ERGOVENT

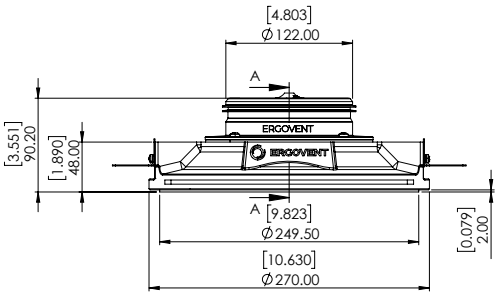
RONDO-COANDA 125

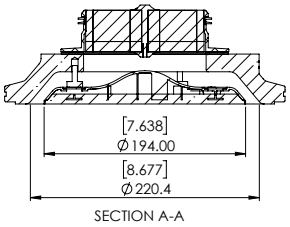
Hidden ventilation diffusers for ceilings and walls

The gypsum cover "armor" is a patented solution that protects against damage.

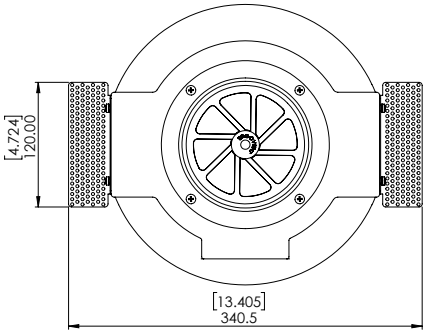
125mm connection / with damper

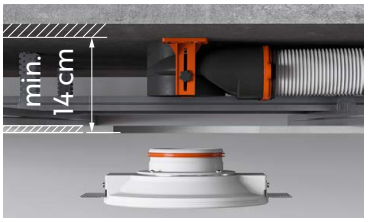
Round-shaped diffuser is a recessed ventilation diffuser designed to deliver air along the ceiling surface using the ***COANDA effect*** that ideal for modern interiors where airflow comfort and discretion are key. Ideally suited for spaces where people are often directly beneath the diffuser—air movement is virtually imperceptible while the room's microclimate remains balanced. High-quality gypsum body: robust, bubble-free casting with integrated mounting elements. Smooth, paint-ready surface finish.





SECTION A-A





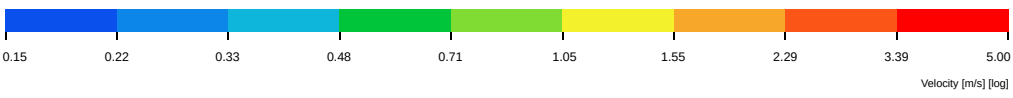
Minimum installation height: 140 mm ≈ 5,51"

