

AGC-RC

Sound attenuator

Absorption/resonance baffle

Use

The AGC-RC baffles are combined absorption/resonance sound attenuating baffles in a two-chamber version for use in air-treatment systems. The frame of galvanised steel sheet produces high rigidity. The surfaces of the mineral-wool absorption material are finished with tear-free, scratch-resistant and humidity-proof glass fleece.

Characteristics

Insertion loss, flow noise and pressure loss measured in accordance with DIN 45646 (ISO 7235)

Non-flammable in accordance with DIN 4102.

Maximum air velocity between the baffles: 20 m/s.

Maximum operating temperature: 100 °C.

Version

frame: sendzimir galvanised steel sheet
lining: mineral wool with steel and glass-fleece cover

Available types

A G C - R C

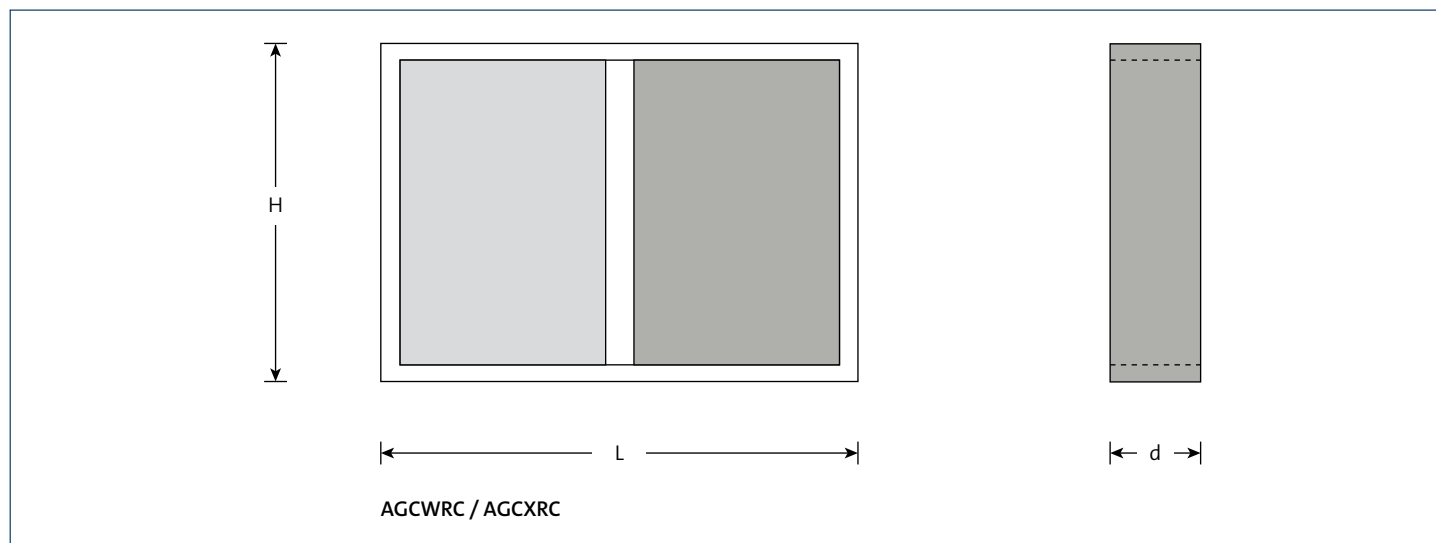
A accessory
G sound attenuation
C baffle

- **Version**

W baffle thickness 100 mm round corner
X baffle thickness 200 mm round corner

R absorption/resonance baffle
C loose baffle

Dimensions



Available dimensions

The nominal height H is available in increments of 50 mm from 150 to 1800 mm.

The length L is only available in 500, 750, 1000, 1250 and 1500 mm.

Greater heights and lengths can be obtained by putting various baffles together. Connector covers are available for this purpose.

To achieve the insertion loss with the given spacings, the baffles must be built into suitable housing made of steel sheet or other materials, such as mineral construction materials.

Note

- The dimensions are in mm.
- The actual length is $L - 5$ in mm.
- The actual height is $H - 5$ in mm.

SA-Select

Check [SA-select](#) to create extended order codes and selection details online. **NB!** At this moment, SA-Select is only available in Dutch. But it is possible to create extended order codes and selection details online.

