

INSTALLATION

TECHNICAL INFORMATION

TECTUS Series

Door

Affix door part with enclosed wood screws.

Frame

Commercial frame

Conduct routing according to SIMONSWERK routing data. Use router bit with a diameter of 24 mm (0.936") Ø (TE 240 3D router bit 16 mm (0.630") Ø) and collar ring 30 mm (1.181") Ø. Affix frame part with enclosed wood screws.

Casing frame

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

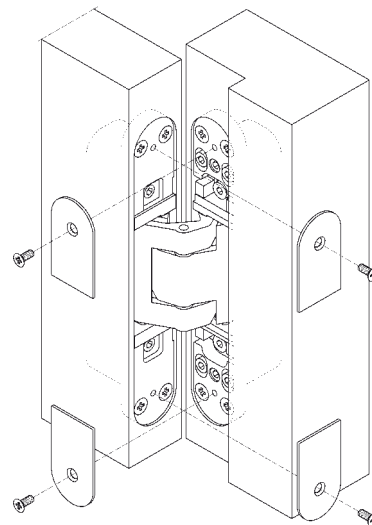
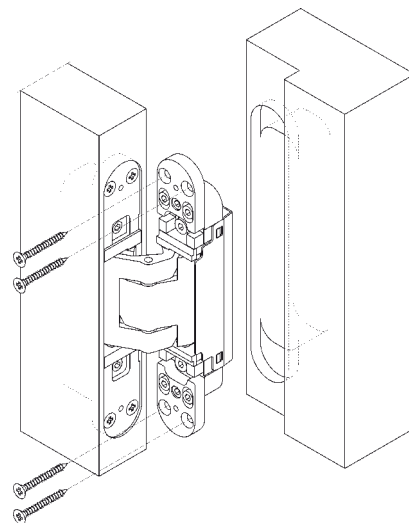
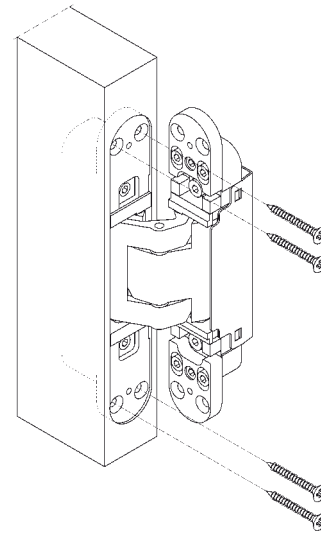
Fix cover plates with of the enclosed screws.

Application technology

Use the Universal Milling Frame (jig) No. 118 as well fitting installation aid for SIMONSWERK templates.

Standard templates for 24 mm bit / 30 mm collar.

Templates for 3/4" bit / 1" collar on request.



ADJUSTMENT

TECHNICAL INFORMATION

TECTUS Series

Three way adjustable

Side	+/- 3 mm (0.118")
Height	+/- 3 mm (0.118")
Depth	+/- 1 mm (0.039")

Side adjustment (horizontal)

- Adjust the adjusting spindles using a 4 mm (0.157") Allen key
- Turn side adjustment screw counterclockwise for increasing the air gap max. 3 mm (0.118") on the locking side
- Turn side adjustment screw clockwise for decreasing the air gap max. 3 mm (0.118") on the locking side

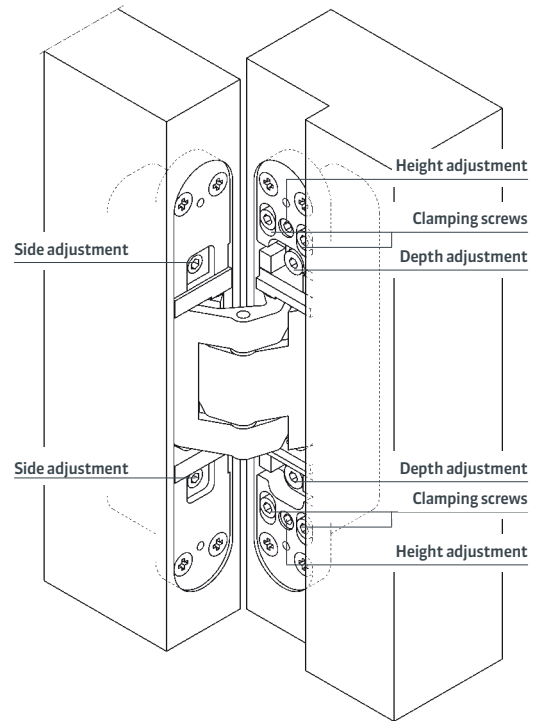
Height adjustment (vertical)

