

# FB-IOU ALU-153

Outward opening wood-aluminium balcony door



**U-VALUE 0,74**  
**Rw 34-42 dB**

# FB-IOU ALU-153

## Outward opening wood-aluminium balcony door

FB-IOU ALU-153 153 is an outward opening balcony door with a single frame and triple glazed glass unit, the jamb and external surface of the door leaf of which are finished with aluminium. This product can be used in houses as well as apartment buildings. Many different colour or oil stain shade options are available.

### MEASURES

Jamb depth 130 mm, 170 mm or 210 mm. FB-IOU ALU-153 balcony doors are manufactured per measurements provided by the client as a custom order pursuant to the ISO 9001 quality system. Permitted tolerances of external measures: width 637-1210 mm, height 1841-2414 mm.

### WOOD

Softwood (pine) and hardwood (oak – doorsill), treated and selected pursuant to quality standard SFS 4433. The jambs are manufactured from finger-jointed wood lamellae connected with weather-resistant glue of class D4. To prevent bending, the jambs and doorframes consist of a minimum of three lamellae glued together.

### ALUMINIUM

The powder-coated weather-resistant aluminium parts are easy to maintain. Depending on the profile structure the thickness of the paint layer is 1.1...1.5 mm.

### GASKETS

A balcony door is provided with a Q-Lon® gasket fastened on the jamb. The standard colour of the gasket is grey. For extra sealing, the doorframe is provided with a TPS pipe-gasket with a wide range of colour options.

### SURFACE FINISHING

The wooden parts are painted or varnished in the factory. Weather-resistant paints and varnishes are used. Standard colour shade is NCS S0502-Y. The visible parts of aluminium profiles are finished with hot-applied powder coating. The standard colour shades are white RAL 9010, brown RR 32, dark grey RAL 7024, grey RAL 7015 and light grey RAL 7040.

### GLASS PANES

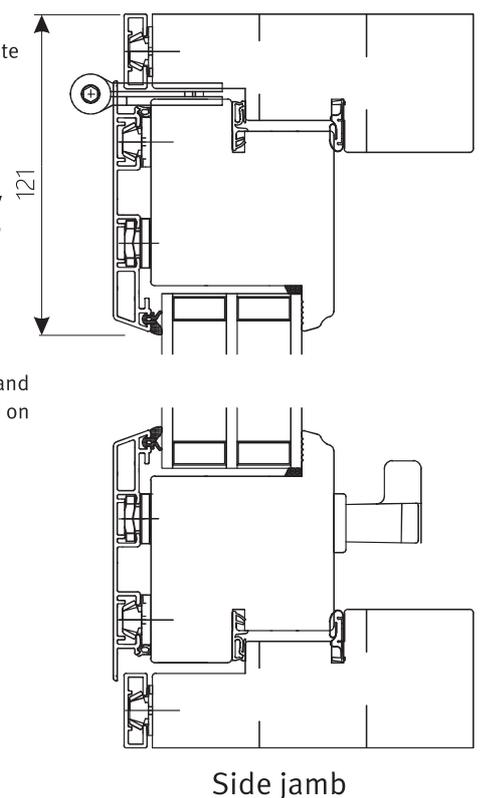
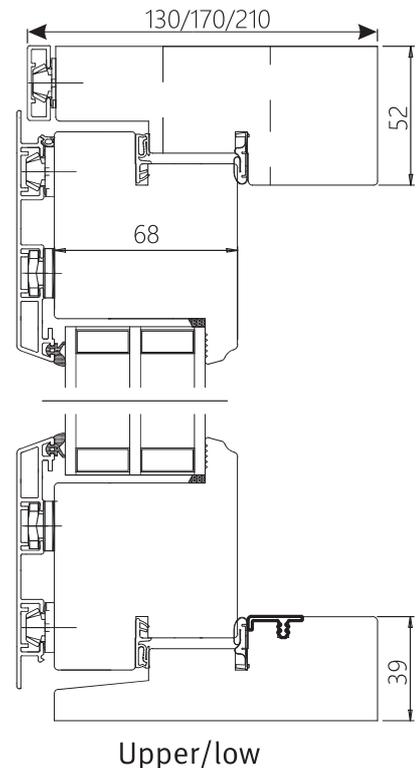
The balcony doors are glazed in the factory. Each door leaf is provided with a triple-glazed standard selective glass unit, filled with argon gas. Upon request special glazed units may also be used, for instance non-steam Fenestra NonFrost® bright SGG DIAMANT®. We also offer noise-dampening glass and safety glass.

