Oyster Diffusers
OD

DESCRIPTION:

The Oyster Diffuser produces a high induction radial swirl pattern which promotes rapid temperature equalization and is suitable for VAV applications where high turndown is present. This product can be installed in standard 24 in. x 24 in - 595x595mm. lay-in ceiling grids or surface mounted using a plaster frame.

MATERIAL :

- Sheet metal
- Aluminum (optional)

FUNCTION :

Decorative swirl diffusers are used in areas with 2.6- 4 meter height spaces. By the help of structure and design, vortex motion occurs around an axis and this provides an effective air distribution.

FINISHING :

- Powder coated in RAL9010 colour as standard. Other colours on request

INSTALLATION :

- Screw
- Mounting Frame

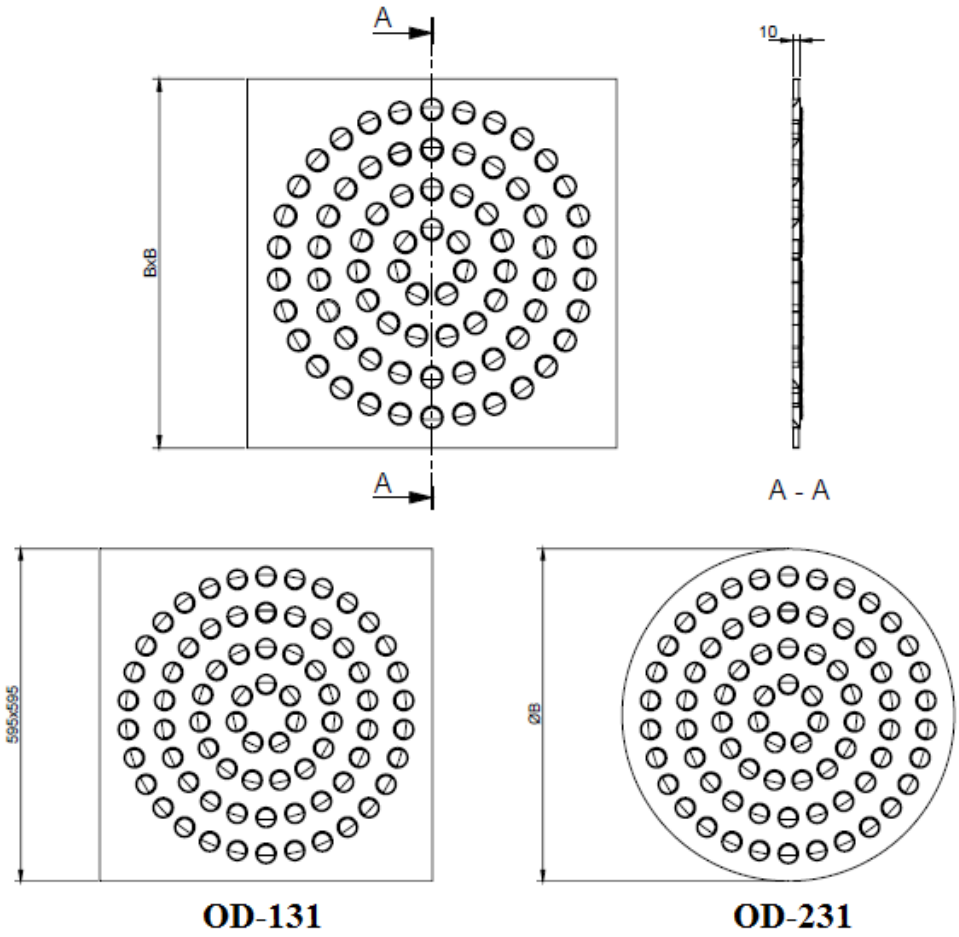
ACCESSORIES:

- Damper
- Plenum Box

STANDARD SIZES (mm):

