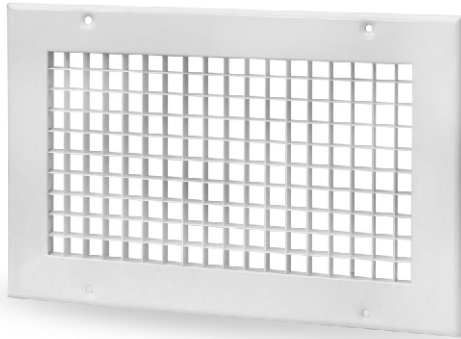


## Egg crate ceiling grilles



# KRS



Egg crate ventilation grilles KRS type are intended to use in air exhaust low- and medium- pressure ventilation systems. Grilles KRS as a cover of air exhaust openings, are characterized by low air flow resistance rate and big effective area.

◀ **Egg crate grille KRS**  
with aluminum egg crate panel

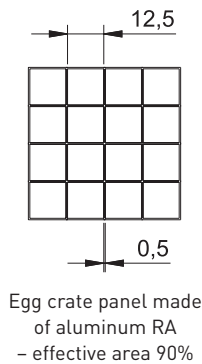
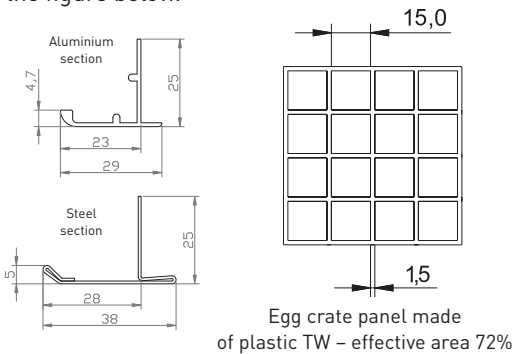
# Egg crate ceiling grilles KRS

## Material and finish

Grilles KRS have frames made of aluminium or steel. The egg crate panel is made of aluminum or plastic. In case of non-anodized aluminum or steel (except the plastic egg crate panel-TW), the whole is powder coated to white RAL color. Coating to other RAL color is possible on request (not applicable for plastic egg crate panel – TW).

## Design

Frame sections and egg crate panels are shown in the figure below.



## Installation

Grilles may be installed to a compartment with use of:

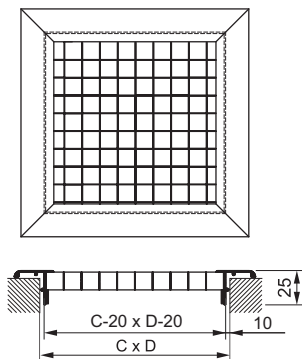
- Screws, through the openings in the grille frame
- clips, invisible from the outside + installation frame or plenum box

**NOTE:** In case of installation in the ceiling it is recommended using of screws through the openings in the grille frame.

## Dimensions and effective areas

Maximum dimensions of the grilles:

- CxD = 1225x625 mm (with egg crate panel RA)
- CxD = 610x610 (with egg crate panel TW)



Where:

- C - width of the installation opening in [mm]
- D - height of the installation opening in [mm]
- $A_{eff}$  - effective area in  $m^2$

**Attention:** In case installation by screws through the openings in the grille frame, plenum box will have dimensions C-6mm, D-6mm. The grille dimensions will not be changed.  
In case ordering same plenum boxes for grilles installation by screws through the openings in the grille frame, specify the dimensions C-6mm, D-6mm.

C	D	Egg crate panel RA
mm	mm	m2
75	125	0,0036
125	125	0,0078
225	125	0,0162
325	125	0,0245
425	125	0,0329
625	125	0,0496
825	125	0,0664
1025	125	0,0831
1225	125	0,0999
75	225	0,0075
125	225	0,0162
225	225	0,0335
325	225	0,0509
425	225	0,0683
625	225	0,1030
825	225	0,1377
1025	225	0,1725
1225	225	0,2072
75	325	0,0113
125	325	0,0245
225	325	0,0509
325	325	0,0773
425	325	0,1036
625	325	0,1564
825	325	0,2091
1025	325	0,2619
1225	325	0,3146
75	425	0,0152
125	425	0,0329
225	425	0,0683
325	425	0,1036
425	425	0,1390
625	425	0,2097
825	425	0,2805
1025	425	0,3512
1225	425	0,4220
75	625	0,0229
125	625	0,0496
225	625	0,1030
325	625	0,1564
425	625	0,2097
625	625	0,3165
825	625	0,4232
1025	625	0,5300
1225	625	0,6367

