

Original Alu Objekt

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Standard version

Product family

Elitfönster Original Alu Objekt outward turning window and patio doors.

Product types

Top swing window, fixed frame, side hung, top hung and patio door. See in addition page 2-6.

Material

Wooden frame of laminated and finger-jointed pine with exterior aluminium cladding.

Impregnation

All wooden parts are impregnated according to the P-marking rules. The impregnation fluid permeates approx. 40 mm into the ends of the wood and approx. 4 mm into other surfaces. The impregnation contributes to highly effective protection against rot.

Surface treatment

Standard colour is white NCS S 0502-Y, gloss value 35 on wood and gloss value 80 for external aluminium cladding. See separate colour guide at elitfonster.se for alternative colour options and surface treatment.

Glazing structure

3-pane sealed glazing unit installed with patented security fixing.

Glass

P-marked, 3-pane, sealed glazing unit type T4-16, with 3 x 4-mm pane, one of which is an energy-efficient pane. 16 mm spacer between the panes, one of the air gaps is filled with Argon.

StormTite™ seal against wind and moisture

Extra sealing strip in the gap between frame and sash.

Handles and fittings

See description under respective product type.

Dimensions and sizes

Frame depth is 115 mm. Drawings in pdf- and dwg-format as well as size guide are available at elitfonster.se.

Verified properties

Elitfönster's products undergo tests to meet stringent requirements. Below is a list of the classes we have had verified in tests at RISE.

Airtightness	Class 4
Rain density	Class E1200 (double doors 9A)
Resistance to wind load	Class 4C (double doors 3C)
Mechanical properties	Class 2
Heavy impact	Class 2
Reaction to fire impact	Class C-s1,d0
Manoeuvring forces openable	Class 2 (class 1 for side hung and door)
Class based on application	W5

Burglary class

Basic version of Original Alu maintains effective security against burglary. For even better protection, the product can be upgraded with classification according to RC2 or RC2N.

See description under respective product type.

Options & accessories

Elitfönster offers a wide range of options which can both change the appearance or add unique features to your window. On pages 8-11 you can read more about internal profiling, glazing bars and mullions, as well as various fittings packages. Further information is available at elitfonster.se about different options including colour, glass, airing and ventilation etc. We also offer accessories such as blinds, pleated blinds, roller blinds, mosquito nets etc.

Option fire version

The product family is offered in the fire classes EI30, EW30 and E30. Certified by RISE and meets the legal requirement concerning reporting of fire properties in CE-marking for openable units, as well as the requirement for type approval for fixed frames.

P-marking, certification and warranties

CE-marking

The product is CE-marked according to SS-EN 14351-1.

P-marked production

Manufactured in a certified P-marked production process, which ensures that the product's quality and performance maintains a high level.

Certificate issued by RISE, Research Institutes of Sweden, according to certification rule 133 "Certification of production process for production of construction products (P-marked production)" in relation to reference: "Production of windows made of wood and wood/metal".

Quality and environmental certification

The manufacturer is certified according to ISO 9001:2015, as well as according to the environmental management system ISO 14001:2015.

Warranty (applies in Sweden)

Provided the instructions for storage, installation, care and maintenance are followed, the following warranty is provided for Elitfönster Original Alu:

- 10 year warranty against condensation between panes in sealed glazing units
- 10 year warranty on the window's (including the fittings) function
- 10 year warranty covering rot damage in the product's wooden parts

Sizes are indicated in modules. 1 module (M) = 100 mm.

The module size includes 20 mm space for caulking on width and height (i.e. 10 mm all around).

Example: Size 5/10 M entails frame outer width = 480 mm and frame outer height = 980 mm. In other words, the module sizes indicate the minimum size of the recess in the wall

Top swing window AFHO

Product family	Product type	Model designation
Elitfönster Original Alu Objekt	Outward opening top swing window	AFHO

Openability

Top swing window, outward opening, slide hung. Swing fitting, so-called slide hung, makes the window horizontally tiltable 180° outside the façade.

Standard handle

Hoppe London, aluminium silver.

Fitting

Swing fitting in yellow chromated steel that is painted white externally on windows with aluminium cladding in NCS S 0502-Y. For other aluminium colours the swing fitting is externally clad with an aluminium profile in the same colour.

