

# Barrier Load Louvres

Fall Protection - Security - Ventilation



**Several blades**  
angle and pitch options

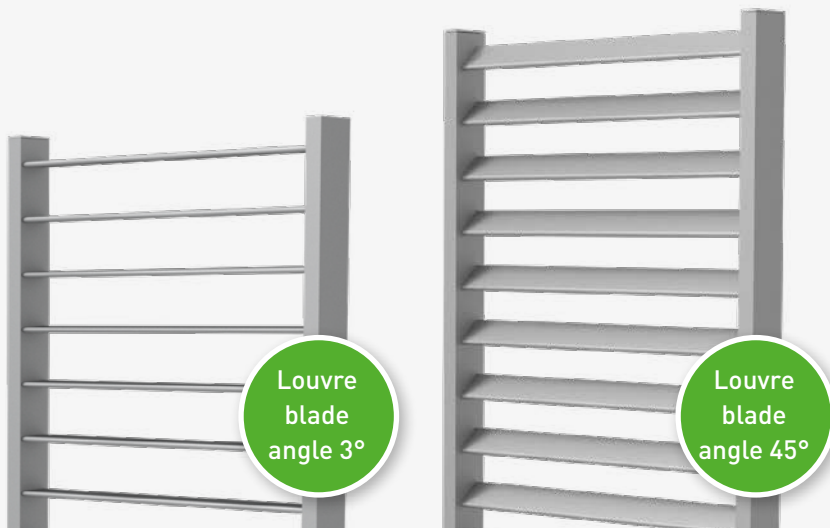


**Barrier Load Approved**  
to BS 6180 and Impact  
Resistant tested EN 13049



**Frame options**  
to suit glazing system

**DUCO**



Fall-through protection



Impact protection

## Duco **Barrier Load Louvre**

Barrier Load Louvres have several advantages, such as fall through protection for open windows at great heights and intensive ventilation of the rooms inside the building. **Secret fixed blades** ensure that the fixing of the blades in the frame are invisible. At the same time, the louvre blades provide solar shading while blocking out the sun's rays and heat without loss of daylight. In addition to these functions, DUCO Barrier Load Louvres also provide an **architectural aspect to the façade**. This type of louvres is widely used in student housing, but can be adapted to any project.

It meets the highest standards in **fall-through protection** and **impact protection**.

### Fall-through protection standards:

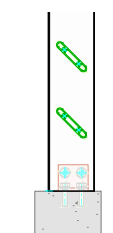
- B 03-004: Class A/B/C4/D
- NEN EN 1991-1-1: Class A/B/C4/D
- BS 6180: XI

### Impact protection standards:

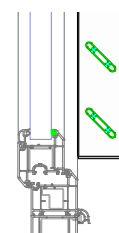
- EN 13049: Class 5
- NF P08-302:
  - Louvre blade angle 3°: Class Q4
  - Louvre blade angle 45° and 55°: Class H2

## FRAME TYPES AND DIMENSIONS

Dimensions in mm	<b>SlimFrame 11/70</b>	<b>LuxFrame 35/70</b>
<b>Louvre pitch</b>	min. 50, max. 100	min. 50, max. 100
<b>Installation depth</b>	70	70
<b>Frame depth</b>	11	35
<b>Min. dimensions</b>	min. W 100	min. W 100
<b>Max. dimensions</b>	max. W 1000	max. W 1000



Mounted on the four corners



Mounted directly on the window frame



Fall-through  
protection



Vandal-proof



Impact protection

## 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 punching (P1)**, **large punching (P2)** or as **false louvres (NP)** and provide a uniform façade design when combined in a single project. DucoGrille Solid 30Z grilles comply with the BS 6180 standard (class X or XI) for **fall-through protection** (except MR 30Z and Solid ISO).

## DucoGrille **Solid** G 30Z Barrier Load

The DucoGrille Solid G 30Z Barrier Load is ideally suited for high-rise applications such as student housing, retail and commercial buildings. It meets the highest standards in **fall-through protection** and **impact protection**.

