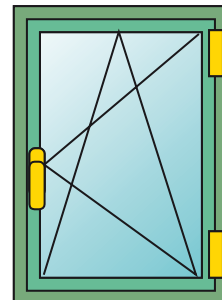


FUTURA 3D 170 HP INVISIBLE

Functions

Complete system for the construction of tilt-and-turn windows with load capacities of up to 170 kg. Available in the standard, logic and microventilation versions.



Technical Features

Making a FUTURA 3D 170 HP Invisible tilt-and-turn window mechanism requires:

- Hinges and arms kit
- Set of fastening mechanisms for Cremones and window handles
- Cremona or window handle (available in different models to choose from in the specific catalogue section)

Adjustments

The FUTURA 3D tilt-and-turn window enables micrometric adjustment in every direction, ideal after installing the casement.

Micro-ventilation

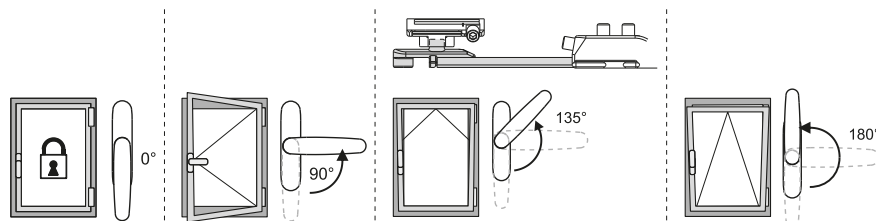
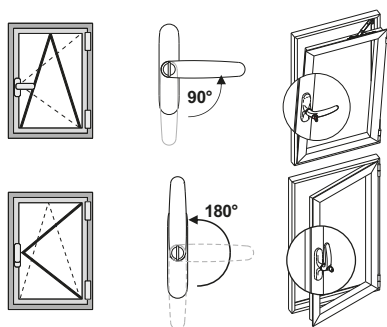
Microventilation enables having simultaneously both the tilt-and-turn position and micro-ventilation (precision opening of the sash) on the casement. Available both as standard and with an additional device.

Logica

The logical operation consists in first tilt-and-turn opening (with the cremone at 90°) and secondly side-hung opening (with the cremone at 180°). Its use is particularly recommended in public buildings (schools, hospitals, etc.) in combination with a cremone with a key in order to have only tilt-and-turn window opening for safety reasons and to allow full opening only for staff with the key.

