

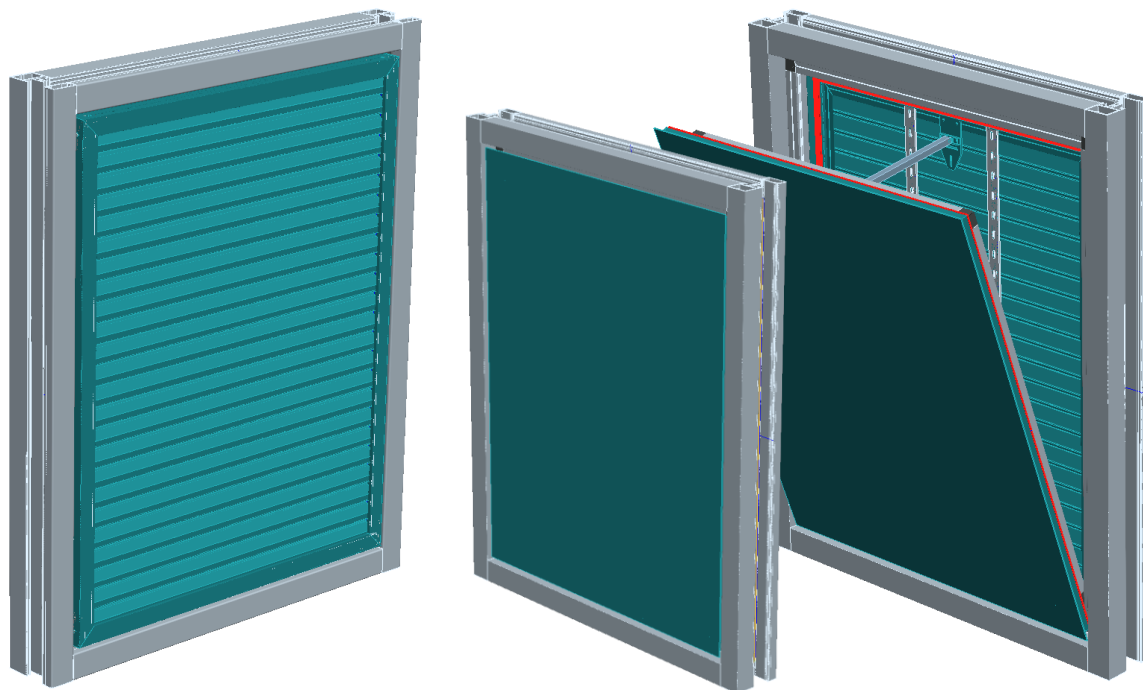
Installation instructions

DucoGrille NightVent

12/09/2023

OUTSIDE

INSIDE



CONTENT

1. Principle
2. Width and height
3. Installation

Safety instructions



Safety instructions – Read before installation



***WARNING** Important safety instructions Always follow all instructions, as incorrect installation can lead to serious personal injury. Keep these instructions.*



Electrically operated grilles pose a crush injury risk for parts of the body.

Make sure that the moving parts of this product cannot be reached by the user:

- ensure there is a minimum distance of 2.5 m between the bottom of the product and the floor,
- screen off the moving parts

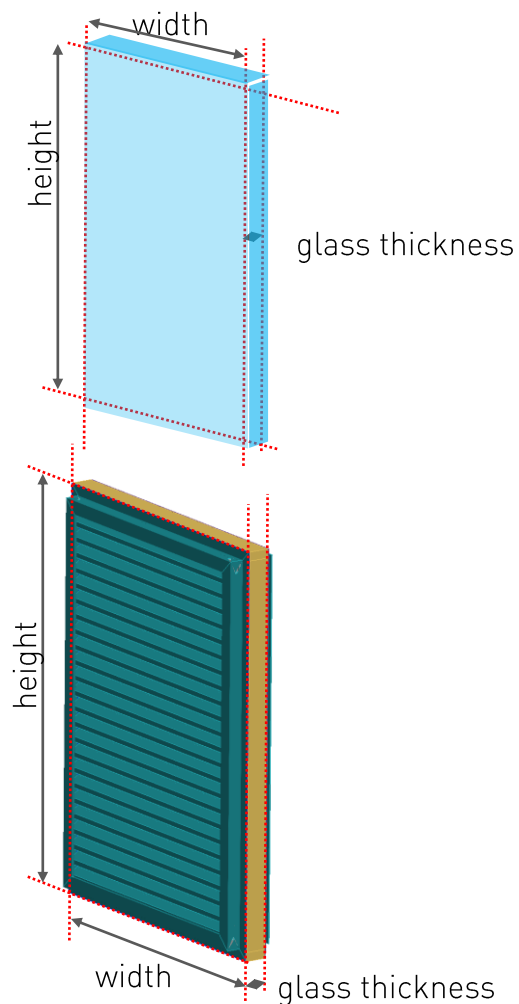
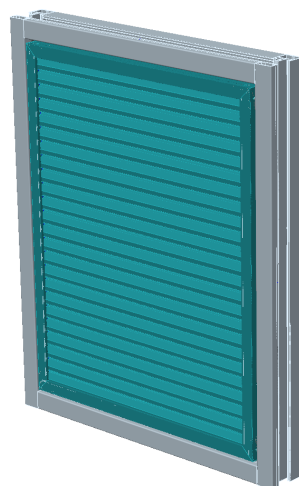
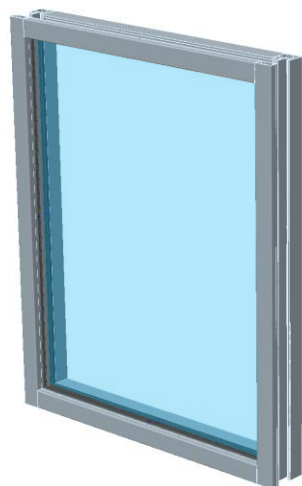


Switch off the power when carrying out maintenance or repairs to the product.

