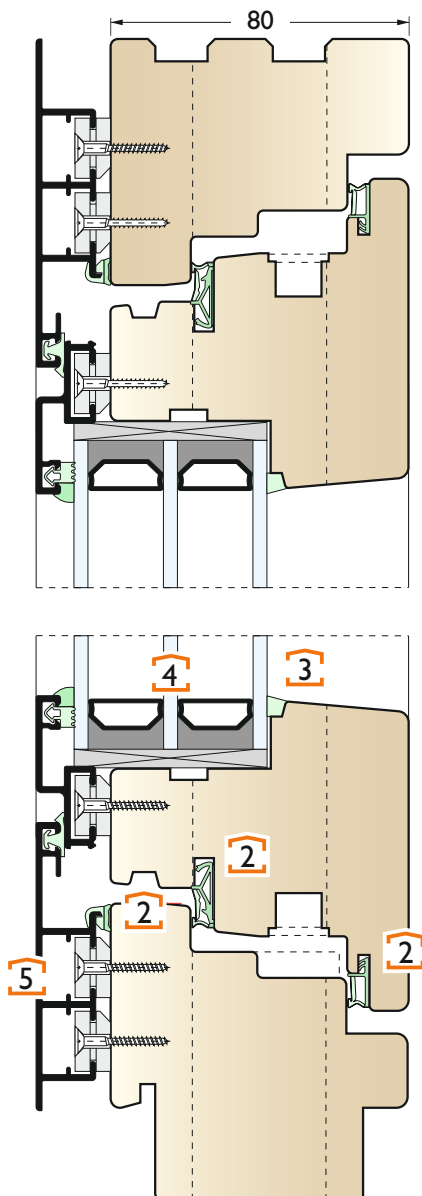


INO-HA80-MM

window - vertical section



Aligned execution of frame and casement, inside and outside. The window is distinguished by modern design and visual perfection, which emphasizes version without glazing batten.

- 1** PROFILES:
Wood frame profiles and casements with a thickness of 80 mm meet the constructional requirements of the DIN 68121 standard.
The profiles are three layers of wood joined together using waterproof D4 adhesive according to the EN 204 and EN 143257 standards.
- WOOD TYPE:**
You can choose from the following species of wood: spruce, larch, oak and meranti
- HARDWARE**
We install hidden ROTO NX Designo II hardware in a silver colour. The certified load-bearing capacity of the standard installed hardware is 150 kg.
- 2** PERMANENT ELASTIC SEALS
Series-mounted highly elastic seals with soft cores and guard backs and smooth surface, resistant to dirt.
- 3** SEALANT
The colour of the sealant matches the colour of the product surface.
- 4** GLAZING
Glazing thickness of 52 mm. Installation of three-layer insulating glass with the thermal conductivity of $U_g = 0.5 \text{ W/m}^2\text{K}$.
- 5** ALUMINIUM SURFACES
A powder-coated aluminum clads are environmentally friendly and provides excellent quality and durability of coloured surfaces. A wide range of colors from the RAL color chart, imitation wood decors and colors with a metallic appearance.

Thermal transfer coefficient

INO-HA80-MM (soft wood)		
$U_f - W/m^2K$	$U_g - W/m^2K$	$U_w - W/m^2K$
1,2		
	0,7 (TGI)	0,96
	0,5 (TGI)	0,83

Legend

$U_f - W/m^2K$ Thermal transfer coefficient on frame window unit calculated according to EN ISO 10077-2.

$U_g - W/m^2K$ Thermal transfer coefficient on glazing.

$U_w - W/m^2K$ Thermal transfer coefficient on complete window unit calculated according to EN ISO 10077-1.

