

# CONFORT SMARTLINE

SLIDE AND LIFT-SLIDE SYSTEMS

**sapa:**

Hydro



# CONFORT SMARTLINE

## HIGH-END SLIDING DOORS THAT COMBINE A MINIMAL SIGHTLINE WITH HIGH THERMAL PERFORMANCE

Confort Smartline is an optimized, high performing, thermally insulated sliding door with a slim sightline. The system combines this highly attractive aesthetic line with remarkable energy efficiency with U values as low as  $0.76 \text{ W/m}^2\text{k}$ . The sliding door belongs to an entirely new generation of sliding systems thanks to technical innovation and well-considered design.

## ADVANCED ENERGY SAVING ON A MODULAR BASIS

- Confort Smartline profiles are coupled with 50 mm glass fibre reinforced polyamide strips, which reduce thermal conduction. These polyamide strips are specially designed in order to improve the thermal values, without adding extra internal inserts in the profiles. The bigger cavities between profiles are insulated with customised PE strips. The result is that Confort Smartline achieves a high thermal performance level and improved total insulation, leading to lower total energy consumption and a reduced environmental impact.
- The system accommodates glazing up to 53 mm

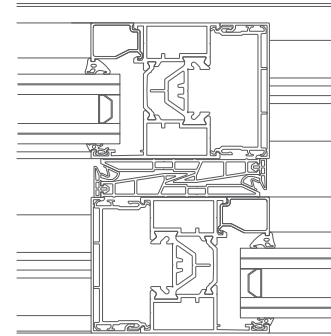
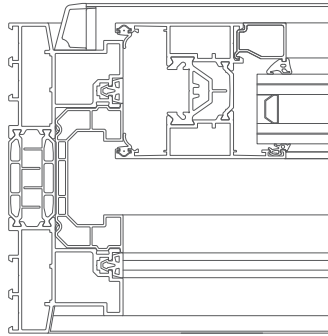


# CONFORT SMARTLINE

/ THERMAL VALUES IN 3 LEVELS\*

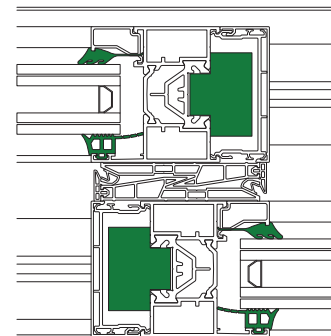
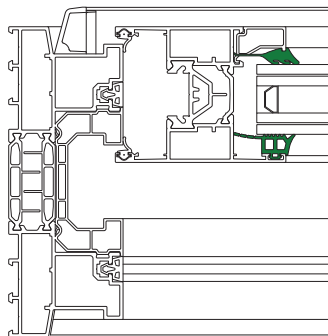
## CONFORT SMARTLINE BASIC

- $U_w$  up to 0.8 W/m<sup>2</sup>K for monorail
- $U_w$  up to 1.0 W/m<sup>2</sup>K for 2-rail slide version



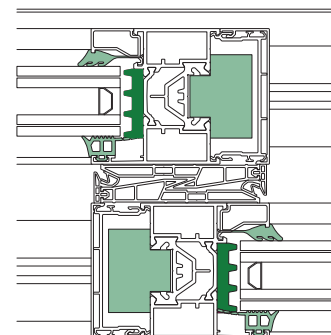
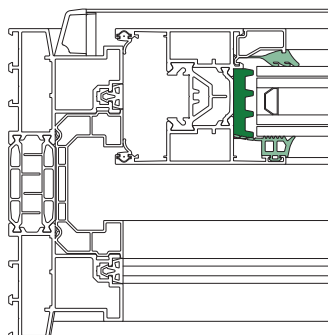
## CONFORT SMARTLINE SI

- $U_w$  up to 0.79 W/m<sup>2</sup>K for monorail
- $U_w$  up to 0.99 W/m<sup>2</sup>K for 2-rail slide version
- Improved thermal glazing gaskets
- PE inserts in vent profile (Foam-power®)



## CONFORT SMARTLINE SHI

- $U_i$  up to 0.76 W/m<sup>2</sup>K for monorail
- $U_i$  up to 0.97 W/m<sup>2</sup>K for 2-rail slide version
- Improved thermal glazing gaskets
- PE inserts in vent profile (Foam-power®)
- PE insert thermal improved glazing unit



\*  $U_w$  achieved using a  $u_g$  of 0.05. The reference size for calculation is 4.5 x 2.3m

# CONFORT SMARTLINE

## / MINERGIE SOLUTION

### WHAT IS MINERGIE® ?

MINERGIE® is a sustainability brand for new and refurbished buildings. At the heart of MINERGIE® is comfort– the comfort of people living or working in the building. Healthy comfort levels are made possible through high-grade building envelopes and the provision of high levels of air quality through managed replenishment.

