

LDW Displacement diffuser

LDW is a stylish semicircle-shaped displacement diffuser for wall-mounted installation. The double-layer perforated front panel ensures uniform, silent and draught-free air distribution. The easily detachable front panel enables convenient cleaning and access to the unit.

- Offers great supply air range
- Silent, uniform, and draught-free air distribution
- Concealed fastening
- Easily detachable front panel
- Effortless cleaning
- Variable circular connections Ø125-400



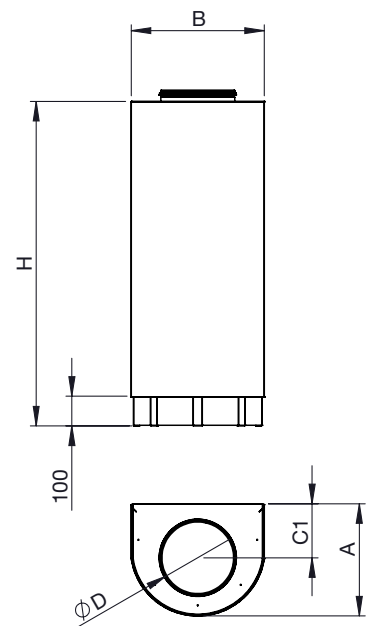
Diffuser principle

Moderately cooled air ($\Delta T \approx -3$ K) is supplied directly to the occupied zone at a low velocity through the diffuser's stylishly designed front panel. The supply air spreads uniformly across the floor and displaces the hot, contaminated air, which is forced to rise to the ceiling by convectional flows. Therefore, the LDW displacement solution ensures high air change efficiency and air quality in the occupied zone.

Material and surface treatment

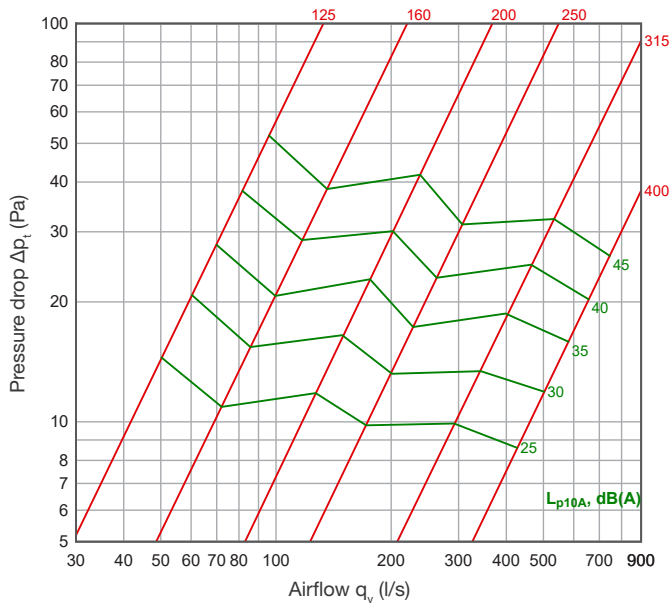
The LDW displacement diffuser is manufactured from galvanized steel. The diffuser is also available from Magnelis zinc-magnesium (ZM310) coated steel. The front panel has a white (RAL 9003) finish by standard, other RAL colors are available upon request.

Nominal size	ØD (mm)	A (mm)	B (mm)	H (mm)	C1 (mm)
LDW 125/160	125/160	288	358	693	137
LDW 200/250	200/250	378	448	1093	182
LDW 315/400	315/400	548	598	1593	272



Technical data

Supply air



Acoustic data, $L_w = L_{p10A} + K_{okt}$

Product	K-factor	Sound level correction factor K_{okt} (dB)							
		63	125	250	500	1k	2k	4k	8k
LDW 125	12,6	-1	-2	1	3	-1	-8	-15	-23
LDW 160	21,9	-2	-3	1	4	-1	-9	-17	-24
LDW 200	36,4	-2	-2	4	4	-2	-10	-19	-24
LDW 250	55,9	-2	-3	2	3	-1	-10	-18	-24
LDW 315	103,0	-2	-1	2	3	-1	-10	-19	-24
LDW 400	166,0	0	-1	2	4	-1	-11	-19	-24