Fall-through protection standards:

- B 03-004: Class C4
- NEN EN 1991-1-1: A/B/F/G
- NF P01-013: A/B (Width < 600 mm)
- BS 6180: XI

Impact protection standards:

- EN 13049: Class 5
- NF P08-302: H2/C2

### FRAME TYPES AND DIMENSIONS

Dimensions in mm	<b>G</b>	<b>G Large</b>	<b>F 30Z/24</b>	<b>F 30Z/28 30Z/32</b>	<b>M</b>
Louvre pitch	37,5				
Installation depth	34,4	31,9	-	-	-
Frame rebate	18,2	40	-	-	-
Frame depth	-	-	38	42	43
Flange width	-	-	24	28/32	-
Min. dimensions	min. W 200 x H 200				

<b>G 30Z</b> Barrier Load
37,5
-
15
42
-
min. W 200 x H 200

### VENTILATION VALUES

Feature		P1		P2	
		STND	+OPT	STND	+OPT
Visual free area		60 %	60 %	86 %	86 %
Physical free area		34 %	34 %	48 %	48 %
Ce (higher is better)		<b>0,243</b>	<b>0,216</b>	<b>0,258</b>	<b>0,232</b>
Cd (higher is better)		<b>0,234</b>	<b>0,242</b>	<b>0,253</b>	<b>0,266</b>
<b>K-FACTOR</b> (lower is better)	INTAKE	<b>16,94</b>	<b>21,43</b>	<b>15,02</b>	<b>18,58</b>
	EXHAUST	<b>18,26</b>	<b>17,08</b>	<b>15,62</b>	<b>14,13</b>

### WATER RESISTANCE

Air velocity	Class			
	P1		P2	
	STND	+OPT	STND	+OPT
0 m/s	<b>B</b>	<b>B</b>	<b>C</b>	<b>B</b>
0,5 m/s	<b>C</b>	<b>B</b>	<b>C</b>	<b>B</b>
1 m/s	<b>C</b>	<b>C</b>	<b>C</b>	<b>B</b>
1,5 m/s	<b>D</b>	<b>C</b>	<b>D</b>	<b>B</b>
2 m/s	<b>D</b>	<b>D</b>	<b>D</b>	<b>C</b>
2,5 m/s	<b>D</b>	<b>D</b>	<b>D</b>	<b>D</b>



Suitable for high  
noise levels

## Duco Acoustic Panel

Duco Acoustic Panel is a sound absorbing recessed mounted wall louvre, manufactured from extruded aluminium sections. It is extremely suitable for housing and residential applications. The Acoustic 150 louvre blades feature sound-absorbing, non-combustible mineral wool and provide an **excellent sound reduction index**.

This custom-made module is available in two variants: **Acoustic Panel 150** and **Acoustic Panel 300** for very high noise exposure. With its double row of louvre blades, the Duco Acoustic Panel 300 offers a **sound reduction index  $R_w$  (C;Ctr) of no less than 17 (-1;-4) dB**. Duco Acoustic Panel grilles meet the BS 6180 standard (class XI) for **fall-through protection** and class 5 of EN 13049 for **impact protection**.



Fall-through  
protection



Impact  
protection

### SOUND ABSORPTION

Attenuation value $R_w$ (C;Ctr)	
150	300
11 (-1;-2) dB	17 (-1;-4) dB

## DucoWall Screening Acoustic

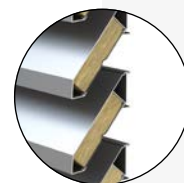


Suitable for high  
noise levels

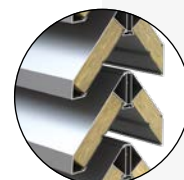
DucoWall Screening Acoustic is a **sturdy aluminium continuous louvre wall system with acoustic damping**. There is a choice of two different louvre steps. The acoustic damping can be further improved by applying the Double Bank, in which an extra louvre is clicked on at the back. In this way, the louvre wall can be adapted to each project according to the wishes and needs. **Installation is quick**, as the louvres are placed directly on the support profile.