1

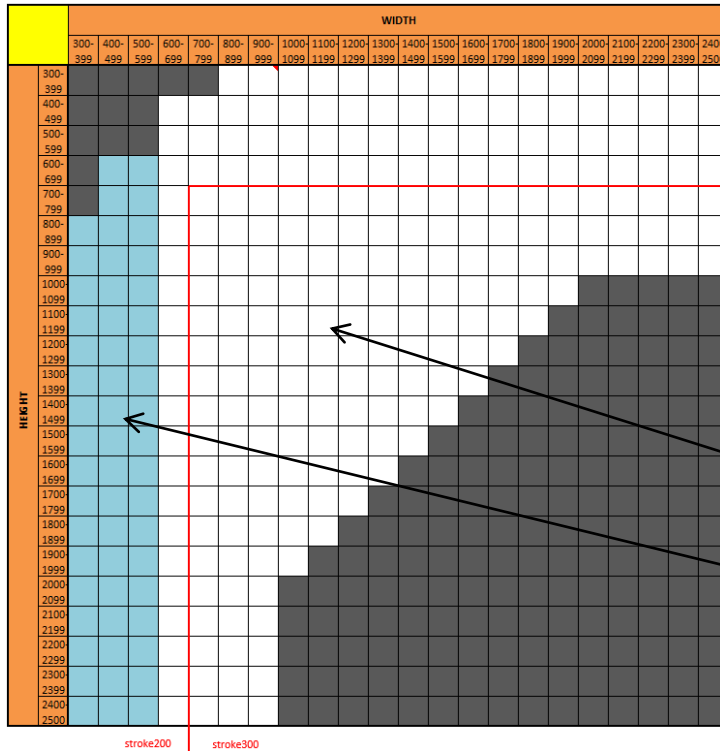
Principle

DucoGrille NightVent can be fitted to any window section (PVC/ALU/wood) or façade section as a GLASS SUBSTITUTE.



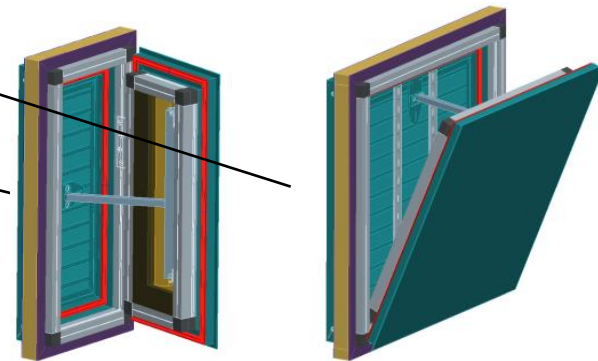
2

Width and height

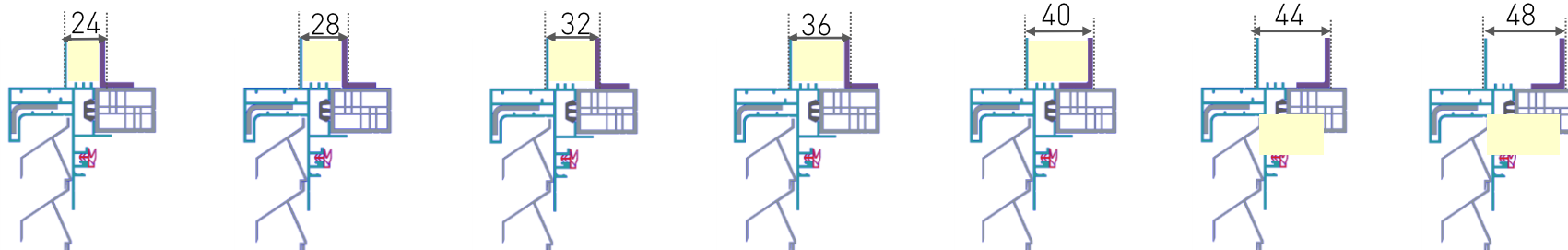


scharnierzijde links/rechts
 niet mogelijk

Width and height can be specified (to the nearest mm).
 If the width is < 60cm, the shutter swings open to the left or right.
 If the width is >= 60 cm the shutter always opens at the top.
 If the width or height is < 70cm, there is a maximum opening of 20cm. In other cases the opening is 30cm.
 Stroke speed is 10mm / s (2/3 force).

