

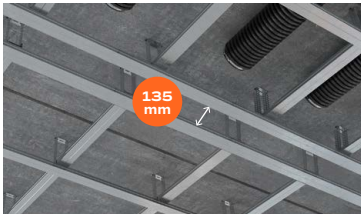
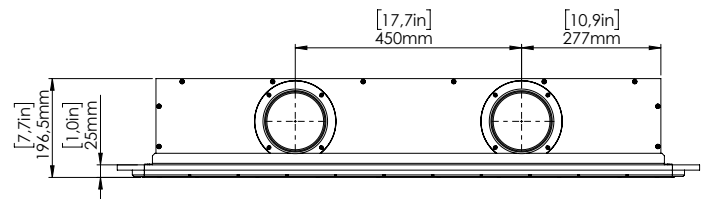
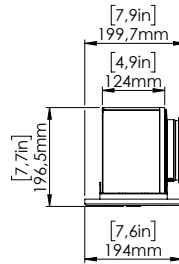
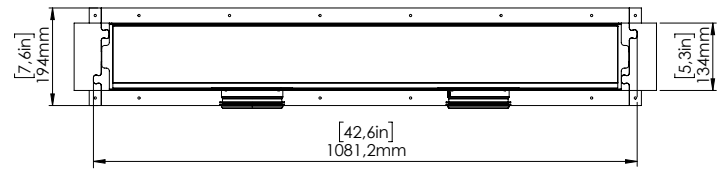
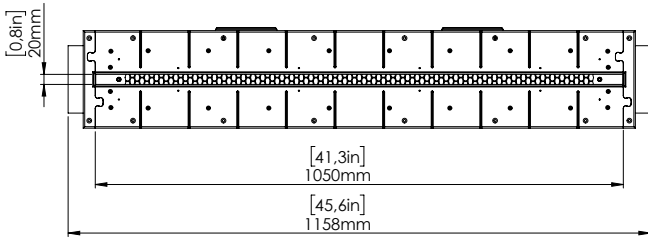
LINEO PRO PUZZLE 125

Hidden linear ventilation diffuser

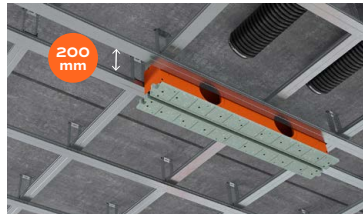


125 mm connections / 1 slot × 1050 mm × 20 mm / with damper

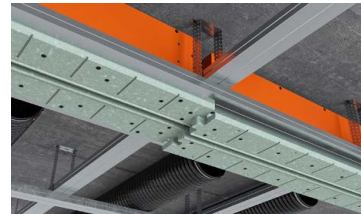
Hidden linear ventilation diffuser for installation in gypsum board (drywall) ceilings. After installation, the diffuser is plastered flush and painted the same color as the ceiling or wall. Only a minimalist slot remains visible, serving as a discreet interior design detail. Units can be linked in a continuous line with other PUZZLE diffusers featuring 75 mm or 90 mm duct connections. The pressurized plenum/connection box is made from 10 mm PVC sheet, which provides good thermal-insulation properties. As a result, the diffuser is suitable not only for ventilation but also for air-conditioning.



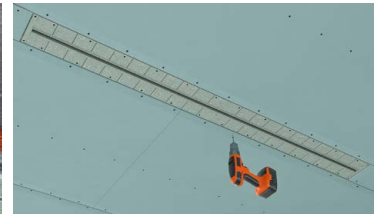
Installation width between profiles:
135 mm / ≈ 5,31 in



Minimum installation height:
200 mm / ≈ 7,87 in

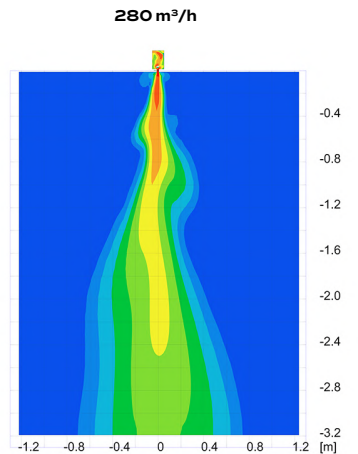
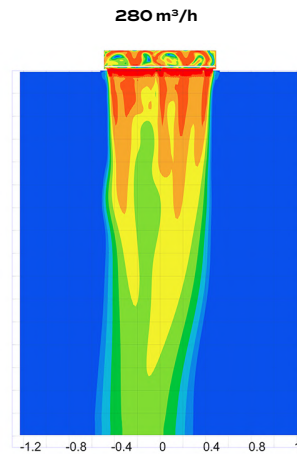
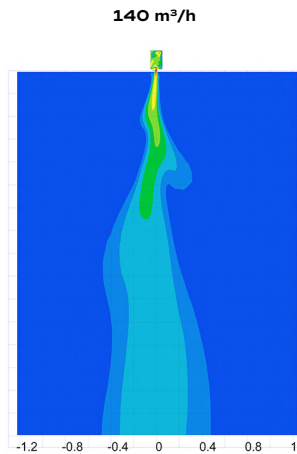
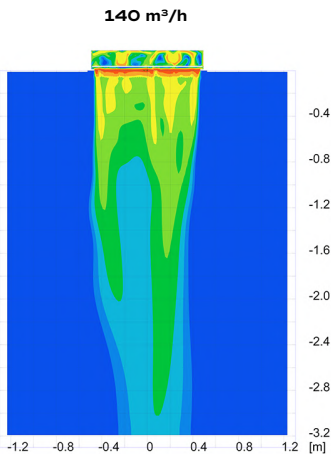
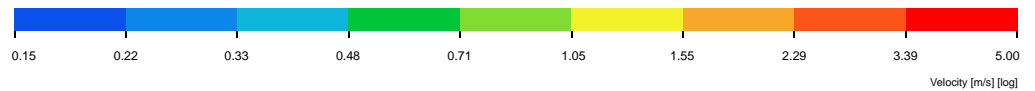


Patented technical solution: the PUZZLE LOCK system allows diffusers to be connected.



