

WALL AND WINDOW LOUVRES



We inspire at www.duco.eu

HOME OF OXYGEN

Duco Ventilation & Sun Control provides every building with a healthy supply of oxygen. With a comprehensive range of innovative natural and mechanical ventilation systems, either combined with external solar shading or otherwise, Duco offers the ultimate guarantee of a healthy and comfortable indoor climate. The occupant's health is,

therefore, central to Duco. A well-thought-out combination of basic ventilation, mechanical extraction, purge ventilation and solar shading ensures optimum air quality. Duco provides an innovative solution for residential buildings, offices, schools or care centres where everyone feels at home.

Duco, Home of Oxygen

DUCO
Ventilation & Sun Control

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DISCLAIMER

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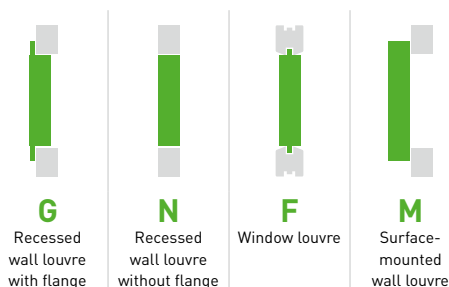


A SOLUTION FOR EVERY SITUATION



→ Any building situation

Duco has a wide range of natural air intake grilles for **both new buildings and refurbishment projects**. Depending on the type of louvre, Duco offers the following options:



→ Finish

Each type of louvre grill is available in all colours: **F1***, any **RAL colour, textured paint, special paints/lacquers, etc.** Each type of louvre grille in this brochure complies with the **Qualicoat** or **Qualanod** quality specifications.

* Except DucoGrille Acoustic 150



→ Aesthetic

The many type of louvre blade (Z, S, V, etc.) ensure a suitable look in each project.



...

→ Vandalism and intrusion security

Solid louvre blades are very sturdy and **'vandal-proof'**. The DucoGrille Solid++ is **intrusion-resistant up to class 2**, in accordance with the European standard.



→ Custom building

The height and width of each grille* can be determined to the mm.

Except DucoGrille Acoustic 150 and DucoGrille Close 35Z.

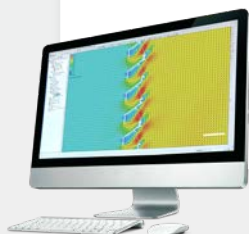
→ Insect screen and vermin screen

With DucoGrille Solid louvre grilles with small punche slots (P1), the **perforated louvre blades** act as an insect screen. With all other types (Solid P2, Classic, Acoustic and Close), **2.3 x 2.3 mm stainless-steel mesh** is provided as standard. 6 x 6 mm or 20 x 20 mm mesh can be selected as an option.

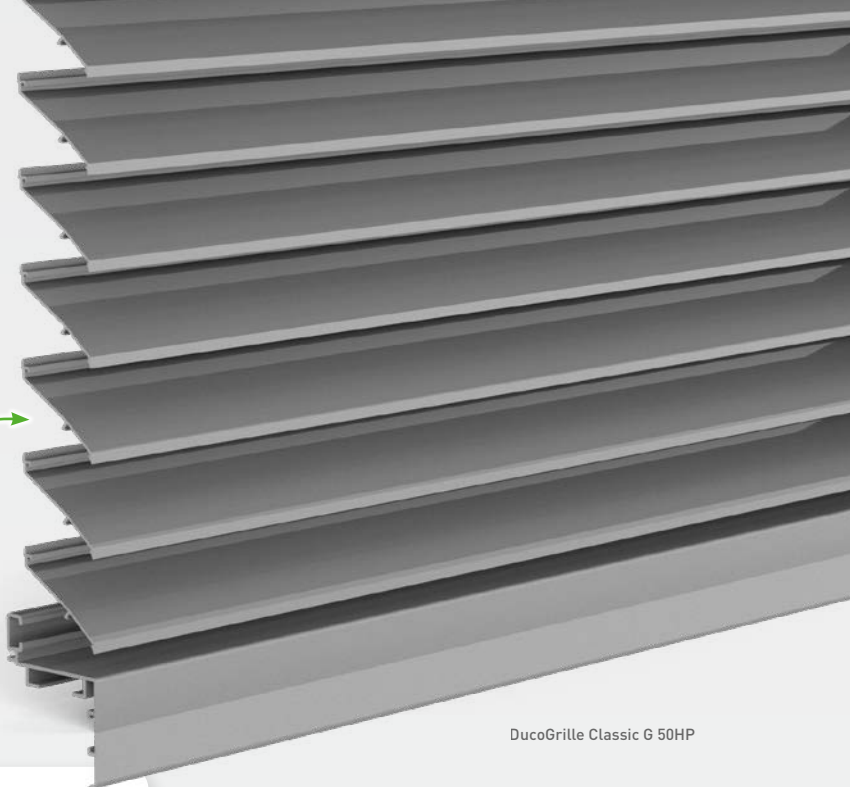


→ Ventilation capacity

Each louvre is extensively tested and optimised by Duco's R&D department. The **'High Performance'** HP louvre blades in the DucoGrille Classic range ensure excellent airflow thanks to low resistance.



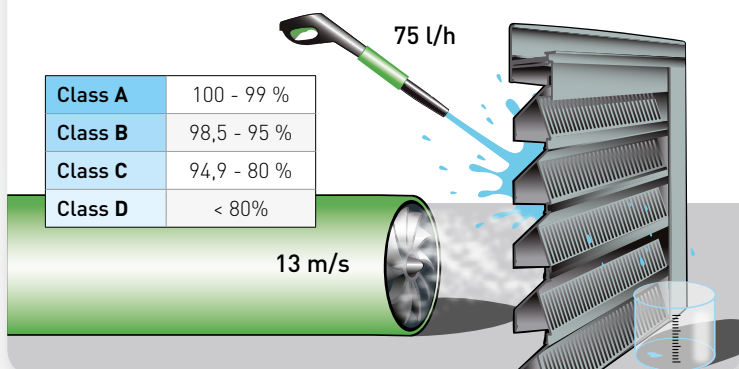
High Performance



DucoGrille Classic G 50HP

→ Water resistance

All DucoGrille louvre grilles have been tested by **BSRIA** in accordance with watertightness tests developed in collaboration with HEVAC. The test simulates 75 litres per hour rainfall at a wind speed of 13 metres per second. Based on the air speed in the louvre and the % watertightness, the louvre is assigned a class.



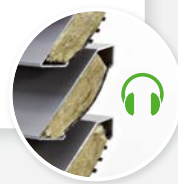
→ Proof against penetration



DucoGrille Classic louvre grilles with **V-blades** are penetration-proof.

→ Sound absorption

DucoGrille **Acoustic** louvre blades are fitted on the inside with non-flammable mineral wool and are ideally suited for applications with high levels of noise intrusion.



→ Total solutions

DucoGrille louvres can be used in **residential and non-residential buildings**. Duco's total solutions for **WORK, SCHOOL** and **CARE** use **ventilative cooling** and **exterior solar shading** for a healthy, comfortable and energy-efficient indoor climate. Please consult the brochures on our website for more information.

The DucoGrille Close 105 and DucoGrille NightVent can also be integrated into Duco's **fully automatic Tronic systems**.





PRODUCTOVERVIEW

Duco has developed a wide range of ventilation grilles: burglar-resistant, penetration-proof, water-resistant, for large volume flows, sound-absorbing, etc. Duco can offer a tailored-made system in every case: **you name it, we have it!**

Ventilation capacity

 = at intake
 = at outlet
 The longer the bar, the greater the airflow.

G

Recessed wall louver with flange

N

Recessed wall louver without flange

F

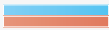
Window louver

M

Surface-mounted wall louver

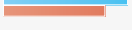
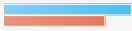
DUCOGRILLE SOLID

Sturdy, **vandal-proof / intrusion-resistant** louver grilles with multiple, sleek dovetailing Z-blades.

DucoGrille Solid 30Z							see p. 8
DucoGrille Solid++ 30Z	 						see p. 10
DucoGrille Solid ISO 30Z	 						see p. 11

DUCOGRILLE CLASSIC

Recessed wall or window louvers, where the aluminium louver blades are clicked into place on **plastic blade holders**.

DucoGrille Classic 20Z							see p. 12
DucoGrille Classic 20V	 						see p. 13
DucoGrille Classic 50Z							see p. 14
DucoGrille Classic 50S							see p. 15
DucoGrille Classic 50/75Z							see p. 16
DucoGrille Classic 50/75S							see p. 17
DucoGrille Classic 45HP							see p. 18
DucoGrille Classic 50HP							see p. 19
DucoGrille Classic 130HP	 						see p. 20
DucoGrille Classic 70S							see p. 22
DucoGrille Classic 70V	 						see p. 23

Legend



Vandal-proof
The grille is
vandal-proof.



**Intrusion
resistant**
The grille is
(optionally) burglar-
resistant to class 2.



**Penetration
safety**
The grille is pene-
tration-proof.



Water-resistant
The louvre grille is
water-resistant to a **high**
to **very high** degree



High Performance
The louvre blades are
optimized for high
airflow



Sound absorption
Can be used in projects
with **light** or **heavy (+)**
noise exposure

Ventilation capacity

 = at intake
 = at outlet
 The longer the bar,
the greater the airflow.

G

Recessed
wall louvre
with flange

N

Recessed
wall louvre
without flange

F

Window louvre

M

Surface-
mounted
wall louvre

DUCOGRILLE ACOUSTIC

Recessed wall louvres featuring **sound-absorbing**, non-flammable mineral wool

DucoGrille Acoustic 75Z							see p. 24
DucoGrille Acoustic 75L							see p. 24
DucoGrille Acoustic 150							see p. 25

DUCOGRILLE CLOSE

Adjustable ventilation grilles with manual or electronic operation

DucoGrille Close 105	Ventilation capacity depending on internal and external louvre grille					see p. 26
DucoGrille Close 35Z						see p. 28
DucoGrille Close M 100						see p. 29

DUCOGRILLE NIGHTVENT

Glass-replacing ventilation hatch with manual or electronic operation

DucoGrille NightVent							see p. 30
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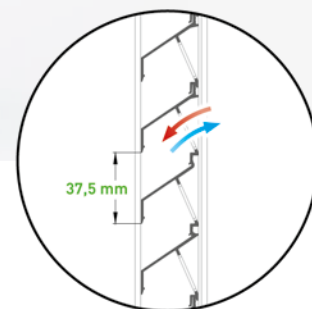
LOUVRE WALL SYSTEMS

The louvre blades in the **DucoGrille Solid**, **Classic** and **Acoustic** range can also be used in a louvre wall without a frame. See our 'Louvre wall systems' brochure for more information.





Vandal-proof

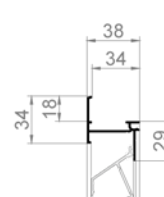


DucoGrille

Solid 30Z

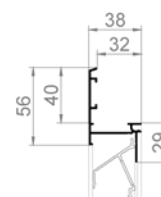
DucoGrille Solid 30Z louvre blades offer high ventilation capacity with relatively small louvre blades. The 'stackable' louvre blades form a single screen, making them **extra strong** and **vandal-proof**.

The louvre blades are available with **small slots (P1)**, **large slots (P2)** or as **false louvres (NP)** and provide a uniform façade design when combined in a single project.