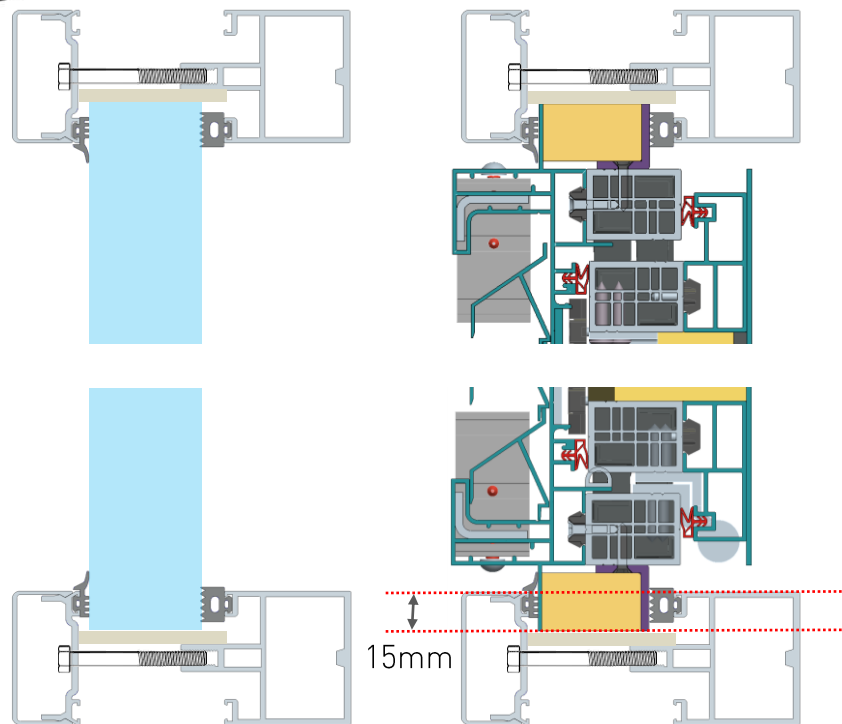


DucoGrille NightVent is available in the following glass thicknesses (mm)

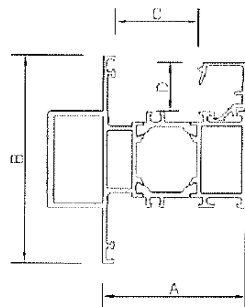
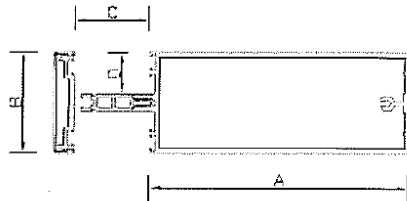


3

Installation



A = Profieldiepte
B = Profielbreedte
C = Spanningsbreedte
D = Spanningshoogte



(Just like glass,) DucoGrille NightVent is mounted in the rebate of the window or façade profile - principle of sealing profiles (dry glazing).

Fitting is best done after mounting the windows in the shell. Depending on the dimensions and façade type, one may consider installing the DucoGrille NightVent in the workshop.

Key points:

- The corners should be tightly sealed.
- The joints should exert a pressure on DucoGrille NightVent between 0.5 and 1.5kN per metre.
- Correct positioning of the "glass" supports is important, see next page.
- Unlike glass, the DucoGrille NightVent is not flat, but is stepped on the inside and outside. This greatly reduces the space to mount a glazing bar or joint. This may require some extra dexterity/craftsmanship for specific types of window profiles. Tip: use a flat wooden or plastic spatula to push the snap frame and/or joint into place.
- There are some additional requirements for an installation that is burglary-resistant (RC2): see slide 7, 8 and 9.

A DucoGrille NightVent of 1m² weighs 38 kg (43 kg if the "burglary-resistant" option is selected).

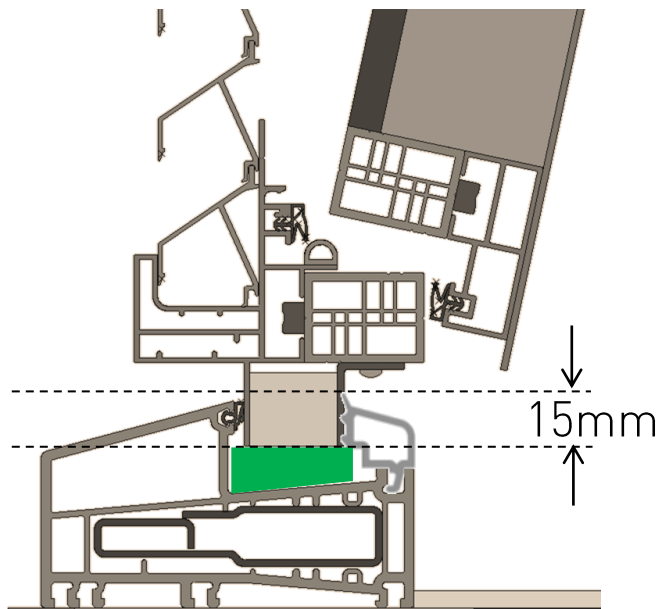
For larger dimensions, extrapolation always gives you a weight on the safe side.

When mounting, provide suitable material.

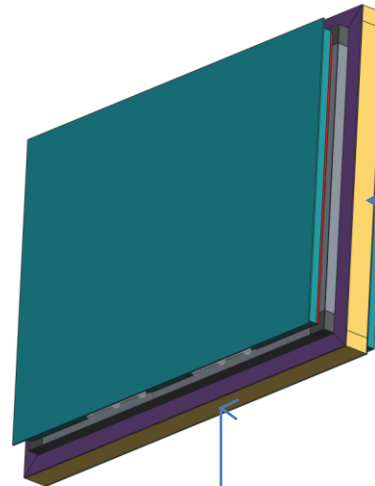
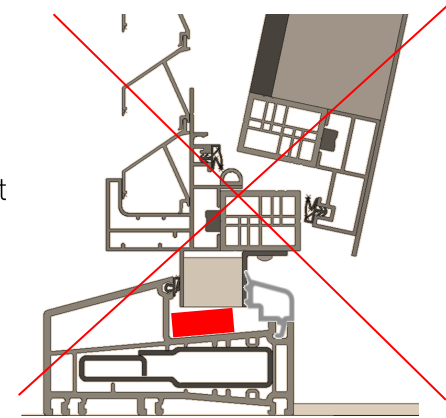
3

Installation

It is very important for the glazing blocks (support blocks, adjusting blocks and spacers or backfilling) to be positioned accurately. Ensure that the DucoGrille NightVent sits approximately 15mm inside the channel. Caution: If the DucoGrille NightVent is placed too far inside the channel, problems can arise when the shutter is opened.



