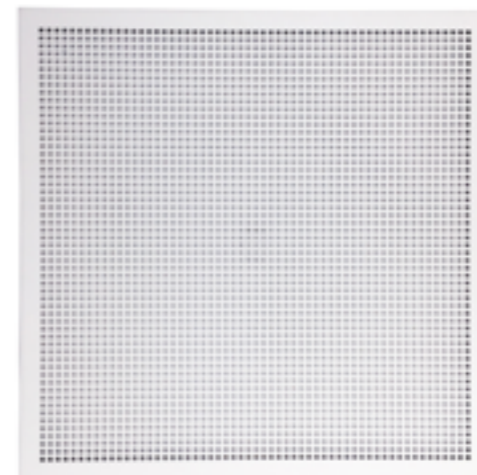


**2/S8**  
v 3.3 (en)

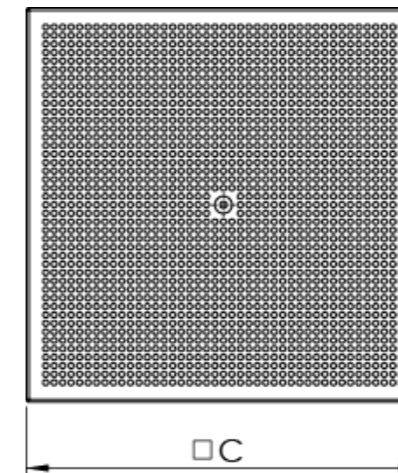
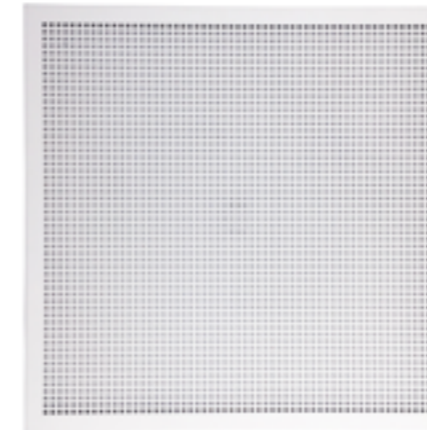
# PERFORATED DIFFUSER

ANP



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**ANP**

- Ceiling diffuser for room heights from 2,5 to 4m.
- Made out of steel sheet, standard RAL 9010
- Fixing with central screw

Options

- RAL...
- Plenum box

Diffuser dimensions

Size	øC [mm]	ANP	
		Outlet area	
		Free A <sub>s</sub> [m <sup>2</sup> ]	Effective A <sub>ef</sub> [m <sup>2</sup> ]
300	298	0,01834	0,01687
400	398	0,03746	0,03448
500	498	0,06057	0,05572
600	595	0,09253	0,08512
625	623	0,10128	0,09318

