



CI/SFB
(31.49) X (L2)



NATURAL VENTILATION

DUCO[®]

VENTILATION & SUN CONTROL


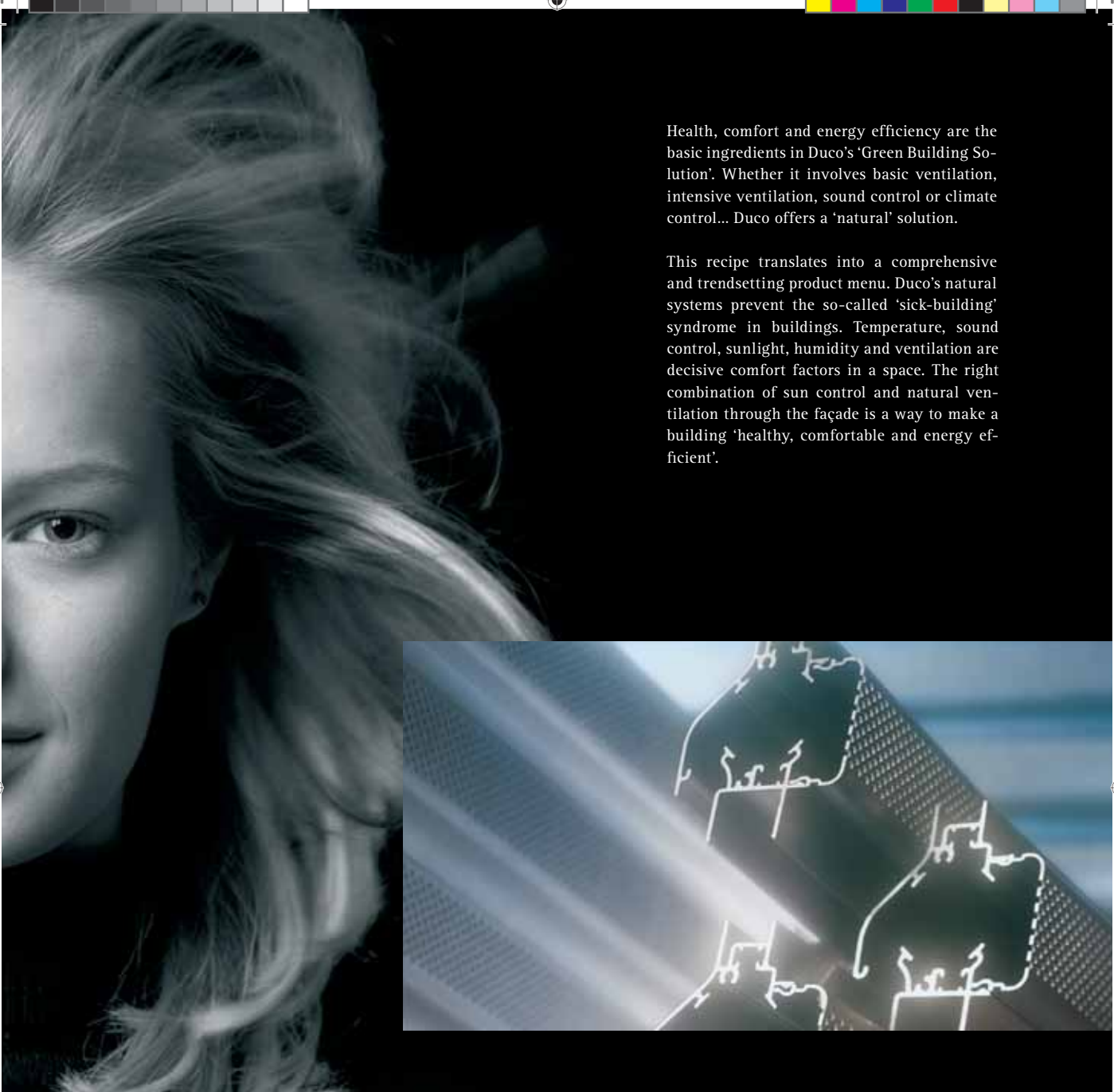
www.duco.eu





The Green





Health, comfort and energy efficiency are the basic ingredients in Duco's 'Green Building Solution'. Whether it involves basic ventilation, intensive ventilation, sound control or climate control... Duco offers a 'natural' solution.