Logica mechanism operation

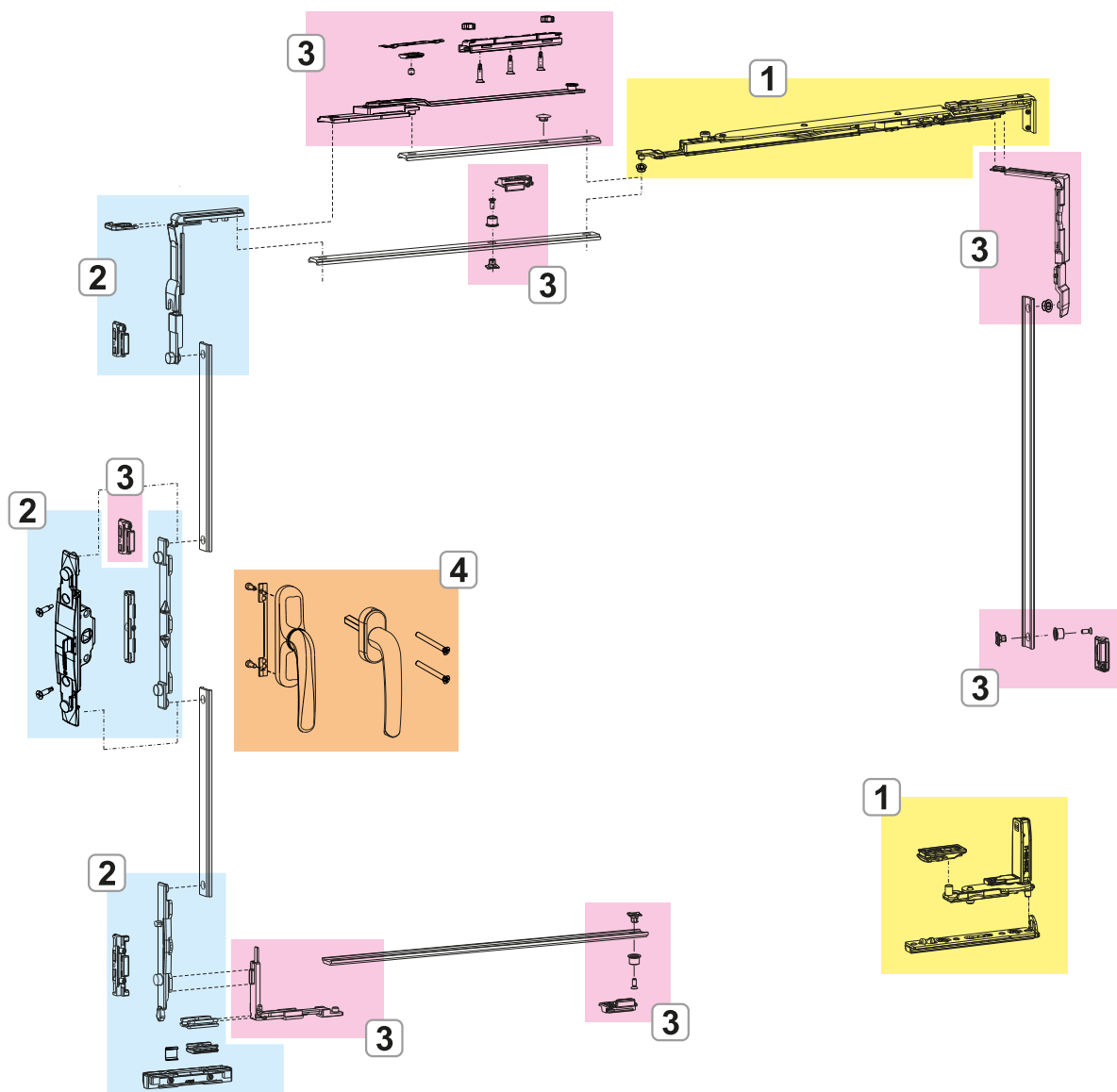
Standard microventilation



FUTURA 3D
170 HP Invisible

FUTURA 3D
170 HP Invisible micro

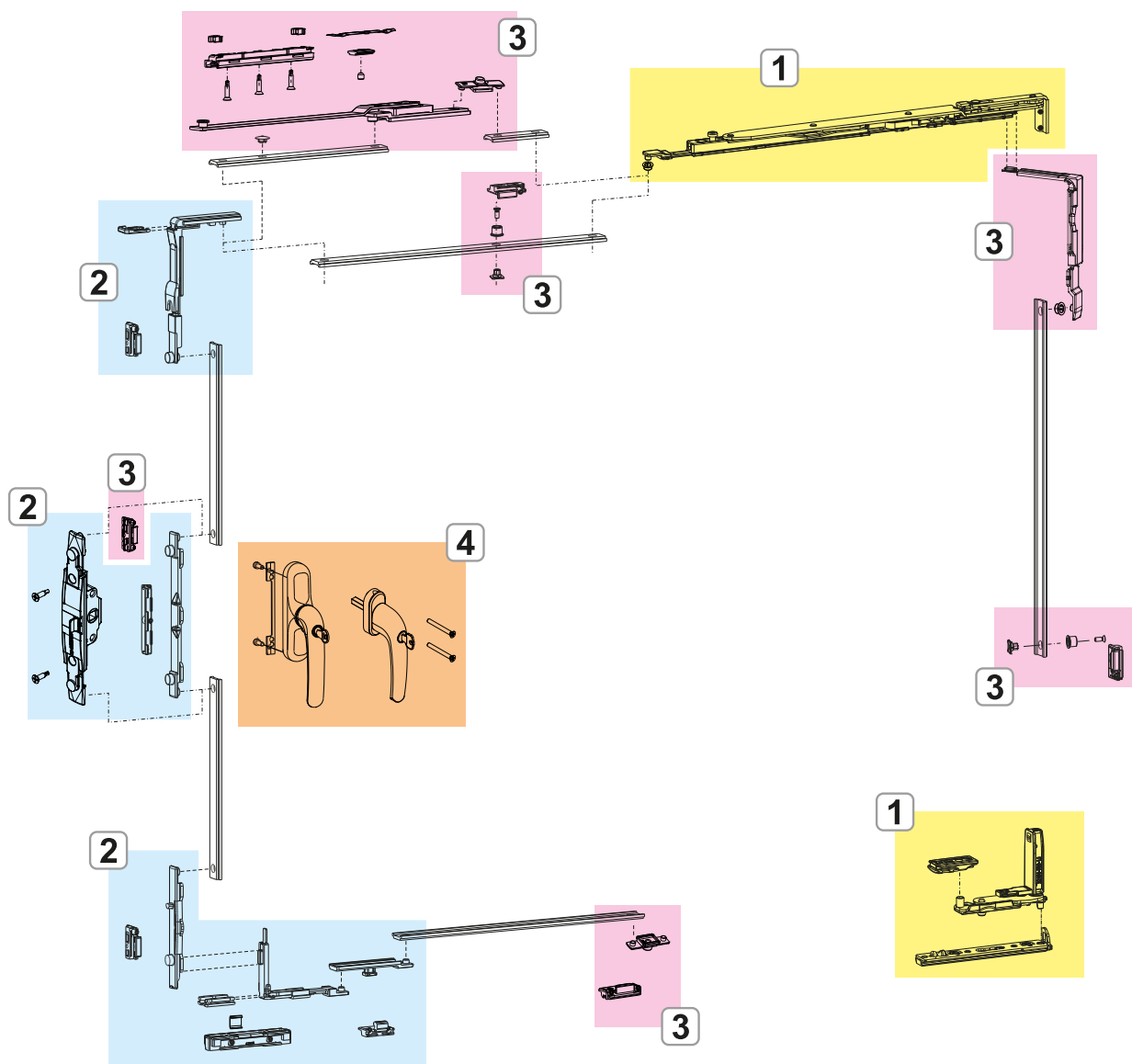
Futura 3D 170 HP Invisible traditional



- 1. FUTURA 3D 170 HP INVISIBLE HINGES AND ARMS
- 2. FUTURA 3D 170 HP INVISIBLE FASTENING MECHANISMS
- 3. FUTURA 3D 170 HP INVISIBLE ADDITIONAL FASTENING MECHANISMS AND ACCESSORIES
- 4. CREMONES AND WINDOW HANDLES

FUTURA 3D
170 HP Invisible lgc

Futura 3D 170 HP Invisible logica



1. FUTURA 3D 170 HP INVISIBLE HINGES AND ARMS
2. FUTURA 3D 170 HP INVISIBLE FASTENING MECHANISMS
3. FUTURA 3D 170 HP INVISIBLE ADDITIONAL FASTENING MECHANISMS AND ACCESSORIES
4. CREMONES AND WINDOW HANDLES

FUTURA 3D 170 HP INVISIBLE HINGES AND ARMS

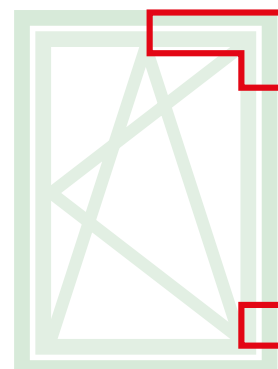
Functions

Hinges (upper and lower) and arm kit, completely pre-assembled and ready to be installed on the profile.