G 30Z

Recessed wall louvre with flange

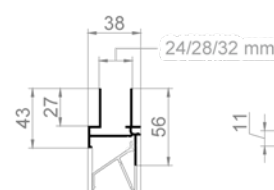


G 30Z Large

Recessed wall louvre with extra large flange

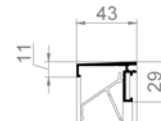
FRAME TYPES AND DIMENSIONS

Dimensions in mm	G	G Large	F	M
Louvre pitch	37,5			
Recess depth	34,4	31,9	-	-
Frame rebate	18,2	40	-	-
Frame depth	-	-	38	43
Flange width	-	-	24/28/32	-
Min. dimensions	min. W 200 x H 200			



F 30Z

Window louvre



M 30Z

Surface-mounted wall louvre

VENTILATION VALUES

		P1	P2
Visual free passage		60 %	86 %
Physical free passage		34 %	48 %
Ce (higher is better)		0,24	0,28
Cd (higher is better)		0,23	0,28
K-FACTOR (lower is better)	INLET	17,70	12,85
	OUTLET	19,13	12,90

WATER RESISTANCE

Air velocity	Class	
	P1	P2
0 m/s	C [91,1%]	B [96,1%]
0,5 m/s	C [83,5%]	B [95,9%]
1 m/s	D [77,7%]	C [93,5%]
1,5 m/s	D	C [87,6%]
2 m/s	D	D [67,3%]
2,5 m/s	D	D

Slots

DucoGrille Solid 30Z is available with louvre blades with **small slots (P1)**, **large slots (P2)** or without slots as **false louvres (NP)**. Combining the two in the same project ensures a uniform appearance.

INSECT SCREEN

Slots				
		P1	P2	NP
Resistant to...	  	Perforated louvre blades as insect screen	Stainless-steel mesh 2.3 x 2.3 mm STANDARD	100 % false louvre
	 		Stainless-steel mesh 6 x 6 mm OPTIONAL	
			Stainless-steel mesh 20 x 20 mm OPTIONAL	

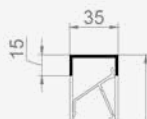
Round version: MR 30Z

The **DucoGrille Solid MR 30Z** is a round surface-mounted wall louvre.

SIZES

	MR 30Z
Frame depth	35 mm
Min. / max. dimensions	min. dia. 300 mm max. Ø 1500 mm

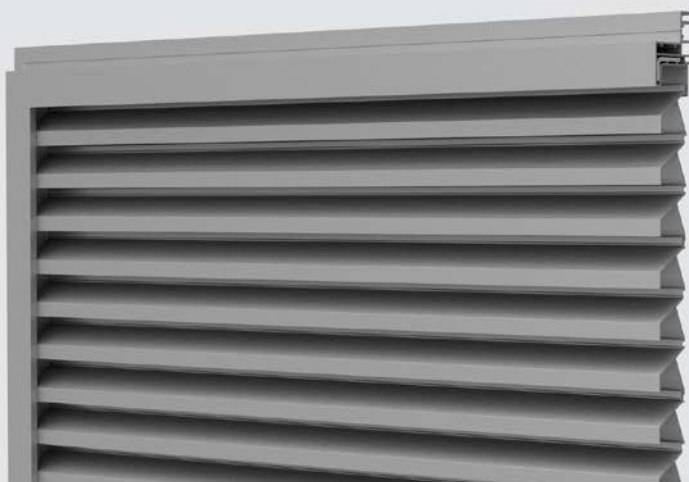
Stainless-steel mesh is not available for round louvre grilles. All other dimensions and properties are the same as for the DucoGrille Solid M 30Z.



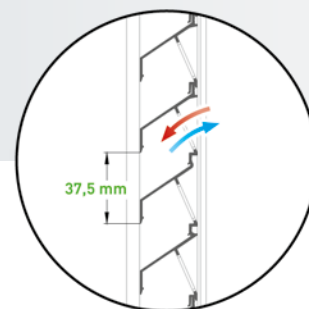
MR 30Z

Surface-mounted wall louvre





Burglar-resistant to
class 2

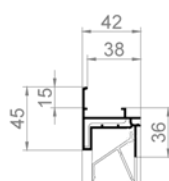


DucoGrille Solid++ 30Z

The DucoGrille Solid++ 30Z uses the same louvre blades as the Solid 30Z (P1 only), but with a **reinforced frame section**. This makes the louvre grilles **intrusion resistant to Class 2**, in accordance with the European standard.

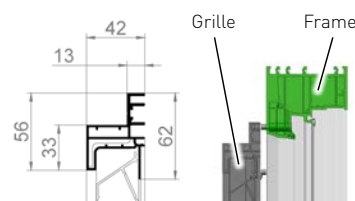
FRAME TYPES AND DIMENSIONS

Dimensions in mm	G	M
Louvre pitch	37,5	
Recess depth	38,4	-
Frame rebate	15	-
Frame depth	-	42
Min. dimensions	min. W 200 x H 200	



++ G 30Z

Recessed wall louvre
with flange



++ M 30Z

Surface-mounted louvre grille for fitting on a frame

SPECIFICATIONS

The DucoGrille Solid++ 30Z is only available with P1 louvre blades. All specifications relating to ventilation capacity, water resistance and insect resistance are identical to the DucoGrille Solid 30Z P1 (see page 8).



P1

DucoGrille Solid++ G 30Z has passed all the tests prescribed in the 'Burglar resistance Construction products' prEN 1627 to prEN 1630 draft standards for class 2 intrusion resistance.

DucoGrille Solid++ M 30Z complies with standards EN 5096:2007 and EN 1627:2011

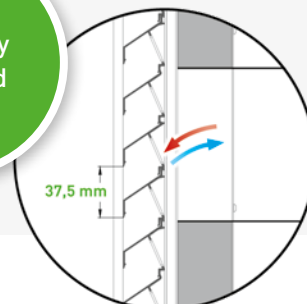
The complete test report is obtainable upon request:
G 30Z: DE 651 XG 815 – CAR 8175 | M 30Z: SKG12.1036





Also available in **RC2**
intrusion-resistant version

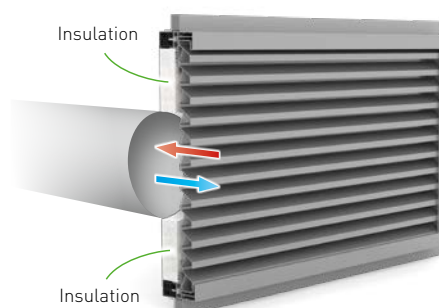
thermally
insulated



DucoGrille

Solid ISO 30Z

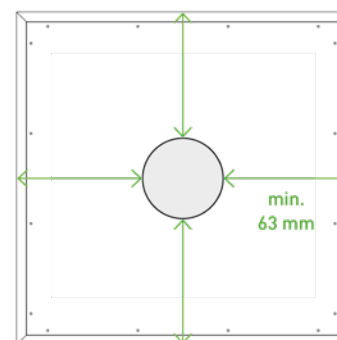
The DucoGrille Solid ISO 30Z is an architectural and **thermally insulated window louvre**. The window louvre can be connected to both round and rectangular air ducts. Available as an option with reinforced frame section for intrusion resistance up to class 2.



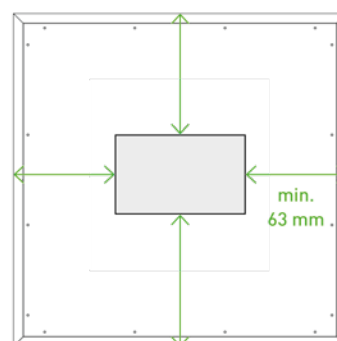
DIMENSIONS AND SPECIFICATIONS

Frame depth	88 mm (with thermal break)
Flange width	24 / 28 / 32 / 36 / 40 / 44 / 48 mm
Duct connection	Round or rectangular, any dimension
Grille dimensions	Louvre grille height = duct height + 2 x 63 mm min. Grille width = duct width + 2 x 63 mm min. Min. W 300 x H 300 mm Max. 2500 mm high / wide if other dimension < 1250 mm
U-value	0.9 W/m²K

→ Rear with **round** duct



→ Rear with **rectangular** duct



SPECIFICATIONS

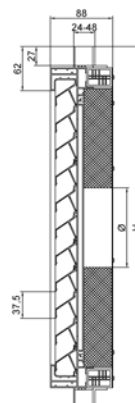
The DucoGrille Solid ISO 30Z is available with P1 and P2 louvre blades. All specifications relating to ventilation capacity and water resistance are identical to the corresponding DucoGrille Solid 30Z models (see page 8).

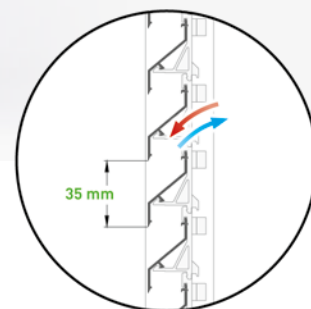


P1



P2



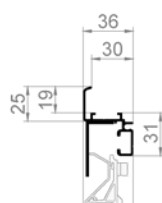


DucoGrille Classic 20Z

DucoGrille Classic 20Z consists of two different types: a recessed wall louvre (G) and an architectural window louvre (F). All types are manufactured from extruded aluminium sections. Insect mesh is fitted as standard. The “Z”-shaped louvre blade produces a sleek design.

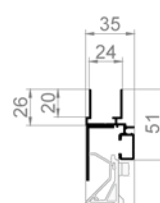
FRAME TYPES AND DIMENSIONS

Dimensions in mm	G	F
Louvre pitch	35	
Recess depth	30	-
Frame rebate	19	-
Flange width	-	24
Frame depth	-	35
Min. dimensions	min. W 200 x H 200	



G 20Z

Recessed wall louvre
with flange



F 20Z

Window louvre

VENTILATION VALUES

Visual free passage		63 %
Physical free passage		41 %
Ce (higher is better)		0,21
Cd (higher is better)		0,18
K-FACTOR (lower is better)	INLET	22,73
	OUTLET	30,52

WATER RESISTANCE

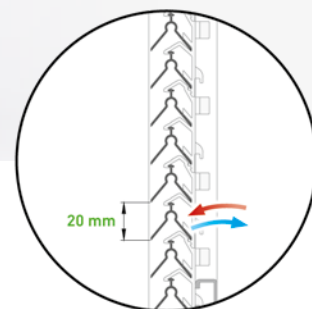
Air velocity	Class
0 m/s	C (94,87%)
0,5 m/s	C (93,15%)
1 m/s	D
1,5 m/s	D (75,4%)
2 m/s	D
2,5 m/s	D

INSECT SCREEN

STANDARD	
Stainless-steel mesh 2.3 x 2.3 mm	
OPTION	Stainless-steel mesh 6 x 6 mm
	Stainless-steel mesh 20 x 20 mm



Good water resistance Penetration safety

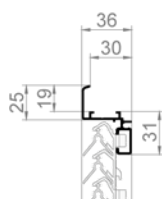


DucoGrille Classic 20V

DucoGrille Classic 20V consists of two different types: a recessed wall louvre (G) and an architectural window louvre (F). All types are manufactured from extruded aluminium sections. Insect mesh is fitted as standard. The “V”-shaped louvre blade produces a sleek design.