Be very careful when placing the support blocks. These should be wider than the thickness of the glass so that the DGNV is worn across the full width.



At the side and top, ensure that the support blocks are never spaced over 500mm. With small shutters there is a minimum of 2 support blocks per side.

At the bottom, make sure that there is at least 1 block per hinge. For larger shutters or shutters with hinges on the side, a block must be placed each 500mm.

Follow the frame or curtain wall manufacturer's instructions precisely!

RC2 burglar-proof installation

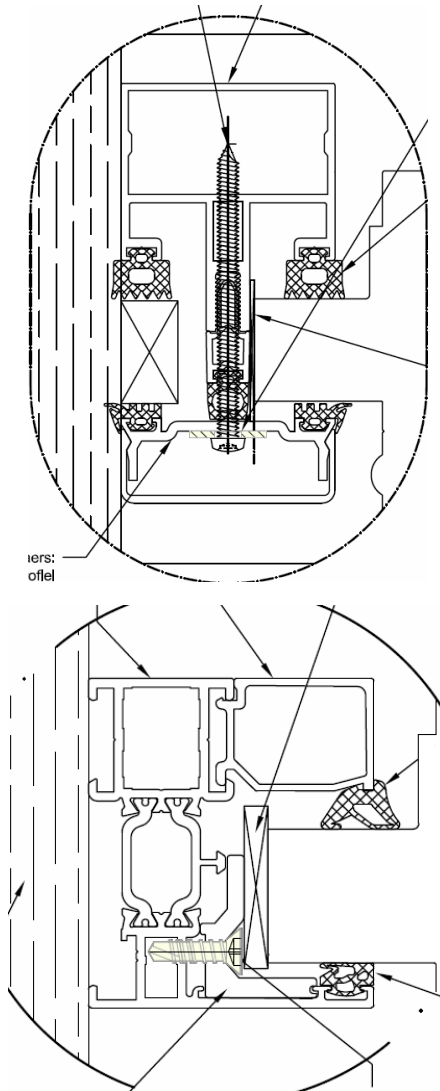
To ensure the burglar-proof resistance of the whole, DucoGrille NightVent (Option RC2) installed in a curtain wall section or window profile, this curtain wall or window profile must also be burglary-resistant at least Class 2.

Follow the manufacturer's installation instructions carefully.
 An example of Reynaer's profiles can be found on the next 2 pages.

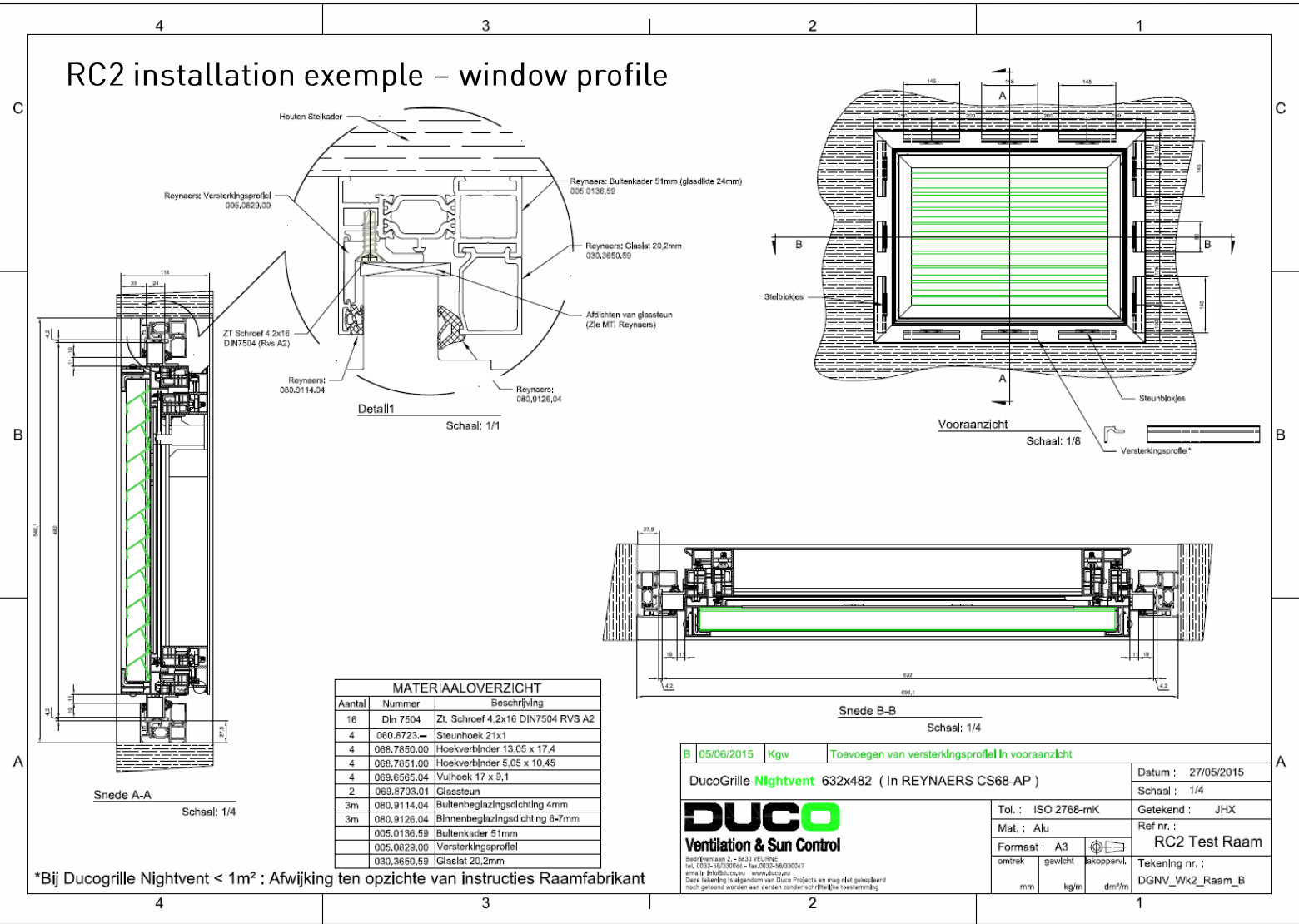
Please note when installing a DucoGrille NightVent with a surface area of less than 1m². In that case there are some variations due to the instructions of the curtain wall or window profile manufacturer. See also the drawings on the next pages.

