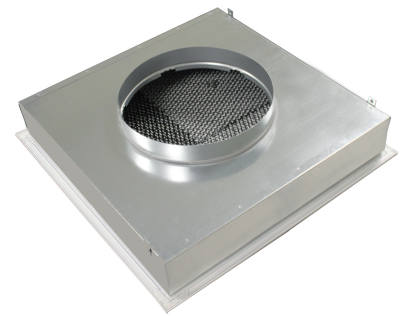


**PPTMB
(RAL9016)**

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



Perforated ceiling diffusers for air supply type PPTMB (RAL9016)

Air supply ceiling diffusers with adjustable 1- to 4-way pattern perforated plate.

Brand

- Cairox

Application

- For air supply in ventilation and air conditioning systems

Material

- Steel

Colour

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

Composition

- Perforated removable front plate with incorporated top entry plenum box
- Perforated innerpart to be opened easily by push-push system

Text for tender

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

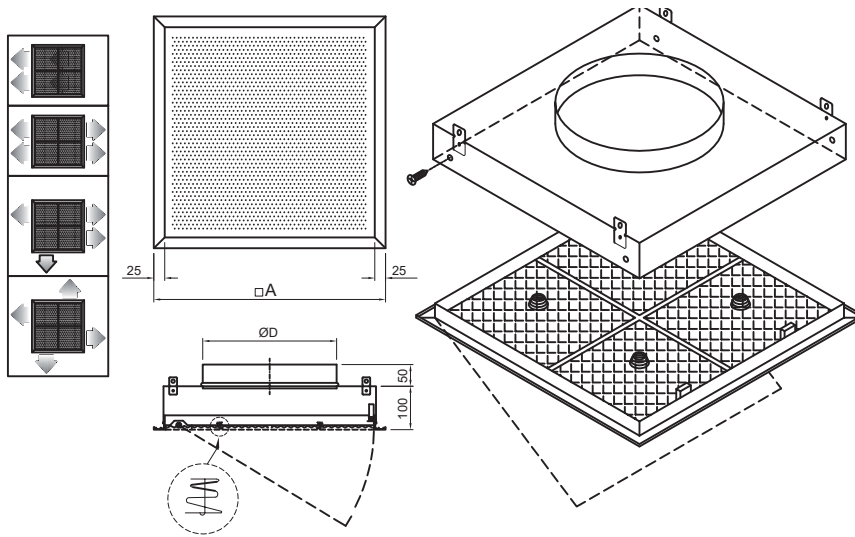
Order example

- **PPTMB, 200**

Explanation

PPTMB = Diffuser type

200 = Diffuser size (connection diameter)



Dimensions		
PPTMB	A [mm]	ØN [mm]
160	300	160
200	400	200
250	500	250

PPTMB		Quick selection									
Q	Ak	300/160			400/200			500/250			
		0.0302			0.0591			0.0976			
	B	1.2	2.4	3.6	1.2	2.4	3.6	1.2	2.4	3.6	
150	Vz	H= 2.7	0.97	0.32	0.19	0.69	0.23	0.14			
		H= 3.2	0.36	0.21	0.15	0.26	0.15	0.1			
		H= 3.8	0.21	0.15	0.11	0.15	0.1	0.08			
	Vk		1.4			0.7					
	X0.25		2.4			2					
	Ps		8			2					
	Lw(A)		25			<20					
200	Vz	H= 2.7	1.29	0.43	0.26	0.92	0.31	0.18	0.73	0.24	0.15
		H= 3.2	0.49	0.28	0.19	0.35	0.2	0.14	0.27	0.16	0.11
		H= 3.8	0.28	0.19	0.15	0.2	0.14	0.11	0.16	0.11	0.08
	Vk		1.8			0.9			0.6		
	X0.25		2.8			2.3			2.1		
	Ps		13			3			1		
	Lw(A)		34			<20			<20		
250	Vz	H= 2.7	1.62	0.54	0.32	1.15	0.38	0.23	0.91	0.3	0.18
		H= 3.2	0.61	0.35	0.24	0.43	0.25	0.17	0.34	0.2	0.14
		H= 3.8	0.35	0.24	0.19	0.25	0.17	0.13	0.2	0.14	0.11
	Vk		2.3			1.2			0.7		
	X0.25		3.1			2.6			2.3		
	Ps		22			6			2		
	Lw(A)		42			22			<20		
300	Vz	H= 2.7				1.38	0.46	0.28	1.09	0.36	0.22
		H= 3.2				0.52	0.3	0.21	0.41	0.23	0.16
		H= 3.8				0.3	0.21	0.16	0.23	0.16	0.13
	Vk					1.4			0.9		
	X0.25					2.9			2.5		
	Ps					8			3		
	Lw(A)					28			<20		
400	Vz	H= 2.7				1.85	0.62	0.37	1.46	0.49	0.29
		H= 3.2				0.69	0.4	0.28	0.55	0.31	0.22
		H= 3.8				0.4	0.28	0.21	0.31	0.22	0.17
	Vk					1.9			1.1		
	X0.25					3.4			3		
	Ps					15			5		
	Lw(A)					38			23		
600	Vz	H= 2.7							2.19	0.73	0.44
		H= 3.2							0.82	0.47	0.33
		H= 3.8							0.47	0.33	0.25
	Vk								1.7		
	X0.25								3.8		
	Ps								12		
	Lw(A)								36		
800	Vz	H= 2.7							2.92	0.97	0.58
		H= 3.2							1.09	0.63	0.44
		H= 3.8							0.63	0.44	0.34
	Vk								2.3		
	X0.25								4.7		
	Ps								22		
	Lw(A)								46		

Symbols and specifications

- Q = Air Volume in m³/h
- Ak = Effective surface (free area) in m²
- 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

- V_k = Average effective velocity through the grill in m/s
- $X_{0.25}$ = Throw length in m at an endvelocity V_t of 0,25m/s
- P_s = Static pressure loss given in Pa
- $L_w(A)$ = Acoustic power in dB(A)
- The throw $X_{0.25}$ 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 $X_{0.25}$ values with factor 1.1. For heating purposes at Dt of +11K a multiplier of 1.1 should be applied to the given $X_{0.25}$ value.
- In order to achieve a high comfort level, selections can be made according to the maximal velocity at the occupied zone V_z . These values are given at distances between diffusers B and installation heights H . Velocities V_z lower than, or equal to 0,25m/s at the occupied zone are advised.
- The pressure losses P_s are given for grilles without damper or with fully opened damper.
- The acoustic power $L_w(A)$ are given for grilles without damper or 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