When you select sound attenuators online, remember the following:

- In sound attenuators, the air supply velocity must be divided evenly over the duct surface. The pressure losses and sound power levels for flow noise apply under this condition. In sound attenuators after bends, branches, fans, the air should be supplied via the conduction blades as much as possible in order to prevent the anticipated differences in air velocity.
- The maximum permitted velocity between the baffles amounts to 20 m/s. Due to the corresponding relatively high pressure loss and flow noise, the air velocities that can be used in practice are generally lower.
- The flow noise of the sound attenuator should be 10 dB less than the sound power of the attenuator less the insertion loss.

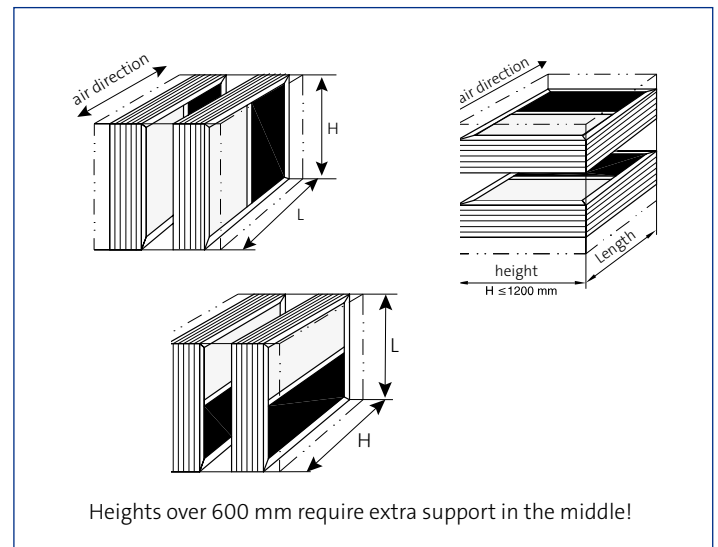
General fitting instructions

Built-in position:

The standard position for the baffles is upright. Lying baffles to a maximum baffle height of 1200 mm are only permitted when penetrating humidity is excluded in principle.

Built-in location:

The baffles should be placed parallel to each other to ensure the absorption sound attenuating surfaces (A) and the resonance sound attenuating surfaces (R) are always opposite each other.



Maximum dimensions sound attenuators:

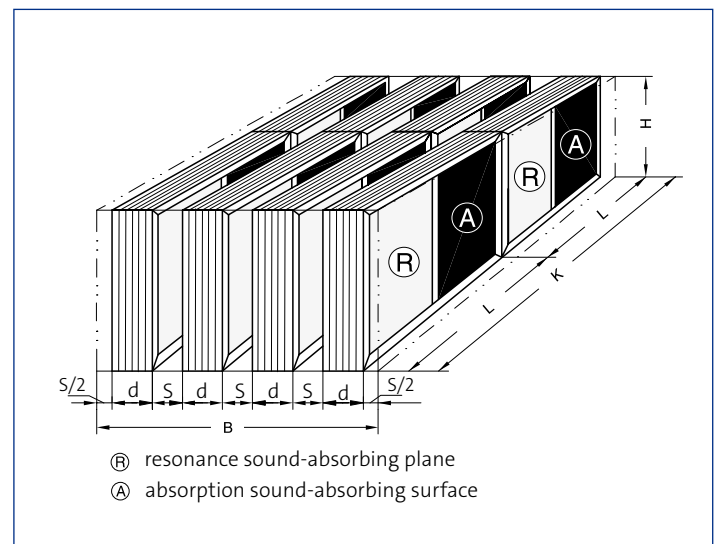
Sound attenuators to a length of 1500 mm can be supplied as one piece.

Greater lengths, up to 3000 mm, are supplied in sections that must be assembled on site.

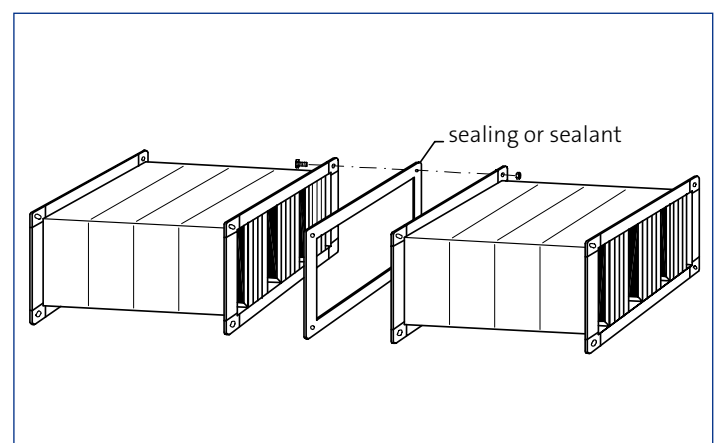
From a height of 1000 mm and a length of 750 mm, the sides of the attenuators have removable reinforcement profiles of approx. 32 mm in height. The duct length K must equal at least the sum of the individual baffles.

