Merford developed the AKR sound screen in particular for applications where the noise source must be screened off but ventilation is still required. This screen type is suitable for applications both inside and outside. The AKR screen is perfect for using with cooling machinery, pumps, ventilators, compressors, and so on, and is even eminently suitable for screening off of a workplace.

APPLICATIONS
The AKR sound screen can be used for many applications. A good example is the screening off of (cooling) machinery.

DESIGN
The screen is constructed from steel columns that are fastened to the foundation or floor using foot plates. Acoustic louvres are assembled between the columns. There are different versions, each with unique properties in terms of sound attenuation, installation depth and pressure loss. Different components can be fitted in the screen, such as doors, windows, recesses and ducts. In result, a solution can be found for virtually all situations. The AKR sound screens can also be combined with Merford SKW screens. Depending on the situation and the chosen construction, the sound protection is between approximately 5 to 15 dB.

DIMENSIONS
Custom-work according to customer’s specifications.

SOUND INSULATION
The air sound insulation is listed in the table on the other side of this product sheet. We can calculate the effective sound attenuation for each situation. The indicated insulation values are measured in conformance with ISO 140-3.

FINISH
As standard, the louvres are produced in bright Sendzimir galvanised steel, however other types of preservation are available as well.

FEATURES
▪ Screening and ventilation in one product
▪ Can be used inside and outside
▪ Robust, sleek design
▪ Permanent set up

APPLICATIONS
▪ Cooling machines
▪ Pumps
▪ Ventilators
▪ Compressors
▪ Shielding wall around workplaces

SOUND INSULATION
Airborne sound insulation values measured with ISO 140-3 and calculated conform ISO-717-1

Air-permeable sound shielding wall
SOUND SCREEN AKR

OPTIONS
- The visible side of the screen can be treated with wet enamel. As standard one layer or two component enamel system, total layer thickness approx. 60 μm.
- Also possible is a treatment with powder coating: as standard one layer, layer thickness minimally 60 μm.
- Two layer enamel system with epoxy primer and enamel finish, layer thickness 100 μm.
- Other type of construction material: sea water resistant AlMg3 / stainless steel 304/316.
- Doors, windows, ducts, recesses, etc.

GUARANTEE
Merford provides you with a guaranteed, acoustic ventilation solution. Contact our sales department to discuss your needs and requirements.

DISCLAIMER
Although this product sheet is drawn up meticulously, no right can be derived from its content. We reserve the right to make changes. For the most up to date version, please contact our specialists or go to our website.

Sound attenuation values of the AKR screen louvres. Measured in the laboratory in conformance with ISO 1403. We would be glad to calculate the effective sound attenuation/protection for your specific application:

<table>
<thead>
<tr>
<th>Frequency</th>
<th>$R_w (C, C_r)$</th>
<th>125</th>
<th>250</th>
<th>500</th>
<th>1000</th>
<th>2000</th>
<th>4000</th>
<th>(Hz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AKR 150</td>
<td>11 (0, -2)</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>11</td>
<td>13</td>
<td>12</td>
<td>(dB)</td>
</tr>
<tr>
<td>AKR 350</td>
<td>13 (-1, -2)</td>
<td>5</td>
<td>6</td>
<td>10</td>
<td>13</td>
<td>14</td>
<td>12</td>
<td>(dB)</td>
</tr>
<tr>
<td>AKR 300</td>
<td>18 (-2, -5)</td>
<td>5</td>
<td>6</td>
<td>13</td>
<td>19</td>
<td>23</td>
<td>22</td>
<td>(dB)</td>
</tr>
</tbody>
</table>

Sound attenuating AKR grids mounted in a steel structure