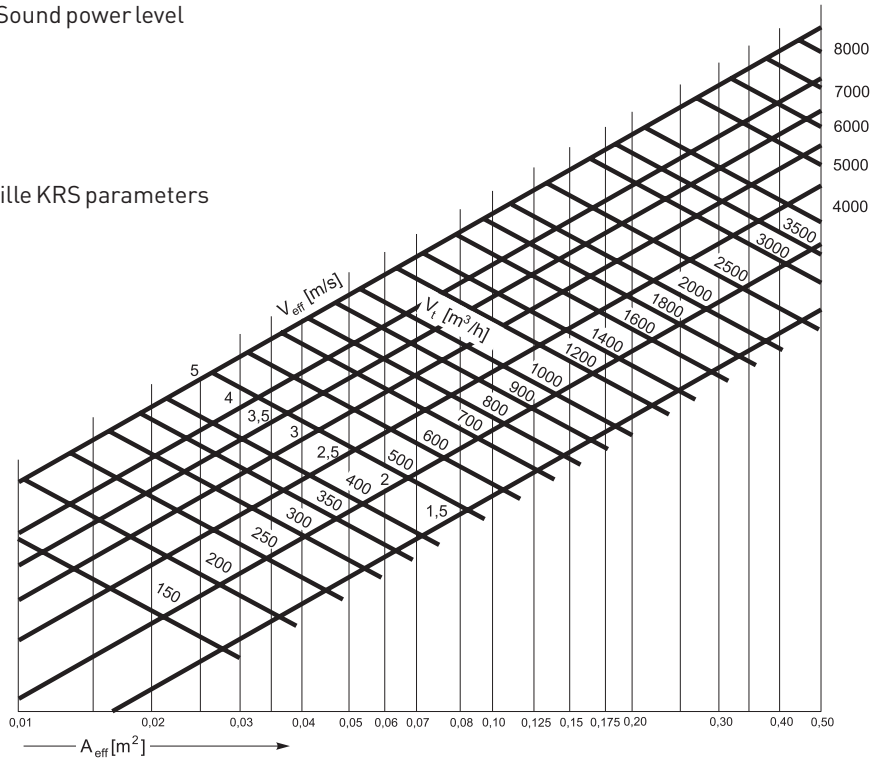
C	D	Egg crate panel TW
mm	mm	m2
200	200	0,0203
225	200	0,0233
325	200	0,0354
425	200	0,0475
610	200	0,0699
200	225	0,0233
225	225	0,0268
325	225	0,0407
425	225	0,0546
610	225	0,0803
200	325	0,0354
225	325	0,0407
325	325	0,0618
425	325	0,0829
610	325	0,1219
200	425	0,0475
225	425	0,0546
325	425	0,0829
425	425	0,1112
610	425	0,1636
200	610	0,0699
225	610	0,0803
325	610	0,1219
425	610	0,1636
610	610	0,2405

# Selection of grilles KRS

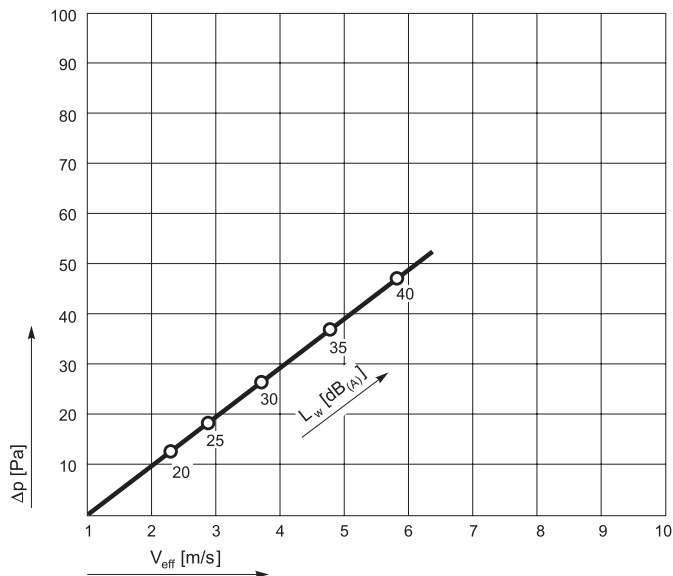


- $V_t$  [m<sup>3</sup>/h] Volumetric air flow
- $V_{eff}$  [m/s] Effective air flow velocity
- $A_{eff}$  [m<sup>2</sup>] Effective area of a grille
- $\Delta p$  [Pa] Local pressure drop
- $L_w$  [dB<sub>(A)</sub>] Sound power level

**Nomograph I**  
Selection of the grille KRS parameters



**Nomograph II**  
The effect of velocity  $V_{eff}$  on pressure drop  $\Delta p$  and sound power level.



## Accessories and order code



While ordering please provide information according to the following method:

**KRS - <C>x<D> - <M> - <P><RAL><K> / <ADD>**

Where:

- <C> - width of the installation opening in [mm]
- <D> - length of the installation opening in [mm]
- <M> - installation method\*:
  - none= installation with use of screws**
  - Z=invisible clip
- <P> - finish:\*
  - AA- anodized aluminum frame, aluminum egg crate panel
  - AL- powder coated aluminum frame and egg crate panel
  - SP- steel powder coated frame, white plastic egg crate panel**
- <RAL> - RAL color (for AL or SP finish)\*
- <K> - egg crate panel color\*\*\*
  - None – egg crate panel is the same color as the color of the frame – for RAL 9010 color
  - R - egg crate panel is the same color as the color of the frame
  - for color different than RAL 9010
- <ADD> - Please specify additional accessories here according to the list below:

Accessories\*\*

- <GA> - Opposed blade damper made of aluminum
- <GS> - Parallel blade damper made of galvanized steel
- <RM> - Installation frame
- <RM+F> - Installation frame with filter

Plenum box according to the specification below:

- <SR><I>-<H>-<K><D><R>
- <I> Insulation:
  - None= no insulation
  - T= insulated
- <H> - Height of the plenum box in mm\*
- <K> - Location of the connection fitting
  - b = side
  - g = top
- <D> - diameter of the connection fitting in mm\*
- <R> - damper in the connection fitting:
  - none= no damper
  - P= damper with adjustment outside the plenum box

\* optional values - default values will be used if optional values are not specified

\*\* more information about accessories in "accessories for grilles and diffusers"

\*\*\* only for AL finish – powder coated aluminum

Order example:

**KRS – 425x425 – Z – AL9010 / SR – 380 – b250P**