Possible execution

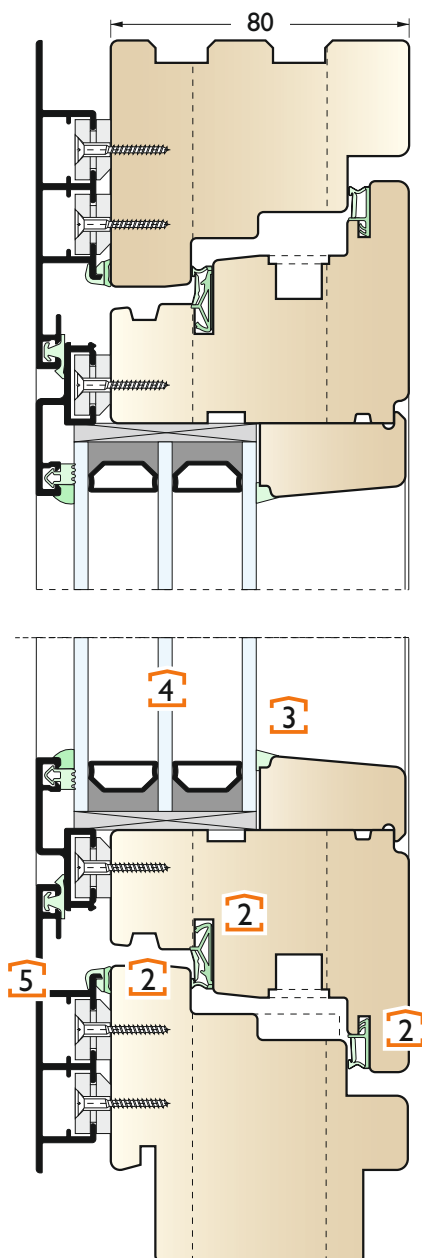
EXECUTION	INO-HA80-MM
Windows and balcony doors	
Fixed elements	
Lifting-sliding	
Sliding-tilting	
Folding-articulated	
Balcony doors opening outwards	

Legend  - possible  - not possible

INO-HA80-ML

Aligned execution of frame and casement, inside and outside

window - vertical section



1 PROFILES:

Wood frame profiles and casements with a thickness of 80 mm meet the constructional requirements of the DIN 68121 standard. The profiles are three layers of wood joined together using waterproof D4 adhesive according to the EN 204 and EN 143257 standards.

WOOD TYPE:

You can choose from the following species of wood: spruce, pine, larch, oak, meranti

HARDWARE

We install hidden ROTO NX Designo II hardware in a silver colour. The certified load-bearing capacity of the standard installed hardware is 150 kg.

2 PERMANENT ELASTIC SEALS

Series-mounted highly elastic seals with soft cores and guard backs and smooth surface, resistant to dirt.

3 SEALANT

The colour of the sealant matches the colour of the product surface.

4 GLAZING

Glazing thickness of 48 mm. Installation of three-layer insulating glass with the thermal conductivity of $U_g = 0.5 \text{ W/m}^2\text{K}$.

5 ALUMINIUM SURFACES

A powder-coated aluminum clads are environmentally friendly and provides excellent quality and durability of coloured surfaces. A wide range of colors from the RAL color chart, imitation wood decors and colors with a metallic appearance.

Thermal transfer coefficient

INO-HA80-ML (soft wood)		
$U_f - W/m^2K$	$U_g - W/m^2K$	$U_w - W/m^2K$
1,2		
	0,7 (TGI)	0,96
	0,5 (TGI)	0,83

Legend

$U_f - W/m^2K$ Thermal transfer coefficient on frame window unit calculated according to EN ISO 10077-2.

$U_g - W/m^2K$ Thermal transfer coefficient on glazing.

$U_w - W/m^2K$ Thermal transfer coefficient on complete window unit calculated according to EN ISO 10077-1.