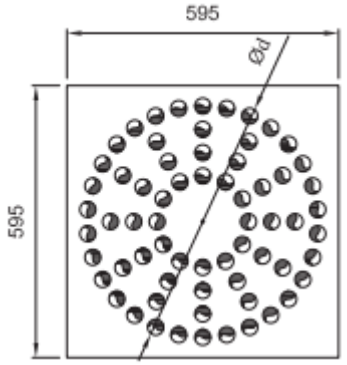
TYPE OD - AVAILABLE SIZES (mm)		
FRAME SIZE		
400x400	500x500	600x600
X	X	X
Ø400	Ø500	Ø600
X	X	X

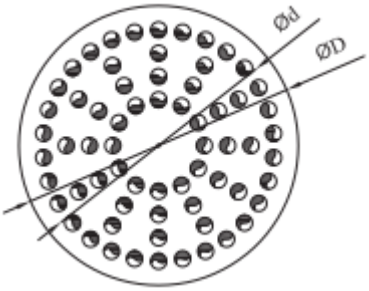
DIMENSIONS:

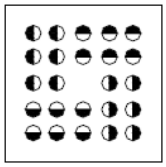
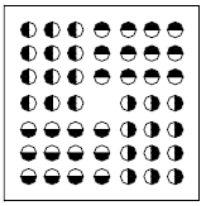
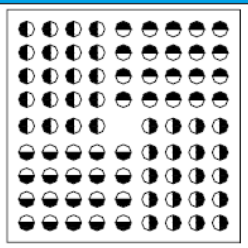
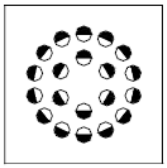
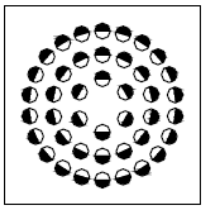
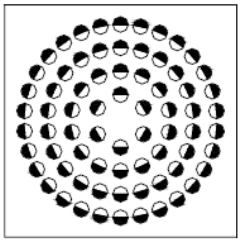