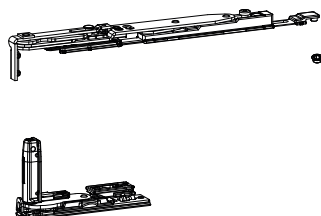
Materials

Body of hinges and arms in stainless steel and zamak.

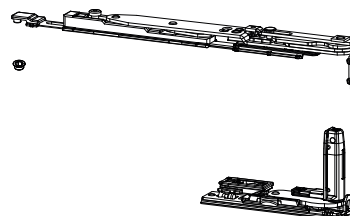
Rod, connecting bracket, pins, screws and grub screws in stainless steel.



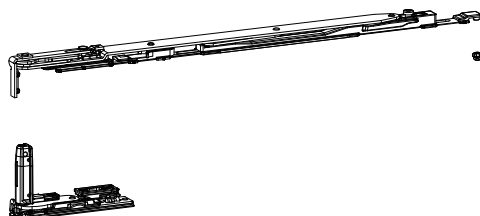
T/T Futura 170 Invisible Kit (420÷640) - LX



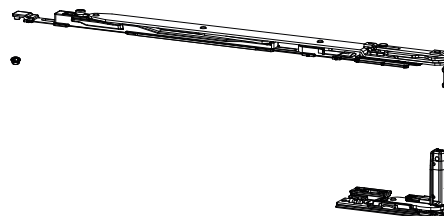
T/T Futura 170 Invisible Kit (420÷640) - RX



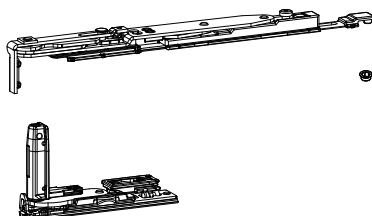
T/T Futura 170 Invisible Kit (641÷1700) - LX



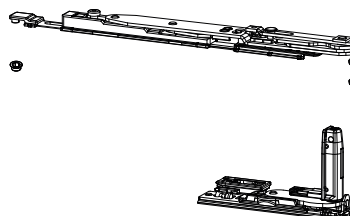
T/T Futura 170 Invisible Kit (641÷1700) - RX



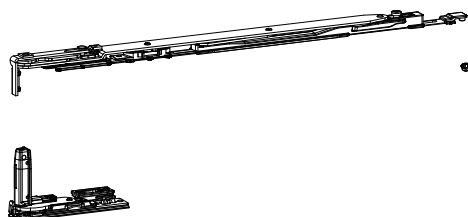
T/T Futura 170 Invisible Kit LGC (420÷640) - LX



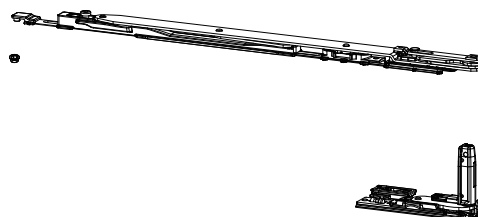
T/T Futura 170 Invisible Kit LGC (420÷640) - RX