This recipe translates into a comprehensive and trendsetting product menu. Duco's natural systems prevent the so-called 'sick-building' syndrome in buildings. Temperature, sound control, sunlight, humidity and ventilation are decisive comfort factors in a space. The right combination of sun control and natural ventilation through the façade is a way to make a building 'healthy, comfortable and energy efficient'.

Green Building Solution

DUCO[®]

VENTILATION & SUN CONTROL

www.duco.eu

3



DucoTop 35 p. 6-7



DucoStrip p. 8



DucoTip 45 p. 9



DucoPlus 45 p. 10



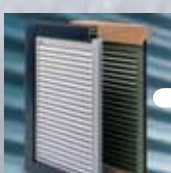
DucoPlus 60 p. 11



DucoTon 80 p. 12



DucoFlat 80 p. 13



DucoFrame F 20Z, F 20V p. 14



DucoFrame F 30V p. 15

Ventilation? “Naturally”!

More than 80% of our time is spent indoors, and for some, the young and the elderly, the proportion of time spent in the home is even greater. Scientists have proved that exposure to polluted air in the home has adverse health effects. More airtight buildings and modern lifestyles result in an increase in the amount of moisture being generated.

In an average family home, this can be up to 20 litres a day from washing, showering, cooking, breathing and perspiration.

All Nations that have signed the “Kyoto Agreement”, now issue Low Energy Directives or are enforcing existing Low Energy Directives. Our homes are becoming even more airtight!

To battle condensation and moisture in our homes and to provide the “controlled” necessary levels of passive background ventilation as required by the Building Regulations, Duco ‘Ventilation & Sun Control’ provides you with this ‘breath of fresh air’. Duco offers a complete range of manually controlled “trickle” ventilators which can be located over the window frames, in window frames, just above the glass or directly through the wall.



Document F

“The approved Document F – Ventilation (2006 edition)” - published on the 3rd of May 2006 - replaces the previous “1995 edition amended 2000” and deals with the requirement of Part F of Schedule 1 to the Building Regulations 2000.

The Requirement of Part F will be met where a ventilation system is provided that, under normal conditions, is capable of limiting the accumulation of moisture, which could lead to mould growth, and pollutants originating within a building which would otherwise become a hazard to the health of the people in the building.

Ventilation is simply the removal of 'stale' indoor air from a building and its replacement with 'fresh' outside air. It is required for one or more of the following purposes :

1. provision of outside air for breathing;
2. dilution and removal of airborne pollutants, including odours;
3. control of excess humidity (arising from water vapour in the indoor air);
4. provision of air for fuel-burning appliances (which is covered under Part J of the Building Regs.)

Buildings are ventilated through a combination of infiltration and purpose-provided ventilation. It is important to minimise the uncontrollable infiltration and supply sufficient purpose-provided ventilation.

Equivalent Area has been introduced into the Approved Document instead of free area for the sizing of background ventilators. Equivalent Area is a better measure of the airflow performance of a ventilator. Free area is simply the physical size of the aperture of the ventilator but may not accurately reflect the airflow performance which the ventilator will achieve. So ventilators are now to be measured by Equivalent Area or the airflow rate through the unit as opposed to the geometric measurement measured in the past.