Perforated diffuser **ANP - 500 - A - H - ød - Z**

Size

**A** - supply air  
**B** - exhaust air  
**H** - horizontal connection  
**V** - vertical connection

Connection diameter

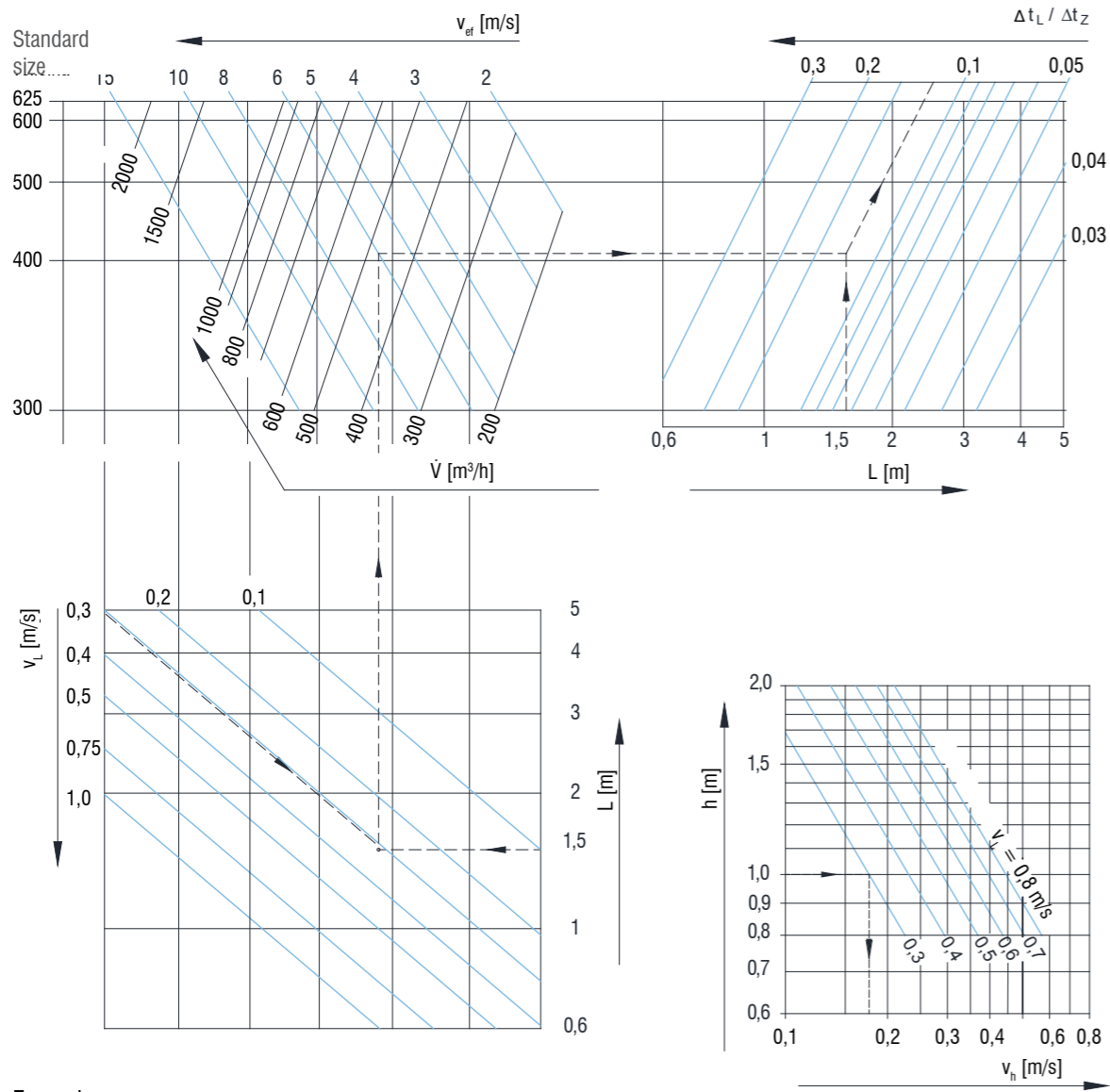
Insulation

\*Screws are delivered only for central screw version  
 \*\*\*Only plenum box UPK1

Definition of symbols:

V [m <sup>3</sup> /h]	- Air flow	t <sub>z</sub> [°C]	- Supply air temperature
x [m]	- Distance from wall	t <sub>p</sub> [°C]	- Air temperature in a room
A, B [m]	- Distance between diffusers	t <sub>m</sub> [°C]	- Core air temperature
C, X [m]	- Distance between diffusers and walls	Δt <sub>z</sub> [K]	- (t <sub>z</sub> - t <sub>p</sub> )
L [m]	- Throw distance L = x + h	Δt <sub>m</sub> [K]	- (t <sub>m</sub> - t <sub>p</sub> )
v <sub>L</sub> [m/s]	- Average core velocity at distance from a diffuser	Δp <sub>t</sub> [Pa]	- Total pressure drop
h [m]	- Distance from the ceiling to the occupied zone	L <sub>WA</sub> [dB(A)]	- Sound power level
v <sub>h</sub> [m/s]	- Average core velocity between two diffusers at distance h [m]		
H [m]	- Room height		

SELECTION DIAGRAM



Example:

**Given:** ANP  
 $\dot{V} = 480$  m³/h  
 $H = 2,8$  m  
 $L = 1,5$  m  
 $v_L = 0,3$  m/s  
 $\Delta t_z = 5^\circ\text{C}$   
 The room has normal acoustic characteristics

**Solution:** ANP  
 $v_{eff} = 6$  m/s  
 Temperature ratio  
 $\Delta t_L / \Delta t_z = 0,12$   
 Temperature difference  
 $\Delta t_L = 0,125 \cdot 5 = 0,6^\circ\text{C}$   
 $v_h = 0,17$  m/s

DISCHARGE DIAGRAM