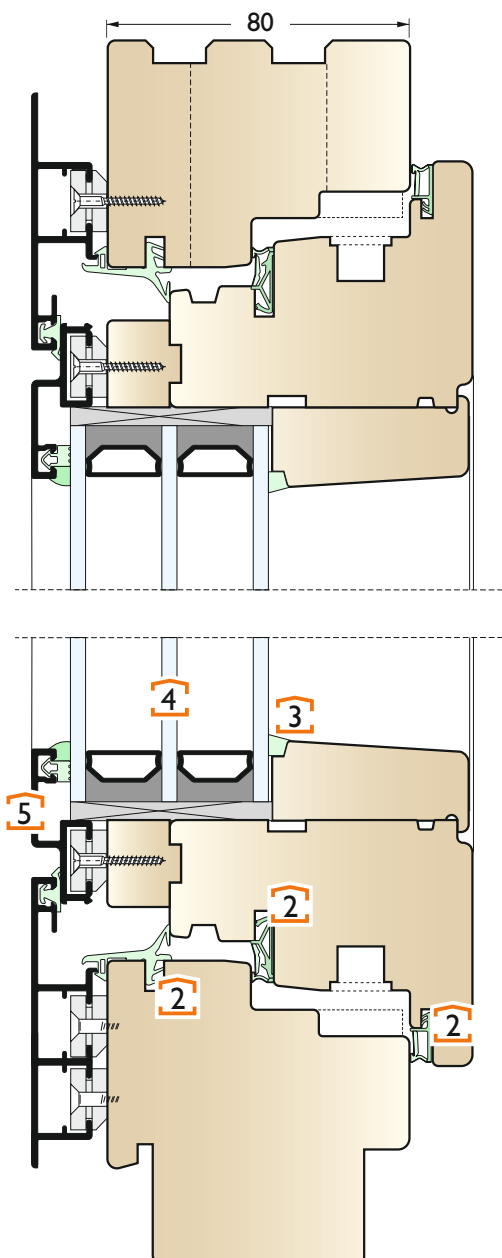
Possible execution

EXECUTION	INO-HA80-ML
Windows and balcony doors	
Fixed elements	
Lifting-sliding	
Sliding-tilting	
Folding-articulated	
Balcony doors opening outwards	

Legend  - possible  - not possible

INO-HA80-F

window - vertical section



Straight lines of aluminium clad which is aligned outside.

1 PROFILES:

Wood frame profiles and casements with a thickness of 80 mm meet the constructional requirements of the DIN 68121 standard. The profiles are three layers of wood joined together using waterproof D4 adhesive according to the EN 204 and EN 143257 standards.

WOOD TYPE:

You can choose from the following species of wood: spruce, pine, larch, oak, meranti

HARDWARE

We install ROTO NX hardware in a silver colour. The certified load-bearing capacity of the standard installed hardware is 150 kg.

2 PERMANENT ELASTIC SEALS

Series-mounted highly elastic seals with soft cores and guard backs and smooth surface, resistant to dirt.

3 SEALANT

The colour of the sealant matches the colour of the product surface.

4 GLAZING

Glazing thickness of 52 mm. Installation of three-layer insulating glass with the thermal conductivity of $U_g = 0.5 \text{ W/m}^2\text{K}$.

5 ALUMINIUM SURFACES

A powder-coated aluminum clads are environmentally friendly and provides excellent quality and durability of coloured surfaces. A wide range of colors from the RAL color chart, imitation wood decors and colors with a metallic appearance.



Thermal transfer coefficient

INO-HA80-F (soft wood)		
$U_f - W/m^2K$	$U_g - W/m^2K$	$U_w - W/m^2K$
1,2		
	0,7 (TGI)	0,96
	0,5 (TGI)	0,83

Legend

$U_f - W/m^2K$ Thermal transfer coefficient on frame window unit calculated according to EN ISO 10077-2.

$U_g - W/m^2K$ Thermal transfer coefficient on glazing.

$U_w - W/m^2K$ Thermal transfer coefficient on complete window unit calculated according to EN ISO 10077-1.