### SOUND ABSORPTION

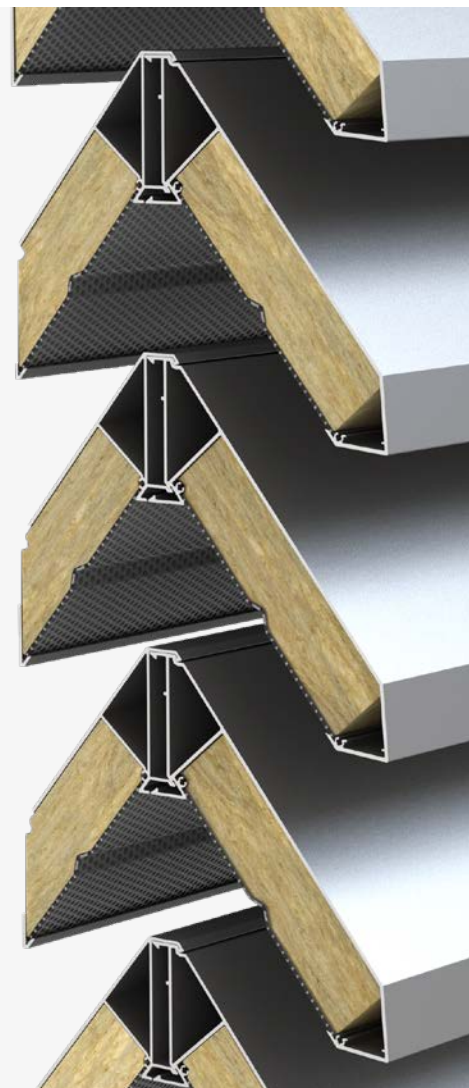
Attenuation value $R_w$ (C;Ctr)			
Single Bank 112	Double Bank 112	Single Bank 150	Double Bank 150
14 (-1;-4) dB	17 (-1;-4) dB	11 (0;-2) dB	15 (-1;-3) dB



Single Bank



Double Bank



# IMPACT AND FALL-THROUGH PROTECTION

Façade elements are increasingly expected to meet 'impact protection' and 'fall-through protection' requirements:



## Impact protection

The resistance of a material to which an intense force or shock is exerted for a short period of time.



## Fall-through protection

The load applied to resist penetration that prevents people from falling through this barrier.

## Overview of results

DUCO products achieve very good results in terms of impact and fall-through protection:

	Impact protection		Fall-through protection			
	EN 13049	NF P08-302	B 03-004	NEN EN 1991-1-1	NF P01-013	BS 6180
Maximum class	Class 5	H2	Class C5	Class C5	C1-C5/D	XI

### DUCOGRILLE SOLID

DucoGrille <b>Solid G 30Z</b>	-	-	-	-	-	X
DucoGrille <b>Solid G 30Z Large</b>	-	-	-	-	-	XI
DucoGrille <b>Solid F 30Z/24</b>	-	-	-	-	-	XI
DucoGrille <b>Solid F 30Z/28</b>	-	-	-	-	-	XI
DucoGrille <b>Solid F 30Z/32</b>	-	-	-	-	-	XI
DucoGrille <b>Solid M 30Z</b>	-	-	-	-	-	XI
DucoGrille <b>Solid++ G 30Z</b>	Class 5	H2/C2	C4	A/B/F/G	A/B*	XI
DucoGrille <b>Solid++ M 30Z</b>	-	-	-	-	-	XI
DucoGrille <b>Solid G 30Z Barrier Load</b>	Class 5	H2/C2	C4	A/B/F/G	A/B*	XI

### DUCO BARRIER LOAD LOUVRE

Duco <b>Barrier Load Louvre</b>	Class 5	Louvre blade angle 3°: Q4 Louvre blade angle 45° and 55°: H2	A/B/C4/D	A/B/C4/D	-	XI
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### DUCOGRILLE ACOUSTIC

Duco <b>Acoustic Panel 150</b>	Class 5	Q4	C5b	C5	C1-C5/D	XI
Duco <b>Acoustic Panel 300</b>	Class 5	Q4	C5b	C5	C1-C5/D	XI

### DUCOWALL

DucoWall <b>Classic W 130HP Metal Clip</b>	Class 5	-	C5a	A/B/F/G	-	XI
DucoWall <b>Screening Acoustic**</b>	Class 5	C2	A/B/C4/D	A/B/F/G	-	XI

Note: often a specific mounting method applies or the test is only valid for specific versions (e.g. a certain step, a certain maximum span ...).

Contact DUCO for more information. Full test reports can be requested from DUCO.

\* Width < 600 mm

\*\* Add 2 brackets per blade length. Screening profiles always mounted on double mullions.



## DUCO'S SOLUTIONS

Discover our products in these brochures:



Call **+32 58 33 00 66**  
or send an email to **[info@duco.eu](mailto:info@duco.eu)**

We will be happy to provide you  
with any further information on our  
products and new developments.

**DUCO**