

LDC Displacement diffuser

LDC is a stylish quarter circle-shaped displacement diffuser for corner 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



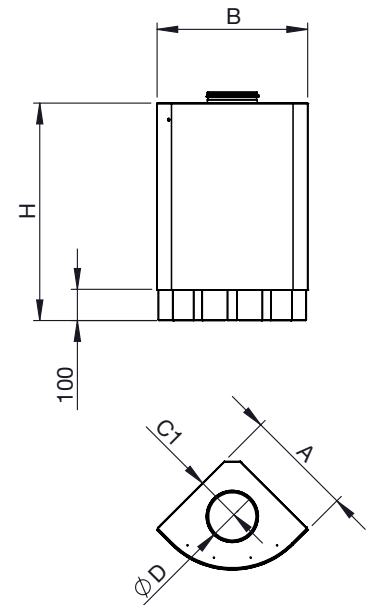
Diffuser principle

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 LDC displacement solution ensures high air change efficiency and air quality in the occupied zone.

Material and surface treatment

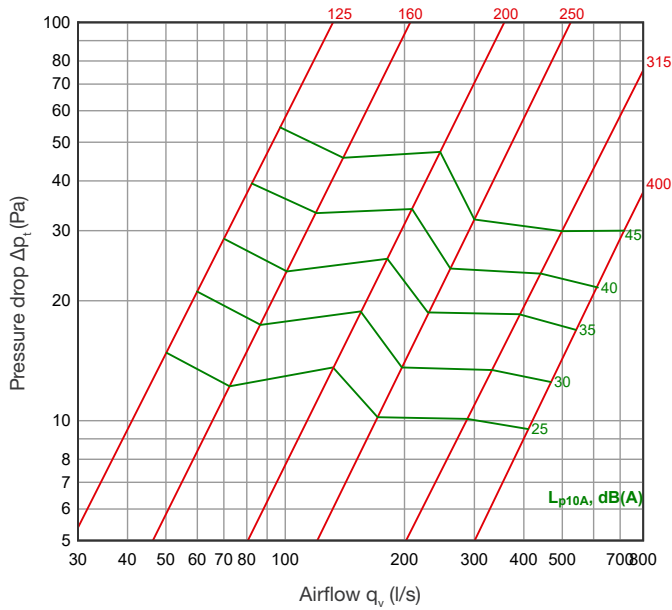
The LDC displacement diffuser is manufactured from galvanized steel. The diffuser is also available from Magnelis zinc-magnesium (ZM310) coated steel. The front panel has a white (RAL 9003) finish by standard, other RAL colors are available upon request.

Nominal size	ØD (mm)	A (mm)	B (mm)	H (mm)	C1 (mm)
LDC 125	125	343	480	693	142
LDC 160	160	343	480	693	142
LDC 200	200	453	635	1093	187
LDC 250	250	453	635	1093	187
LDC 315	315	628	883	1593	270
LDC 400	400	628	883	1593	270



Technical data

Supply air



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

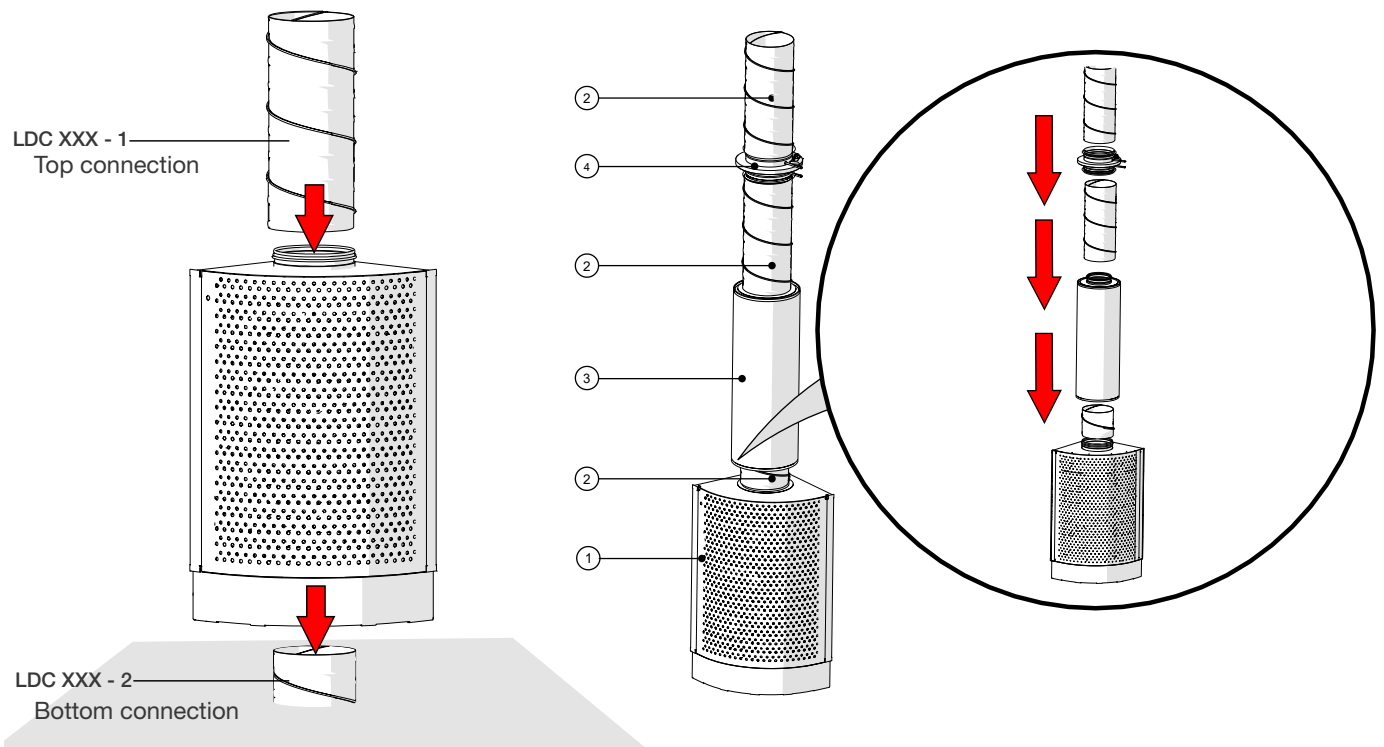
Product	K-factor	Sound level correction factor K_{okt} (dB)							
		63	125	250	500	1k	2k	4k	8k
LDC 125	12,5	0	-2	4	2	-1	-7	-15	-23
LDC 160	20,7	-1	-1	4	2	-1	-8	-16	-24
LDC 200	35,7	-1	0	4	2	-1	-8	-16	-23
LDC 250	53,9	-2	0	2	2	0	-9	-18	-25
LDC 315	99,3	-2	0	0	3	0	-10	-18	-19
LDC 400	144,0	1	0	0	3	0	-10	-19	-25