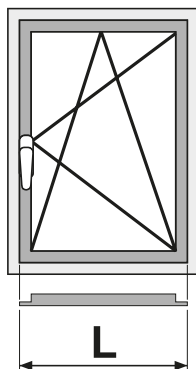


T/T Futura 170 Invisible Kit LGC (641÷1700) - LX



T/T Futura 170 Invisible Kit LGC (641÷1700) - RX





Item code	Description	PROFILE CROSS - SECTION	Range (mm)	Version	Hand	Base Raw	Anodised Elox	Painted	Trend/Gold Brass	Pieces per pack
042061	T/T FUTURA 170 INVISIBLE KIT	C001	W 430 ÷ 640	-	RX	X				5
042062	T/T FUTURA 170 INVISIBLE KIT	C001	W 430 ÷ 640	-	LX	X				5
042071	T/T FUTURA 170 INVISIBLE KIT	C001	W 641 ÷ 1700	-	RX	X				5
042072	T/T FUTURA 170 INVISIBLE KIT	C001	W 641 ÷ 1700	-	LX	X				5
042081	AR FUTURA 170 INVISIBLE LGC KIT	C001	W 430 ÷ 640	Logica	RX	X				5
042082	AR FUTURA 170 INVISIBLE LGC KIT	C001	W 430 ÷ 640	Logica	LX	X				5
042091	AR FUTURA 170 INVISIBLE LGC KIT	C001	W 641 ÷ 1700	Logica	RX	X				5
042092	AR FUTURA 170 INVISIBLE LGC KIT	C001	W 641 ÷ 1700	Logica	LX	X				5
042131	T/T FUTURA 170 INVISIBLE KIT	C003	W 641 ÷ 1700	-	RX	X				5
042132	T/T FUTURA 170 INVISIBLE KIT	C003	W 641 ÷ 1700	-	LX	X				5

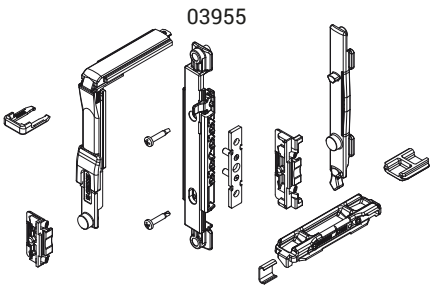
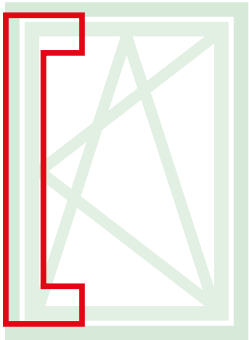
FUTURA 3D 170 HP INVISIBLE FASTENING MECHANISMS

Functions

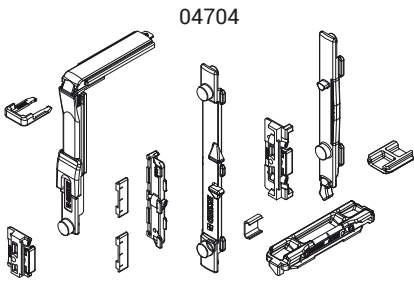
Tilt-and-turn window fastening mechanisms for cremone or window handle, available in Base and Logica versions.

Materials

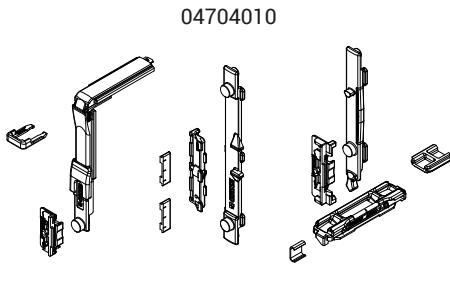
Drive, drive rod, mechanism bolt tip and strikers in zamak with GS Silver Plus finish (up to 500 h of corrosion resistance).
Screws and grub screws in stainless steel.
Polyamide raiser.



