



## Designo R5 - Product card

### Smoke and heat extraction roof window



#### Benefits in a nutshell

- + the window is equipped with laminated safety glass (VSG) and pre-installed thermal insulation (WD block) with the vapour barrier film
- + with electronic opening via a chain motor at the top, the window opens automatically in the event of a fire to allow better heat and smoke extraction
- + certified in accordance with the EN 12101-2 European standard
- + thermal insulation (WD block) gives even 15% better energy balance of the roof window, optimal temperature in the house, lower heating and air-conditioning costs and airtight combination of the window with vapour barriers of the roof
- + 3 protective layers of the timber securing from the destructive influence of the sun and humidity
- + third security grade (timber) and the highest fifth security grade (PVC) protecting from hits from outside are proof of unique durability and safety of you and your family
- + no visible screws in the roof window covering ensure outstanding airtightness of the roof window and at the same time the aesthetic external appearance
- + modern shape of the roof window covering guarantees harmonious integration of the window with the roof attractive colour of the roof window covering (anthracite metallic) is the perfect composition with every kind of the roofing, ensuring architects more flexibility and ease of designing

Model of the window	+ Designo R5
Type of the window	+ smoke and heat extraction window
Usage	<ul style="list-style-type: none"> <li>+ For aerodynamic smoke ventilation, system is certified for roof pitches between 20-45°.</li> <li>+ For geometric smoke ventilation, system is certified for roof pitches between 20-65°.</li> </ul>
Handle	+ convenient handle at the bottom of the sash
Material	<div>  PVC            Timber         </div>
Opening	+ electric
Energy efficiency	<ul style="list-style-type: none"> <li>+ <math>U_w = 1,3</math></li> <li>+ thermal insulation (WD block) with better energy balance of the roof window</li> </ul>
Easy installation	<ul style="list-style-type: none"> <li>+ pre-installed assembly brackets and the roof window covering</li> <li>+ pre-installed thermal insulation (WD block) with the vapour barrier film</li> </ul>
Product quality	<ul style="list-style-type: none"> <li>+ 4 locking points</li> <li>+ 3 protective layers of the timber</li> <li>+ third security grade (timber) and the highest fifth security grade (PVC)</li> <li>+ post-installation setting of the window</li> </ul>
Functionality	<ul style="list-style-type: none"> <li>+ can be successfully used in heated premises, thanks to the same insulation parameters insulation properties of standard roof windows</li> <li>+ Due to the function of the smoke and heat extraction system a combination with such as roller shutters or blinds is not possible</li> </ul>
Design	<ul style="list-style-type: none"> <li>+ no visible screws in the roof window covering</li> <li>+ modern shape of the roof window covering</li> <li>+ attractive colour of the roof window covering – anthracite-metallic</li> </ul>

## Technical data

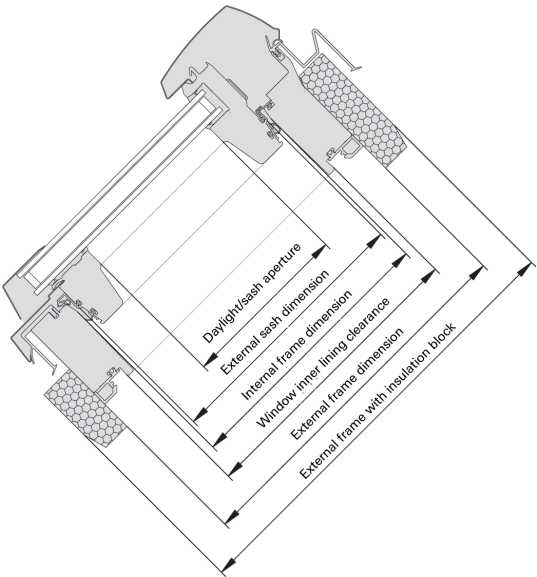
Window	Glazing	Thermal transmittance of glazing (U <sub>g</sub> ) (U <sub>g</sub> - DIN EN 673)	Thermal transmittance of window (U <sub>w</sub> ) (U <sub>w</sub> - DIN EN ISO 10077, DIN EN ISO 12567-2)	Solar factor (g value) (g - in % DIN EN 410)	Acoustic performance in dB (R <sub>wp</sub> - C; C <sub>w</sub> ) EN ISO 10140-2, EN ISO 717-1)	Air permeability (DIN EN 12207)
R58_ xxx/xxx K2RW	2fach-Comfort	1,10	1,3	51	38 (-2;-5) dB	4
R58_ xxx/xxx H2RW	2fach-Comfort	1,10	1,3	51	37 (-1;-5) dB	2

## Window dimensions

Window size	065/140	094/140	114/118	114/140
External frame dimension (mm)	650/1400	940/1400	1140/1180	1140/1400
External frame with insulation block dimension (mm)	710/1460	1000/1460	1200/1240	1200/1460
Internal frame dimension (mm)	574/1324	864/1324	1064/1104	1064/1324
External sash dimension (mm)	566/1315	856/1315	1056/1095	1056/1315
Daylight/sash aperture (mm)	492/1240	782/1240	982/1020	982/1240
Window inner lining clearance (mm)	590/1340	880/1340	1080/1120	1080/1340
Pane surface (daylight area) (m <sup>2</sup> )	0,61	0,97	1,0	1,22
Geometric free area (A <sub>v</sub> , m <sup>2</sup> )	0,76	1,14	1,17	1,41
Aerodynamic free area (A <sub>a</sub> , m <sup>2</sup> )	≥ 0,28	≥ 0,50*	≥ 0,61*	≥ 0,62*
Opening width of ventilation position (mm)	≤ 468	≤ 500	≤ 500	≤ 500
Opening width in the event of fire (mm)	468	865	865	865
Opening angle (degrees)	21	38	46	38
Minimum distance between top edge of roof window and roof ridge (mm)	650	800	800	800

\* The installation of the wind deflectors is necessary to achieve the values.

### Cross Section A-A



### Cross Section B-B