### FIXTURES

High-quality ASSA® locking system FIX S3117 with FIX 150 doorstopper. Handles from the HOPPE® and ASSA/Abloy product ranges. The selection includes surface mount handles and through-door handles. In addition we offer different locking systems. The door is mounted on classic ASSA/Abloy door hinges, as a rule three to four per door.

### PROPERTIES

Thermal resistance: U-value 0.8. Air permeability 0.20 Sound insulation:  $R_w = 34-42$  dB





Fenestra Fenix balcony door is an inward opening single leaf triple glazing wood-aluminium balcony door with an aluminium clad external sash and frame. The balcony door comes in a wide range of colours or varnishes.

There are different appearances: as standard is full glass and as special order can be with spacer or part closed.

## MEASUREMENTS

The sash's maximum area is 3m<sup>2</sup>, the jamb's 6m<sup>2</sup>.

## GLAZING

Triple glazed assembly 3K4Sel/4/4Sel-18 CU+ARG. Glass unit thickness is 48mm.

By special order safety glass, glazing assemblies for improving sound insulation and reducing UV radiation can be used.

## ASSUMED PROPERTIES

Heat retention:

U-value standard glass 0.83;

U-value special glass 0.79.

Sound insulation:

Standard glass  $R_w = 33$  dB

Special glass up to 41 dB

## ALUMINIUM

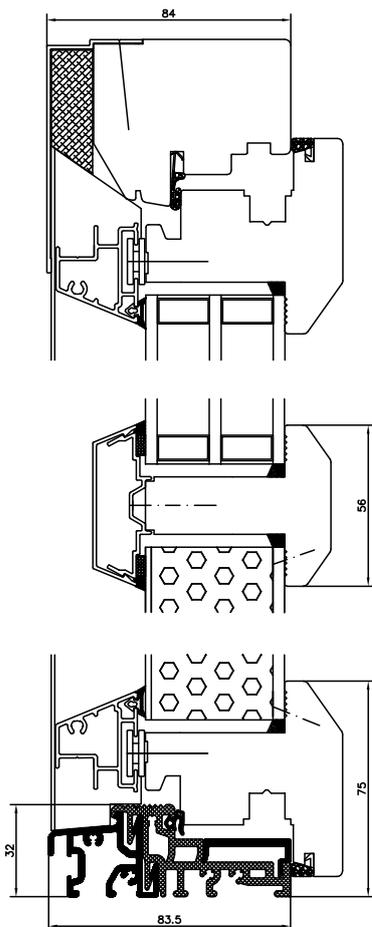
Aluminium parts are powder coated.

## WOOD

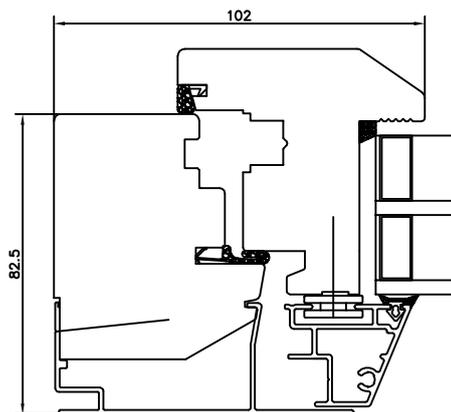
Three ply laminated timber (pine) selected according to quality standard SFS 4433. Frames are fastened using finger-jointed wood laminate using weatherproof glue D4.