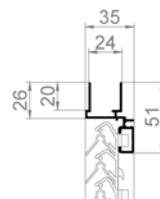
FRAME TYPES AND DIMENSIONS

Dimensions in mm	G	F
Louvre pitch	20	
Recess depth	30	-
Frame rebate	19	-
Flange width	-	24
Frame depth	-	35
Min. dimensions	min. W 200 x H 200	



G 20V

Recessed wall louvre
with flange



F 20V

Window louvre

VENTILATION VALUES

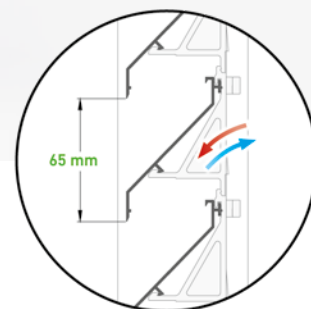
Visual free passage	95 %	
Physical free passage	34 %	
Ce (higher is better)	0,15	
Cd (higher is better)	0,15	
K-FACTOR (lower is better)	INLET	42,93
	OUTLET	47,1

WATER RESISTANCE

Air velocity	Class
0 m/s	A (99,0%)
0,5 m/s	B
1 m/s	C (91,5%)
1,5 m/s	C
2 m/s	C
2,5 m/s	D

INSECT SCREEN

STANDARD	
Stainless-steel mesh 2.3 x 2.3 mm	
OPTION	Stainless-steel mesh 6 x 6 mm
	Stainless-steel mesh 20 x 20 mm

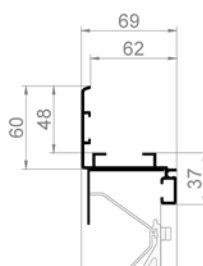


DucoGrille Classic 50Z

DucoGrille Classic 50Z consists of three different types: a recessed wall louvre (G with flange, N without flange) and an architectural window louvre (F). All types are manufactured from extruded aluminium sections. Insect mesh is fitted as standard. The “Z”-shaped louvre blade produces a sleek design.

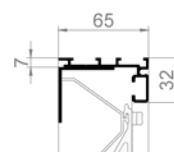
FRAME TYPES AND DIMENSIONS

Dimensions in mm	G	N	F
Louvre pitch	65		
Recess depth	62	65	-
Frame rebate	48	0	-
Flange width	-	-	28
Frame depth	-	-	77
Min. dimensions	min. W 300 x H 300		



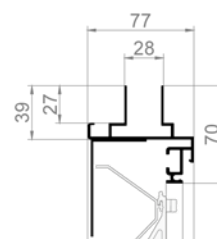
G 50Z

Recessed wall louvre
with flange



N 50Z

Recessed wall louvre
without flange



F 50Z

Window louvre

VENTILATION VALUES

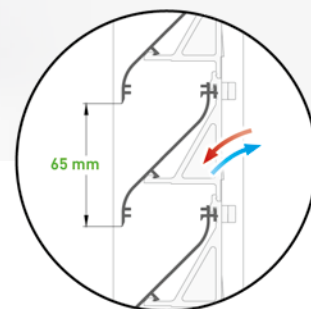
Visual free passage		75 %
Physical free passage		47 %
Ce (higher is better)		0,23
Cd (higher is better)		0,20
K-FACTOR (lower is better)	INLET	19,00
	OUTLET	25,17

WATER RESISTANCE

Air velocity	Class
0 m/s	B
0,5 m/s	B (96,55%)
1 m/s	C (94,09%)
1,5 m/s	C (91,71%)
2 m/s	D
2,5 m/s	D

INSECT SCREEN

STANDARD				
		Stainless-steel mesh 2.3 x 2.3 mm		
OPTION		Stainless-steel mesh 6 x 6 mm		
		Stainless-steel mesh 20 x 20 mm		

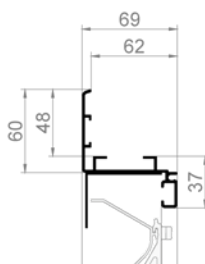


DucoGrille Classic 50S

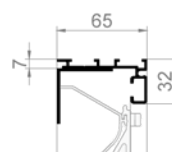
DucoGrille Classic 50S consists of three different types: a recessed wall louvre (G with flange, N without flange) and an architectural window louvre (F). All types are manufactured from extruded aluminium sections. Insect mesh is fitted as standard. The “S”-shaped louvre blade produces a stylish design.

FRAME TYPES AND DIMENSIONS

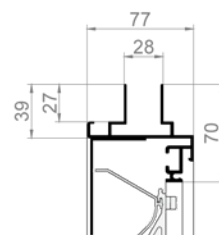
Dimensions in mm	G	N	F
Louvre pitch	65		
Recess depth	62	65	-
Frame rebate	48	0	-
Flange width	-	-	28
Frame depth	-	-	77
Min. dimensions	min. W 300 x H 300		



G 50S
Recessed wall louvre
with flange



N 50S
Recessed wall louvre
without flange



F 50S
Window louvre

VENTILATION VALUES

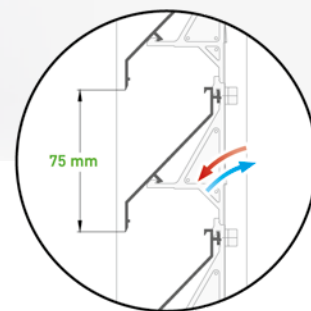
Visual free passage	75 %
Physical free passage	47 %
Ce (higher is better)	0,24
Cd (higher is better)	0,21
K-FACTOR (lower is better)	INLET 17,38
	OUTLET 23,48

WATER RESISTANCE

Air velocity	Class
0 m/s	B
0,5 m/s	B (96,55%)
1 m/s	C (94,09%)
1,5 m/s	C (91,71%)
2 m/s	D
2,5 m/s	D

INSECT SCREEN

STANDARD Stainless-steel mesh 2.3 x 2.3 mm	
OPTION	Stainless-steel mesh 6 x 6 mm
	Stainless-steel mesh 20 x 20 mm



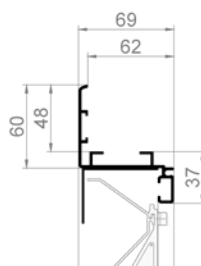
DucoGrille

Classic 50/75Z

DucoGrille Classic 50/75Z consists of three different types: a recessed wall louvre (G with flange, N without flange) and an architectural window louvre (F). All types are manufactured from extruded aluminium sections. Insect mesh is fitted as standard. The “Z”-shaped louvre blade produces a sleek design.

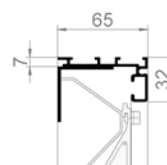
FRAME TYPES AND DIMENSIONS

Dimensions in mm	G	N	F
Louvre pitch	75		
Recess depth	62	65	-
Frame rebate	48	0	-
Flange width	-	-	28
Frame depth	-	-	77
Min. dimensions	min. W 300 x H 300		



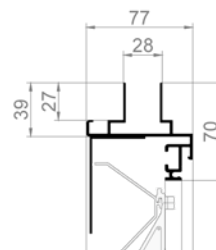
G 50/75Z

Recessed wall louvre
with flange



N 50/75Z

Recessed wall louvre
without flange



F 50/75Z

Window louvre

VENTILATION VALUES

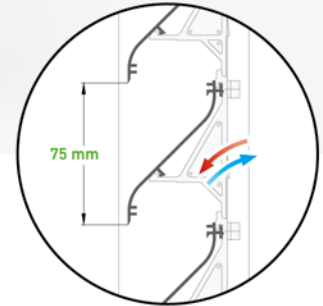
Visual free passage	80 %	
Physical free passage	49 %	
Ce (higher is better)	0,33	
Cd (higher is better)	0,27	
K-FACTOR (lower is better)	INLET	9,00
	OUTLET	13,87

WATER RESISTANCE

Air velocity	Class
0 m/s	B (98.6%)
0,5 m/s	C
1 m/s	C (94.7%)
1,5 m/s	C
2 m/s	C (82.2%)
2,5 m/s	D

INSECT SCREEN

STANDARD	
Stainless-steel mesh 2.3 x 2.3 mm	
OPTION	Stainless-steel mesh 6 x 6 mm
	Stainless-steel mesh 20 x 20 mm



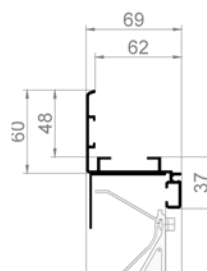
DucoGrille

Classic 50/75S

DucoGrille Classic 50/75S consists of three different types: a recessed wall louvre (G with flange, N without flange) and an architectural window louvre (F). All types are manufactured from extruded aluminium sections. Insect mesh is fitted as standard. The “S”-shaped louvre blade produces a stylish design.

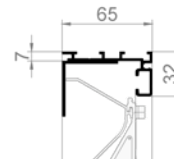
FRAME TYPES AND DIMENSIONS

Dimensions in mm	G	N	F
Louvre pitch	75		
Recess depth	62	65	-
Frame rebate	48	0	-
Flange width	-	-	28
Frame depth	-	-	77
Min. dimensions	min. W 300 x H 300		



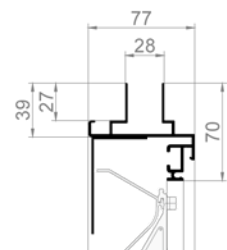
G 50/75S

Recessed wall louvre
with flange



N 50/75S

Recessed wall louvre
without flange



F 50/75S

Window louvre

VENTILATION VALUES

Visual free passage	80 %	
Physical free passage	49 %	
Ce (higher is better)	0,34	
Cd (higher is better)	0,27	
K-FACTOR (lower is better)	INLET	8,75
	OUTLET	13,62

WATER RESISTANCE

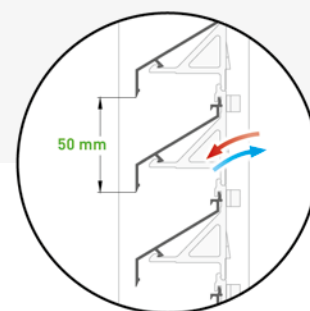
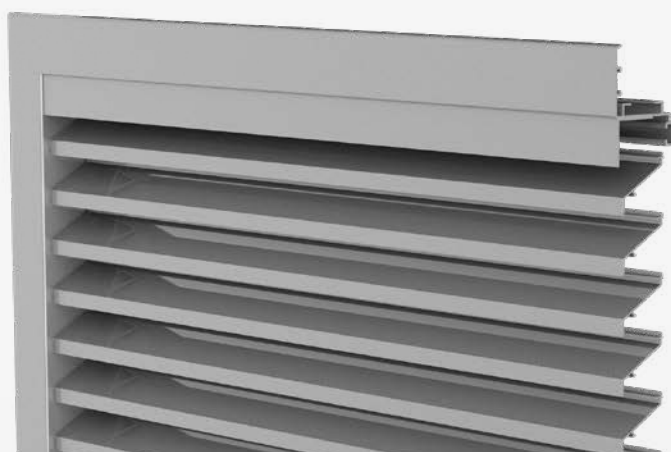
Air velocity	Class
0 m/s	B (98.6%)
0,5 m/s	C
1 m/s	C (94.7%)
1,5 m/s	C
2 m/s	C (82.2%)
2,5 m/s	D

INSECT SCREEN

STANDARD	
Stainless-steel mesh 2.3 x 2.3 mm	
OPTION	Stainless-steel mesh 6 x 6 mm
	Stainless-steel mesh 20 x 20 mm



High Performance

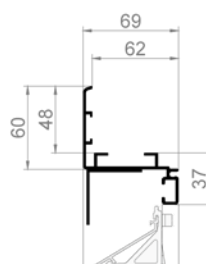


DucoGrille Classic 45HP

The DucoGrille Classic 45HP combines **excellent airflow** with a “Z”-shaped louvre blade for a sleek design. As a result, the DucoGrille Classic 45HP can be used for intensive ventilation in projects with specific aesthetic requirements. All types are manufactured from extruded aluminium sections. Insect mesh is fitted as standard.