In this case, when mounting the curtain wall, use long screws to secure through the chambers of the curtain wall profile. Take a sturdy SS A2 screw with minimum diameter 6.3mm. Choose for screws with a burglary-proof head or drill out the head of the screws after assembly. Also use inox washers M6 type Din 440R.

For window profiles, use the reinforcement profiles as prescribed and delivered by the window manufacturer. Place at least 3 on each side and attach with 4.2x16 DIN 7982 screws.



RC2 installation exemple - window profile

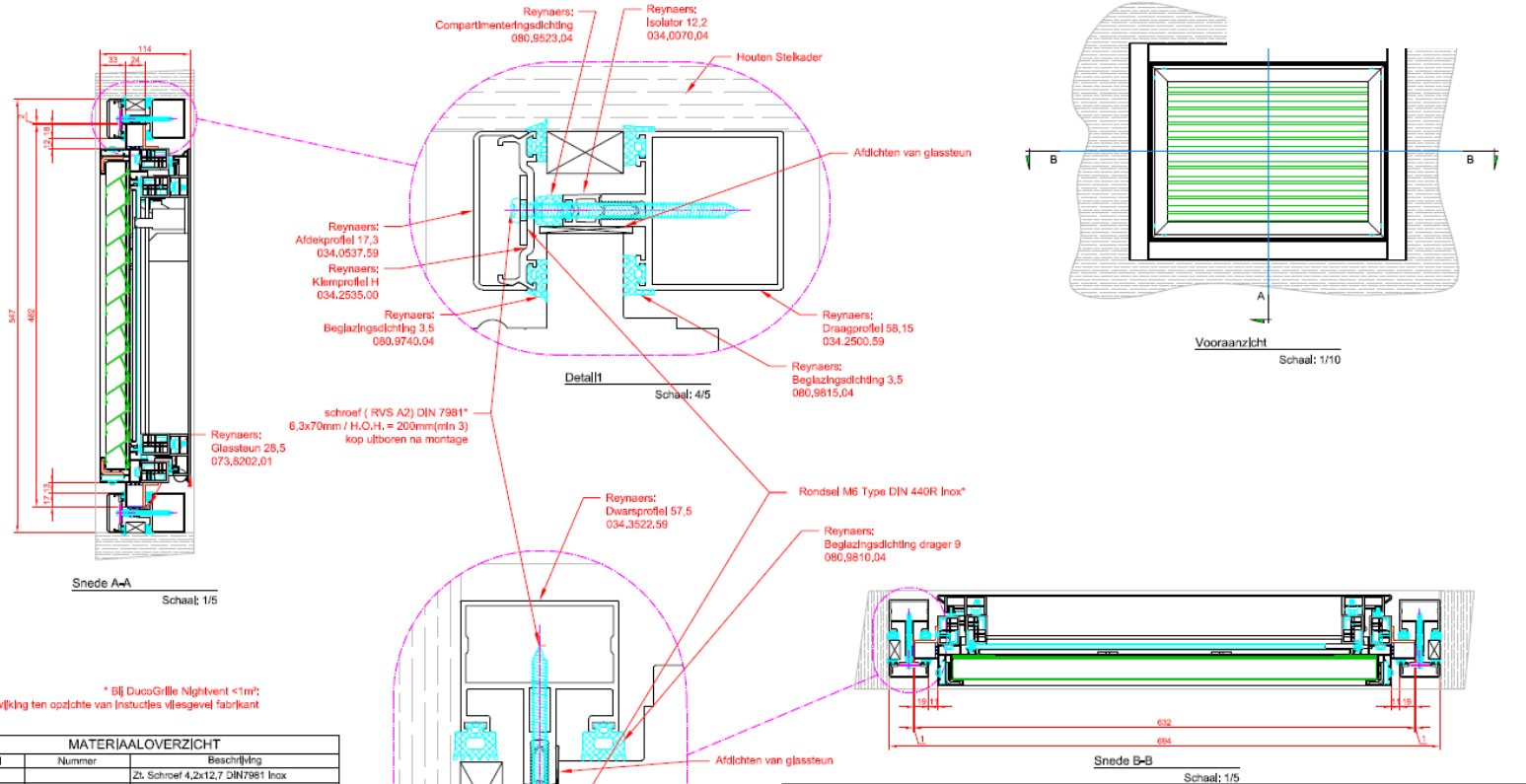


MATERIAALOVERZICHT		
Aantal	Nummer	Beschrijving
16	Dln 7504	Zt. Schroef 4,2x16 DIN7504 RVS A2
4	060.8723.00	Steunhoek 21x1
4	068.7850.00	Hoekverbinder 13,05 x 17,4
4	068.7851.00	Hoekverbinder 5,05 x 10,45
4	069.6565.04	Vulhoek 17 x 9,1
2	069.8703.01	Glassteun
3m	080.9114.04	Buitenbeglazingsdichting 4mm
3m	080.9126.04	Binnenbeglazingsdichting 6-7mm
	005.0136.59	Buitenkader 51mm
	005.0829.00	Versterkingsprofiel
	030.3650.59	Glaslat 20,2mm