Energy consumption is used as the primary quantifiable indicator of building quality. In this way, a reliable and consistent assessment can be made. Only the final energy consumed by the building's operation is relevant. A MINERGIE® building must consume no more than 3 litres of fuel for every square metre —which means up to 5 times energy consumption less than traditional construction.

The MINERGIE® Standard is widely recognised and accepted, primarily due to its objective approach: Providing builders and designers can achieve the standard, they have complete freedom both in their design and choice of materials and also in their choice of internal and external building structures.

The MINERGIE® standard is not limited to residential property. Other buildings that have received the MINERGIE® label include office blocks, schools and even shopping centres.

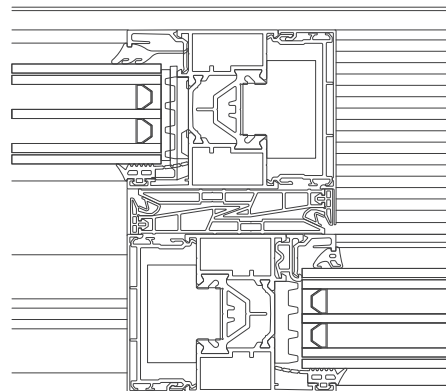
**MINERGIE®**

### CONFORT SMARTLINE MINERGIE® SOLUTION\*

Outstanding thermal insulation is the critical first step to achieve energy-efficient buildings. Using triple-insulated glass, the Confort Smartline solution reaches an excellent insulation level for new build as well as renovation projects. Without any loss of its effortless sliding function, Confort Smartline offers expansive glass surfaces combined with an attractive sightline. On top of that, it offers the opportunity to work with an innovative, energy-efficient and sustainable system in order to meet the latest technical standards and building trends. It also demonstrates that modern standards of building can go hand in hand with the comfort and convenience offered by large sliding doors. The double row PA strips, which ensure the unsurpassed insulation level doesn't have an impact on the building depth: the Confort Smartline remains a compact system (160 mm).

The Confort Smartline highly insulated sliding system with MINERGIE® certification is recognised as the optimum solution for environmentally conscious architects, fabricators and builders introducing an unparalleled level of insulation for passive houses.

(\* request pending)

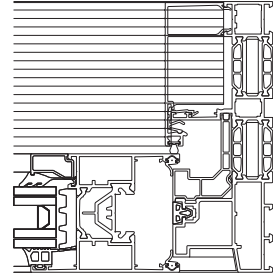
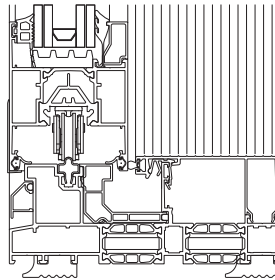


# CONFORT SMARTLINE

/ A VARIETY OF VERSIONS

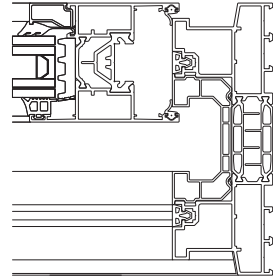
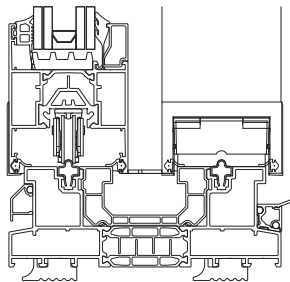
## CONFORT SMARTLINE MONORAIL

- Slide and lift-slide version
- Larger glazed surfaces
- No additional profile for central sealing gasket
- Sliding vent on the inside or on the outside