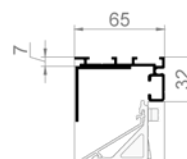
FRAME TYPES AND DIMENSIONS

Dimensions in mm	G	N	F
Louvre pitch	50		
Recess depth	62	65	-
Frame rebate	48	0	-
Flange width	-	-	28
Frame depth	-	-	77
Min. dimensions	min. W 250 x H 250		



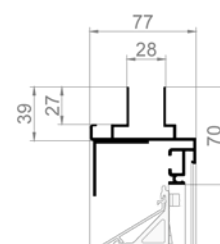
G 45HP

Recessed wall louvre
with flange



N 45HP

Recessed wall louvre
without flange



F 45HP

Window louvre

VENTILATION VALUES

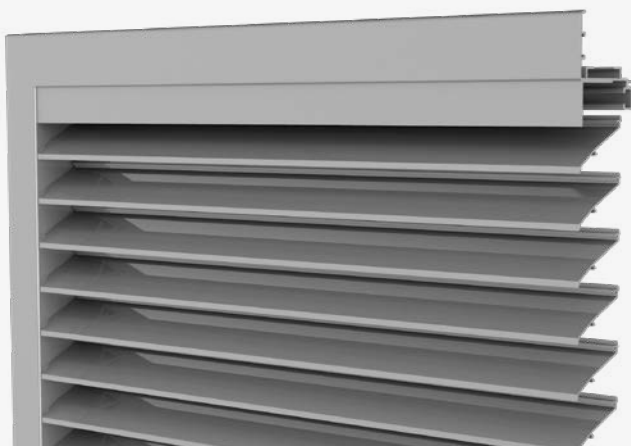
Visual free passage		70 %
Physical free passage		60 %
Ce (higher is better)		0,28
Cd (higher is better)		0,39
K-FACTOR (lower is better)	INLET	12,66
	OUTLET	6,68

WATER RESISTANCE

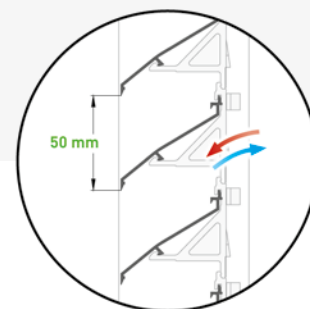
Air velocity	Class
0 m/s	B
0,5 m/s	B
1 m/s	C
1,5 m/s	C
2 m/s	C
2,5 m/s	D

INSECT SCREEN

STANDARD	
Stainless-steel mesh 2.3 x 2.3 mm	
OPTION	Stainless-steel mesh 6 x 6 mm
	Stainless-steel mesh 20 x 20 mm



High Performance

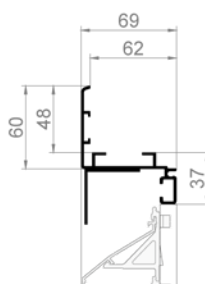


DucoGrille Classic 50HP

The DucoGrille Classic 50HP has been specially developed **for intensive ventilation**. The uniquely shaped 'High Performance' louvre blade with a low resistance factor ensures **excellent airflow**. All types are manufactured from extruded aluminium sections. Insect mesh is fitted as standard.

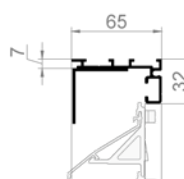
FRAME TYPES AND DIMENSIONS

Dimensions in mm	G	N	F
Louvre pitch	50		
Recess depth	62	65	-
Frame rebate	48	0	-
Flange width	-	-	28
Frame depth	-	-	77
Min. dimensions	min. W 250 x H 250		



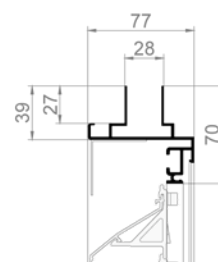
G 50HP

Recessed wall louvre
with flange



N 50HP

Recessed wall louvre
without flange



F 50HP

Window louvre

VENTILATION VALUES

Visual free passage	88 %
Physical free passage	68 %
Ce (higher is better)	0,46
Cd (higher is better)	0,47
K-FACTOR (lower is better)	INLET 4,7
	OUTLET 4,55

WATER RESISTANCE

Air velocity	Class
0 m/s	C (92,3%)
0,5 m/s	C (89,8%)
1 m/s	C (86,5%)
1,5 m/s	D (79,7%)
2 m/s	D
2,5 m/s	D

INSECT SCREEN

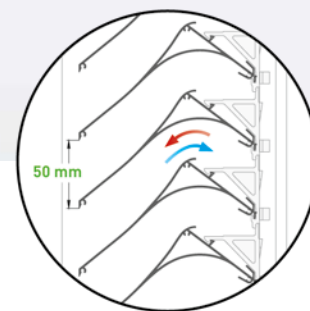
STANDARD	
Stainless-steel mesh 2.3 x 2.3 mm	
OPTION	Stainless-steel mesh 6 x 6 mm
	Stainless-steel mesh 20 x 20 mm



High Performance



Excellent water resistance

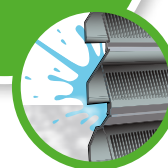


DucoGrille Classic 130HP

The DucoGrille Classic 130HP has been specially developed for **intensive ventilation**. The uniquely shaped 'High Performance' louvre blade with a low resistance factor provides a combination of **very good airflow** together with **excellent water resistance (class A)**. All types are manufactured from extruded aluminium sections. Insect mesh is fitted as standard.

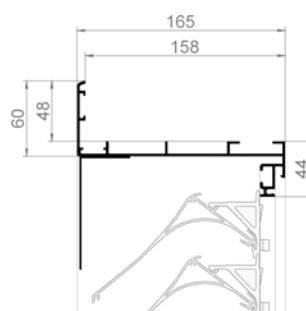
water resistance

CLASS A
up to 2.5 m/s



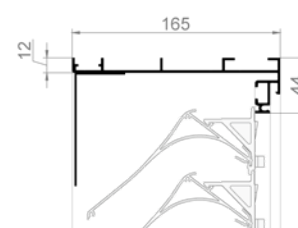
FRAME TYPES AND DIMENSIONS

Dimensions in mm	G	N
Louvre pitch	50	
Recess depth	158	165
Frame rebate	48	0
Min. dimensions	min. W 250 x H 250	



G 130HP

Recessed wall louvre
with flange



N 130HP

Recessed wall louvre
without flange

VENTILATION VALUES

Visual free passage		88 %
Physical free passage		70 %
Ce (higher is better)		0,34
Cd (higher is better)		0,27
K-FACTOR (lower is better)	INLET	8,55
	OUTLET	13,42

WATER RESISTANCE

Air velocity	Class
0 m/s	A
0,5 m/s	A
1 m/s	A
1,5 m/s	A
2 m/s	A
2,5 m/s	A

INSECT SCREEN

STANDARD				
Stainless-steel mesh 2.3 x 2.3 mm				
OPTION	Stainless-steel mesh 6 x 6 mm			
	Stainless-steel mesh 20 x 20 mm			

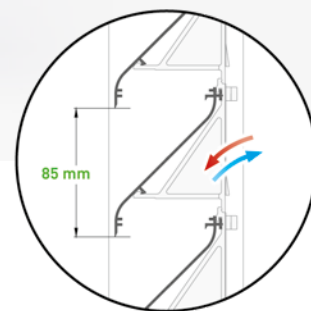


→ Dimensions & order information: see page 37
→ Full specifications: see page 38



DucoGrille **Classic** 50Z

Police station | Alphen aan de Rijn (Netherlands)

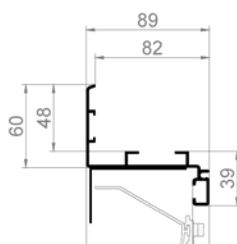


DucoGrille Classic 70S

DucoGrille Classic G 70S is a recessed wall louvre manufactured from extruded aluminium sections. Insect mesh is fitted as standard. The unique “S”-shaped louvre blade produces a stylish design.

FRAME TYPES AND DIMENSIONS

Dimensions in mm	G
Louvre pitch	85
Recess depth	82
Frame rebate	48
Min. dimensions	min. W 300 x H 300



G 70S
Recessed wall louvre
with flange

VENTILATION VALUES

Visual free passage	79 %
Physical free passage	47 %
Ce (higher is better)	0,24
Cd (higher is better)	0,24
K-FACTOR (lower is better)	INLET 16,80
	OUTLET 18,00

WATER RESISTANCE

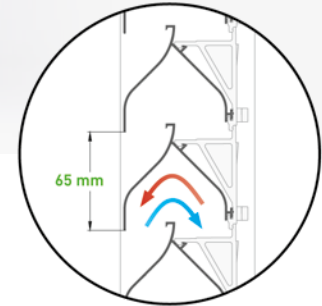
Air velocity	Class
0 m/s	B
0,5 m/s	C
1 m/s	C (94,27%)
1,5 m/s	C
2 m/s	C (84,90%)
2,5 m/s	D

INSECT SCREEN

STANDARD	
Stainless-steel mesh 2.3 x 2.3 mm	
OPTION	Stainless-steel mesh 6 x 6 mm
	Stainless-steel mesh 20 x 20 mm



Good water resistance Penetration safety

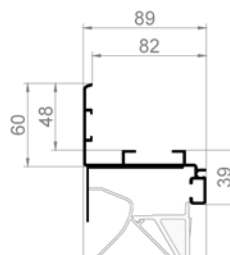


DucoGrille Classic 70V

DucoGrille Classic G 70V is a recessed wall louvre manufactured from extruded aluminium sections. Insect mesh is fitted as standard. The unique “V”-shaped blade ensures better water resistance and makes the louvre grille ‘penetration-proof’ and difficult to see through from the outside.

FRAME TYPES AND DIMENSIONS

Dimensions in mm	G
Louvre pitch	65
Recess depth	82
Frame rebate	48
Min. dimensions	min. W 300 x H 300



G 70V
Recessed wall louvre
with flange

VENTILATION VALUES

Visual free passage	65 %
Physical free passage	36 %
Ce (higher is better)	0,12
Cd (higher is better)	0,11
K-FACTOR (lower is better)	INLET 72,79
	OUTLET 83,88

WATER RESISTANCE

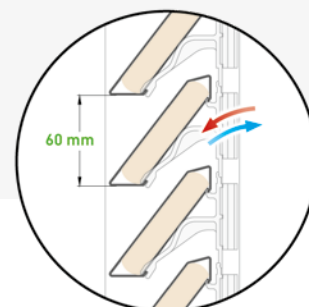
Air velocity	Class
0 m/s	A
0,5 m/s	B (98,98%)
1 m/s	B (95,53%)
1,5 m/s	C (80,43%)
2 m/s	D
2,5 m/s	D

INSECT SCREEN

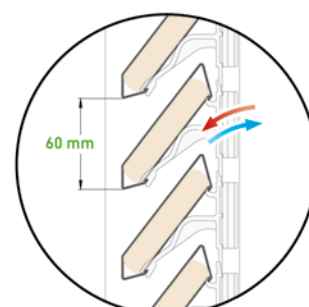
STANDARD Stainless-steel mesh 2.3 x 2.3 mm		
OPTION	Stainless-steel mesh 6 x 6 mm	
	Stainless-steel mesh 20 x 20 mm	



Suitable for moderate
noise levels



75L



75Z

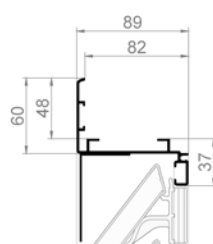
DucoGrille

Acoustic 75Z & 75L

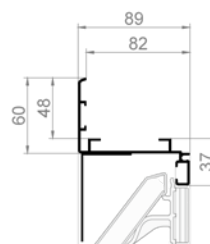
DucoGrille Acoustic G 75Z & G 75L are sound-absorbing recessed wall louvres manufactured from extruded aluminium sections. One type of louvre blade offers the option of **two different looks**: Z and L. The louvre blades have **sound-absorbing, non-flammable mineral wool** inside.