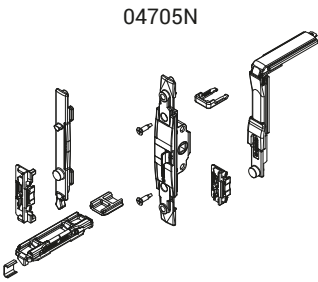
03955



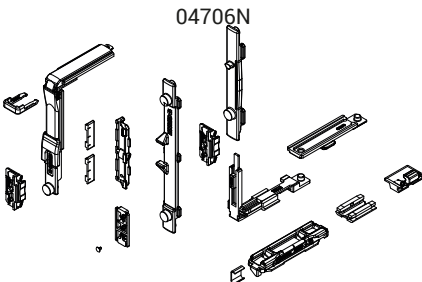
04704



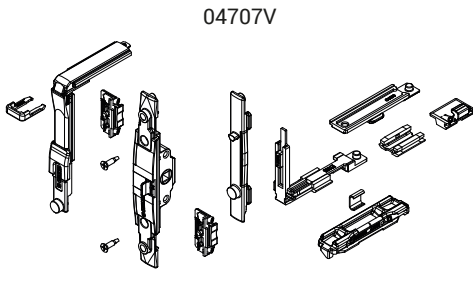
04704010



04705N



04706N



04707V

Item code	Description	PROFILE CROSS - SECTION	Window handle	Version	Base Raw	Anodised Elox	Painted	Trend/Gold Brass	Pieces per pack
03955	T/T FASTENING MECHANISM	C001-C002-C004-C005-C006-C013-C014-C015-C016-C017	NP SUPRA	-	X				10
04704	T/T FASTENING MECHANISM	C001-C002-C004-C005-C006-C013-C014-C015-C016-C017	Cremone	-	X				10
04704010	T/T FASTENING MECHANISM	C003	Cremone	-	X				10
04705N	T/T M 180 FASTENING MECHANISM	C001-C002-C004-C005-C006-C013-C014-C015-C016-C017	Window handle	-	X				10
04706N	T/T LOGICA FASTENING MECHANISM	C001-C002-C004-C005-C006-C013-C014-C015-C016-C017	Cremone	Logica	X				10
04707V	T/T M 180 LOGICA FASTENING MECHANISM	C001-C002-C004-C005-C006-C013-C014-C015-C016-C017	Window handle	Logica	X				10

FUTURA 3D 170 HP INVISIBLE ADDITIONAL FASTENING MECHANISMS AND ACCESSORIES

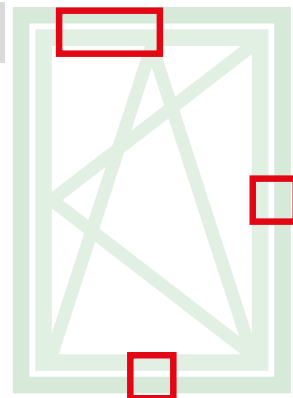
Functions

The FUTURA 3D 170 HP Invisible tilt-and-turn window has a basic load capacity of 130 kg, to obtain a maximum load capacity of 170 kg you need to use the reinforcement set. This product is designed for sash profiles with a smooth channel. In the case of profiles with a machined channel, shims of 1.5 mm and 2 mm must be used.

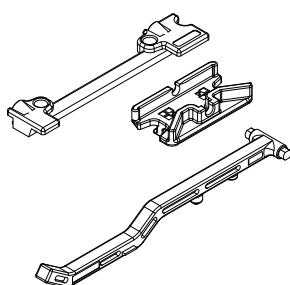
The additional fasteners make it possible to add further fastening elements that either increase the dimensions of the casement or that can be used when locking points are needed on the cross beams or hinge-side upright.

On the basis of the dimensions of the casement, additional fasteners (for H>1200 mm and W>1000 mm) and the additional arm (which is mandatory for W>1000 mm) are to be used in combination with this mechanism.

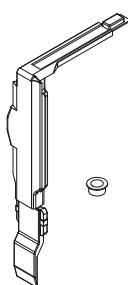
The micro-ventilation device can be fitted at any time, even after the window is installed. When activated with the cremone at 180° there is micro-ventilation (precision sash opening), when it is not activated, with the cremone at 180° there is tilt-and-turn opening.