Closing fitting

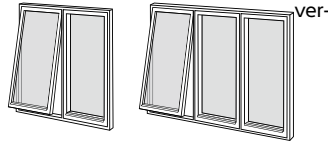
Nickel-free espagnolette in galvanised steel. Latches in hardened steel.

Opening and airing

Fixed opening catch with opening 100 mm where the sashes are automatically restricted when the window is opened. The fitting must be disengaged to open more than 100 mm. The function re-engages when the window is closed. Meets the requirements for protection against falling out, max. permitted opening is 100 mm. Fixed airing position in striking plate.

Multi-pane and combinations

The product can be supplied in combinations with multi-pane, as well as in combinations with fixed frame. See elitfonster.se for more information.



Burglary class

For Original Alu Objekt, top swing window fitting and fixing point are reinforced according to description below to achieve RC2N.

1. Reinforced bottom sash rail and espagnolette.
2. Hardened top fitting.
3. Reinforced slide rail.
4. Glazing method with patented security fixing.
5. Internally lockable handle (Fitting pack 30).
6. Reinforced fixing for striking plate.

Supplement with laminated glass 9.52 to achieve class RC2 or laminated glass 8.76 to achieve SBD (Secured by Design).

Lockable handle and security fittings

See page 8.



Outside



Inside



Technical properties AFHO

U-value

1.2 W/m² °K in standard version.

Down to 0.83 is available as an option, see the table below.

The U-value is indicated for size 1230x1480 mm according to EU standard.

Sound reduction

Rw 36dB in standard version.

Up to Rw 45dB is available as an option, see the table below.

Sound value (dB)			U-value (Light transmission Lt-value %/Solar factor G-value %)				
Rw	Rw+C	Rw+Ctr					
36*	34*	30*	1,2 (75/60)*	1,1 (75/60)	0,99 (74/53)	0,86 (74/53)	0,83 (74/53)
39	38	35	1,2 (74/58)	1,1 (74/58)	1,0 (74/54)	0,88 (74/54)	0,84 (74/51)
40	38	33	1,2 (74/56)	1,1 (74/56)	1,0 (74/51)	0,88 (74/51)	0,84 (74/51)
41	39	35	1,2 (74/56)	1,1 (74/56)	1,0 (73/50)	0,91 (73/50)	0,85 (73/50)
42	40	36	1,2 (73/58)	1,1 (73/58)	1,0 (73/49)	0,93 (73/49)	0,89 (73/49)
45	43	40	1,3 (72/51)	1,2 (72/51)	1,1 (72/51)	0,96 (72/51)	0,92 (72/51)

* standard

The above values refer to windows in standard design or with the glass combination required to achieve the respective sound, U, LT and G values. Some options and accessories such as glass, fittings, valves, etc. may mean that we cannot guarantee the reported value.

Fixed frame AFKO

Product family Elitfönster Original Alu Objekt	Product type Fixed frame	Model designation AFKO
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Openability
Not openable.

Burglary class
Original Alu Objekt fixed are reinforced according to description below to achieve RC2N.



1. Glazing method with patented security fixing.

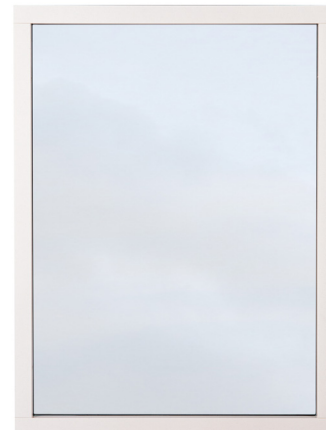
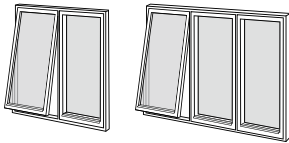
Supplement with laminated glass 9.52 to achieve class RC2 or laminated glass 8.76 to achieve SBD (Secured by Design)



Outside

Combinations

AFKO can be supplied in combination with AFHO.
See elitfonster.se for more information.



Inside

Technical properties AFKO 1-pane

U-value
1.1 W/m² °K in **standard version**.
Down to 0.74 is available as an option, see the table below.
The U-value is indicated for size 1230x1480 mm according to EU standard.