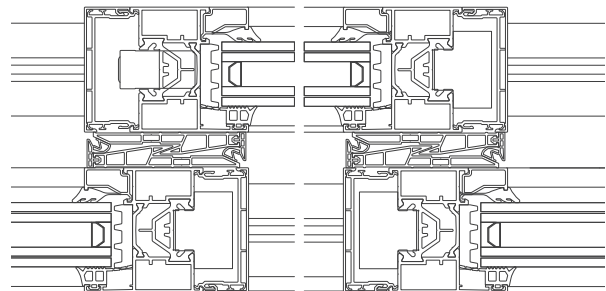
## CONFORT SMARTLINE 2-RAIL

- Equal sized profiles for slide and lift-slide
- Optimized fabrication by use of clip connections, straight cuts, special end-pieces to a large extent
- Total preparation in workshop with minimum of operations left to do on-site
- Multipoint locking
- Wide range of finishing possibilities



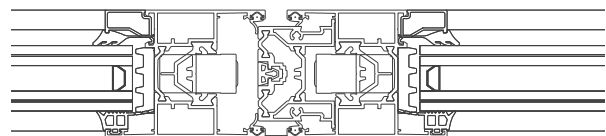
## CONFORT SMARTLINE FIX-SLIDING-FIX SOLUTION

- Slide and lift-slide version
- Larger glazed surfaces
- No additional profile on the lockside, reducing the sightline



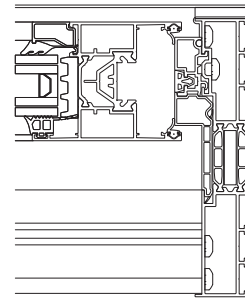
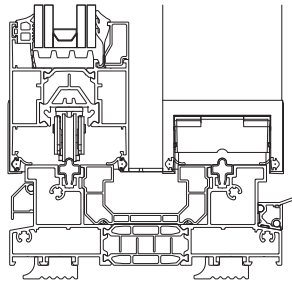
## CONFORT SMARTLINE BI-PART SOLUTION

- Fully thermally insulated
- Standard locking plate
- Click system when installing
- Available for slide and lift-slide versions



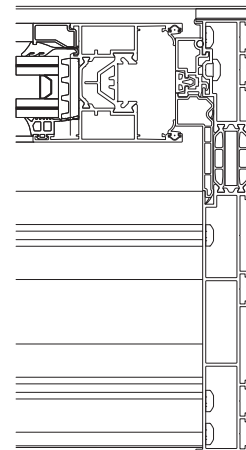
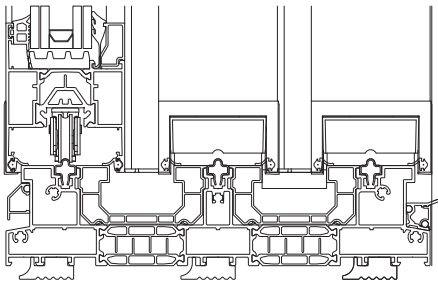
### CONFORT SMARTLINE STRAIGHT CUT / 2-RAIL

- Easy fabrication with straight cut profiles
- Profile connection with screws
- Preformed gaskets to seal profile joints



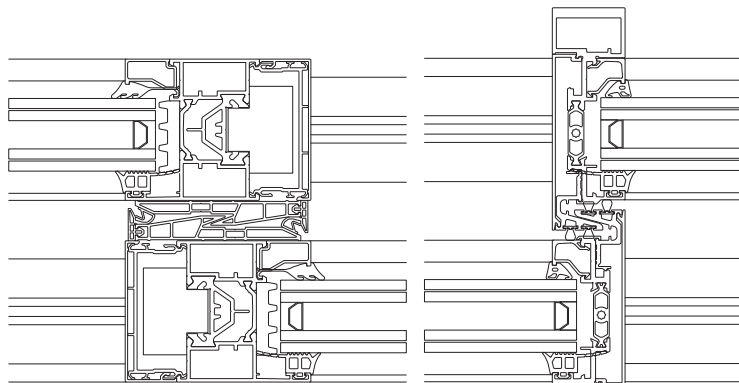
### CONFORT SMARTLINE STRAIGHT CUT / 3-RAIL

