# SETFON ZN

Sound-absorbing baffle in galvanized steel

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**Description and application:**
Rectangular sound-absorbing baffle made of high-performance acoustic materials, designed to provide effective noise attenuation while maintaining low pressure losses.
It is ideal for applications requiring a high level of acoustic comfort and reduced sound transmission within air distribution systems.
Suitable for attenuating noise generated by fans and airflow in main, secondary or terminal ducts of ventilation and air-conditioning systems, for both supply and return air applications, in both commercial and industrial environments.

**Construction:**
- Execution made of Z200 galvanized steel;
- Frame/Casing riveted, thickness 0,8 mm;
- Aerodynamic profiles on both sides;
- Sound-absorbing material in rock wool, density 50 kg/m³, covered with black glass fiber veil.

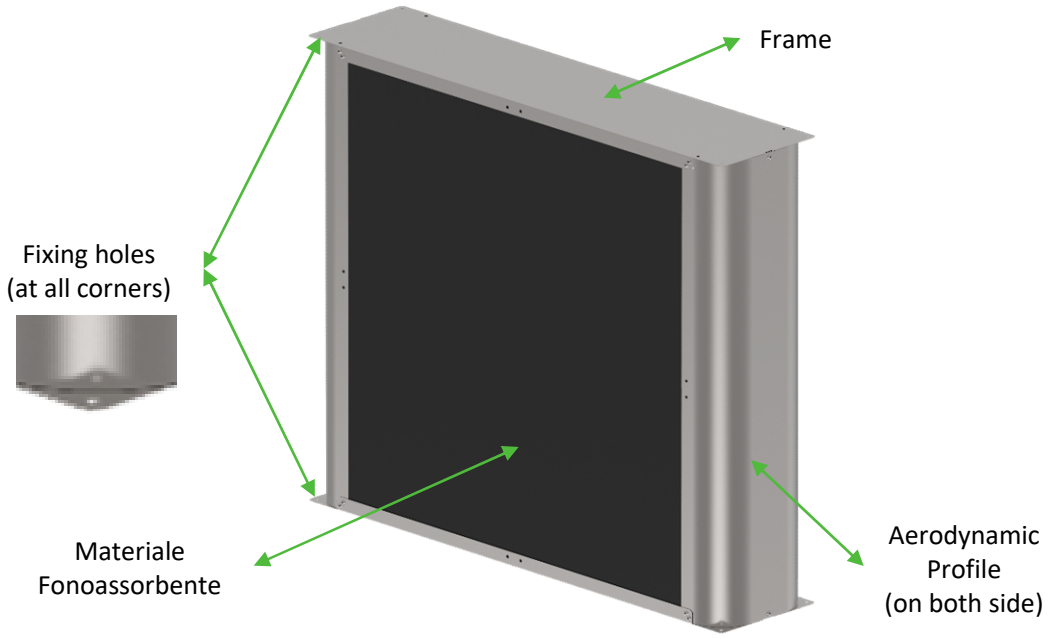
**Available executions:**
- Central type with thicknesses 300, 200, 150 or 100 mm;
- Lateral type with thicknesses 150, 100 or 50 mm;
- Configuration suitable for an effective $V_{max}$ of up to 20 m/s, protecting the sound-absorbing material covering, with micro-expanded mesh or perforated metal sheet R5T8;
- Hygenic version, with 50 kg/m³ rock wool covered with glass fabric, VDI6022 certified, suitable for an effective $V_{max}$ of up to 20 m/s;
- Marine version, with 60 kg/m³ rock wool covered with glass veil, M.E.D. (Marine Equipment Directive) certified, suitable for an effective $V_{max}$ 12 m/s (increasable up to 20 m/s with a dedicated configuration);
- Execution made of stainless steel AISI 304 finishing 2B (**X4** version) / AISI 316L finishing 2B (**X6** version) / ZM 310 Zinc-Magnesium steel (**ZM** version).

**Operating Limits:**
- Dimension DxH: min 300x200 mm / max 2200x2200 mm;
- Maximum temperature: +150 °C;
- Dimensional drawing: page 3;
- Effective $V_{max}$: 12 m/s (see **available execution**);
- Performance and attenuation: see pages 4 and 5*.