For more information, please go to www.duco.eu

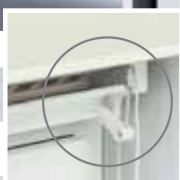
Overview of the Equivalent Area at 1 Pa for Duco vents

Overview of the Equivalent Area at 1 Pa for Duco vents

Vent location	Vent type	Vent length (mm)	Slot height (mm)	Equivalent Area (mm ²)
Over the window frames	DucoTop 35	1000	-	12980
	In window frames	DucoStrip	340	10
		450	10	3868
		290	12	2545
		370	12	3385
		900	12	9315
		230	16	2481
		290	16	3359
		360	16	4034
		410	16	4579
		460	16	5663
Above the Glass		680	16	8348
	DucoTip 45	1000	-	6872
	DucoPlus 45	1000	-	9162
	DucoPlus 60	1000	-	17179
	DucoTon 80	1000	-	13107
	DucoFlat 80	1000	-	13997



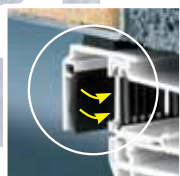
DUCOTOP 35



supplied with either cord or rod control



inner tip provides upward air deflection



selfregulating flap (optional)

Description

DucoTop 35 is a thermally broken thermoplastic 'Over-The-Frame' ventilator, especially designed for (in)visible fitting on top of any window frame. The 'patent applied for' DucoTop 35 has an expandable base with co-extruded seal, adjustable for profiles from 57 mm to 72 mm.

Benefits

- Finish: RAL 9010 (standard white) and RAL 8019 (dark brown)
- It is an "invisible ventilator"
- Fits any window frame
- Self-regulating (optional)
- Inner tip provides upward air deflection
- Easy to operate (hand, cord or rod control)
- Can be turned into a permanent (Gasboard) ventilator
- DucoTop 35, providing 1500 mm²/m, allows the ventilation capacity to be 'set' to specific rates (please state required ventilation capacity when ordering)
- Copes with the existing plaster lines (refurbishment market) and newbuild plaster lines (head extension available for thick reveals)
- Designed to be simply screwed into any cavity closer
- Easy to assemble and install
- Extruded from the highest quality PVCu with a superior structural strength, offering a superior U-value
- The integrated seal assures a tight seal when closed, providing superior weathertightness
- The flap can be fully opened, allowing quick and simple cleaning

Characteristics

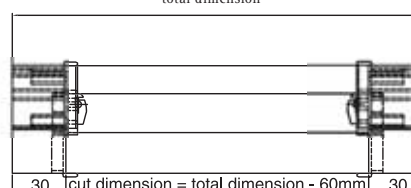
Airflow at 1 Pa	37 m ³ /h/m
Airflow at 2 Pa	50 m ³ /h/m
Equivalent area (at 1 Pa/m vent)	12980 mm ² /m
Free Air performance	15000 mm ²
Height	35 mm
Width	146 mm
Width of adaptor to frame	adjustable from 57 to 72 mm
Operation	hand, cord or rod

How to order made to measure

Please state:

- type
- total length
- maximum ventilation or fixed capacity
- control (hand, cord or rod)
- controllable or permanent version (for gas and domestic fuel burning appliances)
- quantity

total dimension

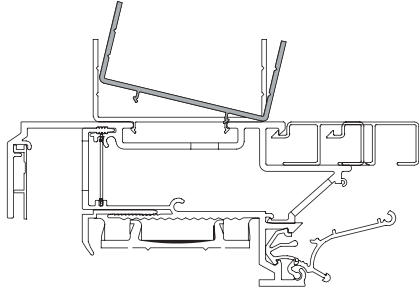


Specifications and drawings can be downloaded from the Duco-site: www.duco.eu



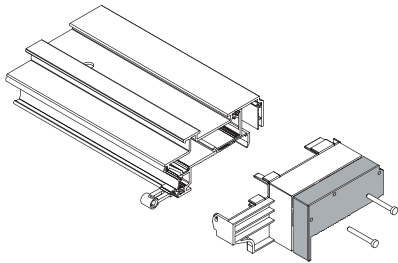
DucoTop 35 Accessories

Head extension



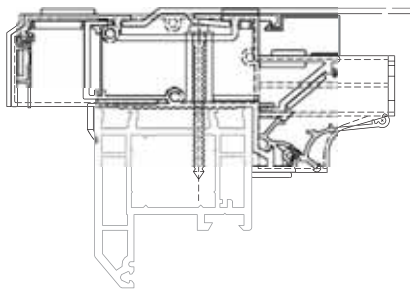
For the refurbishment market a universal U-shape head extension can be fitted to cope with thick plaster reveals.

