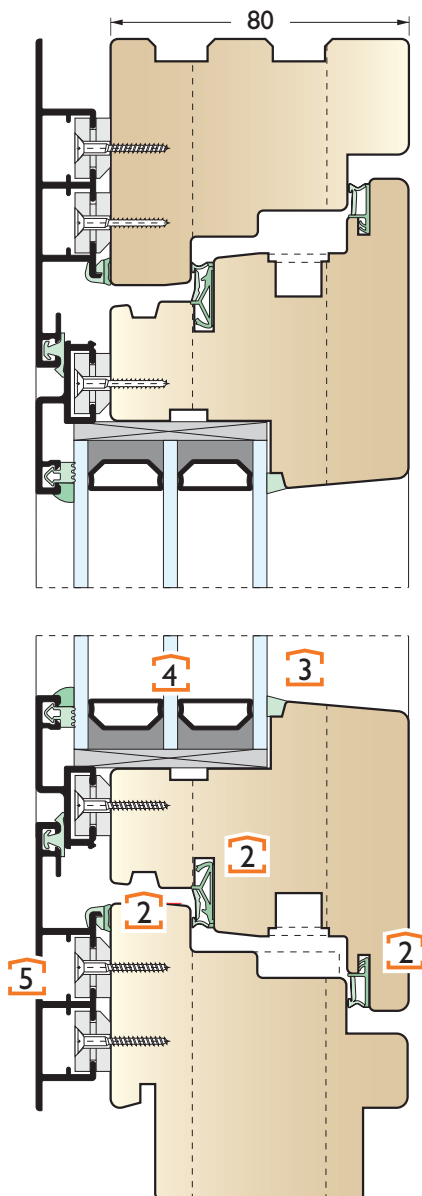


INO-HA80-MM

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.

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.
- 2** WOOD TYPE:
You can choose from the following species of wood: spruce, larch, oak and meranti
- 3** 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 ² K	U _g - W/m ² K	U _w - W/m ² K
1,2		
	0,6 (TGI)	0,90
	0,5 (TGI)	0,83

Legend

U_f - W/m²K Thermal transfer coefficient on frame window unit calculated according to EN ISO 10077-2.

U_g - W/m²K Thermal transfer coefficient on glazing.

U_w - W/m²K Thermal transfer coefficient on complete window unit calculated according to EN ISO 10077-1.

Possible execution

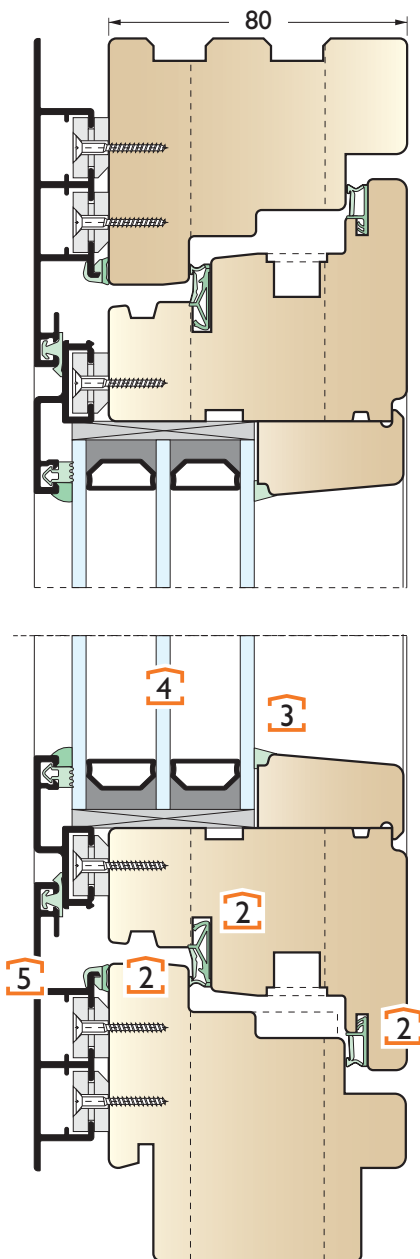
EXECUTION	INO-HA80-MM
Windows and balcony doors	⊕
Fixed elements	⊕
Lifting-sliding	⊗
Sliding-tilting	⊗
Folding-articulated	⊗
Balcony doors opening outwards	⊗