- Slightly loosen all four clamping screws on all hinges
- Adjust the vertical position of the door
- Turn the lower height adjustment screw clockwise for raising the door
- Turn the lower height adjustment screw counterclockwise for lowering the door
Note: Before raising the door make sure that the upper adjustment screw is loosened.
- Retighten the clamping screws on all hinges

Depth adjustment (in/out)

- Slightly loosen the fixing screws
- Align the door to the desired compression
- Retighten the clamping screws

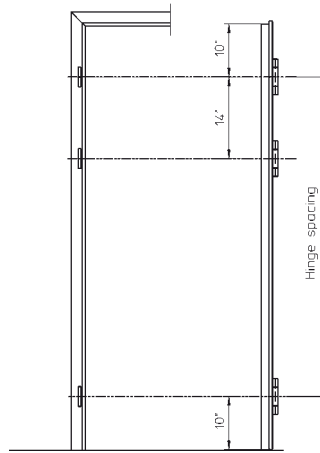
All adjustments can be performed with a 4 mm (0.157") Allen wrench.



TECTUS Series

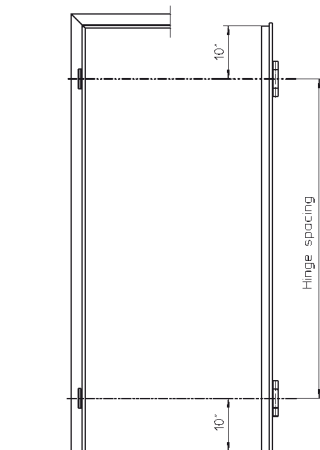
To increase the load capacity of the hinges, a third hinge needs to be positioned 14" below the upper hinge (center to center). The use of a third hinge in order to increase the load capacity has to be determined on a case by case basis. Our hinge data refers to a height/width ratio of the door of 2:1 or more. Please contact us for further information and see also the door manufacturers instructions. Proper preparation and alignment as well as tension-free adjustment are crucial for a hassle-free operation!

Application with increased load capacity

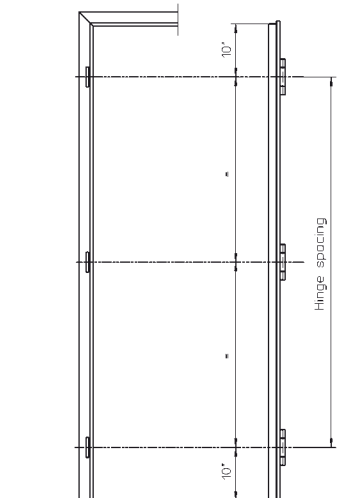


Examples for applications with different door heights

< 8 ft



≥ 8 ft



The hinge spacing does not increase the load capacity!
 Note: We recommend for all exterior doors the use of three hinges.

LOAD CAPACITIES

TECHNICAL INFORMATION

Overview of load values for hinges

The following table provides you with 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.

Assuming a reference value with door leaf dimensions of 1000 x 2000 mm (39.4" x 78.7") (W x H), the use of 2 hinges and a hinge spacing of 1435 mm (56.5"), the permissible load values change with different width and height ratios.

Indicated data refer to hinges only. For required number of hinges and hinge spacing refer to door manufacturers recommendation.

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

→ Hinge spacing in mm / inch	>2000 / 78.7	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88
	2000 / 78.7	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88
	1950 / 76.8	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88
	1900 / 74.8	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88
	1850 / 72.8	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88
	1800 / 70.9	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	39 / 85	39 / 85
	1750 / 68.9	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	39 / 85	38 / 83	38 / 83	36 / 79
	1700 / 66.9	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	39 / 85	38 / 83	37 / 81	36 / 79	35 / 77
	1650 / 65.0	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	39 / 85	38 / 83	37 / 81	36 / 79	35 / 77	34 / 74
	1600 / 63.0	40 / 88	40 / 88	40 / 88	40 / 88	40 / 88	39 / 85	38 / 83	36 / 79	35 / 77	34 / 74	33 / 72	31 / 68
	1550 / 61.0	40 / 88	40 / 88	40 / 88	40 / 88	39 / 85	38 / 83	36 / 79	35 / 77	34 / 74	33 / 72	31 / 68	31 / 68
1435 / 56.5	40 / 88	40 / 88	40 / 88	38 / 83	36 / 79	35 / 77	33 / 72	32 / 70	31 / 68	31 / 68	31 / 68	31 / 68	
	900 / 35.4	950 / 37.4	1000 / 39.4	1050 / 41.3	1100 / 43.3	1150 / 45.3	1200 / 47.2	1250 / 49.2	1300 / 51.2				
	→ Door width in mm / inch												