Possible execution

EXECUTION	INO-HA80-F
Windows and balcony doors	
Fixed elements	
Lifting-sliding	 **
Sliding-tilting	
Folding-articulated	
Balcony doors opening outwards	

Legend

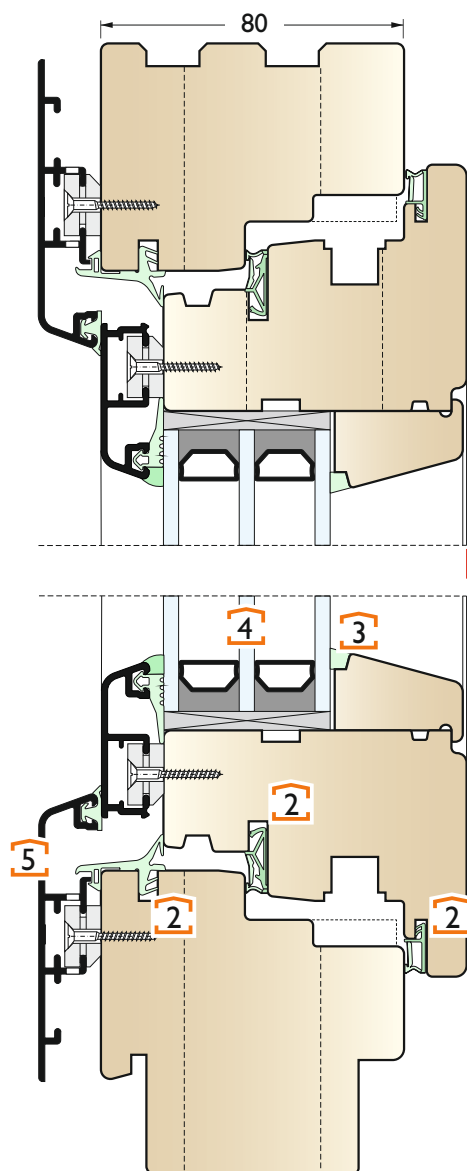
 - possible

 - not possible

** scheme D not possible

INO-HA80

window - vertical section



1 PROFILES :

Wood frame profiles and casements with a thickness of 80 mm meet the constructional requirements of the DIN 68121 standard. The profiles are three layers of wood joined together using waterproof D4 adhesive according to the EN 204 and EN 143257 standards.

WOOD TYPE:

You can choose from the following species of wood: spruce, pine, larch, oak, meranti

HARDWARE

We install ROTO NX hardware in a silver colour. The certified load-bearing capacity of the standard installed hardware is 150 kg.

2 PERMANENT ELASTIC SEALS

Series-mounted highly elastic seals with soft cores and guard backs and smooth surface, resistant to dirt.

3 SEALANT

The colour of the sealant matches the colour of the product surface.

4 GLAZING

You can choose from a variety of thermal and acoustic insulated and safety glass. A spacer between glass made from rustproof metal sheet or plastic material (TGI) further improves the thermal characteristics of the product.

5 ALUMINIUM SURFACES

A powder-coated aluminum clads are environmentally friendly and provides excellent quality and durability of coloured surfaces. A wide range of colors from the RAL color chart, imitation wood decors and colors with a metallic appearance.



Thermal transfer coefficient

INO-HA80 (soft wood)		
$U_f - W/m^2K$	$U_g - W/m^2K$	$U_w - W/m^2K$
1,2		
	0,7 (TGI)	0,96
	0,5 (TGI)	0,83

Legend

$U_f - W/m^2K$ Thermal transfer coefficient on frame window unit calculated according to EN ISO 10077-2.

$U_g - W/m^2K$ Thermal transfer coefficient on glazing.

$U_w - W/m^2K$ Thermal transfer coefficient on complete window unit calculated according to EN ISO 10077-1.