Important: During installation, all fixing screws must be fully tightened.

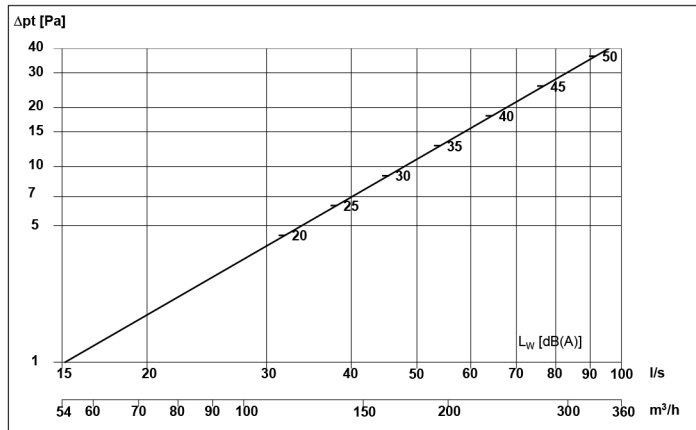
THROW DISTANCE



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

SUPPLY

Diagram for pressure and flow noise:



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

q [l/s]	D _{pt} [Pa]	L _{WA} [dBA]		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
-	-	33	K _{oct}	-38	-2	0	1	-6	-20	-27	-24

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

Calculation of pressure and sound effect according to flow:

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

L_W - sound effect [dB]

q - flow [l/s]

k - factor, sound effect [-]

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

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

L₀ - addend, sound effect [-]

p_t - pressuredifference, balancing [Pa]

Δp_t - total pressuredrop [Pa]

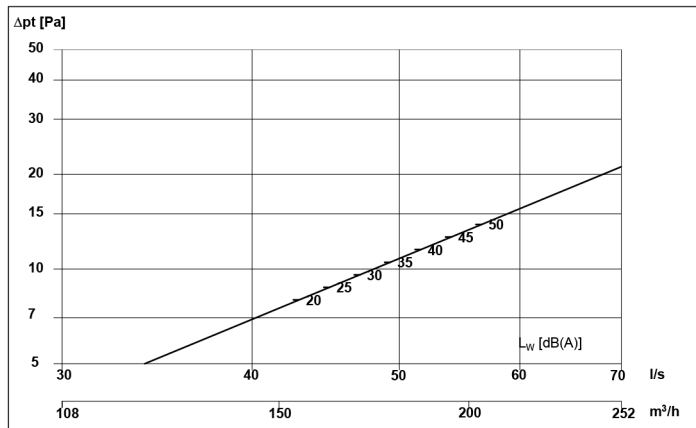
Balancing: $q = K_{factor} \cdot \sqrt{p_i}$

c_{pt} - factor, total pressuredrop [Pa·s²/l²]

	Total p c _{plot}	Balancing K-factor		L _{WA}	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
	0.0044	Not measured	k Lo	65.6 -78.7	16.9 6.6	56.4 -58.4	66.7 -75.1	69.5 -86.3	99.5 -151.3	89.0 -140.8	14.6 -11.3	14.8 -6.6

EXTRACT

Diagram for pressure and flow noise:



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

q [l/s]	D _{pt} [Pa]	L _{WA} [dBA]		63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
-	-	33	K _{oct}	2	0	8	-11	-23	-24	-19	-14

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

Calculation of pressure and sound effect according to flow:

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

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

L₀ - addend, sound effect [-]

p_t - pressuredifference, balancing [Pa]

Δp_t - total pressuredrop [Pa]

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

c_{pt} - factor, total pressuredrop [Pa·s²/l²]

	Total p c _{plot}	Balancing K-factor		L _{WA}	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
	0.0043	Not measured	k Lo	249.8 -387.9	0.0 34.7	-61.4 135.7	290.8 -449.5	144.3 -221.2	88.6 -139.6	8.2 -5.0	-1.5 16.1	-0.4 19.5

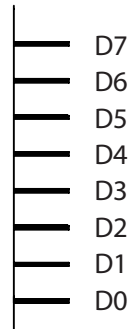
AIRFLOW BALANCING

The diffuser is equipped with an airflow balancing damper. The **aerodynamic damper** is located inside the diffuser and is conveniently adjustable from the outside.

Setting the damper position with the gauge*:

- ✓ Insert the gauge through the diffuser grille until it contacts the balancing damper.
- ✓ Take the reading relative to the ceiling line.
- ✓ Damper positions are indicated on the gauge.

* The damper-position gauge is supplied with the diffuser.



D0 – damper fully open.
D7 – damper fully closed.