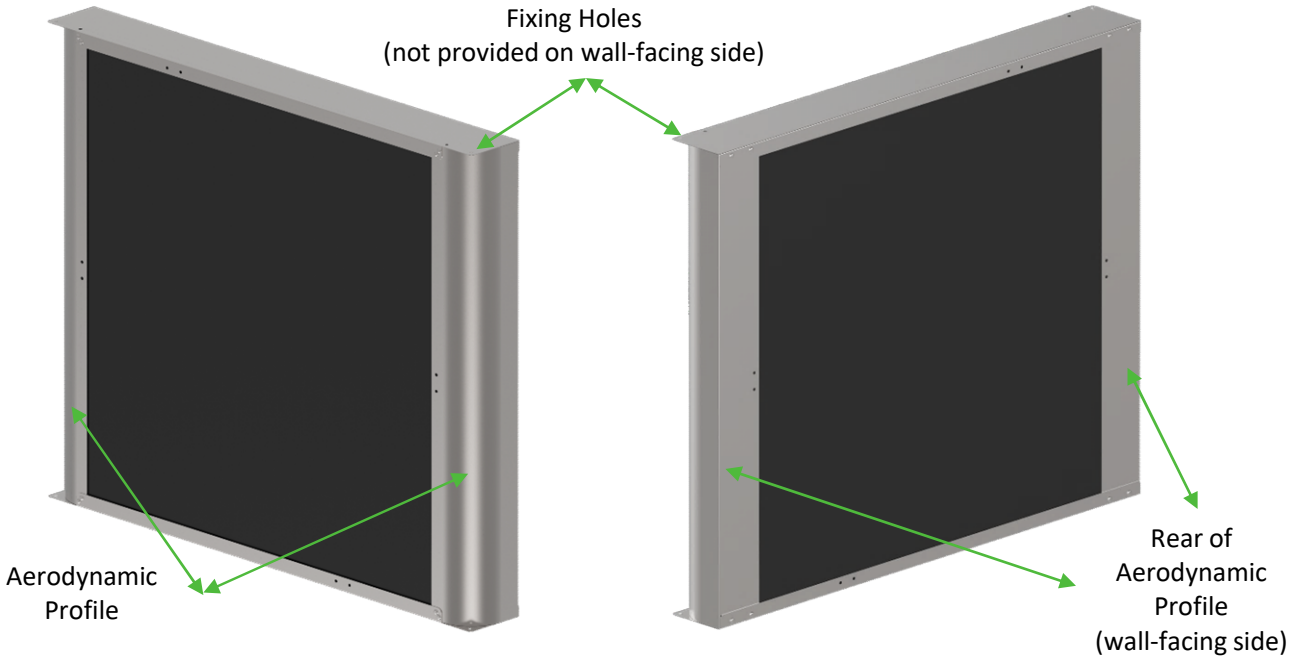
** Detailed data for different dimensions, designs, types, configurations, and versions are available through the online*

**Certifications and Testing:**
- Sound-absorbing material with Euroclass A1 fire resistance in accordance with EN 13501;
- Transmission Loss tests carried out in accordance ISO 7235 at Istituto Giordano (test report no. 142976);
- Pressure loss tests carried out in accordance ISO 7244 at Istituto Giordano (test report no. 136363);
- Regenereted noise tests carried out in accordance ISO 23741 at Istituto Giordano (test report no. 149877).

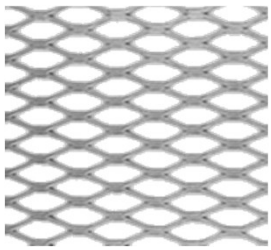
## Additional Construction Information SETFON Central Type