REFERENCE VALUE 40 KG / 88 lbs

TE 240 3D
TE 240 3D Energy

→ Hinge spacing in mm / inch	>2000 / 78.7	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176
	2000 / 78.7	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176
	1950 / 76.8	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176
	1900 / 74.8	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176
	1850 / 72.8	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	79 / 174	79 / 174
	1800 / 70.9	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	77 / 169	77 / 169
	1750 / 68.9	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	78 / 171	76 / 167	75 / 165	75 / 165
	1700 / 66.9	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	79 / 174	76 / 167	73 / 160	73 / 160	73 / 160
	1650 / 65.0	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	77 / 169	74 / 163	71 / 156	71 / 156	71 / 156
	1600 / 63.0	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	78 / 171	74 / 163	71 / 156	69 / 152	69 / 152	69 / 152
	1550 / 61.0	80 / 176	80 / 176	80 / 176	80 / 176	80 / 176	79 / 174	75 / 165	72 / 158	69 / 152	66 / 145	66 / 145	66 / 145
1435 / 56.5	80 / 176	80 / 176	80 / 176	76 / 167	73 / 160	70 / 154	67 / 147	64 / 141	62 / 136	62 / 136	62 / 136	62 / 136	
	900 / 35.4	950 / 37.4	1000 / 39.4	1050 / 41.3	1100 / 43.3	1150 / 45.3	1200 / 47.2	1250 / 49.2	1300 / 51.2				
	→ Door width in mm / inch												

REFERENCE VALUE 80 KG / 176 lbs

TE 340 3D
TE 340 3D Energy

Overview of load values for hinges

REFERENCE VALUE **100 KG / 220 lbs**

TE 541 3D FVZ
TE 540 3D A8
TE 540 3D A8 Energy

100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	>2000 / 78.7
100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	2000 / 78.7
100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	1950 / 76.8
100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	1900 / 74.8
100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	99 / 218	1850 / 72.8
100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	96 / 211	1800 / 70.9
100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	98 / 216	94 / 207	1750 / 68.9
100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	99 / 218	95 / 209	91 / 200	1700 / 66.9
100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	96 / 211	92 / 202	88 / 194	1650 / 65.0
100 / 220	100 / 220	100 / 220	100 / 220	100 / 220	97 / 213	93 / 205	89 / 196	86 / 189		1600 / 63.0
100 / 220	100 / 220	100 / 220	100 / 220	98 / 216	94 / 207	90 / 198	86 / 189	83 / 182		1550 / 61.0
100 / 220	100 / 220	100 / 220	95 / 209	91 / 200	87 / 191	83 / 182	80 / 176	77 / 169		1435 / 56.5
900 / 35.4	950 / 37.4	1000 / 39.4	1050 / 41.3	1100 / 43.3	1150 / 45.3	1200 / 47.2	1250 / 49.2	1300 / 51.2		

→ Door width in mm / inch

→ Hinge spacing in mm / inch

REFERENCE VALUE **120 KG / 264 lbs**

TE 525 3D
TE 526 3D
TE 527 3D
TE 540 3D
TE 526 3D Energy
TE 527 3D Energy
TE 540 3D Energy

120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	>2000 / 78.7
120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	2000 / 78.7
120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	1950 / 76.8
120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	1900 / 74.8
120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	119 / 262	1850 / 72.8
120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	116 / 255	1800 / 70.9
120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	117 / 257	113 / 249	1750 / 68.9
120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	118 / 260	114 / 251	109 / 240	1700 / 66.9
120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	116 / 255	111 / 244	110 / 242	1650 / 65.0
120 / 264	120 / 264	120 / 264	120 / 264	120 / 264	116 / 255	111 / 244	107 / 235	103 / 227		1600 / 63.0
120 / 264	120 / 264	120 / 264	120 / 264	118 / 260	113 / 249	108 / 238	104 / 229	100 / 220		1550 / 61.0
120 / 264	120 / 264	120 / 264	114 / 251	109 / 240	104 / 229	100 / 220	96 / 211	92 / 202		1435 / 56.5
900 / 35.4	950 / 37.4	1000 / 39.4	1050 / 41.3	1100 / 43.3	1150 / 45.3	1200 / 47.2	1250 / 49.2	1300 / 51.2		