FRAME TYPES AND DIMENSIONS

Dimensions in mm	G
Louvre pitch	60
Recess depth	82
Frame rebate	48
Min. dimensions	min. W 250 x H 250



G 75Z
Recessed wall louvre
with flange



G 75L
Recessed wall louvre
with flange

SOUND ABSORPTION

Attenuation value Rw (C;Ctr) in dB	
75Z	75L
6 [0;-1]	6 [0;-2]

VENTILATION VALUES

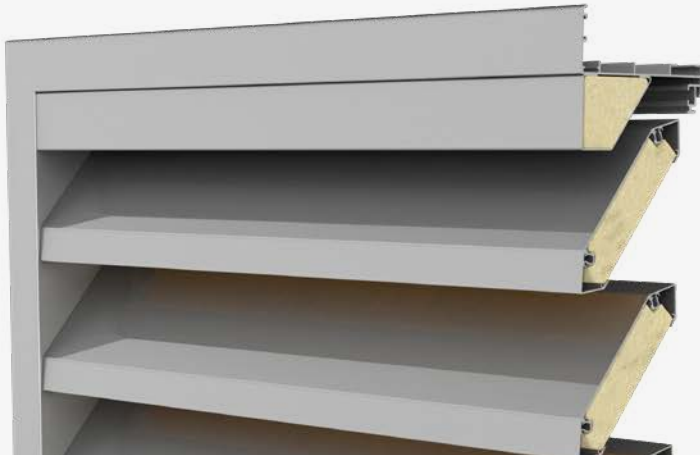
		75Z	75L
Visual free passage		76 %	95 %
Physical free passage		28 %	28 %
Ce (higher is better)		0,24	0,25
Cd (higher is better)		0,21	0,29
K-FACTOR (lower is better)	INLET	16,93	16,52
	OUTLET	21,83	12,14

WATER RESISTANCE

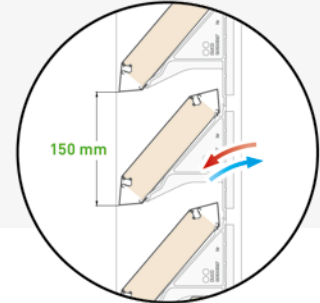
Air velo- city	Class	
	75Z	75L
0 m/s	B (97,8%)	B (97,2%)
0,5 m/s	B (95,1%)	C (93,9%)
1 m/s	C (89,4%)	C (88,2%)
1,5 m/s	D (77,3%)	D (75,0%)
2 m/s	D	D
2,5 m/s	D	D

INSECT SCREEN

STANDARD Stainless-steel mesh 2.3 x 2.3 mm	
OPTION	Stainless-steel mesh 6 x 6 mm
	Stainless-steel mesh 20 x 20 mm



Suitable for high noise levels



DucoGrille Acoustic 150

The DucoGrille Acoustic G150 / N150 is a sound-absorbing built-in wall louvre manufactured from extruded aluminium sections. The louvre blades have **sound-absorbing, non-flammable mineral wool** inside. Thanks to its heavy-duty construction, the DucoGrille Acoustic G150 / N150 has a **high attenuation value plus a low resistance factor** (and consequently better flow rates).

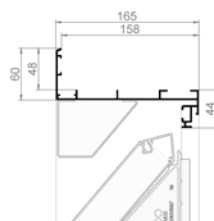
The **Duco Acoustic Panel 300** enables Duco to provide special project systems. This tailor-made module with a double row of Acoustic 150 louvre blades achieves a very high **attenuation value R_w (C;Ctr) of 17 [-1;-4] dB**.



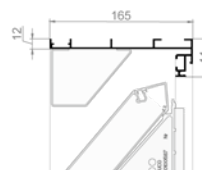
Frequency (Hz)	Octave band value (dB)
63	6,1
125	5,7
250	5,8
500	13,8
1000	22,7
2000	22,8
4000	20,9

FRAME TYPES AND DIMENSIONS

Dimensions in mm	G	N
Louvre pitch	150	
Recess depth	158	165
Frame rebate	48	0
Min. dimensions	min. W 250 x H 250	



G 150
Recessed wall louvre
with flange



N 150
Recessed wall louvre
without flange

SOUND ABSORPTION

Attenuation value
 R_w (C;Ctr) in dB



11 [-1;-2]

VENTILATION VALUES

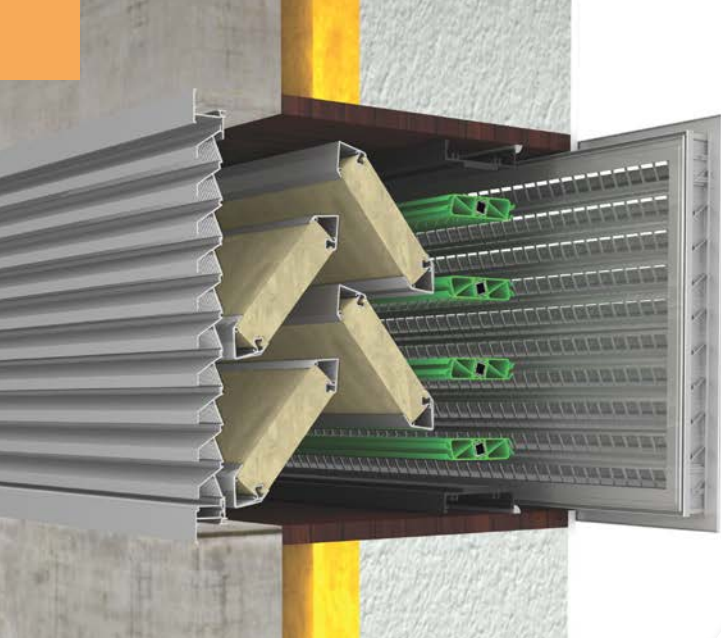
Visual free passage		74 %
Physical free passage		35 %
Ce (higher is better)		0,30
Cd (higher is better)		0,30
K-FACTOR (lower is better)	INLET	11,04
	OUTLET	10,96

WATER RESISTANCE

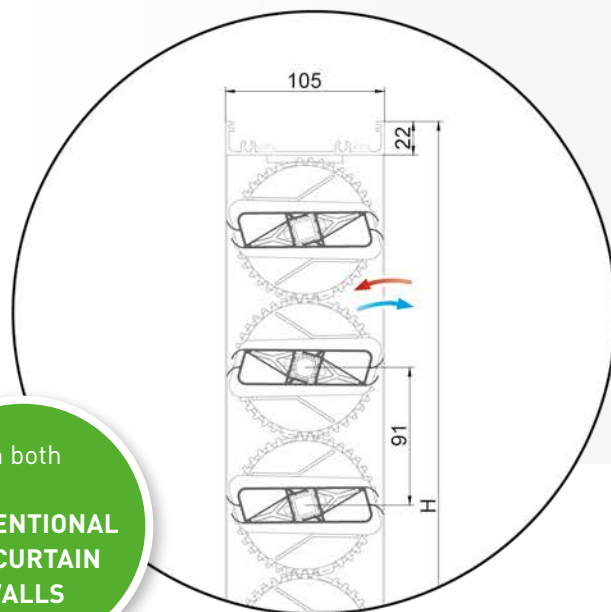
Air velocity	Class
0 m/s	B
0,5 m/s	C
1 m/s	C
1,5 m/s	C
2 m/s	D
2,5 m/s	D

INSECT SCREEN

STANDARD	
Stainless-steel mesh 2.3 x 2.3 mm	
OPTION	Stainless-steel mesh 6 x 6 mm
	Stainless-steel mesh 20 x 20 mm



In both
CONVENTIONAL
and **CURTAIN**
WALLS



DucoGrille Close 105

The DucoGrille Close 105 is an **actuator-controlled multileaf damper** with a large airflow tailored to offices and schools. The multileaf damper can be used as both a supply and exhaust grille. The DucoGrille Close 105 can be built into a **wall or curtain wall** and a wall louvre on both sides, which may or may not be burglar-proof, ensures an aesthetic finish. With a limited depth of just 105 mm, the multileaf damper can easily be installed in smaller rooms, both horizontally and vertically.



→ DucoGrille Close 105
in curtain wall

What is more, the multileaf damper can also act as an **adjustable central extract unit**, combined for instance with Duco's roof cowls. Thanks to the high flow rate, the DucoGrille Close 105 is also ideal for use in providing intensive ventilation or as part of the **(night) cooling systems** of a building.

The DucoGrille Close 105 can be configured **different types of motor** (including **Spring Return** motors as well).

VENTILATION VALUES

Visual free passage		74 %*
Physical free passage		74 %*
Ce (higher is better)		0,62*
Cd (higher is better)		0,62*
K-FACTOR (lower is better)	INLET	2,57*
	OUTLET	2,57*

* Values measured without internal and external louvre grille.

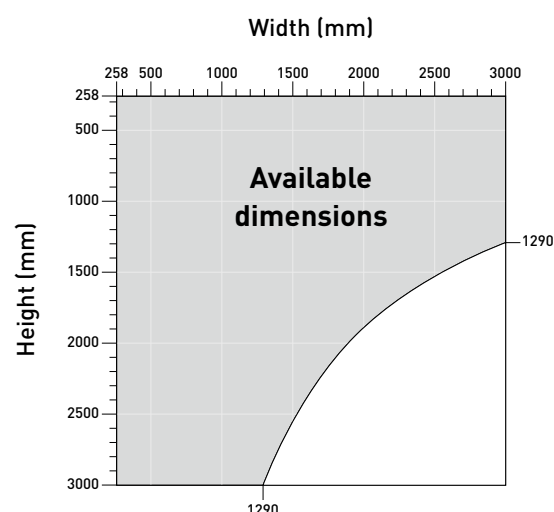
PRE-ASSEMBLY

The **DucoGrille Close 105** is available 'pre-assembled' with the **DucoGrille Solid 30Z** external louvre grille in two types: **G 30Z** (recessed wall louvre with flange) and **F 30Z** (window louvre). This pre-assembled external louvre grille with multileaf damper can be installed quickly and easily.



FRAME TYPES AND DIMENSIONS

Sizes	min. 258 mm up to max. of 3000 mm (incremental by 1 mm) Width and height interdependent, see graph opposite
Depth	105 mm
Louvre pitch	91 mm
Ventilation	805 l/s/m ² at 1 Pa 1200 l/s/m ² at 2 Pa
Air density (in closed position)	Qn50 = 0.79 m ³ /h/m
Water-tightness (in closed position)	Watertight (EN 1027)
Attenuation value 	Rw (C;Ctr) = up to 13 (0,-3)*
Insulation value	U < 1 W/m ² K
Motor noise	35 dB(A) - 45 dB(A)
Operating temperature	-25 °C up to +60 °C
Control	Actuator / BMS
Motors	Different types, please refer to the technical data sheet at www.duco.eu .



* Value with Solid 30Z P1 + DucoGrille Close 105 + 2 x Duco Acoustic Panel 150 + Solid 30Z P2



1 4

Ventilation grille

The DucoGrille Close 105 can be combined with **DucoGrille Solid** and **DucoGrille Classic** louvre grilles on the inside and outside.

3

Close 105 multileaf damper

The DucoGrille Close 105 can be fully automatic based on CO₂ and temperature measurements by connecting with Duco's Tronic (Plus) Systems or with a building management system (BMS).



2

Acoustic panel

Louvre blades provided with sustainable acoustic sound-absorbing material (non-flammable mineral wool) can be fitted before or after the multileaf damper. This ensures that the acoustic value of the ventilation intake or exhaust can be increased. Depending on the requirements, a single row of louvre blades can be fitted or a double row for optimum sound absorbency.