*Bij Ducogrille Nightvent < 1m² ; Afwijking ten opzichte van instructies Raamfabrikant

B	05/08/2015	Kgw	Toevoegen van versterkingsprofiel in voorraanzicht	Datum : 27/05/2015
DucoGrille Nightvent 632x482 (in REYNAERS CS68-AP)				Schaal : 1/4
DUCO Ventilation & Sun Control			Tol. : ISO 2768-mK	Getekend : JHX
<small> Ducoventilator S - 6530 VENT tel. 0032-58755064 - fax 0032-58730067 email info@duco.be - info@duco.com Deze tekening is eigendom van Duco Projects en mag niet gekopieerd noch getoond worden aan derden zonder schriftelijke toestemming </small>			Mat. : Alu	Ref nr. :
Formaat : A3			RC2 Test Raam	
omtrek	gewicht	akopperv.	Tekening nr. ;	
mm	kg/m	dm ² /m	DGNV_Wk2_Raam_B	

RC2 installation exemple – curtain wall profile



* Bij DucoGrille Nightvent <1m²:
 Afwijking ten opzichte van instructies vlesgevel fabriek

MATERIAALOVERZICHT

Aantal	Nummer	Beschrijving
12	ZL Schroef 4,2x12,7 DIN7981 Inox	
12	DIN 7981	schroef (RVS A2) DIN 7981 Ø6,3x70mm
12	073.8202.01	Borgring 6,55*10
2	073.8208.00	Glassteun 28,5
4	080.9483.04	Einddichting
4	080.9490.04	Einddichting
3m	080.9523.04	Compartimenteringsdichting 6,5mm 8,5mm
5m	080.9740.04	Beglazingsdichting 3,5
1m	080.9810.04	Beglazingsdichting drager 9
2m	080.9815.04	Beglazingsdichting 3,5
	034.0070.04	Isolator 12,2
	034.0537.59	Afdrukprofiel 17,3
	034.2500.59	Draagprofiel 58,15
	034.2534.00	Klampprofiel
	034.2535.00	Klampprofiel h
	034.3522.59	Dwaarsprofiel 57,5

D 30/04/2019	JHX	Sneede B-B positie gecorrigeerd,
C 05/06/2015	Kgw	Toevoegen rondsel M6 DIN 440R Inox
B 05/06/2015	Kgw	Toevoegen rondsel M6 DIN 9021
DucoGrille Nightvent 632x482 (In REYNAERS CW50)		Datum : 27/05/2015
		Schaal : 1/5
DUCO Ventilation & Sun Control		Getekend : JHX
Bedrijfsnaam : - 9630 VEURNE Tel. 0032-58/330066 - fax 0032-58/330067 email: info@duco.eu www.duco.eu		Ref nr. :
Deze tekening is eigendom van Duco Projects en mag niet gekopieerd of anderszins verspreid worden aan derden zonder schriftelijke toestemming		RC2 Test Vliesgevel
		Tekening nr. :
		DGNV_Wk2_Vliesgevel_D
		Tol. : ISO 2768-mK
		Mat. : Alu
		Formaat : A3
omtrek	gewicht	lakopperv.
mm	kg/m	dm²/m

Cable

The DucoGrille NightVent opens and shuts using a chain actuator. The cable exits the product from the bottom left of the glazing channel on 65mm from the bottom. (When viewed from the inside of the building). In the case of hatches opening on the left or right, the cable leaves the product in the lower glazing channel at 65 mm from the side where the hinges are located.

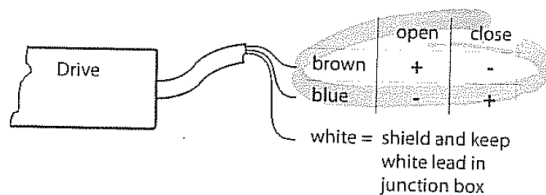
The cable is composed of 3 cores, together good for 6.25mm diameter. The remaining cable length depends on the size of the DucoGrille NightVent. (3m from the actuator, at the top, centrally in the open panel).

Guide the cable to the desired place along the channel for the window or façade section.

Ensure the cable diameter is sufficient to maintain the power supply over a large distance.

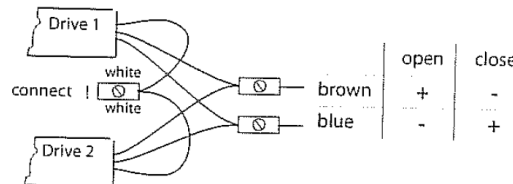
The power supply for the actuator is 24V DC.

Solo-Operation:

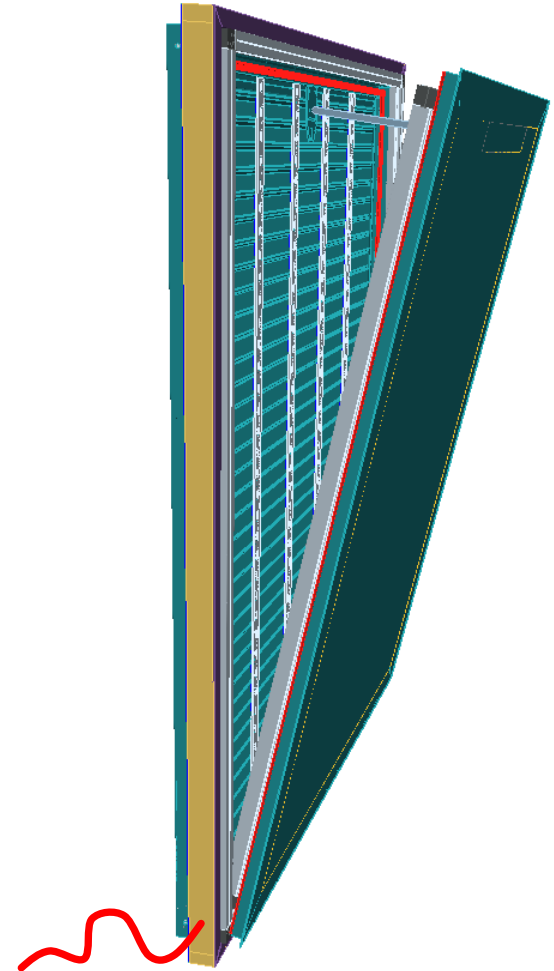


If drive operates in wrong direction interchange the connection leads to the 24V DC control power.

Syncro-Operation



For syncro operation connect the white lead of the drives.



Electronic control

The customer / electrical installer is responsible for the control. Nevertheless, below we give an example of how the management can take place.

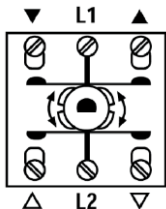
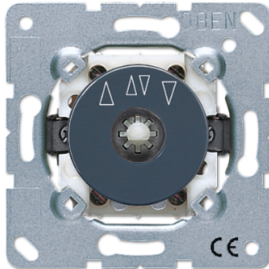
Please note: Given the various possibilities and many switches [2 pole - three position switches] in the market, which often have to fit within the design and aesthetics of the other electronic components, Duco chooses not to offer switches and transformers. The brand and type in the example below is therefore absolutely not binding.

Productdatabladeren

JUNG

Jaloeziedraaischakelaar, Jaloezieschakelaar.

2-polig



Artikelnr.

1234.20

Jaloeziedraaischakelaar 10 AX 250 V ~

met schroefklemmen voor aders tot 2,5 mm²

compleet met indicatieschijf

Met bijgeleverd vergrendelingsplaatje ook als impulsdrukker te gebruiken.

Ook als polariteit omkeerschakelaar te gebruiken (zie aansluitschema in datasheet / technische gegevens).

Schijf met schaalindeling, voor vervanging
 voor art.nr. 1234.10 c.q. 1234.20; SKS 1234.10

Vergrendeling

art.nr.: 34.10

Afdekkingsen:

AS / A range: art.nr. .. 1541 ..

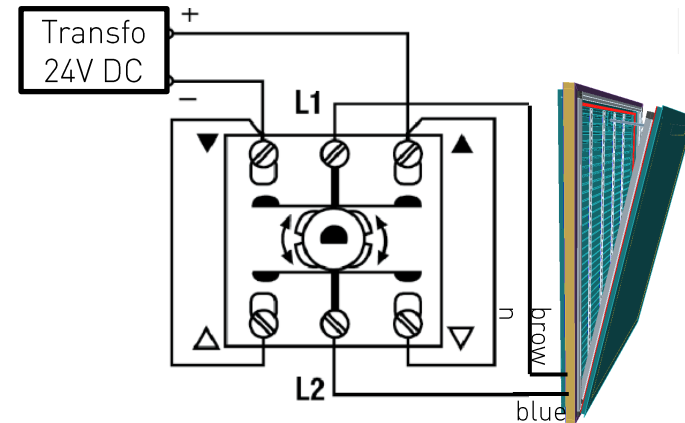
CD range: art.nr. CD 1541 ..

SL range: art.nr. SL 1541 ..

LS range: art.nr. LS 1941 .., .. 1941 ..