Sound reduction
Rw 33dB in **standard version**.
Up to Rw 46dB is available as an option, see the table below.

Sound value (dB)			U-value (Light transmission Lt-value %/Solar factor G-value %)				
Rw	Rw+C	Rw+Ctr					
33*	32*	28*	1,1 (75/60)*	1,0 (75/60)	0,91 (74/53)	0,77 (74/53)	0,74 (74/53)
38	37	34	1,2 (74/58)	1,0 (74/58)	0,92 (74/54)	0,78 (74/54)	0,75 (74/51)
39	37	32	1,1 (74/56)	1,1 (74/56)	0,92 (74/51)	0,79 (74/51)	0,75 (74/51)
41	39	34	1,2 (74/56)	1,0 (74/56)	0,96 (73/50)	0,82 (73/50)	0,76 (73/50)
42	40	35	1,2 (73/58)	1,1 (73/58)	0,98 (73/49)	0,84 (73/49)	0,80 (73/49)
46	44	39	1,3 (72/51)	1,1 (72/51)	1,0 (72/51)	0,88 (72/51)	0,84 (72/51)

Bold = standard

Side hung AFSO

Product family	Product type	Model designation
Elitfönster Original Alu Objekt	Outward opening side hung window	AFSO (1-pane) AFS2O (2-pane) AFS3O (3-pane)

Openability

Outward opening side hung.

Standard handle

Hoppe London, aluminium silver.

Hanging fittings

Depending on the window's size, two or three lift-off hinges in galvanised and powder-coated steel. White hinges for windows with aluminium cladding in colour NCS S 0502-Y, silver for other colours. The hinge is equipped with security pins and is vertically adjustable. Stainless hinges (option) are recommended in coastal and lakeside areas.

Closing fittings

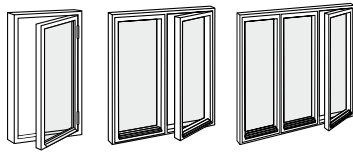
Nickel-free espagnolette in galvanised steel with wedge bolt. Hook bolt espagnolette is offered as an option.

Airing fitting

Window brake, one per window. Window brake is standard in the right pane from the inside for 2- and 3-pane window. Window brake can be supplied in all panes at a supplementary cost. Operated with the espagnolette's handle. Window lower than size M7 supplied solely with friction brake.

Multi-pane and combinations

AFSO can also be offered in versions with 2- and 3-panes. See elitfonster.se for more information.



Burglary class

For Original Alu Objekt side hung window, fitting and fixing point are reinforced according to description below to achieve RC2N.

1. Reinforcement plate wall side for all striking plates and hinges.
2. Reinforced sash side and frame side.
3. Extra protective plate over lock box.
4. Internally lockable handle (Fitting pack 30).
5. Glazing method with patented security fixing.

With 2-pane also:

6. Reinforced striking plate.
7. Reinforced mullion to divide frames.



Supplement with laminated glass 9.52 to achieve class RC2 or laminated glass 8.76 to achieve SBD (Secured by Design).

Lockable handle and security fittings See page 8.

Technical properties AFSO

U-value

1.2 W/m² °K in **standard version**.
Down to 0.84 is available as an option, see the table below.
The U-value is indicated for size 1230x1480 mm according to EU standard.

Sound reduction

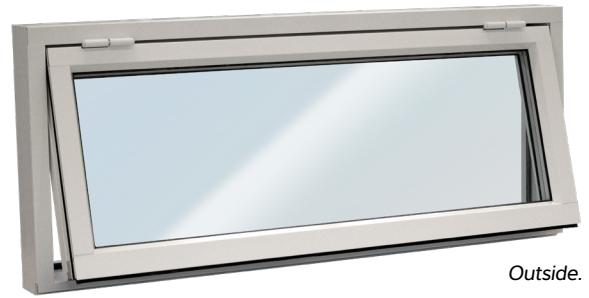
Rw 33dB in **standard version**.
Up to Rw 40dB is available as an option, see the table below.