OD-131 **OD-231**

NOZZLE CONFIGURATION EXAMPLES





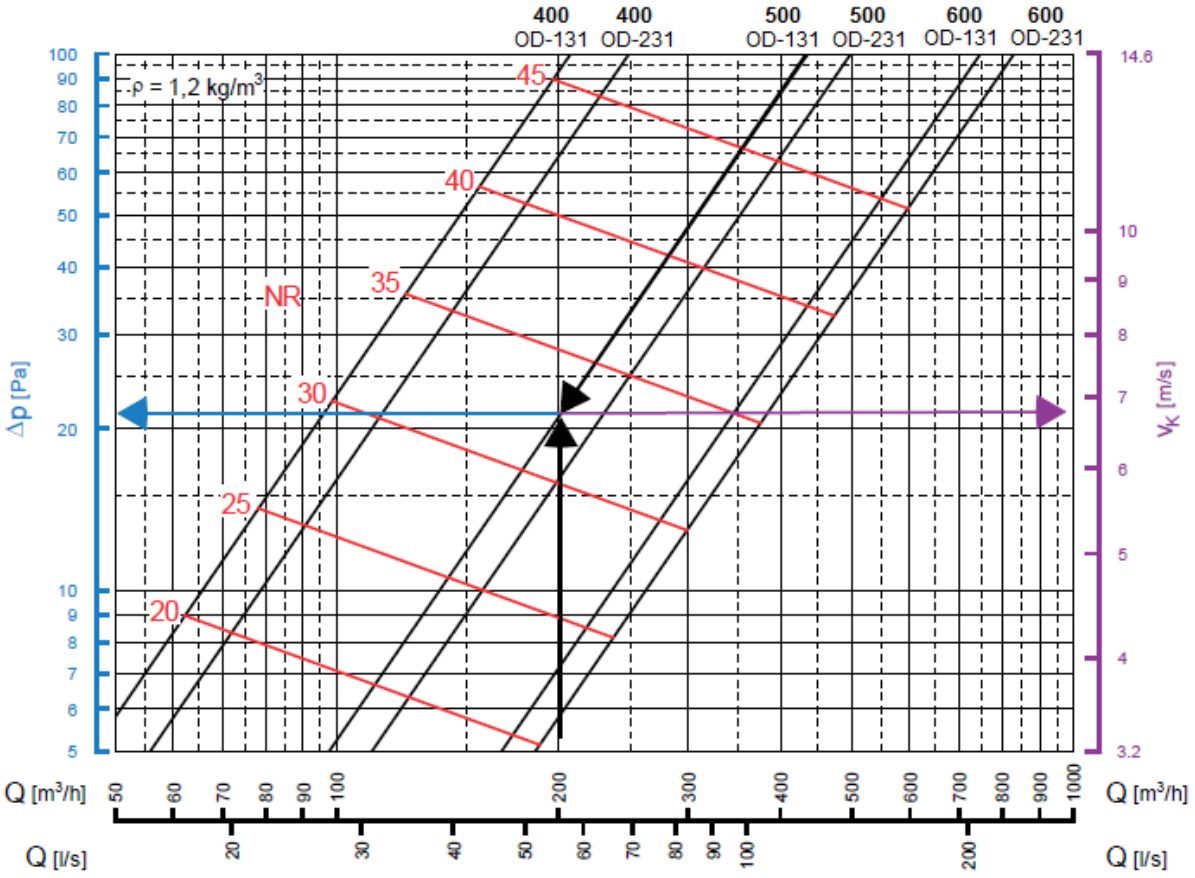
OD-131 / 400	OD-131 / 500	OD-131 / 600
		
OD-231 / Ø400	**OD-231 / Ø500**	**OD-231 / Ø600**
		

SELECTION TABLE

EFFECTIVE AREA TABLE (m2)

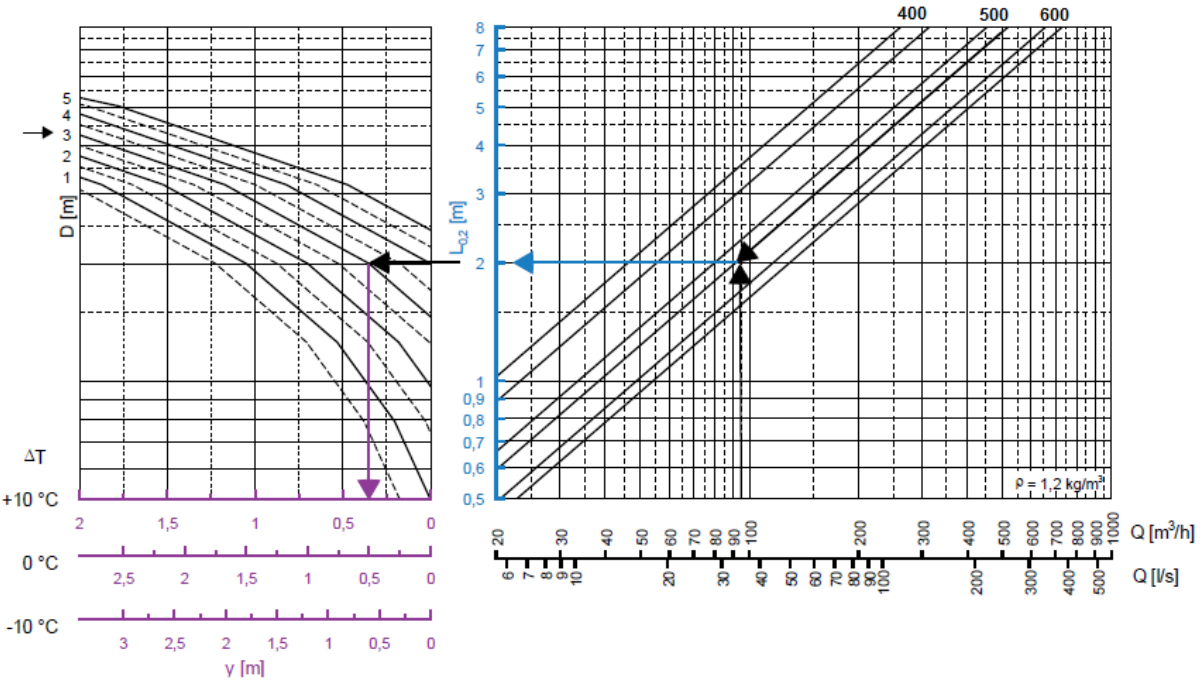
BxB (mm)	S (m²)		Weight / Ağırlık (kg)	#Nozzles / #Nozüller	
	OD-131	OD-231		OD-131	OD-231
400x400	0,0042	0,0336	1,6	24	20
500x500	0,0106	0,0434	2,6	48	42
600x600	0,0212	0,0545	3,1	80	72