## FINISHING

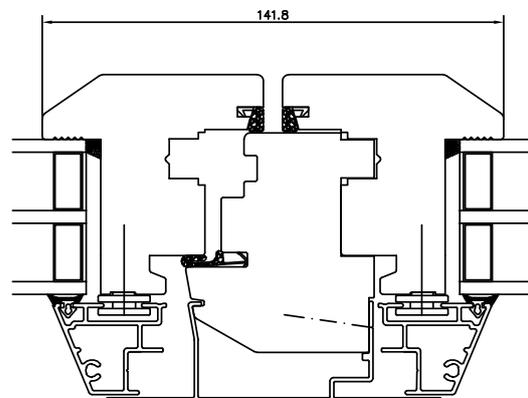
Paint (e.g. RAL catalogue) or stain (AkzoNobel TINTEX catalogue) is used.



Threshold+spacer+upper frame



Side jamb



Central roller sash



**Fenestra IOSU** is a twin leaf balcony door that opens inward and outward with an internal sash with a triple glazed assembly. The Fenestra IOSU balcony door external sash is made from aluminium and the frame is aluminium clad. The balcony door has an oak threshold and many paints and varnishes may be used. Different appearances are possible: as standard full glass and on special order with spacer or partially closed panels.

**MEASUREMENTS**

Frame depth is 170mm and/or 210mm.

**GLAZING**

The external sash uses as standard glazing 4 mm float glass and the internal sash has a double glazing assembly according to the SFS-standard.

**PROPERTIES**

Heat retention: Assumed U-value 1.0

Sound insulation:

Assumed  $R_w=42-47$  dB,  $C_{tr}=35-45$  dB

**ALUMINIUM**

Aluminium details with powder coating are weatherproof and easy to maintain.

**WOOD**

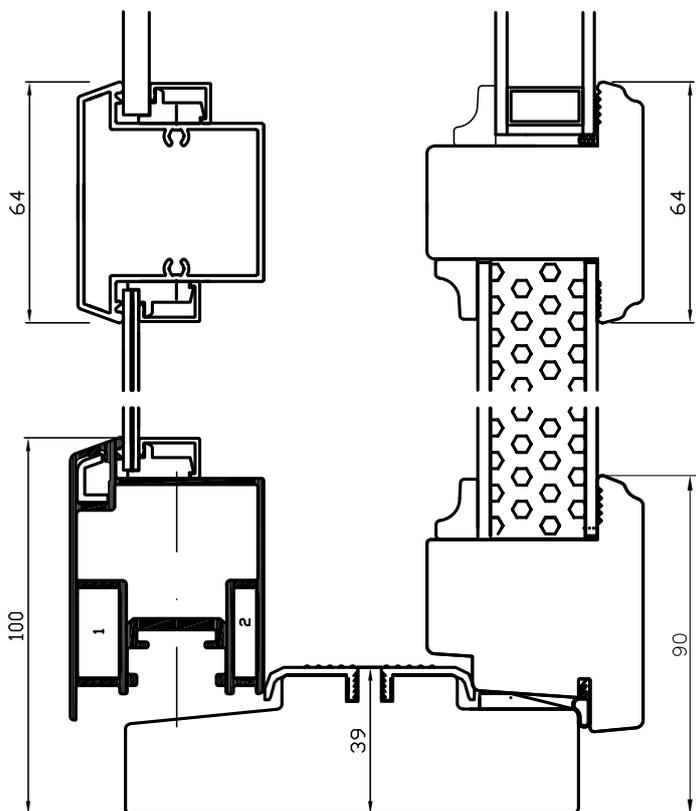
Softwood (pine) and hardwood (oak – threshold) treated and selected according to quality standard SFS 4433.

**SEALS**

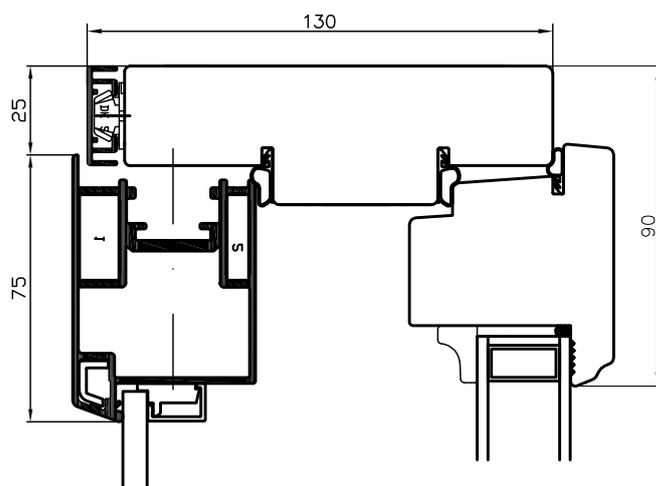
The internal and external sashes are sealed with TPE seals attached to the frame. An additional TPE seal is attached to the inner sash.