DucoTop extensions to site-caps



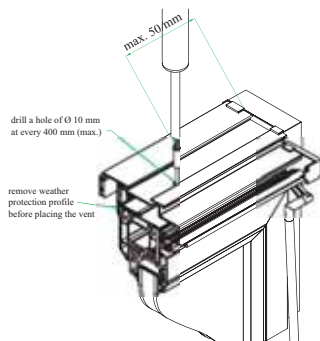
For the refurbishment market side-cap extensions are available to cope with thick plaster reveals on both sides.

Newbuild



A plaster finisher profile can be clipped to the vent-body for newbuild applications.

Fitting DucoTop 35 to a window



DUCO TOP 35



fill-up profile for Newbuild (optional)



extension for thick plaster lines (optional)



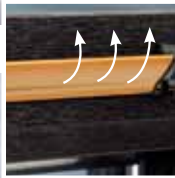
extended end caps (optional)



Specifications and drawings can be downloaded from the Duco-site: www.duco.eu



DUCOSTRIP



inner tip provides upward air deflection



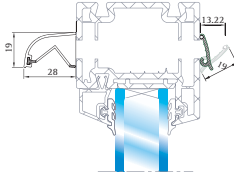
O-ring seal provides highest rating of weathertightness



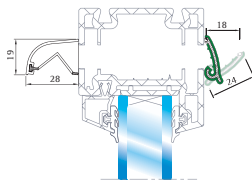
fitting screws concealed by sleek end caps

Equivalent Area		
Vent length (mm)	Slot height (mm)	Equivalent area (mm ²)
340	10	2838
450	10	3868
290	12	2545
370	12	3385
900	12	9315
230	16	2481
290	16	3359
360	16	4034
410	16	4579
460	16	5663
680	16	8348

Controllable Aluminium Slot ventilators

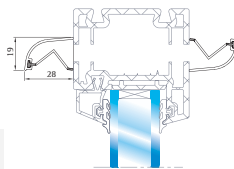


Dimensions canopy & slimline stripvent (for slot widths 10 to 13 mm)



Dimensions canopy & wideline stripvent (for slot widths 14 to 16 mm)

Permanent Aluminium Slot ventilators for domestic fuel burning appliances



Dimensions canopy & canopy for slot widths 12 to 16 mm

Description

DucoStrip is a unique range of high quality aluminium slot ventilators. These ventilators are manufactured from extruded aluminium 'strips'. The combination of 'smooth curves', 'designer end caps' and high quality Polyester Powder coating makes DucoStrip the preferred choice for any type of window sashes or frames.

Benefits

- High quality 'Through-the-Frame' Slotvent
- Designer product
- Sleek & Slim with minimum protrusion
- Directs flow of incoming air upwards, avoiding draughts and discomfort
- Very robust, ideal for high abuse areas
- Highest rating of weathertightness: 900 Pa
- Fitting screws concealed by sleek end caps
- Can be supplied in all RAL colours and Mill finish
- Suitable for PVCu, timber or aluminium windows

Material :

Aluminium Extrusion - Al Mg Si 0,5 to DIN 1748, part 1

Finishes :

Polyester powder coating (60µ): UV colourfast, anodised (20µ)

End caps :

White or black, with injection moulded special shaped end caps

Screws :

Stainless steel A2 Philips screws 3,5 x 9 mm DIN 7981

The outer 'weather canopy' is fitted with a flyscreen complying with BS 5440 : Part 2 : 1989

The inner canopy, identical to the weather canopy but mounted 'upside down' to create an updraught of the incoming air.

One pair of permanent 'combustion air vents' is suitable for:

- Gas appliances up to 18 kW (61.000 Btu/h) input
- Solid fuel closed appliances up to 14 kW (47.000 Btu/h) output
- Solid fuel open appliance with throat opening area up to 10000 mm²
- Oil burning appliance up to 14 kW (47.000 Btu/h) output

Important

Above DucoStrip ventilators can be supplied in mill finish, SAA or any RAL colour.

Please enquire!