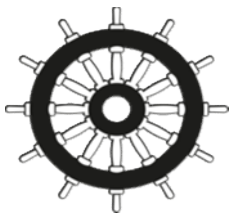



## Additional Construction Information SETFON Lateral Type



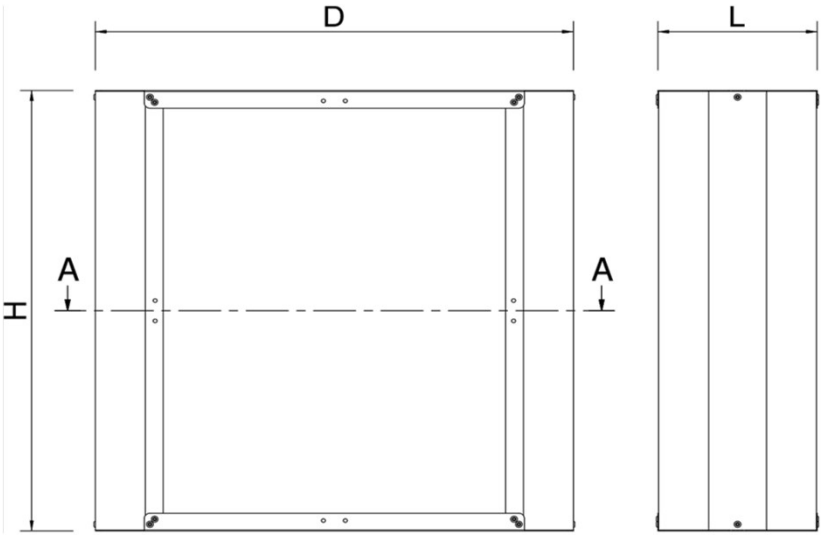

## Option and Available Execution

| Configuration suitable for $V_{max}$ of up to 20 m/s | |
|---|---|
| Micro-expanded mesh | Perforated sheet R5T8 |
|  |  |

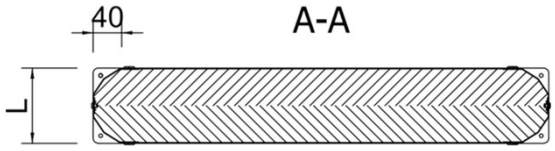
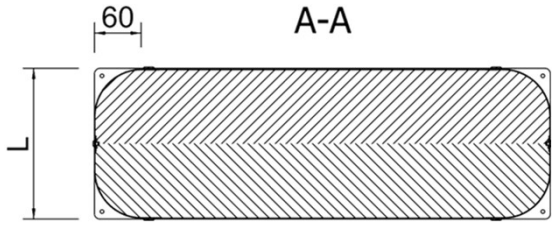
| Version (sound-absorbing material) | |
|---|---|
| Hygenic | Marine M.E.D |
|  |  0575 |

## Dimensional Drawing STD (size in mm)

**Central type**



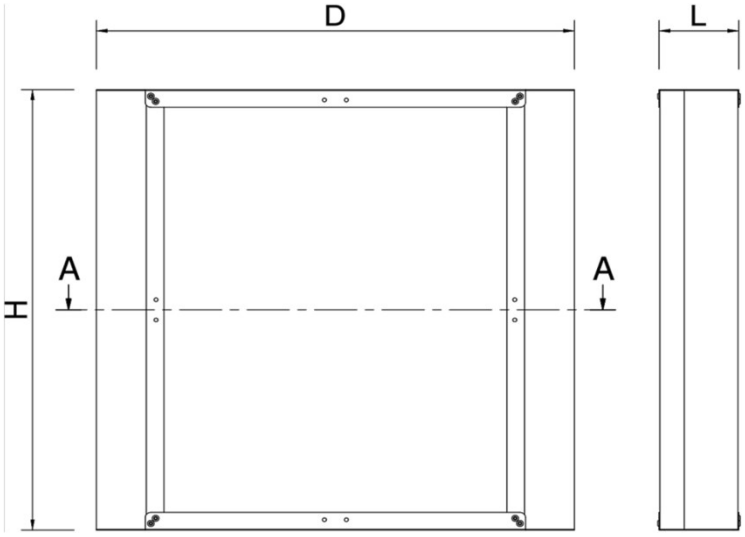

**Available Thicknesses and Aerodynamic Profile Cross-Sections**

| L | | L | |
|---|---|---|---|
| 100 |  | 150<br>200<br>300 |  |

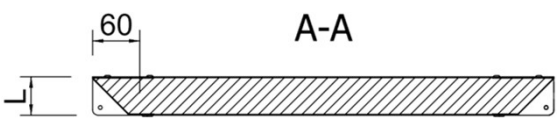
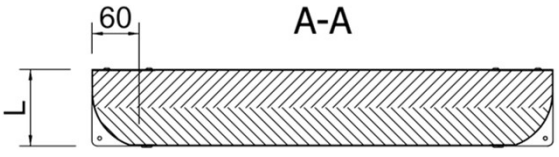