A fiberglass liner is included with the product

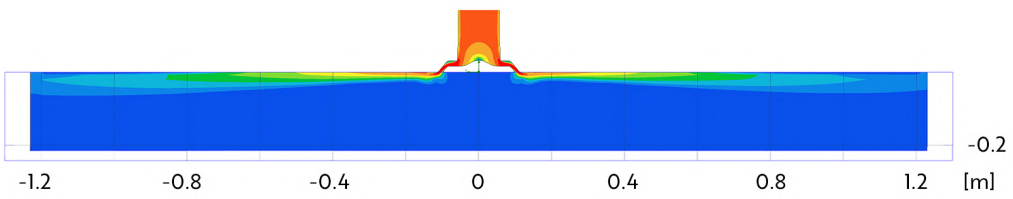
Easy and fast installation

Airflow damper is included with the product

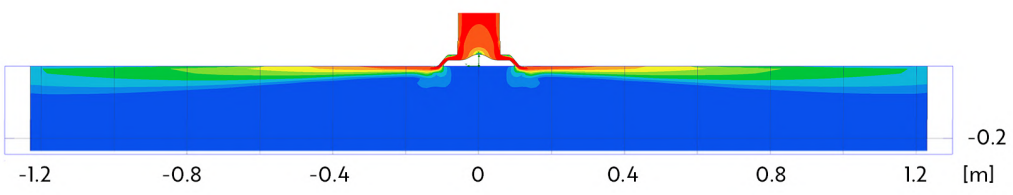
THROW DISTANCE



85 m³/h



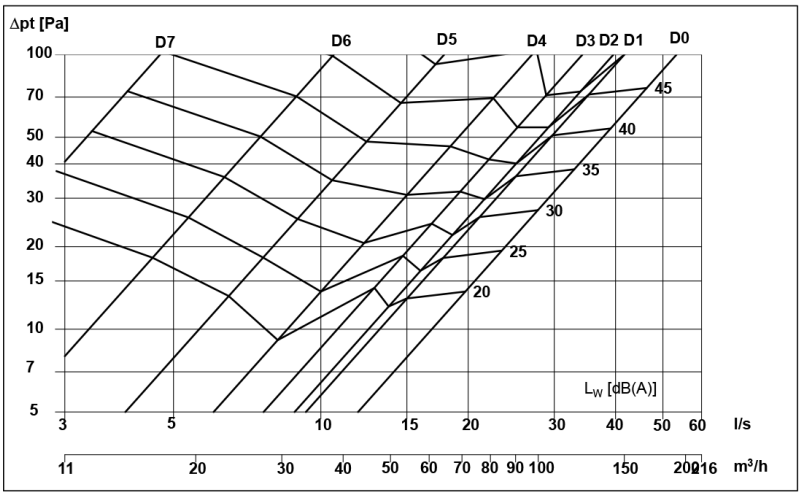
120 m³/h



FLOW NOISE (in accordance with ISO 3741) and PRESSURE DROP test report

SUPPLY

Diagram for pressure and flow noise:



$$L_{Woct}\ [dB] = L_{WA} + K_{oct}$$

q [l/s]	Dp_t [Pa]	L_{WA} [dBA]			63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
-	-	33		K_{oct}	-6	0	-1	-4	-4	-7	-17	-22

Octave correction factors to the diagram are calculated at the listed value of either q, Δp_t or L_{WA}/L_{pA}

Calculation of pressure and sound effect according to flow:

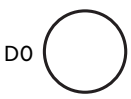
Sound effect: $L_{W(oct\ or\ A)} = k \cdot \log(q) + L_0$

Total pressuredrop: $\Delta p_t = c_{pt} \cdot q^2$

Balancing: $q = K_{factor} \cdot \sqrt{p_i}$

L_W - sound effect [dB]
k - factor, sound effect [-]
L_0 - addend, sound effect [-]
Δp_t - total pressuredrop [Pa]
c_{pt} - factor, total pressuredrop [Pa·s²/l²]
q - flow [l/s]
K_{factor} - factor, balancing [l/(s·√Pa)]
p_i - pressuredifference, balancing [Pa]

	Total p c_{ptot}	Balancing K-factor		LwA	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
D0	0.0352	Not measured	**k**	67.3	50.8	48.9	70.9	73.4	65.9	59.9	69.4	69.9
			Lo	-67.2	-42.6	-32.8	-68.4	-79.2	-75.0	-65.4	-88.2	-92.8
D1	0.0576	Not measured	**k**	67.2	72.5	37.7	51.8	64.6	63.7	78.1	81.4	82.9
			Lo	-59.0	-78.1	-16.4	-37.5	-57.7	-59.7	-81.5	-94.5	-104.4
D2	0.0639	Not measured	**k**	76.6	86.8	58.3	52.4	67.0	78.3	82.0	90.2	90.6
			Lo	-67.2	-93.4	-43.3	-36.8	-59.2	-73.5	-80.3	-104.0	-110.8
D3	0.0855	Not measured	**k**	85.5	86.1	32.1	58.9	77.6	87.0	99.1	87.2	88.4
			Lo	-74.8	-83.4	-6.6	-42.9	-70.4	-79.4	-100.8	-95.7	-102.0
D4	0.1371	Not measured	**k**	56.7	58.4	43.3	51.4	57.0	56.8	56.7	74.6	74.9
			Lo	-31.7	-38.8	-19.8	-31.4	-39.9	-34.8	-37.3	-72.5	-76.7
D5	0.3139	Not measured	**k**	71.1	63.4	40.2	75.5	63.1	70.2	76.3	71.8	72.4
			Lo	-37.7	-36.3	-5.1	-43.2	-34.0	-40.0	-51.4	-56.0	-62.0
D6	0.8871	Not measured	**k**	68.0	24.5	24.0	61.2	65.9	63.7	78.4	73.4	75.9
			Lo	-24.6	10.9	13.2	-18.8	-25.9	-26.1	-40.7	-44.3	-51.1
D7	4.5308	Not measured	**k**	69.0	101.4	39.7	47.6	59.2	80.1	61.3	67.9	68.5
			Lo	-6.7	-34.5	0.2	-1.0	-6.4	-17.1	-8.4	-18.2	-23.9