Product	Sound attenuation (dB)							
	Mean frequency of octave band (Hz)							
	63	125	250	500	1k	2k	4k	8k
LDC 125	23	16	6	5	4	2	1	2
LDC 160	21	13	5	4	4	2	1	2
LDC 200	18	11	3	3	2	1	1	1
LDC 250	17	9	2	3	2	1	1	2
LDC 315	14	6	2	4	1	1	1	2
LDC 400	13	6	3	3	1	1	1	1

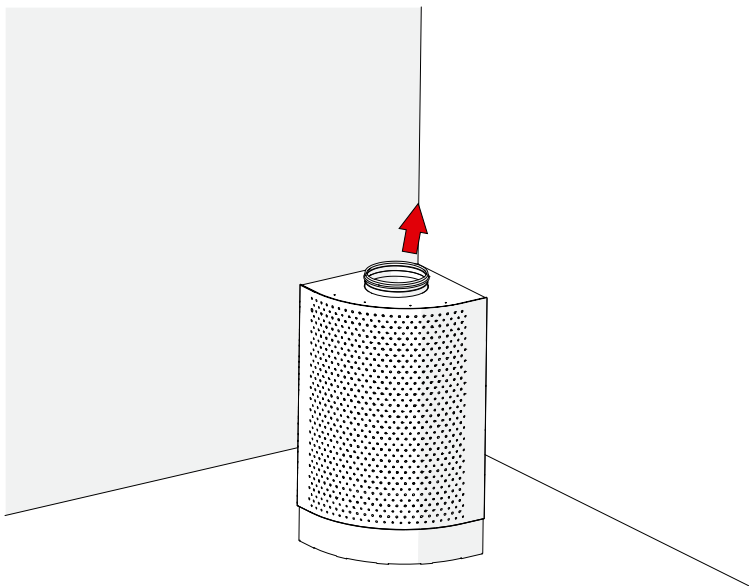
Adjustment

The LDC 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

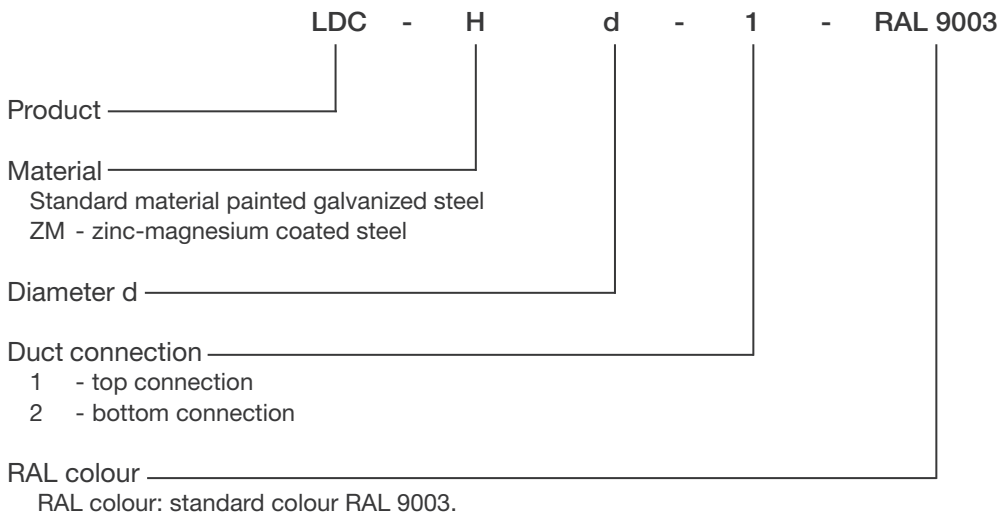


Corner installation



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

Product marking



Example: LDC 160-1-RAL 9003

Accessories

LDCT telescopic duct cover

Product	A (mm)	R (mm)	H (mm)
LDCT 125/160-3	340	272	1800-2400
LDCT 200/250-2	450	382	1300-1800
LDCT 200/250-3	450	382	1800-2400
LDCT 315/400-1	625	557	800-1300
LDCT 315/400-2	625	557	1300-1800