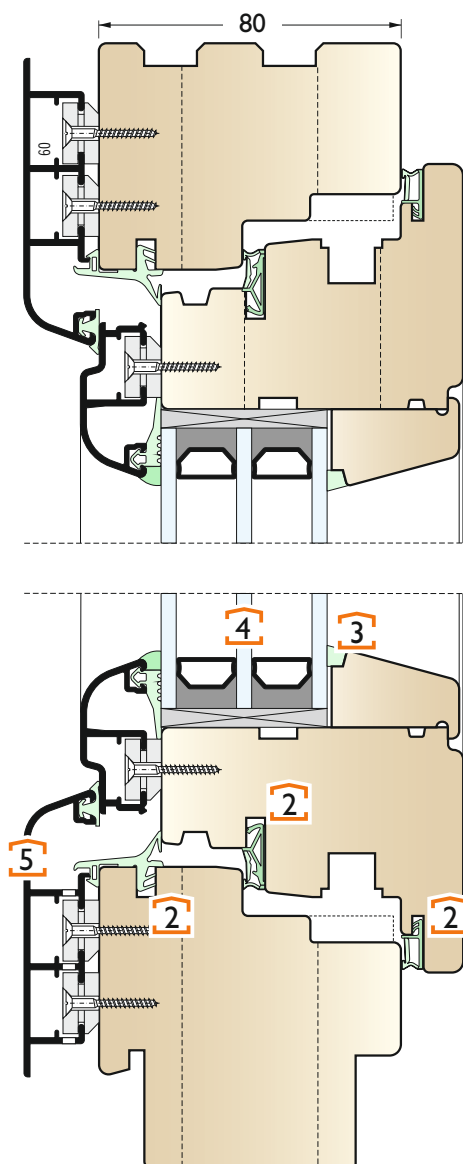
Possible execution

EXECUTION	INO-HA80
Windows and balcony doors	⊕
Fixed elements	⊕
Lifting-sliding	⊕
Sliding-tilting	⊕
Folding-articulated	⊕
Balcony doors opening outwards	⊕

Legend ⊕ - possible ⊗ - not possible

INO-HA80-S

window - vertical section



1 PROFILES :

Wood frame profiles and casements with a thickness of 80 mm meet the constructional requirements of the DIN 68121 standard. The profiles are three layers of wood joined together using waterproof D4 adhesive according to the EN 204 and EN 143257 standards.

WOOD TYPE:

You can choose from the following species of wood: spruce, pine, larch, oak, meranti

HARDWARE

We install ROTO NX hardware in a silver colour. The certified load-bearing capacity of the standard installed hardware is 150 kg.

2 PERMANENT ELASTIC SEALS

Series-mounted highly elastic seals with soft cores and guard backs and smooth surface, resistant to dirt.

3 SEALANT

The colour of the sealant matches the colour of the product surface.

4 GLAZING

You can choose from a variety of thermal and acoustic insulated and safety glass. A spacer between glass made from rustproof metal sheet or plastic material (TGI) further improves the thermal characteristics of the product.

5 ALUMINIUM SURFACES

A powder-coated aluminum clads are environmentally friendly and provides excellent quality and durability of coloured surfaces. A wide range of colors from the RAL color chart, imitation wood decors and colors with a metallic appearance.



Thermal transfer coefficient

INO-HA80-S (soft wood))		
$U_f - W/m^2K$	$U_g - W/m^2K$	$U_w - W/m^2K$
1,2		
	0,7 (TGI)	0,96
	0,5 (TGI)	0,83

Legend

$U_f - W/m^2K$ Thermal transfer coefficient on frame window unit calculated according to EN ISO 10077-2.

$U_g - W/m^2K$ Thermal transfer coefficient on glazing.

$U_w - W/m^2K$ Thermal transfer coefficient on complete window unit calculated according to EN ISO 10077-1.