**Lateral type**




**Available Thicknesses and Aerodynamic Profile Cross-Sections**

| L | | L | |
|---|---|---|---|
| 50 |  | 100<br>150 |  |

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| Pressure Drop and Regenerated Noise Table (in accordance ISO 7244 and ISO 23741) | | | | | | |
|---|---|---|---|---|---|---|
| | Baffle thickness L=200mm Spacing 200mm | | Baffle thickness L=200mm Spacing 150mm | | Baffle thickness L=200mm Spacing 100mm | |
| V [m/s] | $\Delta p_t$ [Pa] | LwA [dB(A)] | $\Delta p_t$ [Pa] | LwA [dB(A)] | $\Delta p_t$ [Pa] | LwA [dB(A)] |
| 1 | < 5 | < 20 | < 5 | < 20 | 5 | < 20 |
| 2 | 7 | 25 | 10 | 23 | 21 | 32 |
| 3 | 17 | 37 | 23 | 36 | 47 | 44 |
| 4 | 28 | 43 | 42 | 44 | 78 | 52 |
| 5 | 45 | 50 | 63 | 51 | 125 | 57 |
| 6 | 64 | 54 | 88 | 57 | | |
| 7 | 84 | 58 | 120 | 61 | | |
| 8 | 110 | 61 | 150 | 65 | | |
| 9 | 140 | 64 | | | | |
| | Free area / Total area Ratio | | | | | |
| | 50% | | 43% | | 33% | |

**V** = front face air velocity referred to the section W x H;
**Δpt** = total pressure drop;
**LwA** = sound power level.

| Attenuation Table (in accordance ISO 7235) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Baffle Thickness | Baffle Spacing | Depth | Frequency [Hz] | | | | | | | |
| | | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| L [mm] | S [mm] | D [mm] | dB | | | | | | | |
| 200 | 200 | 500 | 1 | 2 | 5 | 7 | 9 | 8 | 5 | 3 |
| | | 1000 | 3 | 5 | 10 | 16 | 20 | 18 | 10 | 6 |
| | | 1500 | 4 | 7 | 16 | 24 | 31 | 26 | 15 | 8 |
| | | 2000 | 6 | 10 | 22 | 33 | 42 | 34 | 17 | 9 |
| | 150 | 500 | 1 | 3 | 5 | 9 | 11 | 11 | 7 | 3 |
| | | 1000 | 3 | 6 | 12 | 19 | 24 | 23 | 16 | 6 |
| | | 1500 | 5 | 10 | 18 | 29 | 37 | 35 | 22 | 9 |
| | | 2000 | 7 | 13 | 24 | 40 | 50 | 45 | 26 | 10 |
| | 100 | 500 | 2 | 3 | 7 | 13 | 16 | 17 | 10 | 6 |
| | | 1000 | 5 | 7 | 16 | 28 | 35 | 38 | 23 | 13 |
| | | 1500 | 7 | 11 | 24 | 43 | 50 | 50 | 32 | 18 |
| | | 2000 | 10 | 15 | 33 | 50 | 50 | 50 | 38 | 21 |
| L [mm] | S [mm] | D [mm] | dB | | | | | | | |
| 100 | 100 | 500 | 1 | 1 | 3 | 9 | 16 | 18 | 11 | 5 |
| | | 1000 | 2 | 3 | 7 | 19 | 35 | 40 | 23 | 12 |
| | | 1500 | 3 | 4 | 11 | 30 | 50 | 50 | 32 | 16 |
| | | 2000 | 4 | 6 | 15 | 40 | 50 | 50 | 39 | 20 |
| | 50 | 500 | 1 | 2 | 5 | 12 | 20 | 23 | 17 | 11 |
| | | 1000 | 2 | 4 | 11 | 28 | 43 | 50 | 38 | 25 |
| | | 1500 | 3 | 6 | 17 | 43 | 50 | 50 | 50 | 34 |
| | | 2000 | 4 | 8 | 23 | 50 | 50 | 50 | 50 | 41 |

***Note** : Generic table referring to the standard baffle configuration with sound-absorbing material covered with glass veil.*
*Detailed data for the various types, configurations, versions, and dimensions are available through the online silencer configurator.*




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