Sound value (dB)			U-value (Light transmission Lt-value %/Solar factor G-value %)				
Rw	Rw+C	Rw+Ctr					
33*	31*	27*	1,2 (75/60)*	1,1 (75/60)	1,0 (74/53)	0,87 (74/53)	0,84 (74/53)
37	36	32	1,2 (74/58)	1,1 (74/58)	1,0 (74/51)	0,89 (74/51)	0,85 (74/51)
40	38	34	1,3 (74/55)	1,2 (74/55)	1,0 (73/52)	0,92 (73/52)	0,88 (73/52)

Bold = standard

Top hung AFÖO

Product family	Product type	Model designation
Elitfönster Original Alu Objekt	Outward opening top hung window	AFÖO



Outside.

Openability

Outward opening top hung.

Standard handle

Hoppe London, aluminium silver.

Fittings

Two lift-off hinges in galvanised and powder-coated steel. White hinges for windows with aluminium cladding in colour NCS S 0502-Y, silver for other colours. The hinge is equipped with security pins. Stainless hinges (option) are recommended in coastal and lakeside areas.

Closing fitting

Nickel-free espagnolette in galvanised steel. Latches in hardened steel.

Airing

Airing position in striking plate.

Burglary class

For Original Alu Objekt top hung window, fitting and fixing point are reinforced according to description below to achieve RC2N.

1. Reinforced bottom sash rail, espagnolette and frame top rail.
2. Reinforcement plate wall side for all striking plates and hinges.
3. Reinforced fixing for striking plate.
4. Glazing method with patented security fixing.
5. Internally lockable handle (Fitting pack 30).



Supplement with laminated glass 9.52 to achieve class RC2 or laminated glass 8.76 to achieve SBD (Secured by Design).

Lockable handle and security fittings

See page 8.

Technical properties AFÖO 1-pane

U-value

1.2 W/m² °K in **standard version**.
Down to 0.83 is available as an option, see the table below.
The U-value is indicated for size 1230x1480 mm according to EU standard.

Sound reduction

Rw 36dB in **standard version**.
Up to Rw 45dB is available as an option, see the table below.

Sound value (dB)			U-value (Light transmission Lt-value %/Solar factor G-value %)				
Rw	Rw+C	Rw+Ctr					
36*	34*	30*	1,2 (75/60)*	1,1 (75/60)	0,99 (74/53)	0,86 (74/53)	0,83 (74/53)
39	38	35	1,2 (74/58)	1,1 (74/58)	1,0 (74/54)	0,88 (74/54)	0,84 (74/51)
40	38	33	1,2 (74/56)	1,1 (74/56)	1,0 (74/51)	0,88 (74/51)	0,84 (74/51)
41	39	35	1,2 (74/56)	1,1 (74/56)	1,0 (73/50)	0,91 (73/50)	0,85 (73/50)
42	40	36	1,2 (73/58)	1,1 (73/58)	1,0 (73/49)	0,93 (73/49)	0,89 (73/49)
45	43	40	1,3 (72/51)	1,2 (72/51)	1,1 (72/51)	0,96 (72/51)	0,92 (72/51)

Bold = standard

Patio door ADO, ADO2

Product family	Product type	Model designation
Elitfönster Original Alu Objekt	Patio door and double door	ADO (ADFO/ADKO) ADO2 (ADFO2/ADKO2)

Openability

Outward opening.

Standard handle

Hoppe London with long backplate, aluminium silver. Double door is equipped with handle in active and passive door.

Hanging fittings

Three lift-off hinges in galvanised and powder-coated steel. White hinges for doors with aluminium cladding in colour NCS S 0502-Y, silver for other colours.

The hinge is equipped with security pins and is vertically adjustable. Stainless hinges (option) are recommended in coastal and lakeside areas.

Closing fitting

Single door: Hook bolt espagnolette in nickel-free galvanised steel with three side bolts. Hook bolt espangolette offered as option.

Double door: Double espangolettes. in active door with side bolts (two hook bolts, one side bolt) and end bolt. Passive door has shoot bolt with end bolts

Airing fitting

Door brake, operated with the espangolette's handle. Double doors have brake in both door leaves.

Threshold

Standard threshold 42 mm, the threshold's colour follows the colours on the frame's inside. Threshold in oak or brown-glazed pine with height 42 mm as well as low threshold in aluminium with height 25 mm are offered as options.