Rw (C;C_{tr})

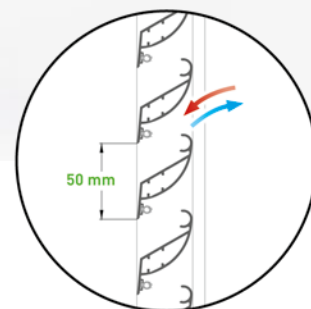
Single row of louvre blades
9 (-1;-2) dB
Double row of louvre blades
12 (0;-2) dB

Octave band values (dB)

Frequency (Hz)	single row of louvre blades	double row of louvre blades
63	7,7	8
125	3,8	5,7
250	2,6	3,6
500	4,4	6,7
1000	8,2	13,3
2000	12,6	20,9
4000	11,4	19,2



MANUAL
or
MOTORISED



DucoGrille Close 35Z

DucoGrille Close G 35Z and N 35Z are closable recessed wall louvres manufactured from extruded aluminium sections. The DucoGrille Close is also available as a closable window louvre (F 35Z), ideal when using Night Cooling. The unique “Z”-shaped louvre blades provide adjustable ventilation via **manual or electric operation**.

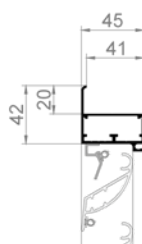


→ Manual stepless operation:
left, centre or right of the grille, as
preferred

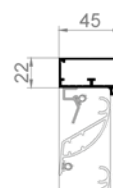
FRAME TYPES AND DIMENSIONS

Dimensions in mm		G	N	F
Louvre pitch		50		
Recess depth		45	45	-
Frame rebate		20	0	-
Flange width		-	-	24/28
Frame depth		-	-	45
Minimum height	MANUAL OPERATION	224*	224*	264*
	ELECTRONIC OPERATION	524*	524*	564*

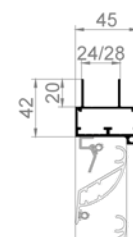
* height to be determined in 50-mm steps



G 35Z
Recessed wall louvre
with flange



N 35Z
Recessed wall louvre
without flange



F 35Z
Window louvre

VENTILATION VALUES

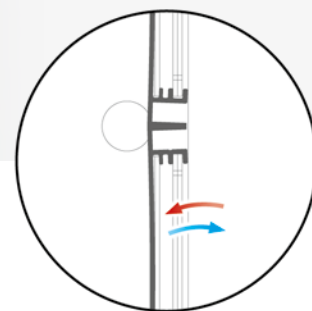
Visual free passage	51 %
Physical free passage	39 %
Ce (higher is better)	0,18
Cd (higher is better)	0,21
K-FACTOR (lower is better)	INLET 30,38
	OUTLET 23,67

WATER RESISTANCE

Air velocity	Class
0 m/s	B (98,25%)
0,5 m/s	B (96,52%)
1 m/s	C (88,82%)
1,5 m/s	D (39,83%)
2 m/s	D
2,5 m/s	D

INSECT SCREEN

STANDARD	
Stainless-steel mesh 2.3 x 2.3 mm	
OPTION	Stainless-steel mesh 6 x 6 mm
	Stainless-steel mesh 20 x 20 mm



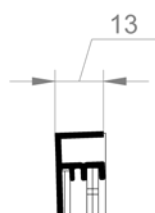
DucoGrille

Close M 100

DucoGrille Close M 100 is a closable surface-mounted internal louvre manufactured from extruded aluminium sections. The plastic slides provide **adjustable ventilation**. The DucoGrille Close M 100 is available as standard with heights of 200 or 300 mm and the width can vary up to a maximum of 1,000 mm.

DIMENSIONS

Frame depth	13 mm
Height of the grille	200 or 300 mm
Width of the grille	max.: 1000 mm



M 100
Surface-mounted wall louvre

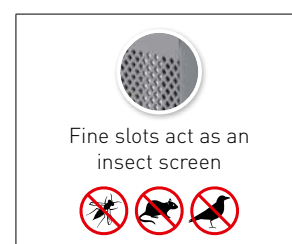
VENTILATION VALUES

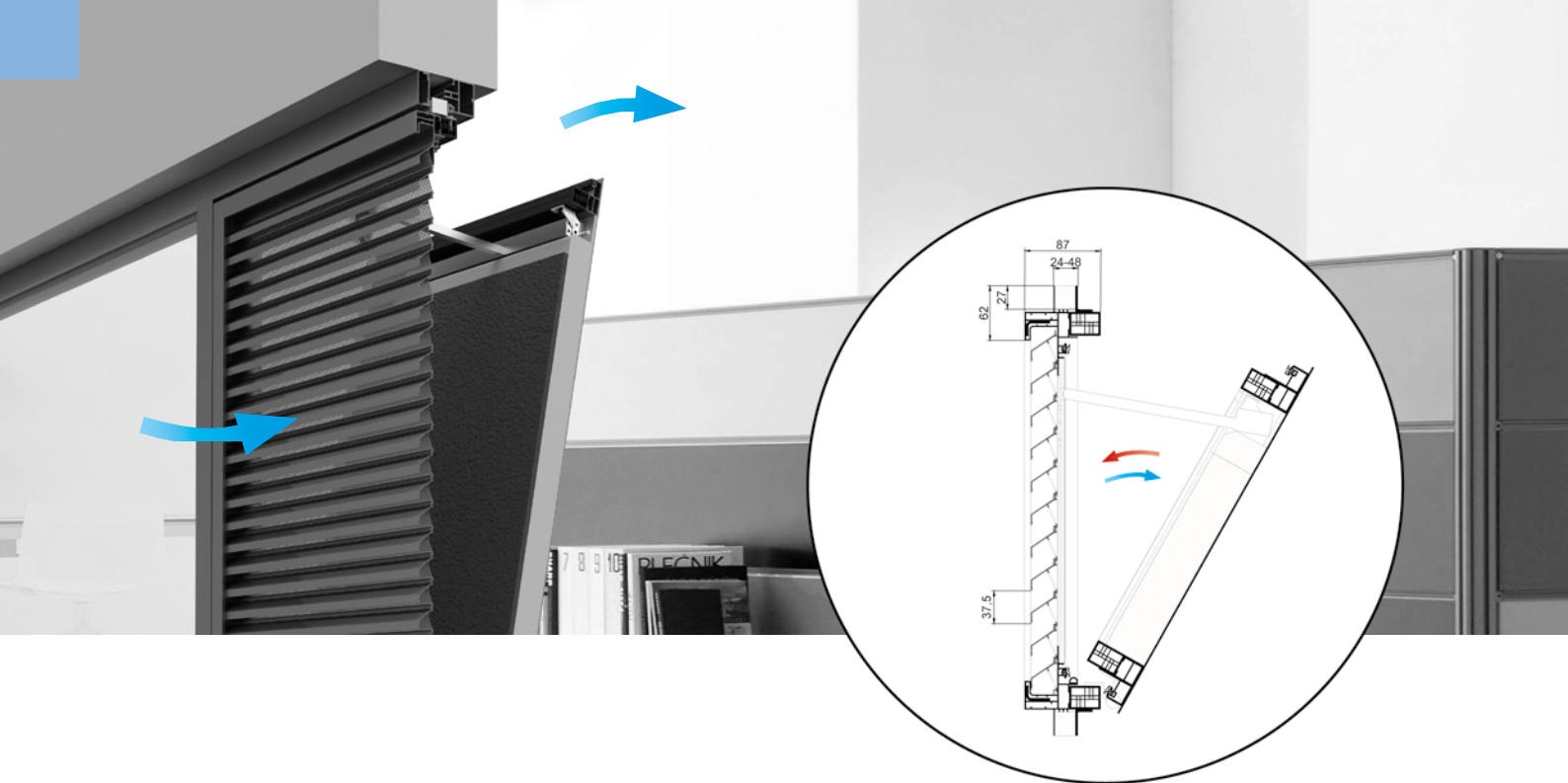
Visual free passage		28 %
Physical free passage		28 %
Ce (higher is better)		0,11
Cd (higher is better)		0,11
K-FACTOR (lower is better)	INLET	88,43
	OUTLET	89,43

AIRFLOW

Dimension	200 x 200	300 x 300
Airflow at 1 Pa (m³/h)	19,76	44,48
Airflow at 2 Pa (m³/h)	27,96	62,90

INSECT SCREEN





DucoGrille NightVent

The DucoGrille NightVent is a **glass-replacing ventilation hatch** that provides efficient cooling of any building thanks to the supply of **large ventilation flow rates**.

The ventilation hatch consists of **a single module**, although it contains two essential components. From outside, the DucoGrille NightVent is protected by a window louvre with perforated louvre blades (**DucoGrille Solid 30Z P1**) that act as an insect screen. On the inside, **an insulated opening panel** with a flat-finished inner panel makes for easy integration into the interior. In addition, the **acoustic attenuation** ensures that the thermal value of the ventilation hatch is comparable to that of a closed window.

The ventilation hatch can be **hinged horizontally or vertically**. The inner and outer panels can be finished in various colours. DucoGrille NightVent is available in **motorised and manual versions**.

The DucoGrille NightVent has been tested under the applicable European regulations by means of intensive tests covering wind and water resistance. In addition, the external louvre grille is also available in a vandal-proof or intrusion-resistant version **up to RC2 class**.

VENTILATION VALUES

Visual free passage		60 %
Physical free passage		34 %
Ce (higher is better)		0,2
Cd (higher is better)		0,2
K-FACTOR (lower is better)	INLET	24,51
	OUTLET	24,51

WATER RESISTANCE

Air velocity	Class
0 m/s	A
0,5 m/s	B
1 m/s	C
1,5 m/s	D
2 m/s	D
2,5 m/s	D

INSECT SCREEN

Fine punching keeps insects out.
Stainless steel mesh can be fitted as an option.



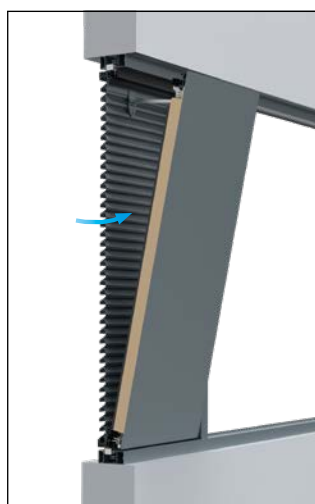
DIMENSIONS AND SPECIFICATIONS

		
	Motorised	Manual
Louvre pitch	37,5 mm	
Flange width	24 / 28 / 32 / 36 / 40 / 44 / 48	
Frame depth	115 mm	
Ventilation	369 l/s/m² at 2 Pa	
Air density (when closed)	Qn50 = 3.6 m³/h/m²	
Water resistance (when closed)	Class 9a (EN 12208-EN1027)	
Attenuation value 	Rw open position [C;Ctr] = 10 [0,-1] Rw closed position [C;Ctr] = 33 [-1,-4]	
Insulation value	U = 1.5 W/m²K	
Motor noise	< 35 dB (A)	n/a
Operating temperature	-25 °C up to +60 °C	n/a
Min. / max. dimensions	see tables on p. 32	
Operation		

If a motorised system is chosen, an actuator can open/close the ventilation hatch via a wired or wireless User controller, or **fully automatically** based on CO₂ and temperature measurements (if used in a Duco Tronic (Plus) System). The ventilation hatch can therefore be opened at any time, even if no one is in. In addition, the DucoGrille NightVent can be linked to the **building management system (BMS)**.



With the manual version, the ventilation hatch is fitted with one or two handles.



→ Inside view



→ Outside view



INTRUSION RESISTANT

The DucoGrille NightVent is vandal-proof and can be specified as an option in an intrusion-resistant version to class RC2 (to EN 5096:2007 & EN 1627:2011).

Available dimensions

The minimum and maximum dimensions of the **DucoGrille NightVent** are dependent on the version.