Possible execution

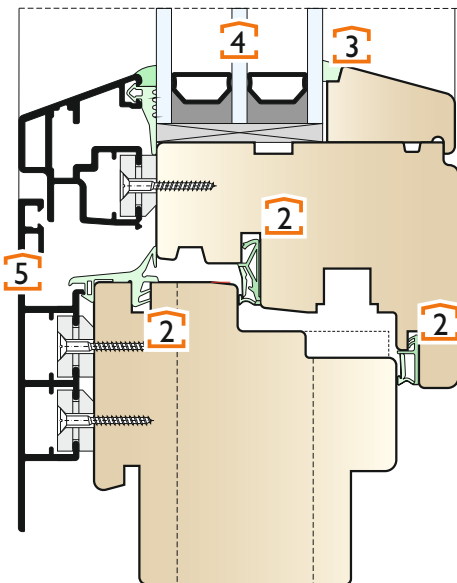
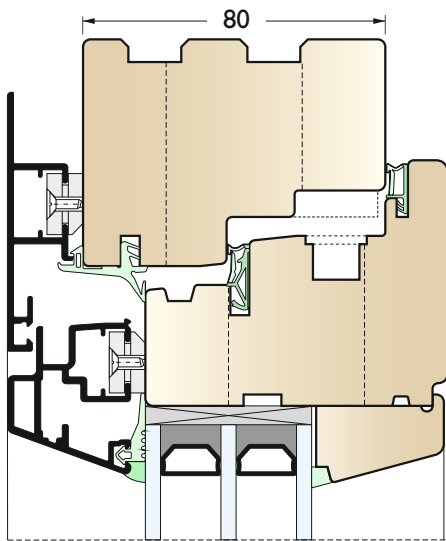
EXECUTION	INO-HA80-S
Windows and balcony doors	
Fixed elements	
Lifting-sliding	
Sliding-tilting	 *
Folding-articulated	
Balcony doors opening outwards	

Legend  - possible  - not possible

* possible: type I 4HA80,
type I 4HA80-BF, type I 4HA80-CF

INO-HA80-B

window - vertical section



1 PROFILES :

Wood frame profiles and casements with a thickness of 80 mm meet the constructional requirements of the DIN 68121 standard. The profiles are three layers of wood joined together using waterproof D4 adhesive according to the EN 204 and EN 143257 standards.

WOOD TYPE:

You can choose from the following species of wood: spruce, pine, larch, oak, meranti

HARDWARE

We install ROTO NX hardware in a silver colour. The certified load-bearing capacity of the standard installed hardware is 150 kg.

2 PERMANENT ELASTIC SEALS

Series-mounted highly elastic seals with soft cores and guard backs and smooth surface, resistant to dirt.

3 SEALANT

The colour of the sealant matches the colour of the product surface.

4 GLAZING

You can choose from a variety of thermal and acoustic insulated and safety glass. A spacer between glass made from rustproof metal sheet or plastic material (TGI) further improves the thermal characteristics of the product.

5 ALUMINIUM SURFACES

Straight lines of aluminium clad which is aligned outside gives the product a very modern look. A powder-coated aluminum clads are environmentally friendly and provides excellent quality and durability of coloured surfaces. A wide range of colors from the RAL color chart, imitation wood decors and colors with a metallic appearance.



Thermal transfer coefficient

INO-HA80-B (soft wood)		
$U_f - W/m^2K$	$U_g - W/m^2K$	$U_w - W/m^2K$
1,2		
	0,7 (TGI)	0,96
	0,5 (TGI)	0,83

Legend

$U_f - W/m^2K$ Thermal transfer coefficient on frame window unit calculated according to EN ISO 10077-2.

$U_g - W/m^2K$ Thermal transfer coefficient on glazing.

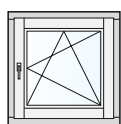
$U_w - W/m^2K$ Thermal transfer coefficient on complete window unit calculated according to EN ISO 10077-1.