Only baffles of the same length L may be fitted alongside and above each other.

Baffle height H and baffle length L may not be interchanged.



The air flow must flow in the direction of the baffle length L through the spacing S. Between the two outer baffles and the duct, the spacing is $s/2$. The width of the spacing must be kept constant over the length L and the height H.



Notes

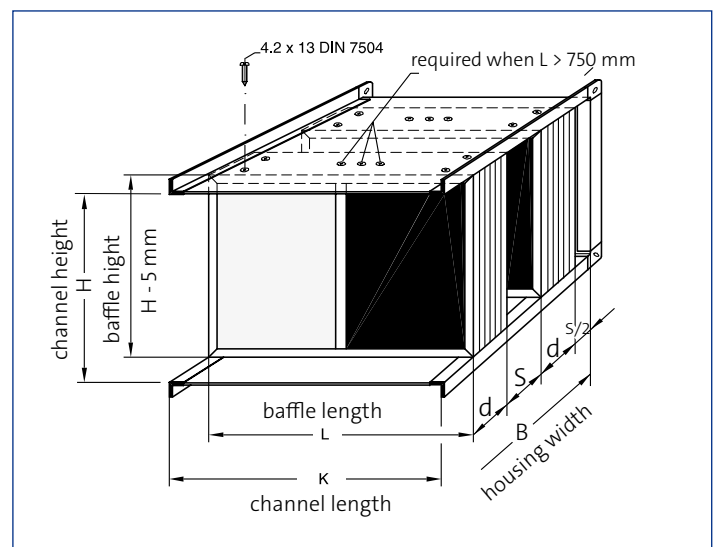
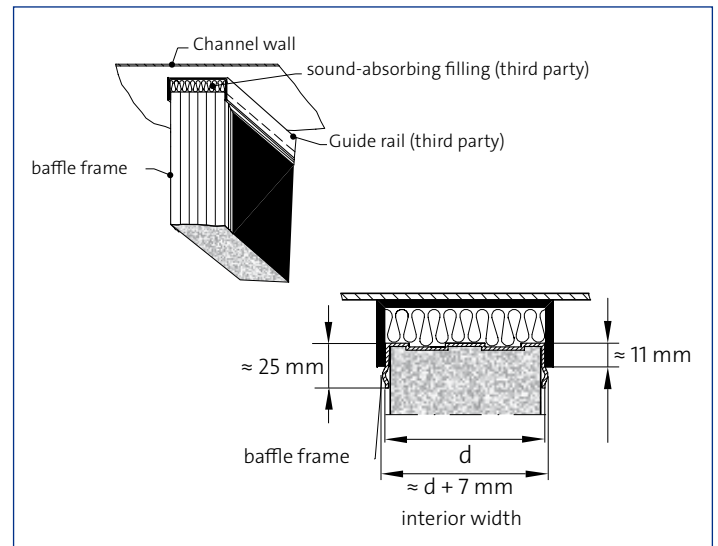
- If the spacing is increased, the attenuation reduces.
- When the spacing reduces, the pressure loss and the flow noise increase. To compensate the duct-wall thickness, the actual baffle height is 5 mm smaller than the nominal height H.
- When several baffles are fitted on top of each other, the baffle height must be ordered taking this correction into account.
- The nominal height H of the baffles is the order size.

Fitting loose baffles in existing air ducts

Baffles can be fitted in a duct with an internal height that equals the nominal baffle height.

When several baffles are fitted on top of each other, the additional baffles must be ordered at a 5 mm greater height H to prevent too great an increase in the free space between the ducts. Remaining free space between the baffle frames and the duct are sealed with an sound attenuating filling.

Loose baffles can be fitted with drilling screws in steel-sheet ducts. Fit the baffles tight and vibration-free. If necessary, seal the screws.