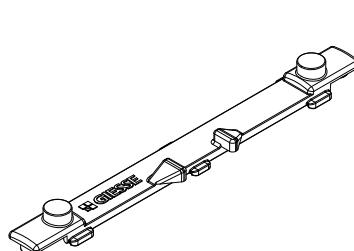
02234K



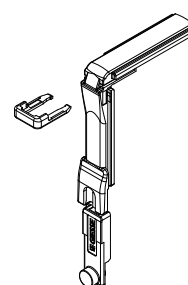
04012



04014K



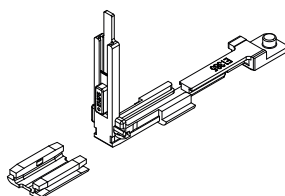
04019K



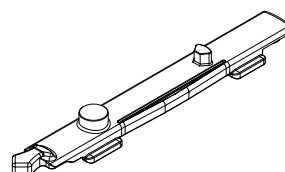
04020K



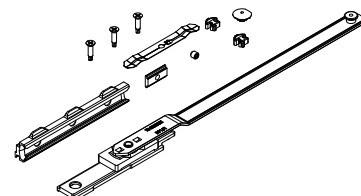
04024K



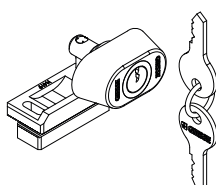
04026K



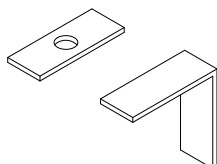
04301K



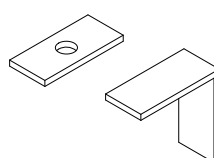
04311



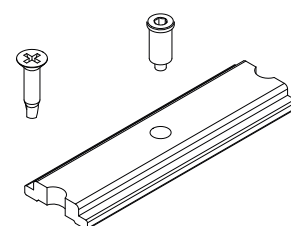
04406



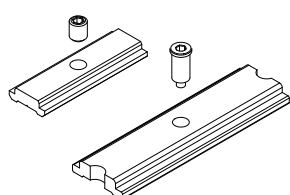
04407



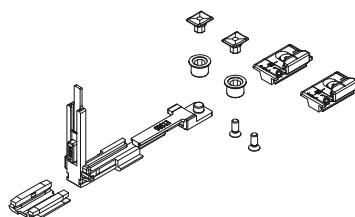
04409



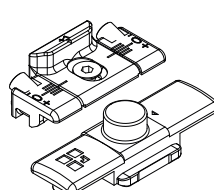
04411



04770K

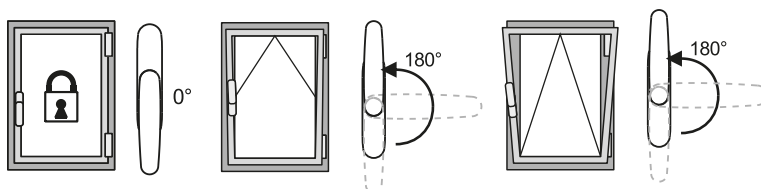


04777K



FUTURA 3D 170 HP INVISIBLE

Micro-ventilation



Item code	Description	PROFILE CROSS - SECTION	Range (mm)	Version	Base Raw	Anodised Elox	Painted	Trend/Gold Brass	Pieces per pack
02234K	MICRO-VENTILATION DEVICE	C001-C002-C003	-	Micro	X				25
04012	CORNER DRIVE FOR FUTURA 170HP INVISIBLE	C001-C002-C003	H > 1200	-	X				10
04014K	FUTURA T/T DRIVE ROD	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	-	-	X				10
04019K	CORNER DRIVE GROOVE 15/20 FUTURA	C001-C002-C003-C004-C005-C006-C009-C010-C011-C012-C013-C014-C015-C016-C017	-	-	X				10
04020K	FUTURA CORNER DRIVE	C001-C002-C003-C004-C005-C006-C009-C010-C011-C012-C013-C014-C015-C016-C017-P001-P002-P003-P004-P005-P006-P007-P008-P009-P010	-	-	X				50
04024K	CORNER DRIVE FOR FUTURA BURGLAR-PROOF FUNCTION	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	-	-	X				10
04026K	FUTURA T/T BOLT TIP	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	-	-	X				10
04301K	T/T FUTURA ADDITIONAL ARM	C001-C002-C003-C004-C005-C006	W > 1000	-	X				5
04311	SASH OPENING BLOCK LOCK	C001-C002-C003-C004-C005-C006-C007-C013-C014-C015-C016-C017	-	-	X				10
04406	SHIMS FOR FUTURA 3D 170 HP INVISIBLE	C001-C002-C003	1,5	-	X				10
04407	SHIMS FOR FUTURA 3D 170 HP INVISIBLE	C001-C002-C003	2	-	X				10
04409	REINFORCEMENT FOR FUTURA 170 HP INVISIBLE	C001-C002	130 -> 170 Kg	-	X				10
04411	REINFORCEMENT FOR FUTURA 170 HP INVISIBLE	C003	130 -> 170 Kg	-	X				10
04770K	FUTURA ADDITIONAL FASTENING MECHANISM	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	H > 1200 L > 1000	-	X				10
04777K	FUTURA ADDITIONAL FASTENING MECHANISM	C001-C002-C003-C004-C005-C006-C013-C014-C015-C016-C017	H > 1200 L > 1000	Logica	X				50