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.
- 2** WOOD TYPE:
You can choose from the following species of wood: spruce, pine, larch, oak, meranti
- 3** 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		
	0,6 (TGI)	0,90
	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

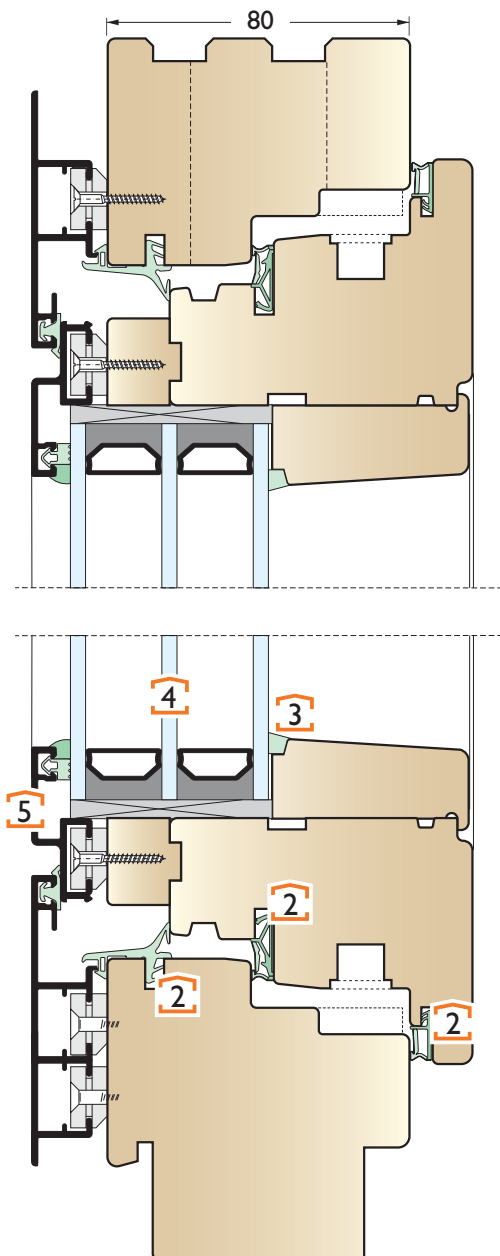
EXECUTION	INO-HA80-ML
Windows and balcony doors	⊕
Fixed elements	⊕
Lifting-sliding	⊗
Sliding-tilting	⊗
Folding-articulated	⊗
Balcony doors opening outwards	⊗

Legend ⊕ - possible ⊗ - not possible

INO-HA80-F

**Straight lines of aluminium clad
which is aligned 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 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 ² K	U _g - W/m ² K	U _w - W/m ² K
1,2		
	0,6 (TGI)	0,90
	0,5 (TGI)	0,83

Legend

U_f - W/m²K Thermal transfer coefficient on frame window unit calculated according to EN ISO 10077-2.

U_g - W/m²K Thermal transfer coefficient on glazing.

U_w - W/m²K Thermal transfer coefficient on complete window unit calculated according to EN ISO 10077-1.

Possible execution

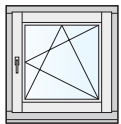
EXECUTION	INO-HA80-F
Windows and balcony doors	⊕
Fixed elements	⊕
Lifting-sliding	⊕ **
Sliding-tilting	⊗
Folding-articulated	⊗
Balcony doors opening outwards	⊗