DucoGrille NightVent MOTORISED

Width in cm

←

→

	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250	
30						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60		L/R	L/R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70		L/R	L/R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	L/R	L/R	L/R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	L/R	L/R	L/R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	L/R	L/R	L/R	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
110	L/R	L/R	L/R	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
120	L/R	L/R	L/R	0	0	0	0	0	0	0	0	0	0	0	0	0								
130	L/R	L/R	L/R	0	0	0	0	0	0	0	0	0	0	0										
140	L/R	L/R	L/R	0	0	0	0	0	0	0	0	0	0											
150	L/R	L/R	L/R	0	0	0	0	0	0	0	0	0												
160	L/R	L/R	L/R	0	0	0	0	0	0	0	0													
170	L/R	L/R	L/R	0	0	0	0	0	0	0														
180	L/R	L/R	L/R	0	0	0	0	0	0															
190	L/R	L/R	L/R	0	0	0	0	0																
200	L/R	L/R	L/R	0	0	0	0																	
210	L/R	L/R	L/R	0	0	0	0																	
220	L/R	L/R	L/R	0	0	0	0																	
230	L/R	L/R	L/R	0	0	0	0																	
240	L/R	L/R	L/R	0	0	0	0																	
250	L/R	L/R	L/R	0	0	0	0																	

L/R = hinged left or right

0 = bottom hinged



DucoGrille NightVent MANUAL

MANUAL

		Width in cm																											
		35	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210	220	230	240	250					
Height in cm	40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	50	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	60	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	70	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	80	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	90	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	100	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	110	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	120	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	130	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	140	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	150	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	160	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	170	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	180	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	190	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	200	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	210	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	220	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	230	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	240	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
	250	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		

= size available = size **not** available

•

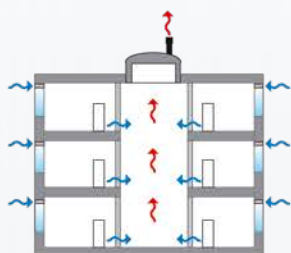
 = one handle

•

 = two handles

VENTILATIVE COOLING

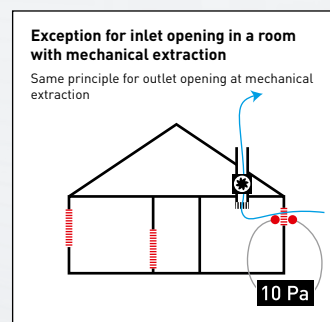
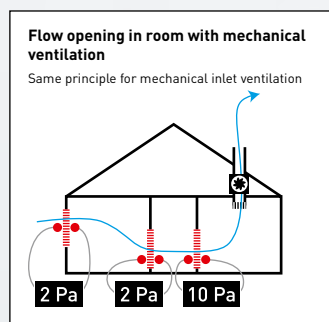
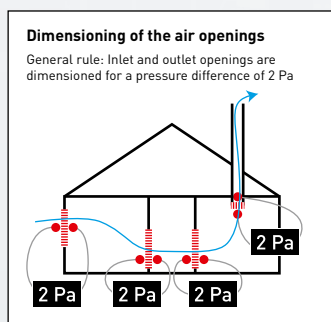
'Free cooling' by means of intensive ventilation



Airtight construction and good insulation not only result in lower heat demand, they also increase the demand for **cooling in a building**. Certainly during the warmer (summer) months, the indoor temperature can soar. **Summer comfort** is

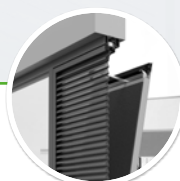
therefore increasingly being included in the design requirements of buildings. This is because by using **high flow rates** of outside air (intensive ventilation), a building can achieve optimum cooling using ventilative cooling (free cooling). That means **without air conditioning** or other artificial means, provided one or two guidelines are followed:

- A** Always use ventilative cooling combined with **good exterior solar shading**.
- B** When designing the building, allow for **sufficient thermal mass** in the building to store the cooling effects of the outside air.
- C** Use the **correct pressure drop** when sizing the inlet grilles.



DUCO'S SOLUTIONS

Duco's extensive range of (controlled) wall and window louvres, louver walls and exterior solar shading are excellent aids within the overall ventilative cooling strategy. Contact your Duco adviser for more information. We will gladly provide you with tailored advice!



DucoGrille **NightVent**



DucoGrille **Close 105**



DucoGrille **Classic** 20Z



DucoGrille **Solid** 30Z

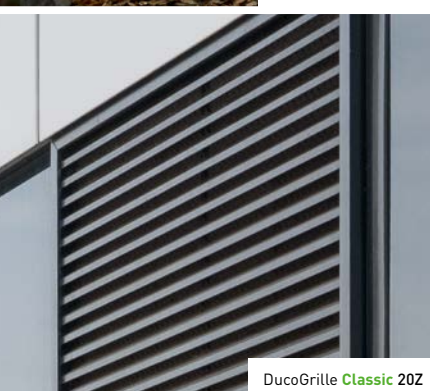
DucoGrille **Classic** 50Z



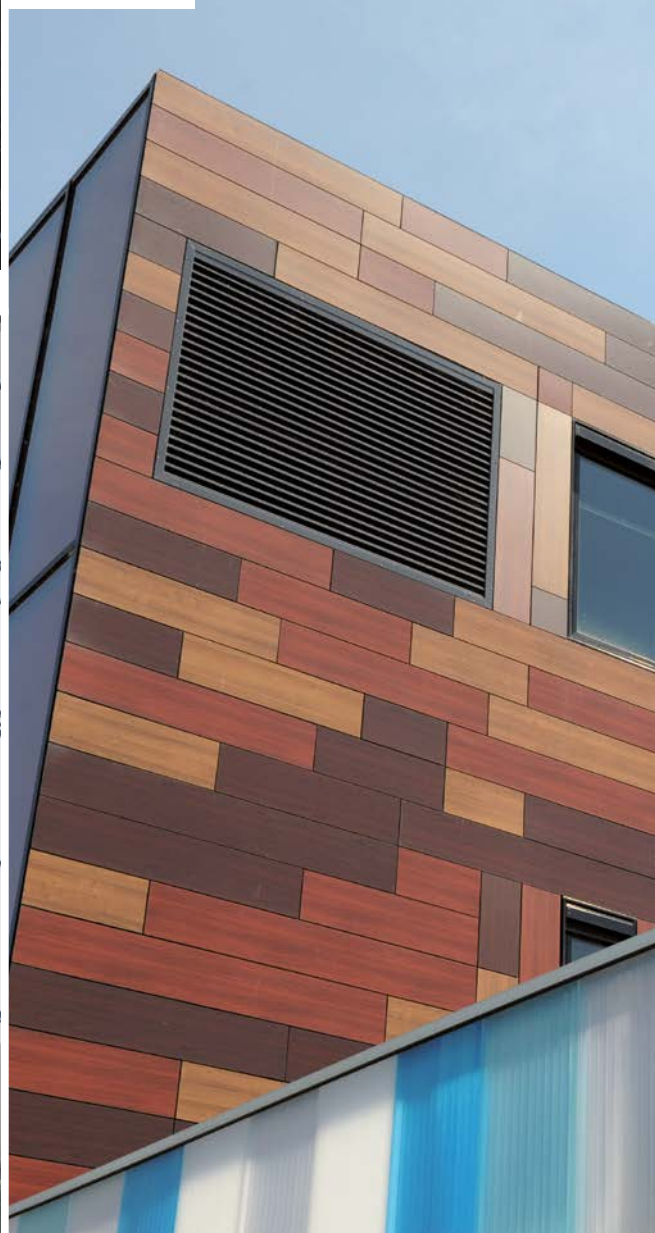
DucoGrille **NightVent**



DucoGrille **NightVent**



DucoGrille **Classic** 20Z



DucoGrille **Classic** 20Z





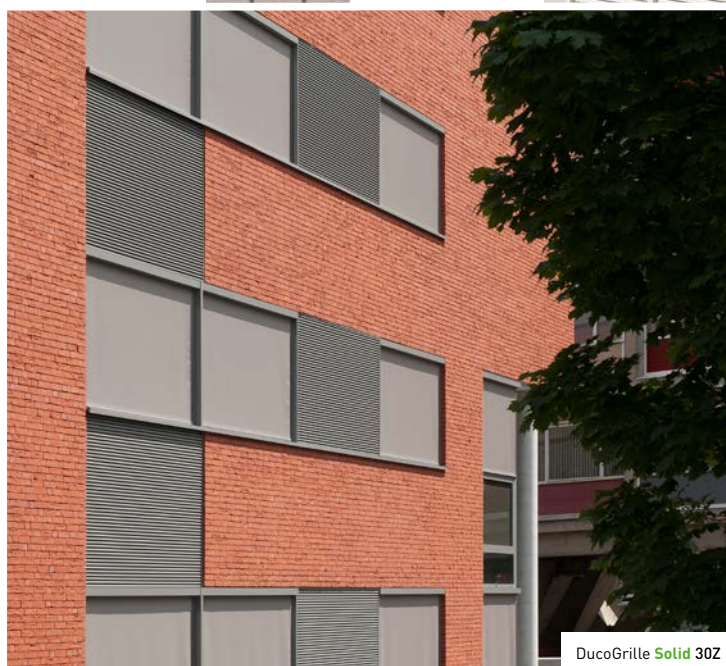
DucoGrille **Solid 30Z**



DucoGrille **Classic 20Z**



DucoGrille **Solid MR 30Z**



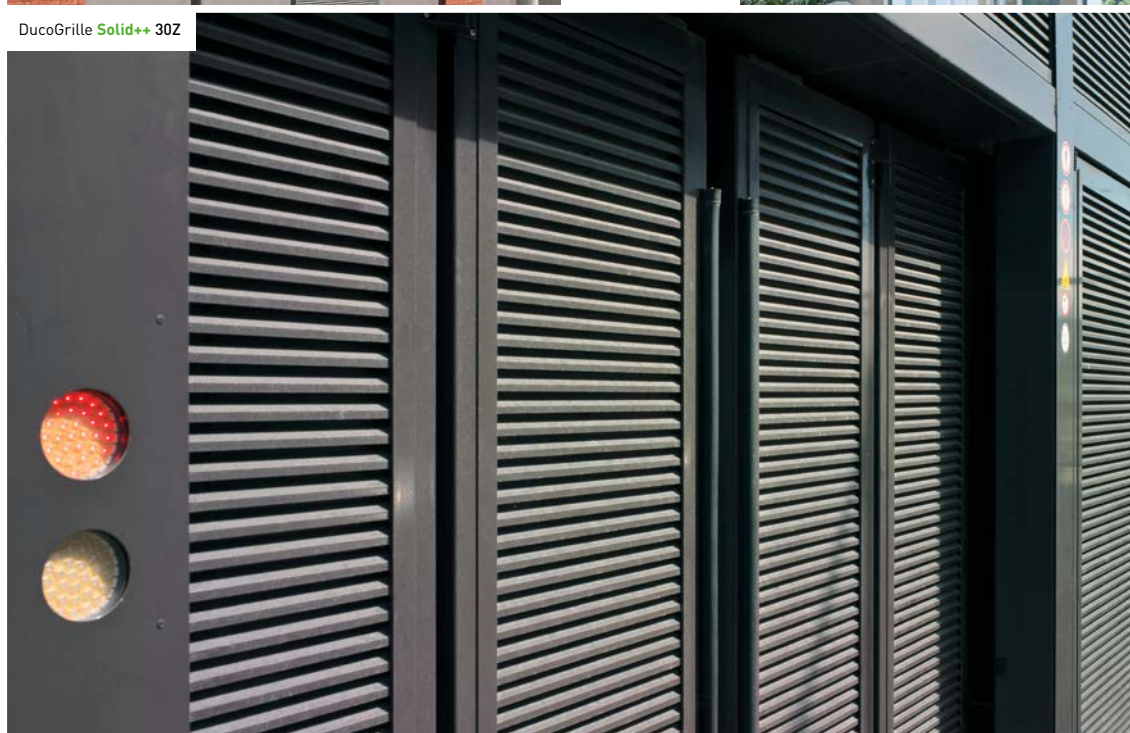
DucoGrille **Solid 30Z**



DucoGrille **NightVent**



DucoGrille **NightVent**



DucoGrille **Solid++ 30Z**

SERVICE PLEASE!