Please add colour number to order reference!

Specifications and drawings can be downloaded from the Duco-site: www.duco.eu



Description

DucoTip 45 is an aluminium glazed-in window ventilator featuring a smooth-curve canopy for superior weatherability and positive action inner 'tip' which directs the flow of incoming air upwards. The punched inside grille acts as an insect mesh. This slimline ventilator requires only 45 mm glass reduction but provides 7495 mm² equivalent area/metre. The DucoTip 45 is suitable for PVCu, timber or aluminium windows and easy to assemble (1 screw end caps). The vent can be supplied in all RAL colours, SAA and mill finish. A permanent version for gas and domestic fuel burning appliances is available.

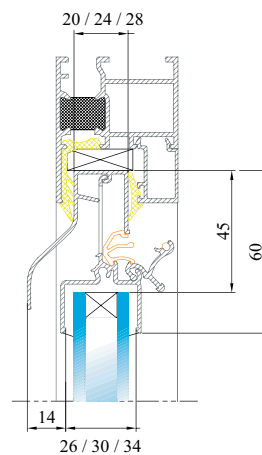
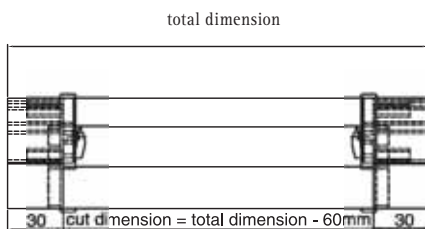
Characteristics

Airflow at 1 Pa	20 m ³ /h/m
Airflow at 2 Pa	27 m ³ /h/m
Equivalent area (at 1 Pa/m vent)	6872 mm ² /m
Free Air performance	10000 mm ²
Glass reduction	45 mm
Glass thicknesses	20, 24 and 28 mm
Vent height	60 mm
Operation	hand, cord or rod
Acoustic Value, Dne,A (open)	28,2 dB(A)

How to order made to measure

Please state:

- type
- glass thickness
- total length
- control (hand, cord or rod)
- controllable or permanent version (for gas and domestic fuel burning appliances)
- finish (RAL colour, SAA, mill finish)
- quantity



DUCOTIP 45



positive, wear-free
action for control flap



raised grille = excellent
weather performance



45 mm glass reduction
only



Specifications and drawings
can be downloaded from the
Duco-site: www.duco.eu



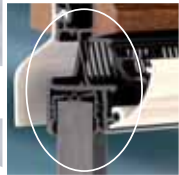
DUCOPLUS 45



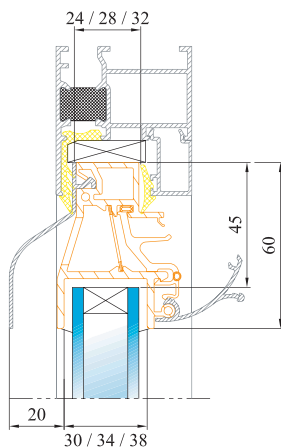
45 mm glass reduction only



graded operating mechanism provides control of air



thermally broken and thermally improved



Specifications and drawings can be downloaded from the Duco-site: www.duco.eu



10

Description

DucoPlus 45 is a thermally broken and thermally improved “controllable” aluminium glazed-in window ventilator featuring a smooth-curve canopy for superior weatherability and positive action inner ‘tip’ which directs the flow of incoming air upwards. This slimline ventilator requires only 45 mm glass reduction but provides 9162 mm² equivalent area/metre. The DucoPlus 45 is suitable for PVCu, timber or aluminium windows. The vent can be supplied in all RAL colours (also twin colours), SAA and mill finish. A permanent version for gas and domestic fuel burning appliances is available as well as a tricklevent version.