Possible execution

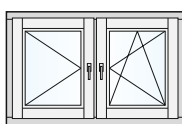
EXECUTION	INO-HA80-B
Windows and balcony doors	
Fixed elements	
Lifting-sliding	
Sliding-tilting	
Folding-articulated	
Balcony doors opening outwards	

Legend  - possible  - not possible

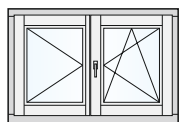
TYPES of windows and balcony doors



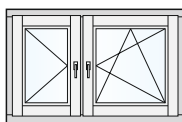
Type 01 HA80



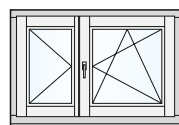
Type 01-01 HA80



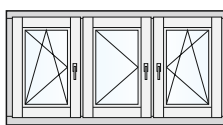
Type 06 HA80



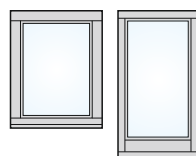
Type 01-01 HA80



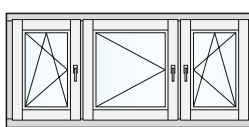
Type 07 HA80



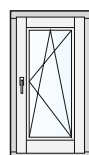
Type 01-01-01 HA80



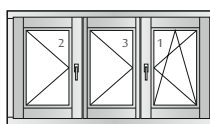
Type 08 HA80



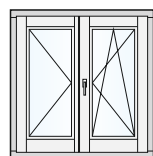
Type 01-01-01 HA80



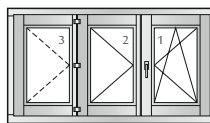
Type 09 HA80



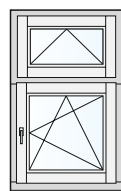
Type 01-01-01B HA80



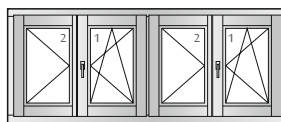
Type 11 HA80



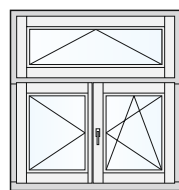
Type 01-01-01 C HA80



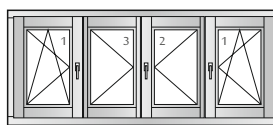
Type 12/13 HA80



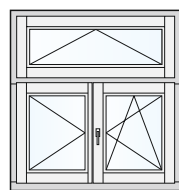
Type 06-06 HA80



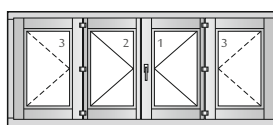
Type 01/01 HA80



Type 01-06-01A HA80

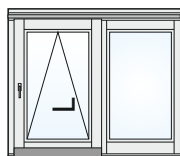


Type 01/06 HA80

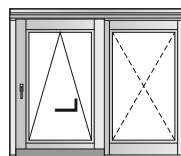


Type 01-06-01B HA80

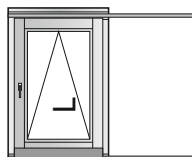
Sliding-tilting



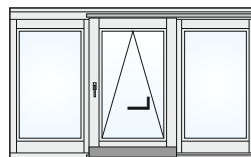
Type I 4 HA80 PSK



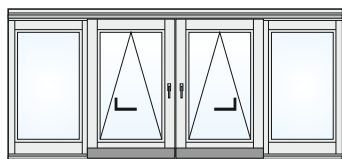
Type I 4 HA80-FD PSK



Type I 4 HA80-A PSK

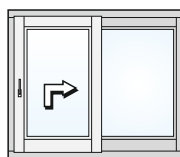


Type I 4 HA80-BF PSK