D0 no damper


D1 1 segment


D2 2 segments


D3 3 segments


D4 4 segments / full open


D5 4 segments / 75% open

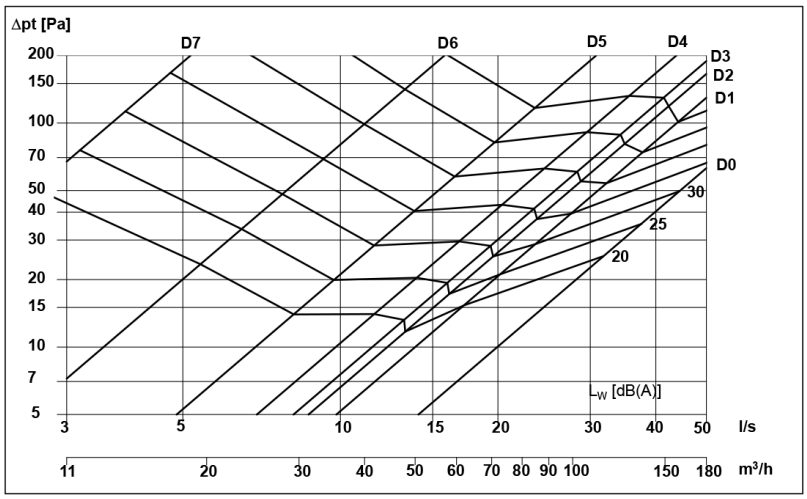

D6 4 segments / 50% open


D7 4 segments / 25% open

FLOW NOISE (in accordance with ISO 3741) and PRESSURE DROP test report

EXTRACT

Diagram for pressure and flow noise:



$$L_{Woct}\,[dB] = L_{WA} + K_{oct}$$

q [l/s]	Dp_t [Pa]	L_{WA} [dBA]			63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
-	-	33		K_{oct}	0	-1	-3	-3	-5	-6	-13	-21

Octave correction factors to the diagram are calculated at the listed value of either q, Δp_t or L_{WA}/L_{pA}

Calculation of pressure and sound effect according to flow:

Sound effect: $L_{W(oct\ or\ A)} = k \cdot \log(q) + L_0$

Total pressuredrop: $\Delta p_t = c_{pt} \cdot q^2$

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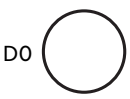
q - flow [l/s]
K_{factor} - factor, balancing [l/(s·√Pa)]
p_i - pressuredifference, balancing [Pa]

	Total p c_{ptot}	Balancing K-factor		LwA	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
D0	0.0252	Not measured	**k**	69.2	42.8	45.1	84.0	46.2	57.7	87.6	84.0	84.2
			Lo	-83.9	-35.8	-39.2	-113.1	-49.7	-69.5	-121.2	-122.1	-128.4
D1	0.0518	Not measured	**k**	73.4	26.5	53.8	52.7	48.2	67.7	83.5	84.8	85.4
			Lo	-70.7	-5.3	-44.6	-45.1	-38.8	-68.5	-90.1	-100.0	-109.1
D2	0.0662	Not measured	**k**	59.7	20.7	23.5	35.6	42.9	59.0	69.0	77.7	77.7
			Lo	-47.1	6.6	1.6	-17.0	-27.3	-51.5	-66.0	-84.5	-92.7
D3	0.0755	Not measured	**k**	60.5	56.9	56.0	61.3	49.6	62.9	61.9	71.2	72.2
			Lo	-47.9	-44.9	-41.1	-51.6	-36.3	-57.6	-55.4	-75.0	-84.9
D4	0.1042	Not measured	**k**	61.6	46.0	56.3	56.1	53.3	59.2	67.0	77.4	78.7
			Lo	-45.5	-30.1	-39.3	-39.8	-37.6	-48.1	-58.9	-80.1	-89.5
D5	0.2111	Not measured	**k**	65.1	85.0	46.8	58.0	58.1	60.4	73.9	88.8	89.9
			Lo	-39.3	-65.9	-19.8	-33.2	-33.8	-38.3	-57.0	-80.6	-89.0
D6	0.8025	Not measured	**k**	64.0	32.0	51.8	41.2	58.3	71.2	65.3	84.5	85.1
			Lo	-26.9	2.8	-18.1	-6.4	-24.1	-39.3	-35.1	-59.8	-67.9
D7	7.4766	17.2	**k**	57.9	40.3	40.6	56.0	39.5	50.1	73.3	68.2	69.3
			Lo	-4.1	11.2	-1.7	-11.0	3.1	-3.1	-20.3	-23.1	-28.8


D0 no damper


D1 1 segment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D4 4 segments / full open


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