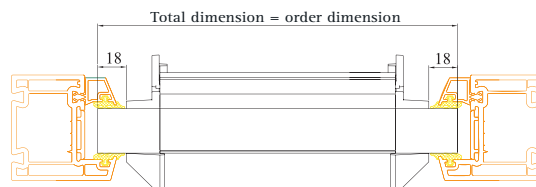
Characteristics

Airflow at 1 Pa	26 m ³ /h/m
Airflow at 2 Pa	37 m ³ /h/m
Equivalent area (at 1 Pa/m vent)	9162 mm ² /m
Free Air performance	12000 mm ²
Wind- and watertightness	Up to 600 Pa
Glass reduction	45 mm
Glass thicknesses	24, 28 and 32 mm
Vent height	60 mm
Operation	hand, cord or rod
Acoustic Value, D _{nc,A} (open)	26,1 dB(A)

How to order made to measure

Please state:

- type
- glass thickness
- total length
- control (hand, cord or rod)
- controllable, trickle or permanent version (for gas and domestic fuel burning appliances)
- finish (RAL colour, SAA, mill finish)
- quantity



Description

DucoPlus 60 is a thermally broken and thermally improved “controllable “ aluminium glazed-in window ‘flap’ ventilator with soft line design outer profile and built-in ‘air deflector’ which directs the flow of incoming air upwards. The punched inside profile acts as an insect mesh. The DucoPlus 60 is suitable for PVCu, timber or aluminium windows. The vent can be supplied in all RAL colours (also twin colour), SAA and mill finish. A permanent version for gas and domestic fuel burning appliances is available. DucoPlus 60 has excellent sound absorption qualities : RqA = -1dB(A).

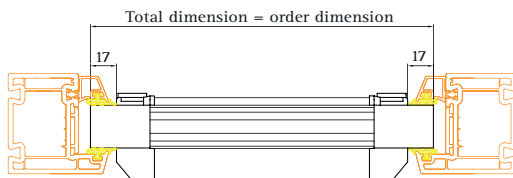
Characteristics

Airflow at 1 Pa	49 m ³ /h/m
Airflow at 2 Pa	70 m ³ /h/m
Equivalent area (at 1 Pa/m vent)	17179 mm ² /m
Free Air performance	15000 mm ²
Wind- and watertightness	up to 650 Pa
Stiffness and strength	up to 1430 Pa
Glass reduction	60 mm
Glass thicknesses	20, 24, 28 and 32 mm
Vent height	75 mm
Operation	hand, cord or rod
Acoustic Value, Dne,A (open)	27,0 dB(A)

How to order made to measure

Please state:

- type
- glass thickness
- total length
- control (hand, cord or rod)
- controllable, trickle or permanent version (for gas and domestic fuel burning appliances)
- finish (RAL colour, SAA, mill finish)
- quantity



DUCOPLUS 60



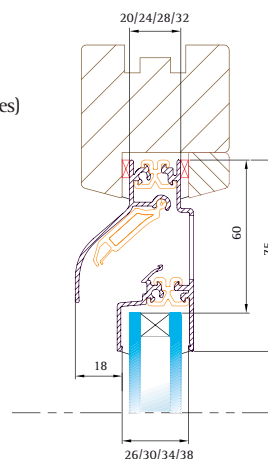
60 mm glass reduction only



thermally broken and thermally improved



built-in air deflector = upward air deflection



Specifications and drawings can be downloaded from the Duco-site: www.duco.eu



O

DUCO TON 80



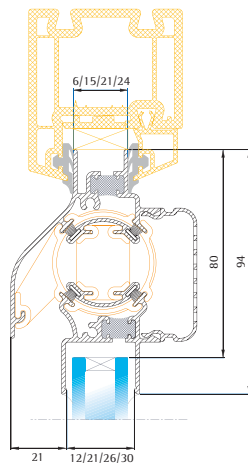
four finseal brushes



Duco soft line design



symmetrical inner profile can be clipped-off/on by hand



Specifications and drawings can be downloaded from the Duco-site: www.duco.eu



Description

DucoTon 80 is a thermally broken and thermally improved “controllable “ aluminium glazed-in window ‘rotating drum’ ventilator with soft line design outer profile. The punched symmetrical inside profile acts as an insect mesh and can be clipped-off/on by hand. A perfect seal against wind and water ingress is assured by four finseal brushes. The DucoTon 80 is suitable for PVCu, timber or aluminium windows. The vent can be supplied in all RAL colours (also twin colour), SAA and mill finish. A permanent version for gas and domestic fuel burning appliances is available.