PRESSURE LOSS AND NOISE LEVELS



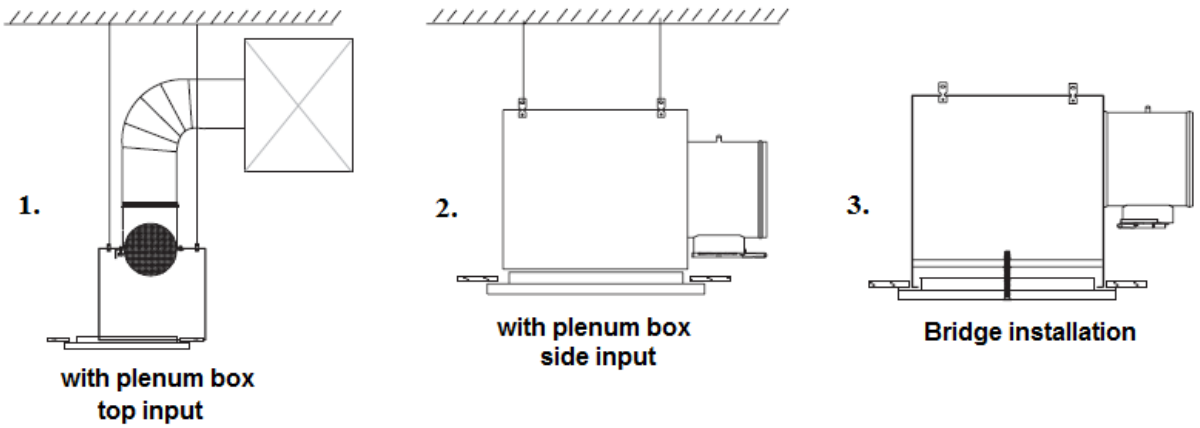
Q [m³/h]	supply air flow rate
v_k [m/s]	outlet velocity from the diffuser
Δp [Pa]	total pressure loss
NR	noise rating (ISO standard, in relation to 10^{-12} W) taking no account of the attenuation of the room

THROW DISTANCES



Q [m³/h] or [l/s]	supply air flow rate
v_m [m/s]	average velocity of the throw at distance L
L [m]	diffusion radius (= x + y)
x [m]	horizontal dimension of the throw
y [m]	vertical dimension of the throw
$L_{0,2}$ [m]	diffusion radius with terminal velocity 0.2 m/s
D [m]	distance between two diffusers
ΔT [°C]	difference between supply air temperature and ambient temperature

INSTALLATION:



with plenum box top input

with plenum box side input

Bridge installation

ORDER CODES

OD-131	00	RAL9010	SM	F 400x400mm
OD-131: Square Plated OD-231: Circular Plated	000: Without Damper PBD: plenum box with damper	00: No coating EX: Eloxal Coating RAL----: Powder Coating	00: No Mounting SM: Screw Mounting BM: Bridge Mounting	N: Neck Size F: Frame Size