**FINISHING**

Paint (e.g. RAL catalogue) or stain (AkzoNobel TINTEX catalogue) is used



Side frame



Upper/lower frame



**Fenestra French** is a twin leaf wood-aluminium balcony door with an aluminium clad frame and an external sash made of aluminium. The French balcony door can only be opened and locked from the inside. There are different appearances: as standard is full glass and as special order can be with spacer and panels. The balcony door comes in a wide range of colours and varnishes. Possible extras that may be ordered are air vents, venetian blinds and decorative mouldings.

## MEASUREMENTS

The frame depth is 130 mm and 170 mm or 210 mm. MSE-type balcony doors are custom-made according to client measurements conforming to ISO 9001 quality standards.

## GLAZING

The external sash uses as standard glazing 4 mm float glass and the internal sash a double glazed assembly according to the SFS-standard.

## PANELS

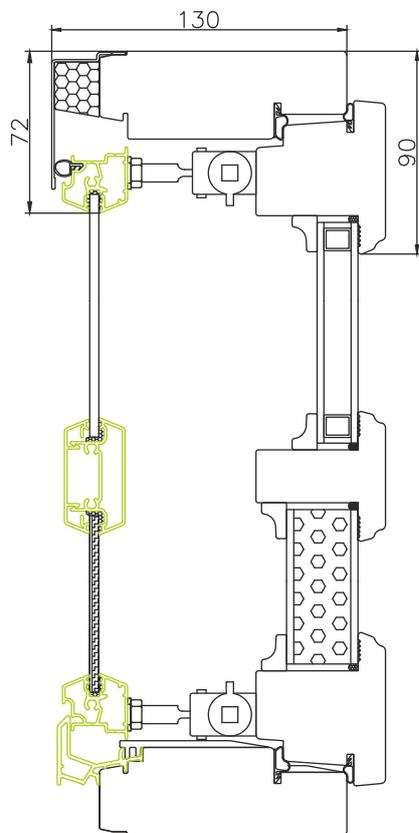
The internal sash lower part may be an insulated non-transparent panel consisting of painted MDF boards and polyurethane foam blocks.

## PROPERTIES

Heat retention: Assumed U-value 1.0

Sound insulation:

Assumed  $R_w=42-47$  dB,  $C_{tr}=35-45$  dB



Upper/lower frame

## ALUMINIUM

Aluminum details with powder coating are weatherproof and easy to maintain.

## WOOD

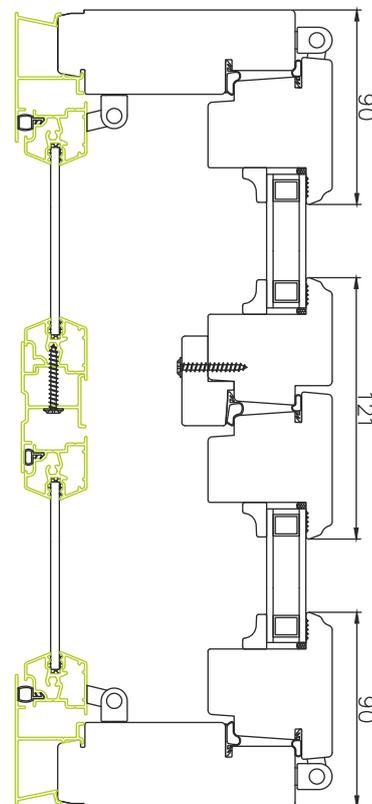
Softwood (pine), treated and selected according to quality standard SFS 4433.

## SEALS

A TPE seal fastened to the frame is used as the inner sash seal with an additional TPE seal on the inner frame. The external sash seal is within the sash seal groove..

## FINISHING

Paint (e.g. RAL catalogue) or stain (AkzoNobel TINTEX catalogue) is used.



Abutted sashes