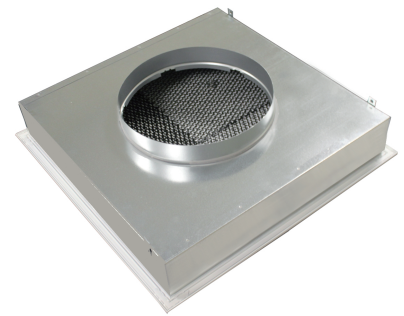


**PS/PPTMB  
(RAL9016)**

- Perforated diffusers
- Square
- Steel
- White, RAL 9016



## Perforated diffusers for system ceilings type PS/PPTMB (RAL9016)

Air supply diffusers with adjustable 1- to 4-way pattern perforated plate for mounting in 600 x 600 mm system ceilings.

### Brand

- Cairox

### Application

- For air supply in ventilation and air conditioning systems

### Material

- Frame: aluminium
- Inner part: steel

### Colour

- Standard colour white, RAL 9016
- Other colours available upon request

### Composition

- Perforated front plate in white finish RAL 9016 with incorporated plenum box
- Perforated inner part to be opened easily by push-push system

### Text for tender

- The square air supply system ceiling diffusers are of the multidirectional type with a perforated front plate and an incorporated plenum box. They are made of aluminium and steel with white powdercoating finish RAL 9016.
- **Cairox** type **PS/PPTMB**

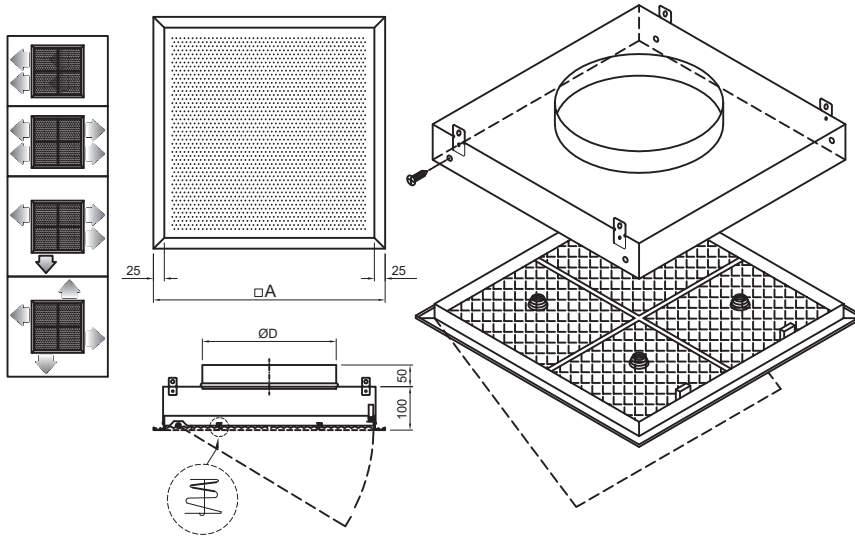
### Order example

- **PS/PPTMB, 200**

Explanation

**PS/PPTMB** = Diffuser type

**200** = Diffuser size (connection diameter)



PS/PPTMB		Dimensions		
		A [mm]		ØN [mm]
160		595x595		160
200		595x595		200
250		595x595		250
315		595x595		315

PS/PPTMB			Quick selection												
Q	PS/PPTMB		600/160			600/200			600/250			600/315			
	Ak	B	1.2	2.4	3.6	1.2	2.4	3.6	1.2	2.4	3.6	1.2	2.4	3.6	
150	Vz	H= 2.7	0.44	0.15	0.09										
		H= 3.2	0.17	0.1	0.07										
		H= 3.8	0.1	0.07	0.05										
	Vk		0.3												
	X0.25		1.7												
	Ps		0.4												
200	Vz	H= 2.7	0.59	0.2	0.12										
		H= 3.2	0.22	0.13	0.09										
		H= 3.8	0.13	0.09	0.07										
	Vk		0.4												
	X0.25		1.9												
	Ps		0.7												
250	Vz	H= 2.7	0.74	0.25	0.15	0.74	0.25	0.15							
		H= 3.2	0.28	0.16	0.11	0.28	0.16	0.11							
		H= 3.8	0.16	0.11	0.09	0.16	0.11	0.09							
	Vk		0.5												
	X0.25		2.1												
	Ps		1.1												
300	Vz	H= 2.7				0.89	0.3	0.18							
		H= 3.2				0.33	0.19	0.13							
		H= 3.8				0.19	0.13	0.1							
	Vk		0.6												
	X0.25		2.3												
	Ps		1.6												
400	Vz	H= 2.7				1.18	0.39	0.24	1.18	0.39	0.24				
		H= 3.2				0.44	0.25	0.18	0.44	0.25	0.18				
		H= 3.8				0.25	0.18	0.14	0.25	0.18	0.14				
	Vk		0.8												
	X0.25		2.6												
	Ps		2.8												
600	Vz	H= 2.7				1.78	0.59	0.36	1.78	0.39	0.24	1.78	0.59	0.36	
		H= 3.2				0.67	0.38	0.27	0.67	0.38	0.27	0.67	0.38	0.27	
		H= 3.8				0.38	0.27	0.21	0.38	0.27	0.21	0.38	0.27	0.21	
	Vk		1.1												
	X0.25		3.3												
	Ps		5.2												
800	Vz	H= 2.7										2.37	0.79	0.47	
		H= 3.2										0.89	0.51	0.36	
		H= 3.8										0.51	0.36	0.27	
	Vk		1.5												
	X0.25		4												
	Ps		9.7												
1000	Vz	H= 2.7										2.96	0.99	0.59	
		H= 3.2										1.11	0.63	0.44	
		H= 3.8										0.63	0.44	0.34	
	Vk		1.9												
	X0.25		4.8												
	Ps		15.6												

**Symbols and specifications**

- Q = Air Volume in m<sup>3</sup>/h
  - Ak = Effective surface (free area) in m<sup>2</sup>
  - B = Distance between diffusers in m
  - H = Installation height of the diffusers in m
  - Vz = Maximum velocity at the occupied zone regarding distance between diffusers and installation height in m/s
  - Vk = Average effective velocity through the grill in m/s
  - X0.25 = Throw length in m at an endvelocity Vt of 0,25m/s
  - Ps = Static pressure loss given in Pa
  - Lw(A) = Acoustic power in dB(A)
- 
- The throw X0.25 is given at an end velocity of 0.25m/s for a smooth ceiling without any obstacles.
  - The table values are given for the adjustable deflection plates set at its standard position to achieve an air flow pattern in 4 direction
  - The values are given for isothermal supply air. Throw distances for cooling conditions at -11K can be calculated by deviding the X0.25 values with factor 1.1. For heating purposes at Dt of +11K a multiplier of 1.1 should be applied to the given X0.25 value.
  - In order to achieve a high comfort level, selections can be made according to the maximal velocity at the occupied zone Vz. These values are given at distances between diffusers B and installation heights H. Velocities Vz lower than, or equal to 0,25m/s at the occupied zone are advised.
  - The pressure losses Ps are given for grilles without damper of with fully opened damper.
  - The acoustic power Lw(A) are given for grilles without damper of with fully opened damper without room attenuation. Acoustic powers below 20dB(A) are mentioned as "<20" in the tables.
  - For all special requirements, please contact our engineering office.

## Placement instruction

