# Louvre wall system DUCO Ventilation & Sun Control DucoWall Screening Acoustic

## Omschrijving

DucoWall Screening Acoustic is a sturdy aluminium louvre wall system with acoustic damping. There is a choice between two different louvre blade pitches. The acoustic damping can be further improved by applying the Double Bank, where an additional blade is clicked on at the back. In this way, the louvre wall can be adapted to the wishes and needs of any project. Installation is quick, as the blades are placed directly on the mullion.

## Version

### Blade

* Shape of blade Single Bank: DWSA 150 Front

Double Bank: DWSA 150 Front + DWSA 110 Back

* Pitch 112.5 mm

150 mm

* Blade height 192 mm
* Blade depth 238 mm

### Mullion

* Mullion 40/21 (Double)
  + Fixing directly to the underlying structure.
  + Without free span.
* Mullion 40/70 Double and 40/100 Double
  + Fixing to the underlying structure with the supplied L-profiles.
  + Suitable for free span.

|  |  |  |
| --- | --- | --- |
| Type | Installation depth (mm) | |
| **Single Bank** | **Double Bank** |
| 40/21 (Double) | 162 | 238 |
| 40/70 Double | 212 | 238 |
| 40/100 Double | 242 | 242 |

### Accessories (+options)

* Insect mesh frame 2.3 x 2.3 mm

## Material and surface treatment

### Blade

* Aluminium EN AW-6063 T66 (EN 573-3)

Profile thickness: min. 1.5 mm

* Finish
  + Polyester powder coated (60-80 μm) according to Qualicoat Seaside type A (specific RAL codes or textured paint on request)

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## Technical specifications

### Reaction to fire

AS-s1,d0 (EN 13501-1)

### Fire resistance

Damping material: non-combustible (NEN 6064)

### Free area

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Feature | Single Bank 112 | | Double Bank 112 | | Single Bank 150 | | Double Bank 150 | |
| **STD** | **+OPT** | **STD** | **+OPT** | **STD** | **+OPT** | **STD** | **+OPT** |
| Visual free area | 66 % | 66 % | 66 % | 66 % | 74 % | 74 % | 74 % | 74 % |
| Visual free area | 25 % | 25 % | 25 % | 25 % | 35 % | 35 % | 35 % | 35 % |

### Flow rates

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Feature | Single Bank 112 | | Double Bank 112 | | Single Bank 150 | | Double Bank 150 | |
| **STD** | **+OPT** | **STD** | **+OPT** | **STD** | **+OPT** | **STD** | **+OPT** |
| Ce | 0.254 | 0.226 | 0.197 | 0.182 | 0.295 | 0.252 | 0.211 | 0.200 |
| K-factor intake | 15.50 | 19.58 | 25.77 | 30.19 | 11.49 | 15.75 | 22.46 | 25.00 |
| Cd | 0.253 | 0.231 | 0.196 | 0.175 | 0.290 | 0.251 | 0.193 | 0.175 |
| K-factor exhaust | 15.62 | 18.74 | 26.03 | 32.65 | 11.89 | 15.87 | 26.85 | 32.65 |

According to EN 13030

### Water resistance

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Velocity v (m/s) | Single Bank 112 | | Double Bank 112 | | Single Bank 150 | | Double Bank 150 | |
| **STD** | **+OPT** | **STD** | **+OPT** | **STD** | **+OPT** | **STD** | **+OPT** |
| 0 | B | B | A | A | C | B | B | A |
| 0.5 | C | B | B | A | D | C | B | A |
| 1 | C | C | C | A | D | C | C | A |
| 1.5 | D | C | C | B | D | D | C | B |
| 2 | D | D | D | C | D | D | D | C |
| 2.5 | D | D | D | D | D | D | D | D |
| 3 | D | D | D | D | D | D | D | D |
| 3.5 | D | D | D | D | D | D | D | D |

According to EN 13030

### Attenuation value

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| in dB | Single Bank 112 | Double Bank 112 | Single Bank 150 | Double Bank 150 |
| Rw (C;Ctr) | 14 (-1;-4) | 11 (0;-2) | 17 (-1;-4) | 15 (-1;-3) |
| 125 Hz | 5.5 | 5.1 | 6.7 | 6.0 |
| 250 Hz | 4.7 | 4.3 | 5.1 | 4.6 |
| 500 Hz | 7.1 | 6.2 | 10.9 | 9.0 |
| 1000 Hz | 14.9 | 12.5 | 21.8 | 18.5 |
| 2000 Hz | 21.2 | 14.0 | 34.1 | 23.7 |
| 4000 Hz | 17.3 | 11.9 | 27.2 | 20.2 |

### Impact resistance\*

|  |  |  |
| --- | --- | --- |
| Class | Impact front  Single & Double Bank  112 & 150 | Impact rear  Single & Double Bank  112 & 150 |
| EN 13049 | 5 | 5 |
| NF P08-302 | H2 | C2 |

\* Additional mounting of 2 fall-through protection brackets per blade.

### Fall-through protection\*

|  |  |
| --- | --- |
| Class | Single & Double Bank  112 & 150 |
| B03-004 | A/B/C1-4/D |
| NEN-EN 1991-1-1 | A/B/F/G |
| BS 6180 | XI |

\* Additional mounting of 2 fall-through protection brackets per blade.

### Strength calculation

According to EN 1990, EN 1991, EN 1999