

## INVISIBLE SASH HINGE KIT



### Functions

FUTURA 3D 170 HP Invisible hinge set (top and bottom) for side-hung sash or secondary sash combined with turn-and-tilt sash.

Online data sheet



### Technical Features

The product is designed for sash profiles with smooth channel. In the case of profiles with undercut channel, shims item 04406 (1.5 mm) or item 04407 (2 mm) must be used.

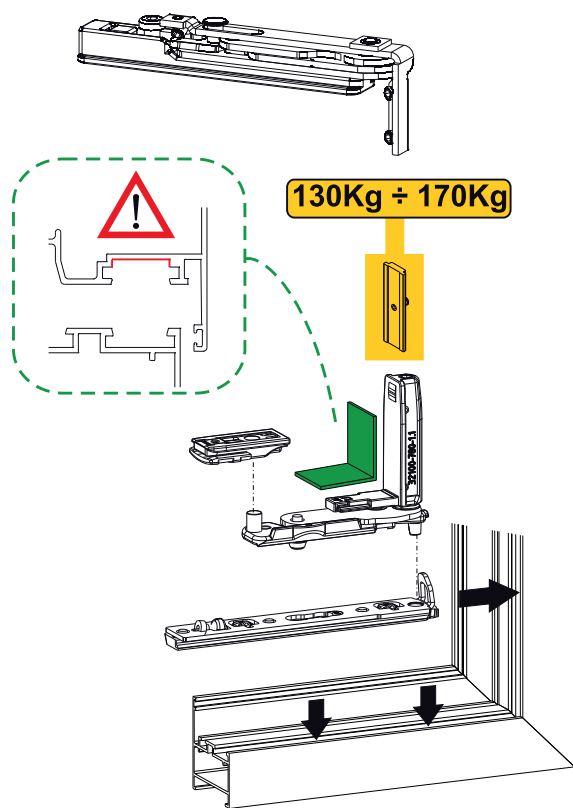
### Materials

Hinge in stainless steel and zamak, pin and grub screws in stainless steel  
Polyamide bushes

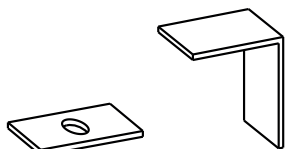
### Capacities

The product has a nominal load capacity of 130 kg. For higher load capacities up to 170 kg, reinforcement kit item 04409 or item 04411 is required.

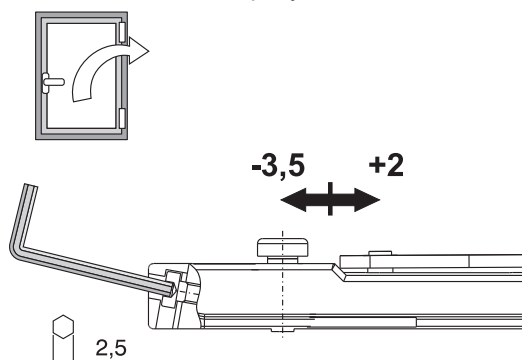
Assembly



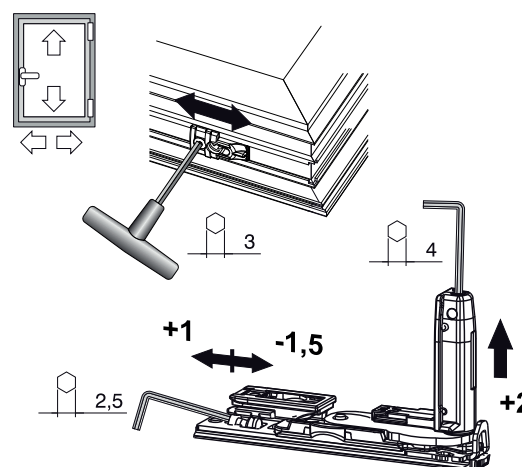
Shims for FUTURA 3D 170 HP Invisible



Sash drop adjustment



Side and vertical adjustment



Futura 3D Invisible <130 kg  
Maximum allowable thickness of glass

2500	43	39	36	31	27	24	22	20	18	17	15	14	14	13	
2400	45	41	38	32	28	25	23	21	19	17	16	15	14	13	
2300	47	43	39	34	30	26	24	21	20	18	17	16	15	14	
2200	50	45	41	35	31	28	25	23	21	19	18	17	15	15	
2100	50	47	43	37	33	29	26	24	22	20	19	17	16	15	
2000	50	50	46	39	34	30	27	25	23	21	20	18	17	16	
1900	50	50	48	41	36	32	29	26	24	22	21	19	18	17	
1800	50	50	50	44	38	34	31	28	25	24	22	20	19	18	
1700	50	50	50	46	41	36	33	30	27	25	23	22	20	19	
1600	50	50	50	50	43	39	35	32	29	27	25	23	22	19	
1500	50	50	50	50	46	41	37	34	31	29	27	25	22	19	
1400	50	50	50	50	44	40	36	33	31	29	25	22	19		
1300	50	50	50	50	48	43	39	36	33	29	25	22			
1200	50	50	50	50	50	47	43	39	33	29	25				
1100	50	50	50	50	50	50	47	39	33	29					
1000	50	50	50	50	50	50	50	47	39	33					
900	50	50	50	50	50	50	50	47	39						
800	50	50	50	50	50	50	50	47							
700	50	50	50	50	50	50	50								
600	430	500	550	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700