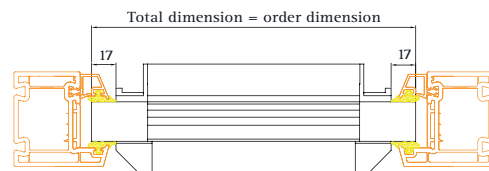
Characteristics

Airflow at 1 Pa	37 m ³ /h/m
Airflow at 2 Pa	50 m ³ /h/m
Equivalent area (at 1 Pa/m vent)	13107 mm ² /m
Free Air performance	15000 mm ²
Wind- and watertightness	up to 650 Pa
Stiffness and strength	up to 1600 Pa
Glass reduction	80 mm
Glass thicknesses	6, 15, 21 and 24 mm (transom profile: 15 mm)
Vent height	94 mm (transom profile: 104 mm)
Operation	hand, cord or rod
Acoustic Value, Dne,A (open)	26,0 dB(A)

How to order made to measure

Please state:

- type
- glass thickness
- total length
- control (hand, cord or rod)
- controllable or permanent version (for gas and domestic fuel burning appliances)
- finish (RAL colour, SAA, mill finish)
- quantity



Description

DucoFlat 80 is a thermally broken and thermally improved “controllable” aluminium glazed-in window ‘flap’ ventilator with zero protrusion. The vent is especially suitable for sliding windows and patio door applications. The design of the lower outside profile directs the flow of incoming air upwards. The punched inside profile acts as an insect mesh. The DucoFlat 80 is suitable for PVCu, timber or aluminium windows. The vent can be supplied in all RAL colours (also twin colour), SAA and mill finish. A permanent version for gas and domestic fuel burning appliances is available.

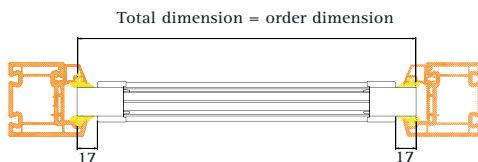
Characteristics

Airflow at 1 Pa	40 m ³ /h/m
Airflow at 2 Pa	57 m ³ /h/m
Equivalent area (at 1 Pa/m vent)	13997 mm ² /m
Free Air performance	15000 mm ²
Wind- and watertightness	up to 650 Pa
Stiffness and strength	up to 1600 Pa
Glass reduction	80 mm
Glass thicknesses	20, 24 and 28 mm
Vent height	95 mm
Operation	hand, cord or rod
Acoustic Value, Dne,A (open)	27,0 dB(A)

How to order made to measure

Please state:

- type
- glass thickness
- total length
- control (hand, cord or rod)
- controllable, trickle or permanent version (for gas and domestic fuel burning appliances)
- finish (RAL colour, SAA, mill finish)
- quantity



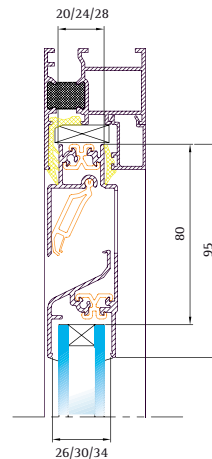
DUCOFLAT 80



suitable for sliding windows and patio doors

thermally broken and thermally improved

punched grille acts as an insect mesh



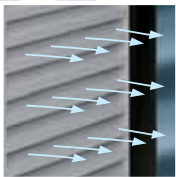
Specifications and drawings can be downloaded from the Duco-site: www.duco.eu



DUCOFRAME F 20Z-F 20V



intensive ventilation
(night cooling)



significant airflow



insect proof



Specifications and drawings
can be downloaded from the
Duco-site: www.duco.eu

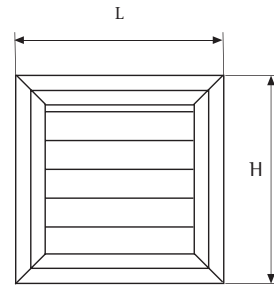
Description

DucoFrame F 20Z and F 20V are glazed-in louvre grilles, made from aluminium profiles. All units are assembled from extruded sections of aluminium Al Mg Si 0.5. They can be fitted in any PVCu, timber or aluminium window. DucoFrame are ergonomic and aesthetic design 'louvre windows'. They are splash water and insect proof. DucoFrame F 20Z and F 20V are provided with an insect screen. DucoFrame provides burglar proof intensive ventilation during night and day.