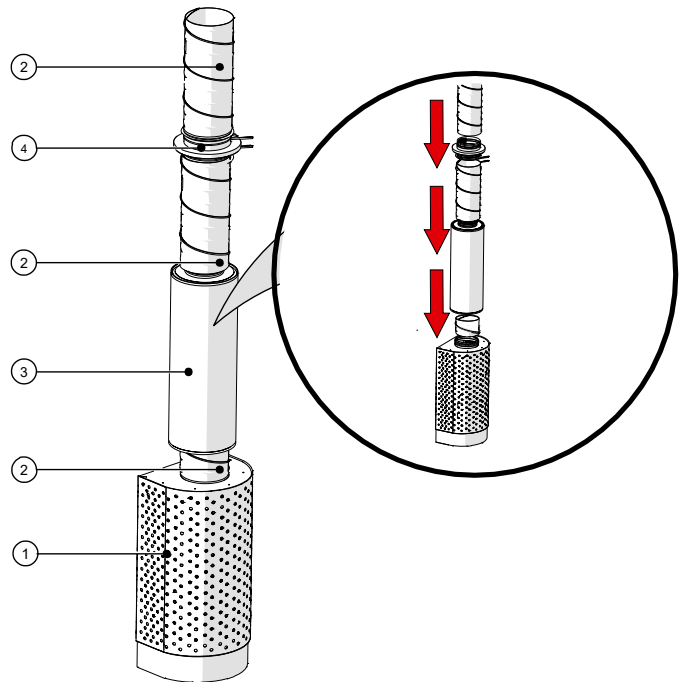
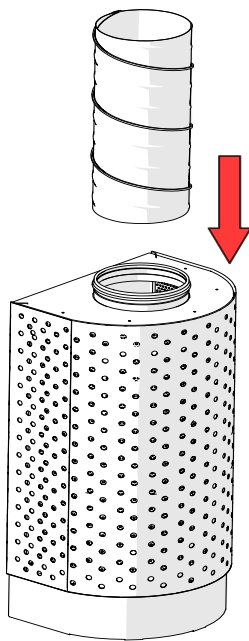
Product	Sound attenuation (dB)							
	Mean frequency of octave band (Hz)							
	63	125	250	500	1k	2k	4k	8k
LDW 125	23	17	8	4	3	1	1	2
LDW 160	21	15	7	2	2	1	1	2
LDW 200	19	13	5	1	1	1	1	1
LDW 250	17	10	4	1	1	1	1	1
LDW 315	15	9	2	2	1	1	1	1
LDW 400	13	8	2	1	1	1	1	1

Adjustment

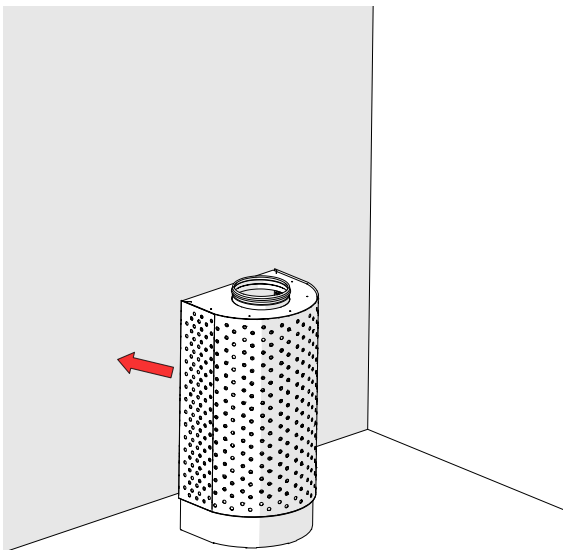
The LDW displacement diffuser allows quick evaluation of the supply air flow rate by measuring differential pressure from the measurement nipple. To accurately adjust the airflow, the diffuser can be equipped with a KRI measuring and adjustment damper. The damper should be installed at least three duct diameters upstream of the diffuser’s air inlet. When the damper is located close to the diffuser, it is then advised to install an NRF/NRP 50 attenuator between the damper and displacement unit. Dampers and attenuators need to be ordered separately.

Installation

Top connection

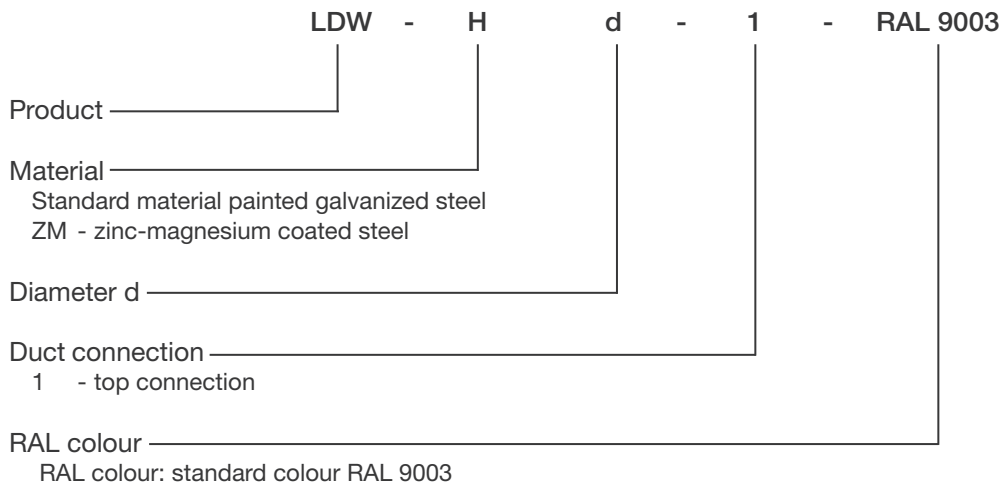


Installation against a wall



* Baseplate is included as standard. Check order code examples under product marking. For further information, look at LDW installation instructions.

Product marking



Example: LDW 125-1-RAL 9003