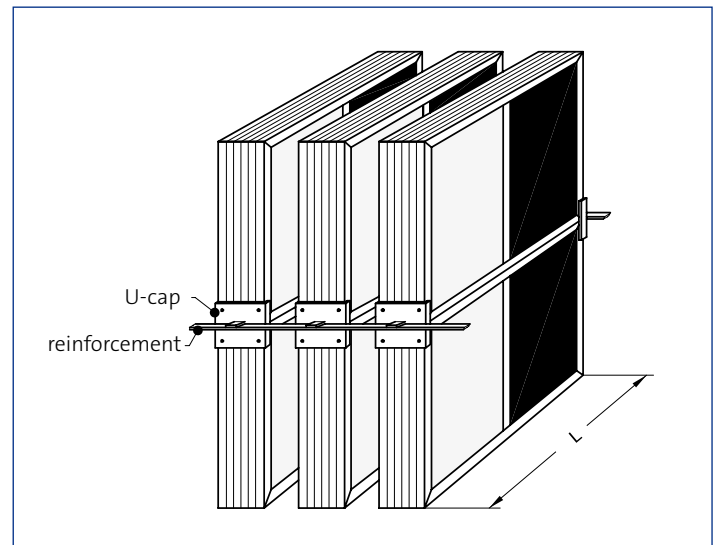
Fitting loose baffles in existing air ducts (continued)

Combine on top of each other:

Loose baffles can be fitted on top of each other up to a total height of approx. 5390 mm.

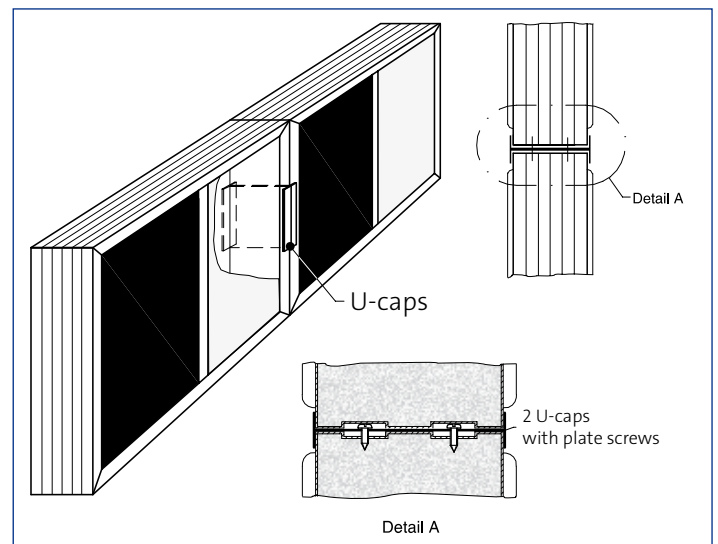
They are connected with U profile connectors.

To keep the spacing S constant at greater heights, the U profile connectors are connected together with a strip.



Combine behind each other:

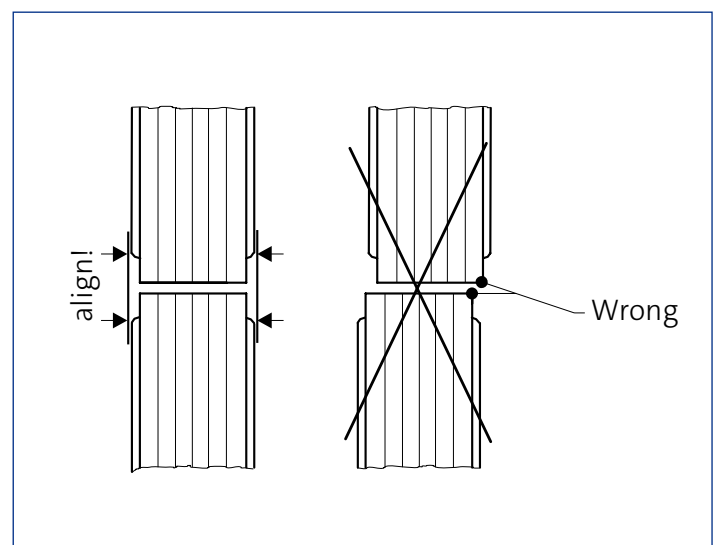
Loose baffles can be fitted behind each other up to a total length of 3000 mm.



Alignment:

Always align the baffles carefully!

Avoid zigzag positioning of the baffles.