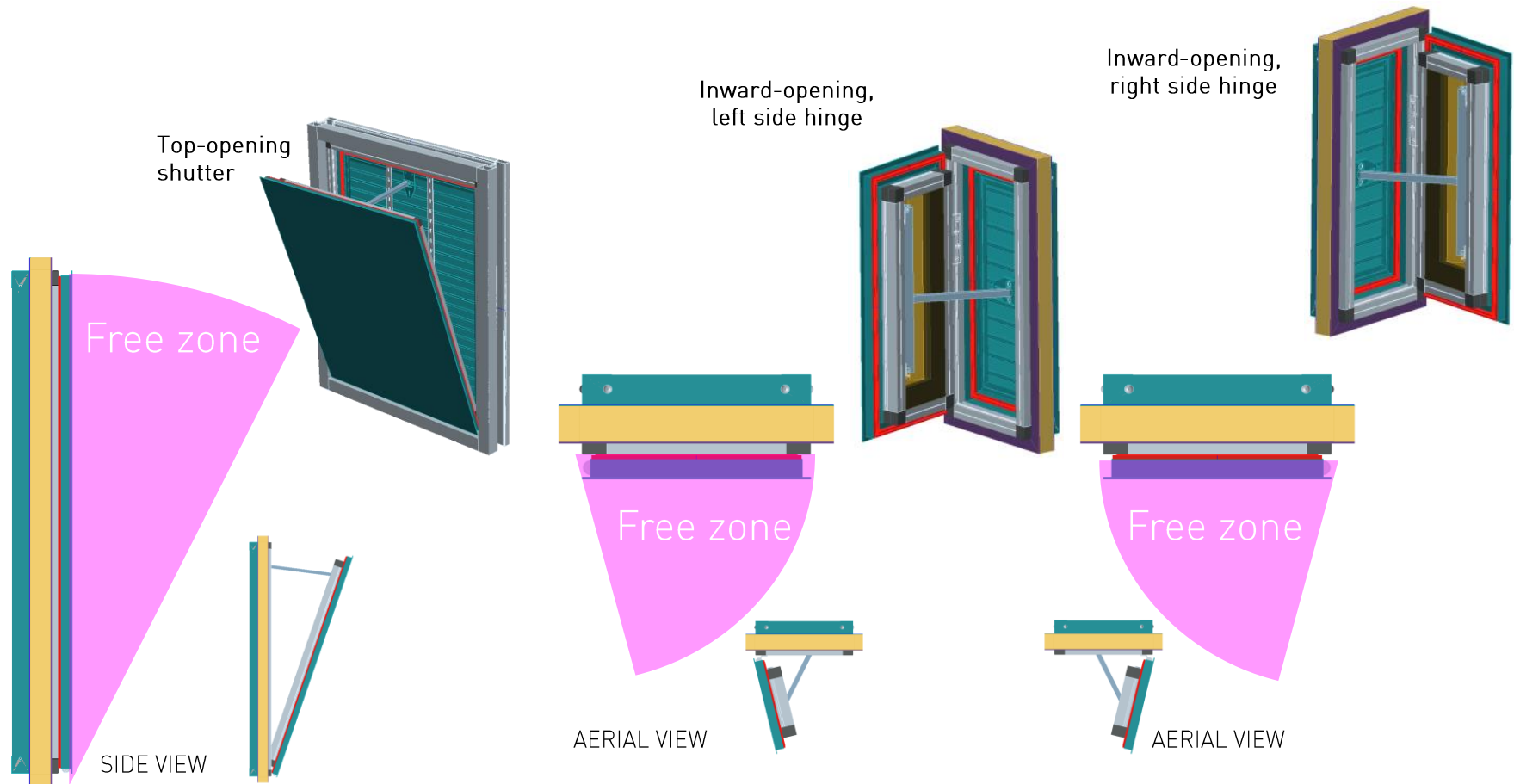
Uitvoering:

Jaloeziedraaischakelaar/ -impulsgever 2-polig



Positioning

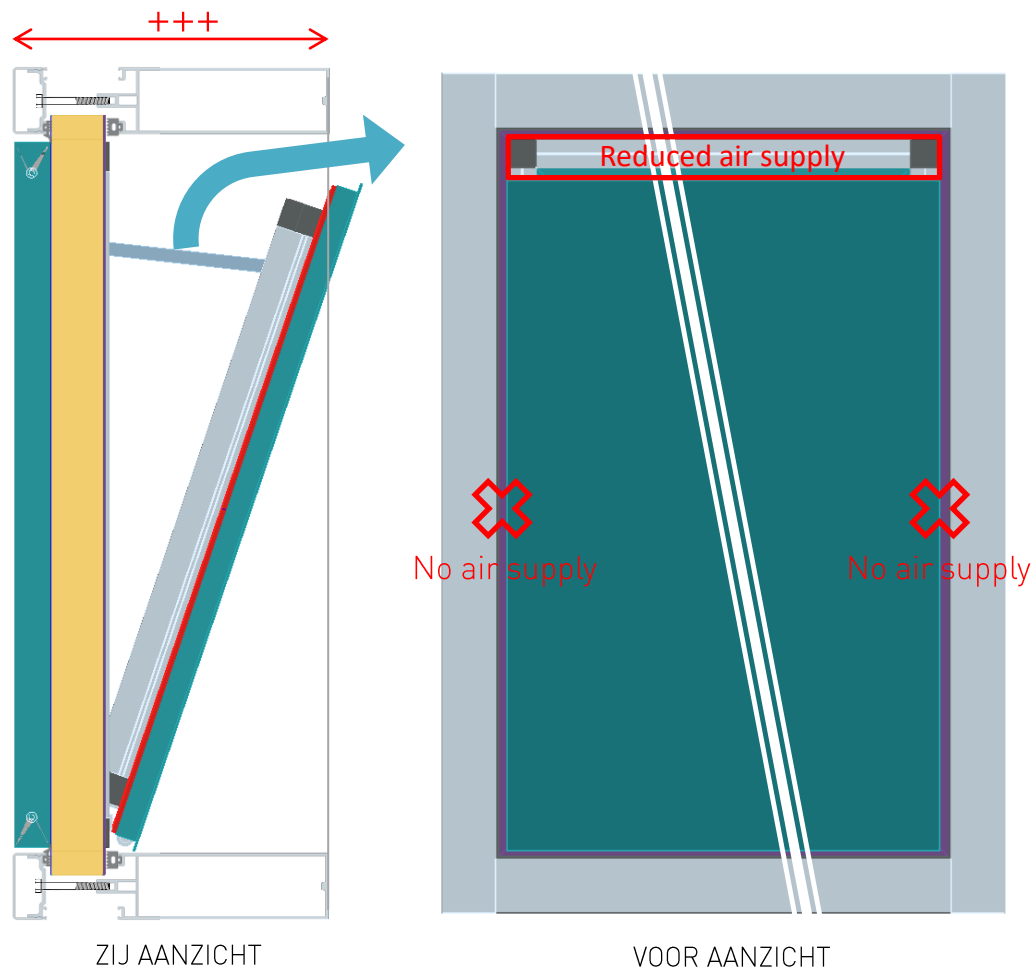
Ensure that the area on the inside of the DucoGrille NightVent is clear to allow the shutter to rotate. Remove all obstructions and inform the end-user of the positioning of interior elements etc.



Ventilation

CAUTION:

When a window or façade section is used with a very large profile depth, air supply may be greatly reduced. Take this into account when calculating the required ventilation surface area.



3

Installation