- 3 vents beside each other
- 2/3 of the window can be opened
- Same insulation pieces and sealing profiles



### CONFORT SMARTLINE INTERLOCK SOLUTIONS

- Standard width 92 mm
- Slim interlock of 36 mm
- Available for slide and lift-slide versions



# CONFORT SMARTLINE

## ATTRACTIVE DESIGN

- Confort Smartline was designed to offer a high performing sliding system with an attractive, slim sightline
- The system is designed to be compatible with other Sapa Building System products such as our curtain wall and conservatory systems
- The frame allows the internal floor finishes to be flush with the inner frame avoiding tresholds
- Standard ventilation systems can easily be integrated
- A comprehensive range of supplementary profiles allow the fenestration to be integrated perfectly into the building
- Specially designed end pieces make Confort Smartline complete in all respects
- Reversed locking principle for lift-slide comes with elegant locking plates on the frame side, avoiding the unattractive and protruding locking bolts from the past
- Interlock section with patented design gives minimal interruption of the glazed surface at 36mm
- Design handles complete the high standard finish



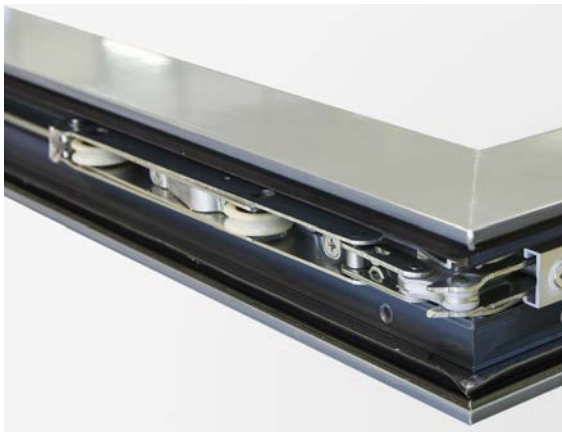


## ENHANCED PERFORMANCE

- Perfect water evacuation is ensured via drainage holes and integrated sealings
- Separate drainage: two levels of drainage
- EPDM gaskets for the lift slide-version
- Gasket sealings in central joint of sashes ensure a draught free door
- Special profile for dual metal solution
- Weather resistance lift-slide: 4 [EN 12207] - E900 [EN 12208] - C3 [EN 12210]

## IMPRESSIVE LIFT/SLIDE STRENGTH AND DURABILITY

- A combination of strong profiles, stainless steel rails and polyamide rollers with needle bearings allows Confort Smartline to be used for glazing areas up to 2,8 meter high
- The use of a stainless steel rail ensures the smooth movement of the vents and avoids surface finishing damage
- Polyamide bottom rollers can take up to 330 kg for each vent and still ensure a smooth operation.
- The vent profiles with a building depth of 70 mm accommodate glazing up to 53 mm, so triple and laminated glass options are possible.



## EASY TO MANUFACTURE AND INSTALL

- The Confort Smartline sliding system is designed in such a way that it is easy to fabricate for the manufacturer, the number of operations necessary to fabricate the Confort Smartline is reduced.
- Frames and sashes are assembled using eccentric, pen or press corners. Stainless steel corner chevrons guarantee a perfect alignment of the corners
- All profiles are prefabricated using the specially designed punching tools or machining centers. Drainage holes, vent cut outs and the holes punched for the eccentric cleats are therefore very precise, ensuring fast and accurate assembly.
- No punching needed for the installation of the bottom rollers (lift-slide version).
- Easy to install central drainage system
- Straight cut finishing profiles at interlock
- Maximum preparation in-house, minimum assembly on site
- Fabrication manuals and precise software give the fabricator the information he requires to proceed swiftly



## DIMENSIONS

Min. sightline monorail (fixed glazing)	53 mm
Min. sightline monorail (sliding part)	132 mm
Min. sightline 2-rail (fixed and sliding part)	127 mm
Min. sightline 2-rail (lift-slide version)	138 mm
Min. sightline 2-rail (straight cut)	122 mm
Min. sightline mid section	36 mm
Profile depth 2-rail	160 mm
Profile depth 3-rail	250 mm
Profile depth vent	70 mm
Max dimensions vent - hardware related* - (W x H)	3100 x 2800 mm
* weight limit = 330 kg (lift-slide)	