FUTURA 3D 170 HP INVISIBLE SECONDARY SASH

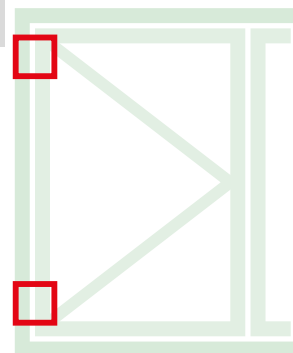
Functions

FUTURA 3D 170 HP Invisible features specific hinges for the secondary sash, with the same retractable styling line and the same adjustments.

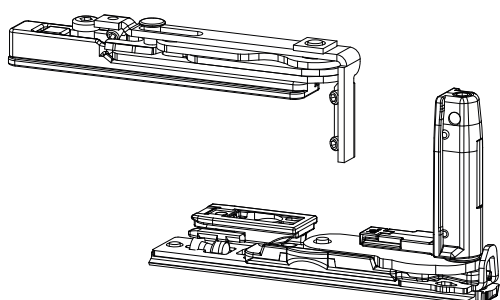
Materials

Body of hinges in stainless steel and zamak.

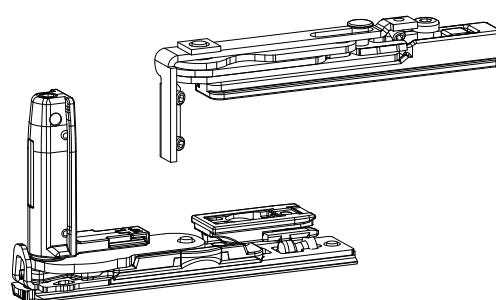
Pins, screws and grub screws in stainless steel.



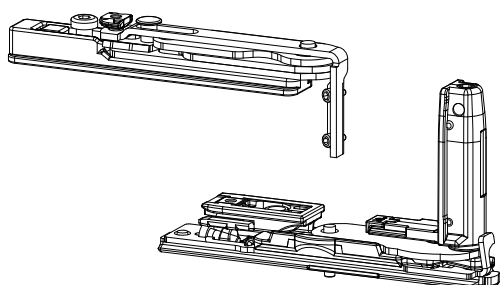
044001



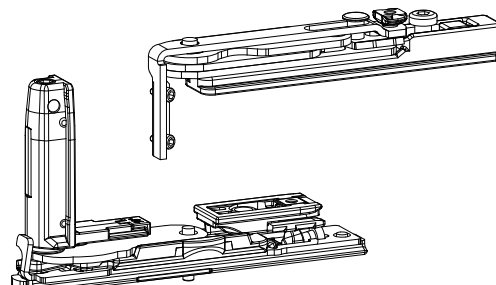
044002



044011



044012



Item code	Description	PROFILE CROSS - SECTION	Hand	Base Raw	Anodised Elox	Painted	Trend/Gold Brass	Pieces per pack
044001	INVISIBLE SECONDARY SASH HINGE KIT	C001	RX	X				10
044002	INVISIBLE SECONDARY SASH HINGE KIT	C001	LX	X				10
044011	INVISIBLE SECONDARY SASH HINGE KIT	C003	RX	X				10
044012	INVISIBLE SECONDARY SASH HINGE KIT	C003	LX	X				10