To provide the best support for your project, you will find **sectional drawings, technical data sheets, specification texts** and **assembly instructions** on our **website: www.duco.eu**.

Find out what Duco can do for you.



Calculating airflow → airflowcalculation.duco.eu

Calculate the required air flow rates, area or pressure differences for each type of louvre grille with this handy online tool.

A screenshot of a web-based calculation tool. The title is "Air flow rate". Below the title, there are three tabs: "Air flow rate", "Surface (m²)", and "Pressure drop (Pa)". The "Air flow rate" tab is selected. Under this tab, there are input fields for "Unit" (set to "l/s"), "Pressure drop" (set to "Pa"), and "Surface" (set to "m²"). There is a "Calculate" button at the bottom.

BIM library → All the products in this library, compiled in accordance with Revit Standards, are freely available from now on in Autodesk Revit MEP 2015/2016/2017/2018 format, 3D dwg (usable for all versions of AutoCad) and IFC. Download the library at www.duco.eu/bim-library.

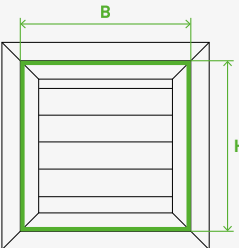
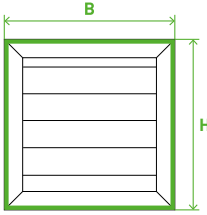
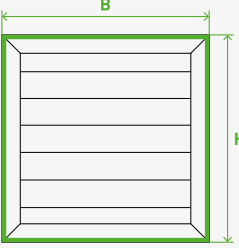
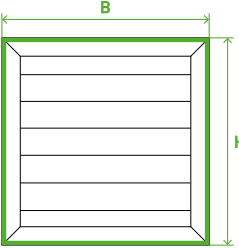


TAILORED **ADVICE**

Duco offers tailored expertise & services for specifiers, and has a dedicated unit to advise and support architects, engineering offices and consultancies. Duco works with reputable organisations such as the WTCB, the von Karman Institute, etc. Duco's knowledge and years of experience enable an appropriate solution to be offered for each of your projects.

Any questions? Please contact us at info@duco.eu or call 0333 112 1134 to for tailored advice!

DIMENSIONS AND ORDERING INFORMATION

Grille type	Grille size = ORDER SIZE	Mounting
 G Recessed wall louvre with flange	 Dimension of louvre without flange (installation dimension) = (Width – 10 mm) × (Height – 10 mm) of the wall opening	Fixing dowels included as standard. Allow 5 mm clearance (all round) between opening in wall and frame for fixing.
 N Recessed wall louvre without flange	 Dimension of louvre (installation dimension) = (Width – 10 mm) × (Height – 10 mm) of the wall opening	
 M Surface-mounted wall louvers	 Total Width × total Height of the louvre grille (overall dimension) (MR: diameter of the louvre)	Screws and plugs included as standard
 F Window louvres + DucoGrille NightVent	 Total Width × total Height of the louvre grille (overall dimension)	Recessed mounting in window section
 DucoGrille Close 105	Total Width x total Height of the louvre grille (overall dimension)	To be provided by customer

TECHNICAL VALUES TABLE

VALUES TABLE

			DUCOGRILLE SOLID					DUCOGRILLE CLASSIC					
			Solid 30Z see p. 8			Solid++ 30Z see p. 10		Solid ISO 30Z see p. 11	Classic 20Z see p. 12	Classic 20V see p. 13	Classic 50Z see p. 14	Classic 50S see p. 15	Classic 50/75Z see p. 16
→ Ventilation values													
Property		Unit	P1	P2	NP	P1	P1	P2					
Visual free passage		%	60	86	0	60	60	86	63	95	75	75	80
Physical free passage		%	34	48	0	34	34	48	41	34	47	47	49
K factor, intake (lower is better)			17,7	12,85	n/a	17,7	17,7	12,85	22,73	42,93	19	17,38	9
K factor, outlet (lower is better)			19,13	12,9	n/a	19,13	19,13	12,9	30,52	47,1	25,17	23,48	13,87
Ce (higher is better)			0,24	0,28	n/a	0,24	0,24	0,28	0,21	0,15	0,23	0,24	0,33
Cd (higher is better)			0,23	0,28	n/a	0,23	0,23	0,28	0,18	0,15	0,2	0,21	0,27
→ Water resistance (with insect screen)													
Property		Unit	P1	P2	NP	P1	P1	P2					
Water resistance for v = 0 m/s		class	C [91,11]	B [96,09]	n/a	C [91,11]	C [91,11]	B [96,09]	C [94,87]	A [99,0]	B	B	B [98,6]
Water resistance for v = 0.5 m/s		class	C [83,47]	B [95,90]	n/a	C [83,47]	C [83,47]	B [95,90]	C [93,15]	B	B [96,55]	B [96,55]	C
Water resistance for v = 1.0 m/s		class	D [77,65]	C [93,53]	n/a	D [77,65]	D [77,65]	C [93,53]	D	C [91,5]	C [94,09]	C [94,09]	C [94,7]
Water resistance for v = 1.5 m/s		class	D	C [87,57]	n/a	D	D	C [87,57]	D [75,4]	C	C [91,71]	C [91,71]	C
Water resistance for v = 2.0 m/s		class	D	D [67,28]	n/a	D	D	D [67,28]	D	C	D	D	C [82,2]
Water resistance for v = 2.5 m/s		class	D	D	n/a	D	D	D	D	D	D	D	D
→ Sound reduction													
Solution			P1	P2	NP	P1	P1	P2					
Rw		dB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
C			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
C _{tr}			n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Octave band values		at 125 Hz	dB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		at 250 Hz	dB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		at 500 Hz	dB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		at 1000 Hz	dB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		at 2000 Hz	dB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		at 4000 Hz	dB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
→ Frame types and sizes													
Property		Unit	P1	P2	NP	P1	P1	P2					
Louvre pitch		mm	37,5			37,5	37,5		35	20	65	65	75
G Recessed wall louvre with flange	Recess depth	mm	G: 34,4 / G Large: 31,9			38,4	x		30	30	62	62	62
	Frame rebate	mm	G: 18,2 / G Large: 40			15			19	19	48	48	48
N Recessed wall louvre without flange	Recess depth	mm	x			x	x		x	x	65	65	65
	Frame rebate	mm									0	0	0
F Window louvre	Flange width	mm	24/28/32			x	24/28/32/36/40/44/48		24	24	28	28	28
	Frame depth	mm	38						35	35	77	77	77
M Surface-mounted wall louvre	Recess depth	mm	Rectangular [M]: 43 Round [MR]: 35			42	x		x	x	x	x	x
Minimum / maximum louvre dimensions (Width x Height)		mm	Rectangular [G, F, M]: min. W 200 x H 200 Round [MR]: min. dia. 300 – max. dia. 1500			min. W 200 x H 200	min. 300 x 300 mm max. 2500 mm high / wide if other dimension < 1250 mm		min. W 200 x H 200	min. W 200 x H 200	min. W 300 x H 300	min. W 300 x H 300	min. W 300 x H 300
→ Frame types and sizes													

DUCOGRILLE CLASSIC						DUCOGRILLE ACOUSTIC			DUCOGRILLE CLOSE			DUCOGRILLE NIGHTVENT		
														
Classic 50/75S	Classic 45HP	Classic 50HP	Classic 130HP	Classic 70S	Classic 70V	Acoustic 75Z	Acoustic 75L	Acoustic 150	Close 105	Close 35Z	Close M 100	NightVent		
see p. 17	see p. 18	see p. 19	see p. 20	see p. 22	see p. 23	see p. 24	see p. 24	see p. 25	see p. 26	see p. 28	see p. 29	see p. 30		
80	70	88	88	79	65	76	95	74	74*	51	28	60		
49	60	68	70	47	36	28	28	35	74*	39	28	34		
8,75	12,66	4,7	8,55	16,8	72,79	16,93	16,52	11,04	2,57*	30,38	88,43	24,51		
13,62	6,68	4,55	13,42	18	83,88	21,83	12,14	10,96	2,57*	23,67	89,43	24,51		
0,34	0,28	0,46	0,34	0,24	0,12	0,24	0,25	0,3	0,62*	0,18	0,11	0,2		
0,27	0,39	0,47	0,27	0,24	0,11	0,21	0,29	0,3	0,62*	0,21	0,11	0,2		
									* measured without internal and external louvre grille					
B [98,6]	B	C [92,3]	A	B	A	B [97,8]	B [97,2]	B	n/a	B [98,25]	n/a	A		
C	B	C [89,80]	A	C	B [98,98]	B [95,1]	C [93,9]	C	n/a	B [96,52]	n/a	B		
C [94,7]	C	C [86,5]	A	C [94,27]	B [95,53]	C [89,4]	C [88,2]	C	n/a	C [88,82]	n/a	C		
C	C	D [79,7]	A	C	C [80,43]	D [77,3]	D [75]	C	n/a	D [39,83]	n/a	D		
C [82,2]	C	D	A	C [84,90]	D	D	D	D	n/a	D	n/a	D		
D	D	D	A	D	D	D	D	D	n/a	D	n/a	D		
									Closed	Open		Closed	Open	
n/a	n/a	n/a	n/a	n/a	n/a	6	6	11	21	3	n/a	n/a	33	10
n/a	n/a	n/a	n/a	n/a	n/a	0	0	-1	-2	0	n/a	n/a	-1	0
n/a	n/a	n/a	n/a	n/a	n/a	-1	-2	-2	-2	-1	n/a	n/a	-4	-1
n/a	n/a	n/a	n/a	n/a	n/a	2,7	2,6	4,8	13,7	1,4	n/a	n/a	21,5	7,3
n/a	n/a	n/a	n/a	n/a	n/a	3,5	3	4	14,6	2,4	n/a	n/a	21,3	6,5
n/a	n/a	n/a	n/a	n/a	n/a	2,1	1,9	7,4	16,5	3,1	n/a	n/a	28,2	9,2
n/a	n/a	n/a	n/a	n/a	n/a	4,8	4,4	11,4	20,9	2,2	n/a	n/a	37,1	8,9
n/a	n/a	n/a	n/a	n/a	n/a	10,1	9,7	12,4	23,2	2,6	n/a	n/a	45,2	11,5
n/a	n/a	n/a	n/a	n/a	n/a	12,4	11,5	13	29,8	2,7	n/a	n/a	53,7	12,4
75	50	50	50	85	65	60	60	150	91	50	n/a	37,5		
62	62	62	158	82	82	82	82	158	see p. 26	45	✕	✕		
48	48	48	48	48	48	48	48	48		20				
65	65	65	158	✕	✕	✕	✕	158		45	✕	✕		
0	0	0	0					0		0				
28	28	28	✕	✕	✕	✕	✕	✕		24/28	✕	24/28/32/36/40/44/48		
77	77	77								45			115	
✕	✕	✕	✕	✕	✕	✕	✕	✕		✕	13	✕		
min. W 300 x H 300	min. W 250 x H 250	min. W 250 x H 250	min. W 250 x H 250	min. W 300 x H 300	min. W 300 x H 300	min. W 250 x H 250	min. W 250 x H 250	min. W 250 x H 250	see drawing on p. 27	see table on p. 28	fixed height 200 or 300 max. width 1000 mm	see tables on p. 32		



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