Door filling

1. Primed door with smooth profile has oil-hardened board internally and aluminium plate externally.
2. Primed, antique version door has profiled execution on the inside with MDF-board as well as external aluminium plate.
3. Glazed door in standard version or with profiled inside has internal smooth pine plywood and aluminium plate externally .



Internal filling in profiled execution (antique).

Wicket door (double doors)

Left wicket door viewed from the outside is standard, right wicket door can be selected as an option.

Lockable handle and security fittings

See page 9.

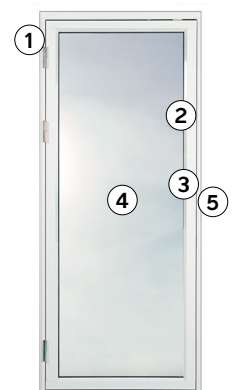


Burglary class

For Original Alu Objekt patio door, fitting and fixing point are reinforced according to description below to achieve RC2N. Applies solely for fully glazed patio doors.

1. Reinforcement plate wall side for all striking plates and hinges.
2. Reinforced sash side and frame side.
3. Extra protective plate over lock box.
4. Glazing method with patented security fixing.
5. Lockable handle (Fitting pack 4, prepared for cylinder).

Supplement with laminated glass 9.52 to achieve class RC2 or laminated glass 8.76 to achieve SBD (Secured by Design).



Patio door ADO, ADO2

>> cont.

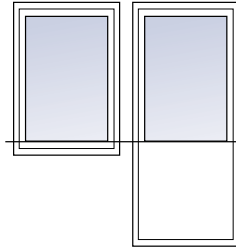
Alignment single door

ADFO aligns with openable window
ADKO aligns with fixed frames

Example

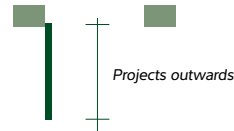
AFHO 9/12 aligns with ADFO 9/21-12

AFKO 8/13 aligns with ADKO 8/20-13

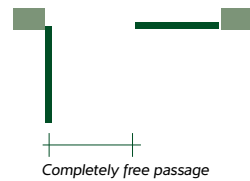


FUNCTIONAL DIMENSIONS (the figures are viewed from above)

Dimension open door 90°
 Frame outer width -51 mm



Double door with equal partition, wicket door open
 frame outer width /2-145 mm



Child safety lock (option)
 Max. permitted opening in childproof position = 100 mm

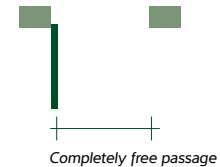


Evacuation dimensions

According to the National Board of Housing, Building and Planning's Building Regulations, a free evacuation area is achieved when the width of the opening is at least 0.50 m and the height of the opening is at least 0.60 m. The sum of the width and height must be at least 1.50 m.

FREE PASSAGE DIMENSION

Single door
 frame outer width -179 mm



Double door, both door leaves open
 frame outer width -255 mm



Technical properties ADO, fully glazed version

U-value

1,1 W/m² °K in **standard version**.
 Down to 0,81 is available as an option, see the table below.
 The U-value is indicated for size 1230x2180 mm. according to EU standard.

Sound reduction

Rw 33dB in **standard version**.
 Up to Rw 44dB is available as an option, see the table below.

Sound value (dB)			U-value (Light transmission Lt-value %/Solar factor G-value %)				
Rw	Rw+C	Rw+Ctr					
33*	31*	26*	1,1 (75/60)*	1,0 (75/60)	0,95 (74/53)	0,84 (74/53)	0,81 (74/53)
37	35	30	1,2 (74/58)	1,1 (74/58)	0,97 (74/54)	0,85 (74/51)	0,81 (74/51)
38	36	31	1,2 (74/56)	1,0 (74/56)	0,97 (74/51)	0,85 (74/51)	0,81 (74/52)
40	38	33	1,2 (74/56)	1,0 (74/56)	0,97 (74/51)	0,85 (74/51)	0,81 (74/51)
41	39	34	1,2 (74/56)	1,0 (74/56)	0,98 (73/52)	0,87 (73/52)	0,84 (73/52)
42	40	35	1,2 (73/54)	1,1 (73/54)	1,0 (73/49)	0,90 (73/49)	0,87 (73/49)
44	42	37	1,3 (73/55)	1,2 (73/55)	1,0 (72/51)	0,93 (72/51)	0,90 (72/51)

* standard

Also offered with sealed filling at the bottom in two sound levels:

Standard filling with sound value Rw 25 dB / Rw+C 24 dB / Rw+Ctr 23 dB
 Sound filling with sound value Rw 42 dB / Rw+C 40 dB / Rw+Ctr 35 dB

Technical properties ADO2 double door, fully glazed version

U-value

1,2 W/m² °K in **standard version**.
 Down to 0,81 is available as an option, see the table below.
 The U-value is indicated for size 2000x2180 mm according to EU standard.