Futura 3D Invisible <130 kg  
Maximum permissible load capacity

2500	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
2400	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
2300	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
2200	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
2100	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
2000	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
1900	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
1800	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
1700	130	130	130	130	130	130	130	130	130	130	130	130	130	130	
1600	130	130	130	130	130	130	130	130	130	130	130	130	130	122	
1500	130	130	130	130	130	130	130	130	130	130	130	130	121	114	
1400	130	130	130	130	130	130	130	130	130	130	130	130	121	113	106
1300	130	130	130	130	130	130	130	130	130	130	130	120	111	104	
1200	130	130	130	130	130	130	130	130	130	130	119	110	102		
1100	130	130	130	130	130	130	130	130	130	118	108	100			
1000	130	130	130	130	130	130	130	130	117	106	98				
900	130	130	130	130	130	130	116	104	95						
800	130	130	130	130	130	114	101	91							
700	130	130	130	130	111	98	87								
600	430	500	550	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700

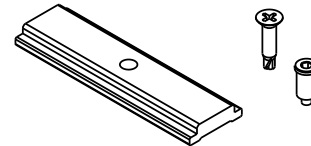
Futura 3D Invisible 130kg - 170 kg  
Maximum allowable thickness of glass

2500	43	39	47	40	35	31	28	26	24	22	20	19	18	17	
2400	45	41	49	42	37	33	30	27	25	23	21	20	18	17	
2300	47	43	50	44	39	34	31	28	26	24	22	21	19	18	
2200	50	45	50	46	40	36	32	29	27	25	23	22	20	19	
2100	50	47	50	49	43	38	34	31	28	26	24	23	21	19	
2000	50	50	50	50	45	40	36	33	30	28	26	24	22	19	
1900	50	50	50	50	47	42	38	34	31	29	27	25	22	19	
1800	50	50	50	50	50	44	40	36	33	31	29	25	22	19	
1700	50	50	50	50	50	47	43	39	35	33	29	25	22	19	
1600	50	50	50	50	50	45	41	38	33	29	25	22	19		
1500	50	50	50	50	50	49	44	39	33	29	25	22	19		
1400	50	50	50	50	50	50	47	39	33	29	25	22	19		
1300	50	50	50	50	50	50	47	39	33	29	25	22			
1200	50	50	50	50	50	50	47	39	33	29	25				
1100	50	50	50	50	50	50	47	39	33	29					
1000	50	50	50	50	50	50	47	39	33						
900	50	50	50	50	50	50	47	39							
800	50	50	50	50	50	50	47								
700	50	50	50	50	50	50									
600	430	500	550	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700

Futura 3D Invisible 130kg - 170 kg  
Maximum permissible load capacity

2500	130	130	170	170	170	170	170	170	170	170	170	170	170	170	
2400	130	130	170	170	170	170	170	170	170	170	170	170	170	170	
2300	130	130	170	170	170	170	170	170	170	170	170	170	170	170	
2200	130	130	170	170	170	170	170	170	170	170	170	170	170	170	
2100	130	130	170	170	170	170	170	170	170	170	170	170	170	163	
2000	130	130	170	170	170	170	170	170	170	170	170	170	165	154	
1900	130	130	170	170	170	170	170	170	170	170	170	167	156	146	
1800	130	130	170	170	170	170	170	170	170	170	170	158	147	138	
1700	130	130	170	170	170	170	170	170	170	170	170	160	149	139	130
1600	130	130	170	170	170	170	170	170	170	170	170	163	150	139	122
1500	130	130	170	170	170	170	170	170	170	165	152	140	130	121	114
1400	130	130	170	170	170	170	170	170	169	154	141	130	121	113	106
1300	130	130	170	170	170	170	170	156	142	130	120	111	104		
1200	130	130	170	170	170	170	159	143	130	119	110	102			
1100	130	130	170	170	170	163	144	130	118	108	100				
1000	130	130	170	170	167	146	130	117	106	98					
900	130	130	170	170	149	130	116	104	95						
800	130	130	165	152	130	114	101	91							
700	130	130	142	130	111	98	87								
600	430	500	550	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700

Reinforcement for FUTURA 3D 170 HP Invisible



Item code	Description	Notes	PROFILE CROSS - SECTION	Hand	Base Raw	Anodised Elox	Painted	Trend/Gold Brass	Pieces per pack
044001	INVISIBLE SASH HINGE KIT		C001	RX	X				10
044002	INVISIBLE SASH HINGE KIT		C001	LX	X				10
044011	INVISIBLE SASH HINGE KIT		C003	RX	X				10