→ Door width in mm / inch

→ Hinge spacing in mm / inch

REFERENCE VALUE **160 KG / 352 lbs**

TE 640 3D A8
TE 640 3D A8 Energy

160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	>2000 / 78.7
160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	2000 / 78.7
160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	1950 / 76.8
160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	1900 / 74.8
160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	159 / 350	1850 / 72.8
160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	154 / 339	1800 / 70.9
160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	156 / 343	150 / 330	1750 / 68.9
160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	158 / 348	152 / 335	146 / 321	1700 / 66.9
160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	153 / 337	147 / 324	1650 / 65.0
160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	155 / 341	149 / 328	143 / 315	1600 / 63.0
160 / 352	160 / 352	160 / 352	160 / 352	160 / 352	157 / 346	150 / 330	144 / 317	138 / 304	133 / 293	1550 / 61.0
160 / 352	160 / 352	160 / 352	152 / 335	145 / 319	139 / 306	133 / 293	128 / 282	123 / 271		1435 / 56.5
900 / 35.4	950 / 37.4	1000 / 39.4	1050 / 41.3	1100 / 43.3	1150 / 45.3	1200 / 47.2	1250 / 49.2	1300 / 51.2		

→ Door width in mm / inch

→ Hinge spacing in mm / inch

LOAD CAPACITIES

TECHNICAL INFORMATION

Overview of load values for hinges

→ Hinge spacing in mm / inch	>2000 / 78.7	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440
	2000 / 78.7	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440
	1950 / 76.8	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440
	1900 / 74.8	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440
	1850 / 72.8	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	198 / 436
	1800 / 70.9	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	193 / 425
	1750 / 68.9	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	195 / 429	188 / 414
	1700 / 66.9	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	197 / 434	190 / 418	182 / 401
	1650 / 65.0	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	192 / 423	184 / 405	177 / 390
	1600 / 63.0	200 / 440	200 / 440	200 / 440	200 / 440	200 / 440	194 / 427	186 / 410	178 / 392	172 / 379
	1550 / 61.0	200 / 440	200 / 440	200 / 440	200 / 440	196 / 432	188 / 414	180 / 396	173 / 381	166 / 365
1435 / 56.5	200 / 440	200 / 440	200 / 440	190 / 418	182 / 401	174 / 383	167 / 368	160 / 352	154 / 339	
	900 / 35.4	950 / 37.4	1000 / 39.4	1050 / 41.3	1100 / 43.3	1150 / 45.3	1200 / 47.2	1250 / 49.2	1300 / 51.2	

→ Door width in mm / inch

REFERENCE VALUE **200 KG** / 440 lbs

TE 640 3D
TE 640 3D Energy

→ Hinge spacing in mm / inch	>2000 / 78.7	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661
	2000 / 78.7	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661
	1950 / 76.8	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661
	1900 / 74.8	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661
	1850 / 72.8	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	298 / 656
	1800 / 70.9	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	289 / 637
	1750 / 68.9	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	293 / 645	281 / 619
	1700 / 66.9	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	296 / 652	284 / 626	273 / 601
	1650 / 65.0	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	287 / 632	276 / 608	265 / 584
	1600 / 63.0	300 / 661	300 / 661	300 / 661	300 / 661	300 / 661	291 / 641	279 / 615	268 / 590	257 / 566
	1550 / 61.0	300 / 661	300 / 661	300 / 661	300 / 661	295 / 650	282 / 621	270 / 595	259 / 570	249 / 548
1435 / 56.5	300 / 661	300 / 661	300 / 661	286 / 630	273 / 601	261 / 575	250 / 551	240 / 529	231 / 509	
	900 / 35.4	950 / 37.4	1000 / 39.4	1050 / 41.3	1100 / 43.3	1150 / 45.3	1200 / 47.2	1250 / 49.2	1300 / 51.2	

→ Door width in mm / inch

REFERENCE VALUE **300 KG** / 661 lbs

TE 645 3D

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