Sound reduction

Rw 34dB in **standard version**.
 Up to Rw 43dB is available as an option, see the table below.

Sound value (dB)			U-value (Light transmission Lt-value %/Solar factor G-value %)				
Rw	Rw+C	Rw+Ctr					
34*	33*	29*	1,2 (75/60)*	1,1 (75/60)	0,98 (74/53)	0,85 (74/53)	0,81 (74/53)
43	42	38	1,3 (73/55)	1,2 (73/55)	1,1 (72/51)	0,96 (72/51)	0,92 (72/51)

* Standardutförande

The above values refer to patio doors in standard design or with the glass combination required to achieve the respective sound, U, LT and G values. Some options and accessories such as glass, fittings, valves, etc. may mean that we cannot guarantee the reported value.

Fittings pack window



Standard handle*
Handle London

Aluminium (silver)
Installation kit standard handle.

Includes: Int. handle with cover plate.

Standard for all windows.



Fittings pack 9

White version
Child protection airing fitting
for window.

Includes: Fix 93, screws.



Fittings pack 13

Aluminium (silver)
Internal cover plate for loose handle. The
cover is slidable.

Includes: Cover plate with holder.
3 x screws.
Handle is purchased separately.



Loose handle

Includes: Handle Tokyo
Goes with fitting pack 13.



Fittings pack 15*

Aluminium (silver)
Installation kit KISI2 for window handle.

Includes: KISI2, child safety lock.



Fittings pack 22*

White version
Child protection catch arrangement, Fix 184.

Includes: Plastic coated wire.
4 x screws.
Fitting.



Fittings pack 30*
Handle London

Aluminium (silver)
Installation kit security handle/
child safety lock.

Includes: Internal handle with cylinder.
Key.
Cover plate.



Fittings pack 31*
Handle London

Aluminium (silver)
Installation kit safety handle/child safety
lock, KISI2.

Includes: Internal handle with cylinder.
Key.
Cover plate.
KISI2, child safety lock.



Fittings pack 33
Handle ASSA Vingå 7312

Matt chrome version

Includes: Internal handle
Pressure cylinder 7310
2 x screws

Meets the requirements according to SS
3620, class A

* Also available in black. Model Hoppe Tokyo.

Fittings pack patio door



Standard handle*
Handle London

Aluminium (silver)
Installation kit internal handle with long backplate.

Includes: Internal handle L or R.
3 x screws.
Standard for all patio doors.



Fittings pack 1*
Handle London

Aluminium (silver)
Installation kit for internal handle with turn knob.

Includes: Internal handle L or R.
3 x screws.



Fittings pack 2*
Handle London

Aluminium (silver)
Installation kit for external handle and internal handle with turn knob.

Includes: External handle straight.
Internal handle L or R.
3 x screws.



Fittings pack 3*
Handle London

Aluminium (silver)
Installation kit for ext. handle prepared for lock cylinder and int. handle with turn knob. Cylinder not included.

Includes: External handle straight.
Internal handle L or R.
3 x screws.

Suitable cylinder ASSA 1209 or 1309 with long carrier.



Fittings pack 4*
Handle London

Aluminium (silver)
Installation kit for internal handle prepared for lock cylinder. Cylinder not included.

Includes: Internal handle L or R.
3 x screws.

Suitable cylinder ASSA 1209 or ASSA 1309 with long carrier.



Fittings pack 5*
Handle London

Aluminium (silver)
Installation kit for internal handle prepared for lock cylinder and external handle. Cylinder not included.

Includes: External handle straight.
Internal handle L or R.
3 x screws.

Suitable cylinder ASSA 1209 or ASSA 1309 with long carrier.