Legend ⊕ - possible ⊗ - not possible

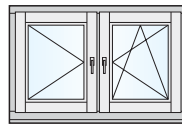
** scheme D not possible

TYPES

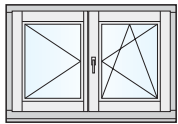
of windows and balcony doors



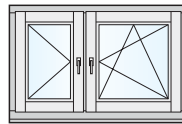
Type 01 HA80



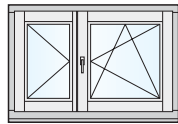
Type 01-01 HA80



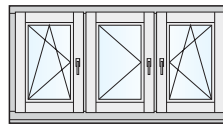
Type 06 Ha80



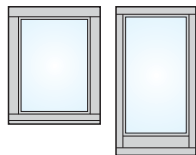
Type 01-01 HA80



Type 07 HA80

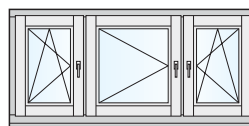


Type 01-01-01 HA80



Type 08 HA80

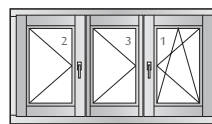
Type 09 HA80



Type 01-01-01 HA80



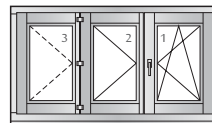
Type 11 HA80



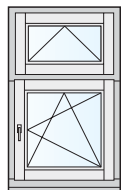
Type 01-01-01B HA80



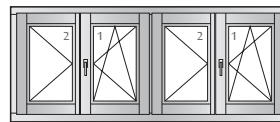
Type 12/13 HA80



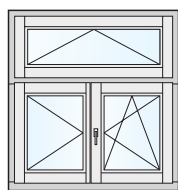
Type 01-01-01 C HA80



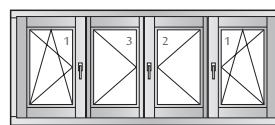
Type 01/01 HA80



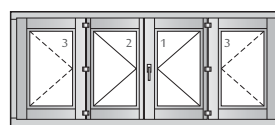
Type 06-06 HA80



Type 01/06 HA80

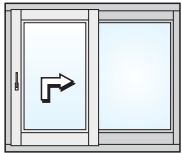


Type 01-06-01A HA80

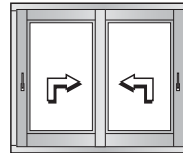


Type 01-06-01B HA80

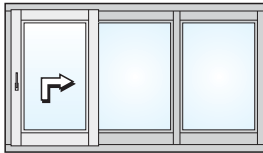
Lifting-sliding



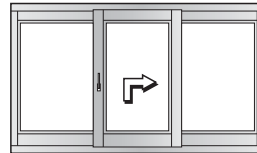
Type 18 HA80
1 x casement, 1 x fiksud



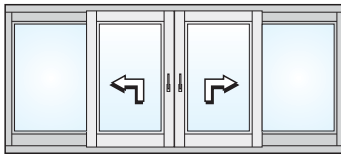
Type 18 HA80-D
2 x casement



Type 18 HA80-A
1 x casement, 2 x fiksud



Type 18 HA80-G
1 x casement, 2 x fiksud



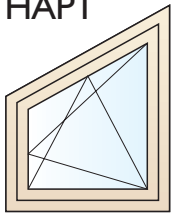
Type 18 HA80-C
2 x casement, 2 x fiksud

DESIGNER SHAPES

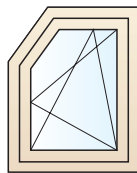
Trapezoid windows

Designer shapes in MM and ML versions are not possible

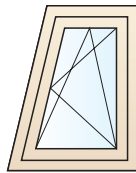
HAPI



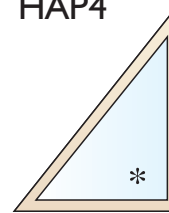
HAP2



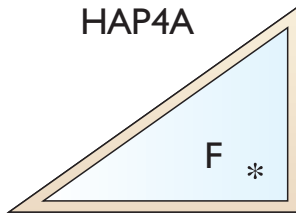
HAP3



HAP4



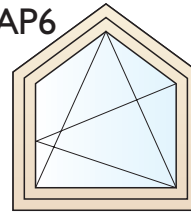
HAP4A



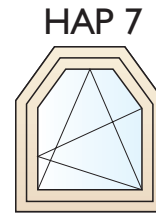
HAP5



HAP6

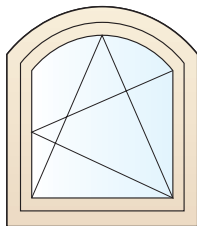


HAP 7

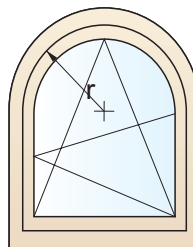


Arch and half-round windows

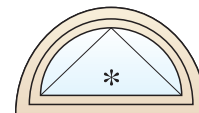
HAPI1



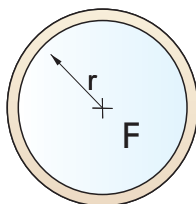
HAPI2



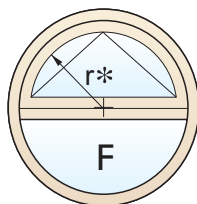
HAPI3



HAPI4



HAPI4A



Legend

* - service opening only or fixed glazing