen ① and ④ with ¼ turn > turn ② in opposite direction > take the door part to the correct position with ③ > tighten ① (8 Nm) > relieve ③ > tighten ④ (8 Nm). Adjust the hinges uniformly!

**FR** Desserrer ① et ④ de ¼ de tour > ② tourner dans l'autre sens > avec ③ placer la porte dans la position appropriée > ① bien serrer (8 Nm) > ③ décharger > ④ bien serrer (8 Nm). Régler uniformément les paumelles !

**ES** Afloje ① y ④ con un ¼ de vuelta > gire ② en la dirección opuesta > con ③ ajuste la hoja de la puerta a la posición deseada > apriete ① (8 Nm) > afloje ligeramente ③ > apriete ④ (8 Nm). Las bisagras se deben ajustar de manera uniforme.



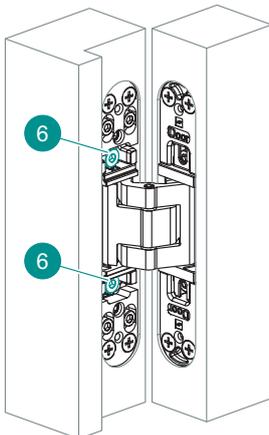
**<>** Seitenverstellung / Side adjustment / Réglage latéral / Ajuste lateral:

**DE** Mit ⑤ gleichmäßig den Türflügel in die passende Position bringen. Das Band-Flügelteil darf nicht vorstehen!

**EN** Take the door part to the correct position uniformly with ⑤. The hinge door part must not protrude!

**FR** Avec ⑤, placer uniformément la porte en position appropriée. La partie d'ouvrant de la paumelle ne doit pas saillir !

**ES** Con ⑤ ajuste uniformemente la hoja de la puerta hasta alcanzar la posición deseada. La parte de la bisagra para la puerta no debe sobresalir del cuerpo de la bisagra.



**□** Andruckverstellung / Depth adjustment / Réglage de la compression de joint / Ajuste de profundidad:

**DE** ⑥ leicht lösen > den Türflügel gleichmäßig in passenden Andruck bringen > ⑥ fest anziehen (8 Nm).

**EN** Slightly loosen ⑥ > take the door part into the correct depth uniformly > tighten ⑥ (8 Nm).

**FR** Desserrer ⑥ légèrement > placer la porte uniformément à la bonne compression > ⑥ bien serrer (8 Nm).

**ES** Afloje ⑥ ligeramente > ajuste uniformemente la hoja de la puerta hasta alcanzar la profundidad necesaria > apriete ⑥ (8 Nm).

# GENERAL INFORMATION

Regarding hinge load values  
Reference value **80 kg / 176 lbs.**

## Overview of load values for hinges

The following table provides an overview of the maximum load value for the individual hinge type, taking the interaction of width and height of the door as well as the hinge spacing into account.

The reference load carrying capacity is based on a height / width ratio of 2:1. For example, assuming a reference value with door leaf dimensions of 1000 x 2000 mm (39.370" x 78.740") (W x H), a positioning of 250 mm / 10" from the top and 250 mm / 10" from the bottom to the center of each hinge is required.

For required number of hinges and hinge spacing refer to door manufacturer recommendation.

Values represent hinges positioned 250 mm / 10" from the top and 250 mm / 10" from the bottom to center of each hinge.

**Green:** load value = reference value. **Orange:** load value < reference value.

	>2743 / 108	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178
	2591 / 102	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178
	2438 / 96	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	78 / 171
→ Door panel height in mm / inch	2388 / 94	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	79 / 174	76 / 167
	2337 / 92	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	76 / 167	74 / 163
	2286 / 90	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	77 / 169	74 / 163	71 / 156
	2235 / 88	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	78 / 171	75 / 165	72 / 158	69 / 152
	2184 / 86	80 / 178	80 / 178	80 / 178	80 / 178	80 / 178	76 / 167	73 / 160	70 / 154	67 / 147
	2134 / 84	80 / 178	80 / 178	80 / 178	80 / 178	77 / 169	74 / 163	71 / 156	68 / 149	65 / 143
	2083 / 82	80 / 178	80 / 178	80 / 178	77 / 169	75 / 165	72 / 158	69 / 152	66 / 145	63 / 137
	2032 / 80	80 / 178	80 / 178	80 / 178	75 / 165	72 / 158	69 / 152	66 / 145	64 / 141	61 / 134
	1981 / 78	80 / 178	80 / 178	77 / 169	73 / 160	70 / 154	67 / 147	64 / 141	62 / 136	59 / 130
		≤ 914 / 36	965 / 38	1016 / 40	1067 / 42	1118 / 44	1158 / 46	1219 / 48	1270 / 50	1321 / 52
	→ Door width in mm / inch									

The specifications above are guidelines. Especially in the case of borderline load requirements, please contact us.

# LOAD VALUES FOR HINGES

**An accurate, professional fitting in accordance with the SIMONSWERK installation instructions is recommended.**

Installation site (residential building, public building, school, administration, barracks, kindergarten etc.)
Type of material of the element
Frequency of operation
Door dimensions (e.g. excess widths)
Positioning of hinges
Assembly of hinges
Outward opening doors (porch)
Door stop
Door closer
Swing-door operator
Wall soffits
Closing sequence control systems, etc.