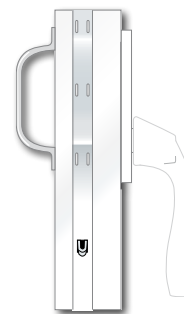


Fittings pack 6*
Handle London

Aluminium (silver)
Installation kit for ext- and internal handle prepared for lock cylinder. Cylinder not included.

Includes: External handle straight.
Internal handle L or R.
3 x screws.

Suitable cylinder 2 x ASSA 1209 or 1309 int + ext. with long carrier.



Fittings pack 12

Galvanised
External pull handle.

Includes: External pull handle.
2 x pop rivets.

* Also available in black. Model Hoppe Tokyo.

Fittings pack patio door

>> cont.

**Fittings pack 22***

White version
Child protection catch arrangement, Fix 184.

Includes: Plastic coated wire.
4 x screws.
Fitting.

**Fittings pack 31***
Handle London

Aluminium (silver)
Installation kit safety handle/child safety lock, KISI2.

Includes: Internal handle with cylinder, key, cover plate.
KISI2, child safety lock.

**Fittings pack 33**

Handle ASSA Vinga 7312

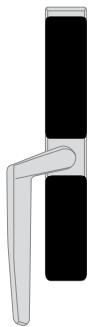
Includes: Internal handle.
Pressure cylinder 7310.
2 x screws.

Meets the requirements according to SS 3620, class A

**Fittings pack 43****Internal code handle
Matt chrome.

Includes: Supplied with one way screw
and 2 x 1.5V AAA batteries.

Meets the requirements according to SS3620, class B.

**Fittings pack 43 passive****Internal code handle
Matt chrome.

Suitable for passive door leaf in
a double door.

**Fittings pack 44****Internal code handle + external handle
London.

Matt chrome.

Includes: Supplied with one way screw
and 2 x 1.5V AAA batteries.

* Also available in black. Model Hoppe Tokyo.

** The same model is also available in black.

Antique profile, glazing bars and mullions

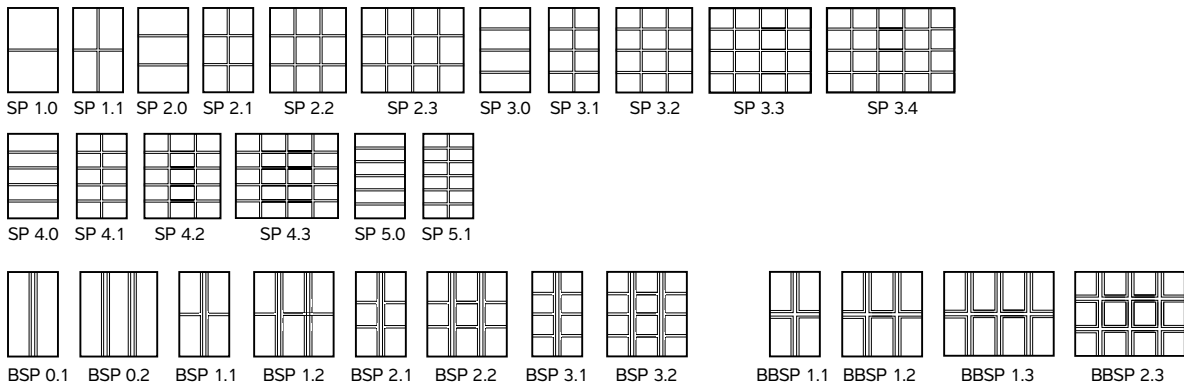
Antique profile (option)

Internal profile on frame and sash, see picture for version.

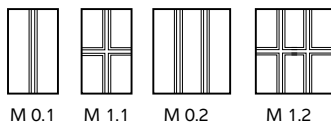


Glazing bars and mullions (option)

Example of narrow (SP) and wide (BSP) removable glazing bars, can also be selected as intermediate glazing bar.
Contact your retailer for other combinations.



Example of mullions, can be combined with glazing bars



Material and dimension

Type	Material	Narrow	Wide
Detachable glazing bars	Aluminium	30 mm	65 mm
Intermediate glazing bar	Aluminium	26 mm	45 mm
Fixed mullion that divides the panes	Wood/Aluminium		63 mm