## GLAZING

Infill thickness sliding parts 2- and 3-rail	23 - 53 mm
Glazing method	dry glazed with EPDM gaskets or silicon

## FINISHES

- Over 400 powder coated paint colours in matt, gloss or satin.
- Unique wood effect, textured and textured metallic ranges are available.
- Anodised finish is also available as an option.
- Accessories can be supplied in corresponding colours to match the profiles.
- The polyamide thermal break allows for dual colour finishes. As a result, the exterior building requirements do not need to affect the interior design choices.
- Our surface finishes meet the highest standards of Qualicoat or Qualanod.

## THERMAL & WEATHER PERFORMANCES

Thermal break	50 mm PA 6.6 GF25 (30 or 35 mm in the vent)		
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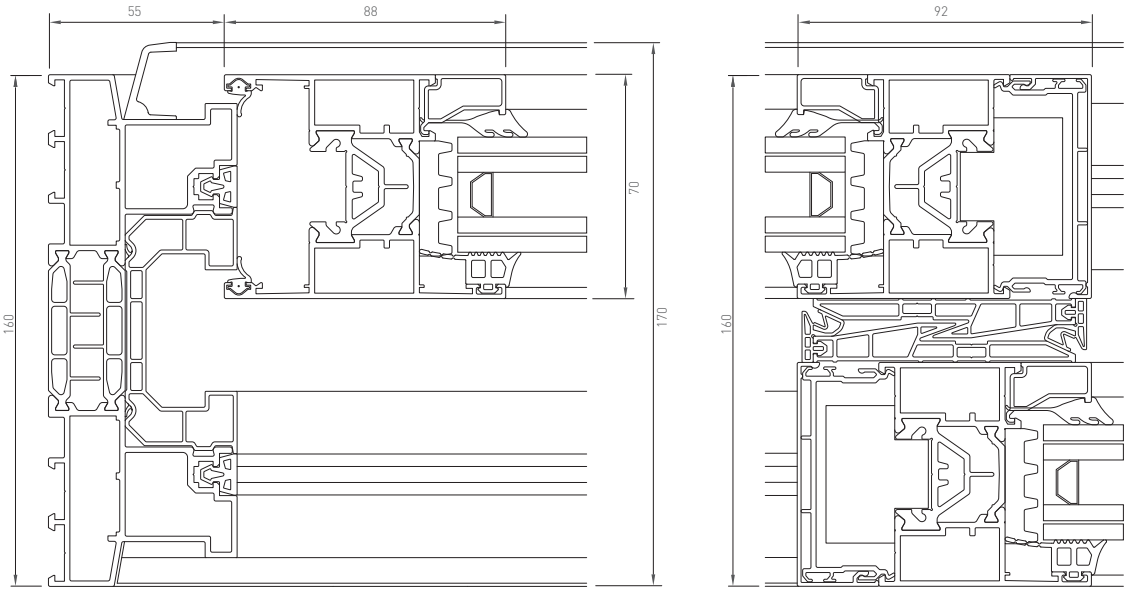
Thermal insulation*	monorail version	duorail lift-slide version	
SHI:	$U_w$ to 0.76 W/m <sup>2</sup> K	$U_i$ to 0.97 W/m <sup>2</sup> K	EN ISO 10077-2
SI:	$U_w$ to 0.79 W/m <sup>2</sup> K	$U_i$ to 0.99 W/m <sup>2</sup> K	EN ISO 10077-2
Basic:	$U_w$ to 0.81 W/m <sup>2</sup> K	$U_i$ to 1.0 W/m <sup>2</sup> K	EN ISO 10077-2

combined U value of the profile and glazing

Lift-Slide version		
Air permeability	4 - 600 Pa	EN 12207
Watertightness	E900 - 900 Pa	EN 12208
Windresistance	C3 - 1200 Pa, sec. 1800 Pa	EN 12210

This information is only an indication. For more information, please consult your local Sapa Building System branch.

# SECTIONS



## APPLICATIONS

Sliding version, monorail



Sliding version, 2-rail



Sliding version, 3-rail



Lift-sliding version, monorail



Lift-sliding version, 2-rail



Lift-sliding version, 3-rail



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