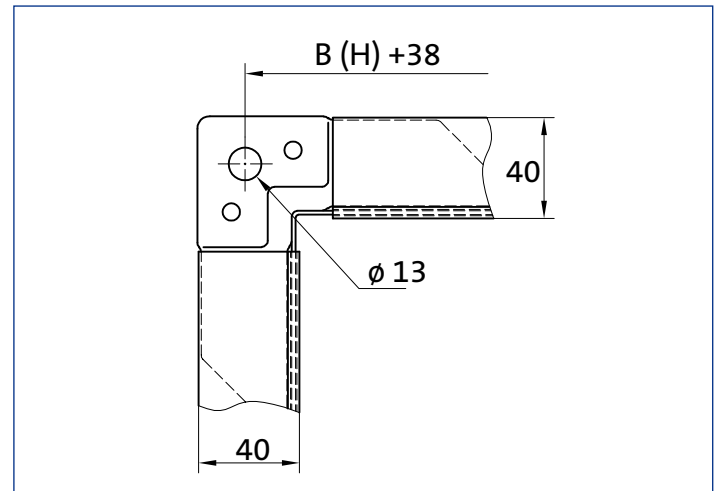
Composite sound attenuators

Frame:

Outer frame profile DW40, fender profiles from steel sheet.
Required bolts and nuts (M8 x 20) supplied by third parties.

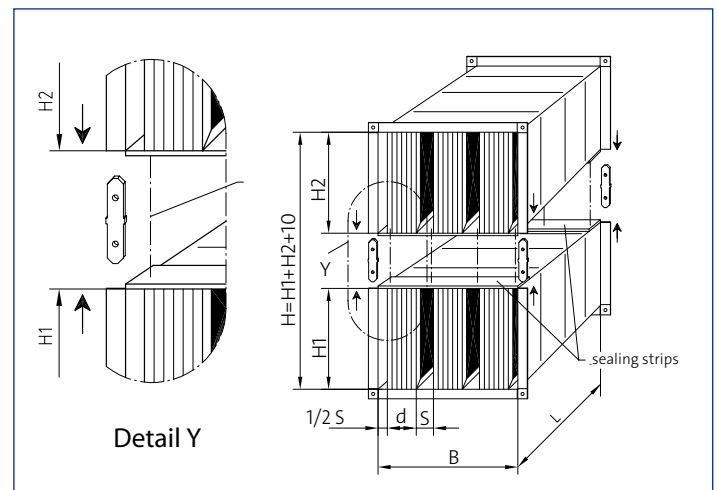
NB:

Both types of housing require the same length L.
In both types of housing, the baffle thickness d and the spacing S must be the same.
The frame parts that are connected, do not have a DW profile.



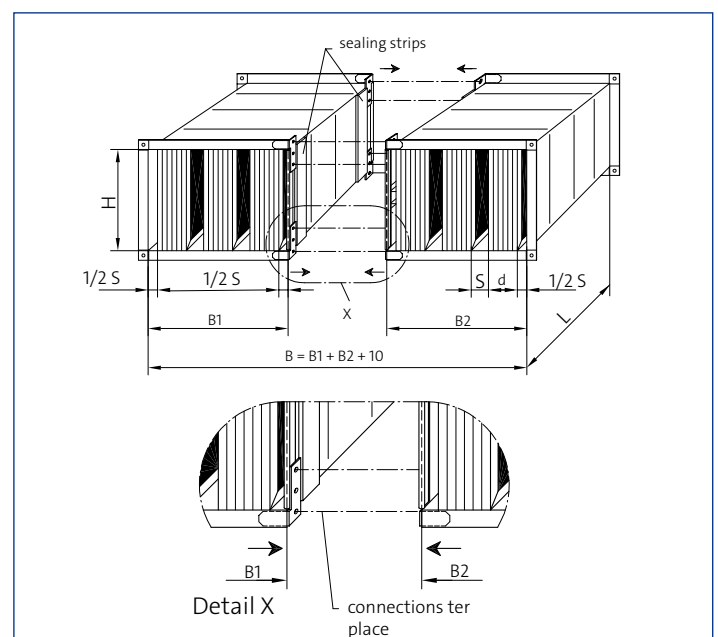
Combine on top of each other:

Both types of housing require the same width B.
The total height H is always 10 mm greater than the sum of both separate heights H1 + H2.
Use connection plates to connect the flange parts together.



Combine next to each other:

Both types of housing require the same height H.
The total width W is always 10 mm greater than the sum of both separate widths W1 + W2.



Composite sound attenuators (continued)

Concrete or brickwork:

Build into ducts of concrete or brickwork with guide rails.