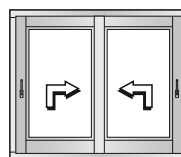


Type I 4 HA80-CF PSK

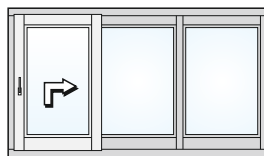
Lifting-sliding



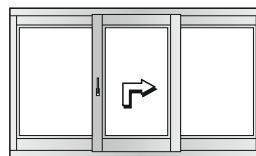
Type I 8 HA80
1 x casement, 1 x fiksed



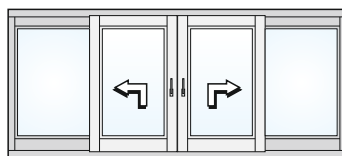
Type I 8 HA80-D
2 x casement



Type I 8 HA80-A
1 x casement, 2 x fiksed

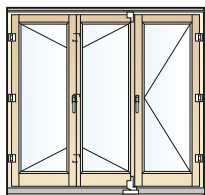


Type I 8 HA80-G
1 x casement, 2 x fiksed

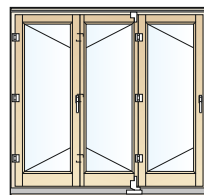


Type I 8 HA80-C
2 x casement, 2 x fiksed

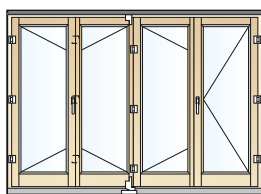
Folding-articulated



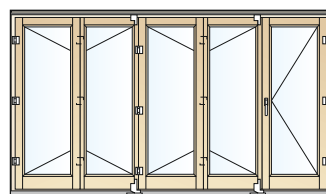
TYPE 321 HA80 FT
TYPE 312 HA80 FT



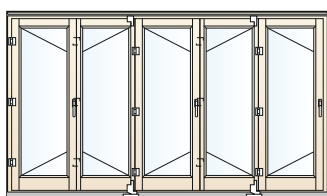
TYPE 330 HA80 FT
TYPE 303 HA80 FT



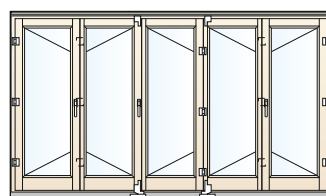
TYPE 431 HA80 FT
TYPE 413 HA80 FT



TYPE 541 HA80 FT
TYPE 514 HA80 FT



TYPE 550 HA80 FT
TYPE 505 HA80 FT



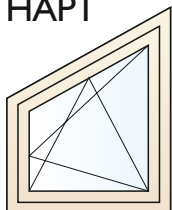
TYPE 532 HA80 FT
TYPE 523 HA80 FT

DESIGNER SHAPES

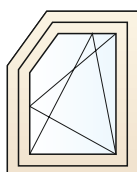
Trapezoid windows

Designer shapes in MM and ML versions are not possible

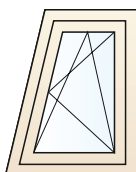
HAP1



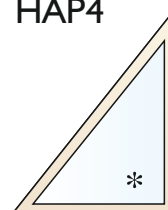
HAP2



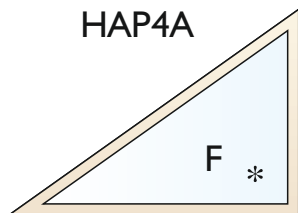
HAP3



HAP4



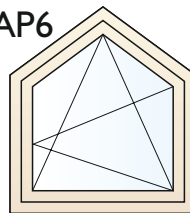
HAP4A



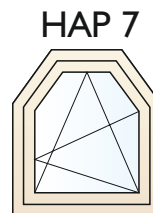
HAP5



HAP6

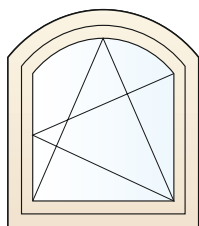


HAP 7

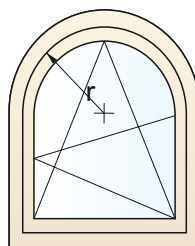


Arch and half-round windows

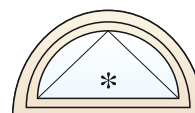
HAP11



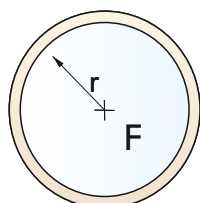
HAP12



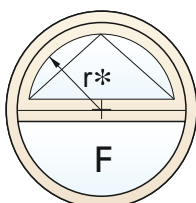
HAP13



HAP14



HAP14A



Legend

* - service opening only or fixed glazing