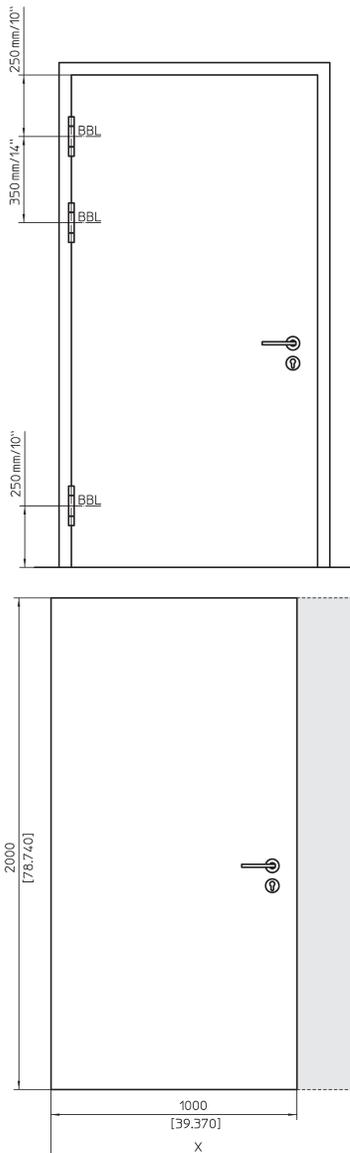
**When selecting or deciding on a hinge, the load alone is already often viewed as being identical to the weight of the door. However, the hinge load can often be several times the door weight, caused by various influential factors.**

Even taking these various criteria into account, an additional reserve should always still be included when selecting the hinge.

Especially in public buildings where extra loads are incurred due to the high opening frequency and stress which is not always calculable (kindergarten, hospitals etc.), a larger sized hinge should be used even if this would not have been necessary based on the door weight.

### Reference details

The load specifications for SIMONSWERK hinges are based on a maximum door weight. Additionally, the named influential factors must be taken into account for hinge loads.



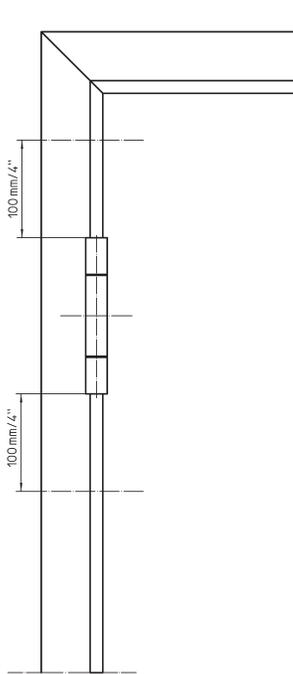
### Third hinge

In addition to the factors mentioned above the use of a third hinge can have a significant impact on the load capacity. In practice, often a third hinge is located in the middle of the door in order to meet the visual demands and to minimize warping in the center of the door. If a third hinge is used to increase the durability and load capacity, the hinge must be positioned 350 mm / 14" below the upper hinge (center to center). If a third hinge is placed in a different location, e.g. the center, it does not increase the durability and load capacity. The use of a third hinge in order to increase the load capacity has to be determined on a case by case basis. Our hinge data refers to a height/width ratio of the door of 2:1 or more. Please contact us for further information and also see the door manufacturers' instructions. Proper preparation and alignment as well as tension-free adjustment are crucial for a hassle-free operation.

### Doors with excess widths

SIMONSWERK heavy-duty hinges have been designed for the indicated load capacities. If the width of a door exceeds the height/width ratio of 2:1, the load capacity is reduced. Review the load value tables for additional details.

# LOAD VALUES FOR HINGES



## Frame anchoring

In order to achieve a maximum load capacity, it is necessary to anchor the frame within 100 mm / 4" above and below the upper hinge, plus in other areas as needed.

## Door closers

When overhead door closers are used, SIMONSWERK recommends the use of a third hinge in the upper third of the door. The correct adjustment of the closer is a fundamental requirement for a long-lasting, problem-free functioning of the door unit.

## Powered door openers

When a powered door opener is used, SIMONSWERK recommends using four hinges placed in two pairs at the top and the bottom. Using the recommended hinge location of 250 mm / 10" from the top and 250 mm / 10" from the bottom, the additional hinges should be placed 350 mm / 14" below and above the upper and lower installed hinges.

## Closing sequence control systems

When closing sequence control systems are used with double-leaf doors, it is important to ensure that a cushioned closing device is used for the active door leaf, so that the forces are not directly transmitted to the hinges. In this case, SIMONSWERK recommends using a third hinge in the upper third of the door.

## Wall openings, door stoppers

If it is necessary to use a door stopper, this should either be mounted on the wall or, instead, on the floor placed at 75 % of the door's width away from the hinge axis in the direction of the lock.

## Miscellaneous

This information is only a guideline and other factors such as door material, door width, usage level, location, and environment might alter these. Therefore, it is suggested to contact SIMONSWERK for recommendations.