DIMENSIONS

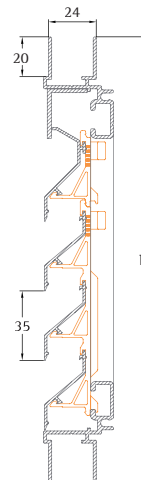
CUSTOM MADE ONLY !

When ordering please specify (L)ength and (H)eight.

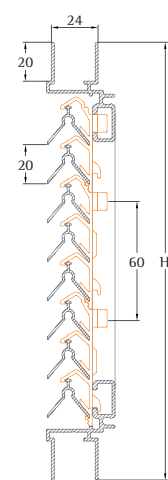


Characteristics

Equal leg outer frame	24 mm
Depth to fit	30 mm
Minimum profile thickness	1,2 mm
Finishes	satın or bronze anodized or any RAL colour
Airflow from 50 dm ²	4,3 ltrs./sec/dm ² at a 2 Pa difference



F 20 Z



F 20 V

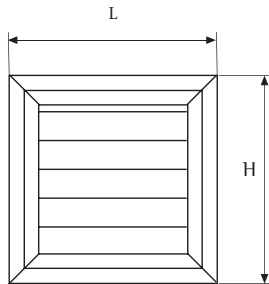
Description

DucoFrame F 30P are glazed-in louvre grilles, made from aluminium profiles. All units are assembled from extruded sections of aluminium Al Mg Si 0.5. They can be fitted in any PVCu, timber or aluminium window. DucoFrame are ergonomic and aesthetic design 'louvre windows'. They are splash water and insect proof. The punched profiles of the DucoFrame F 30P act as an insect mesh. DucoFrame provides burglar proof intensive ventilation during night and day.

DIMENSIONS

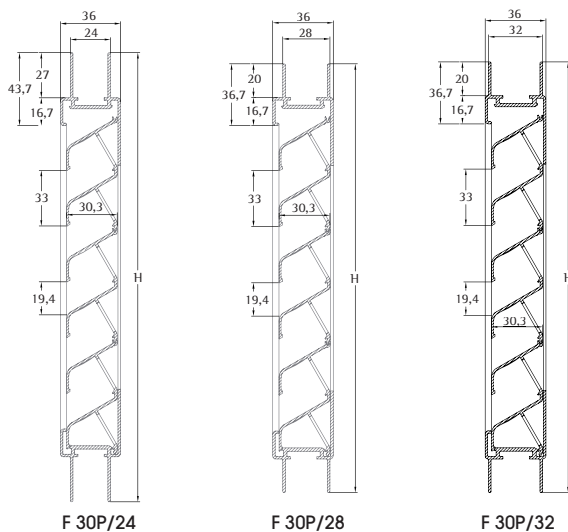
CUSTOM MADE ONLY !

When ordering please specify (L)ength and (H)eight.



Characteristics

Equal leg outer frame	24/28 mm
Depth to fit	30 mm
Minimum profile thickness	1,5 mm
Finishes	satin or bronze anodized or any RAL colour
Airflow from 50 dm ²	4,0 ltrs./sec/dm ² at a 2 Pa difference



DUCOFRAME F 30P



intensive ventilation
(night cooling)



burglar proof



insect proof



Specifications and drawings
can be downloaded from the
Duco-site: www.duco.eu





TEL 0032-58/33 00 33 • FAX 0032-58/33 00 44
info@duco.eu • www.duco.eu

DUCO[®]
VENTILATION & SUN CONTROL
www.duco.eu

