

LTF Displacement diffuser

LTF is a stylish rectangular displacement diffuser for a flexible installation on a wall or ceiling, either flush- or surface-mounted. 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
- Flexible and simple installation
- Easily detachable front panel
- Effortless cleaning
- Variable circular connections Ø160-400

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

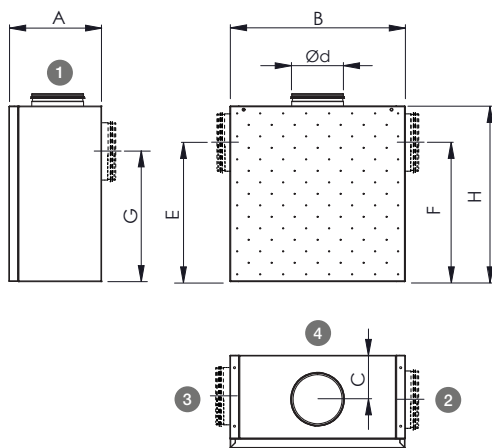


Material and surface treatment

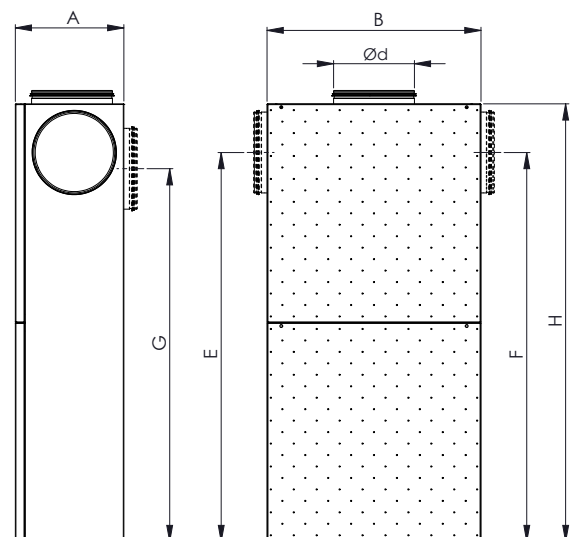
The LTF displacement diffuser is manufactured from galvanized steel. The diffuser is also available from Magnelis® zinc-magnesium (ZM310) coated steel. Diffuser has a white (RAL 9003) finish by standard, other RAL colors are available upon request.

Nominal size d (mm)	Ø d (mm)	A (mm)	B (mm)	H (mm)	C (mm)	E/F (mm)	G (mm)	Weight (kg)
160	159	285	540	540	135	270	270	12,0
200	199	285	540	1140	135	1000	950	22,7
250	249	335	660	1350	160	1200	1150	33,0
315	314	395	830	1550	190	1350	1300	46,3
400	399	495	995	1950	245	1700	1650	69,3

LTF 160 250

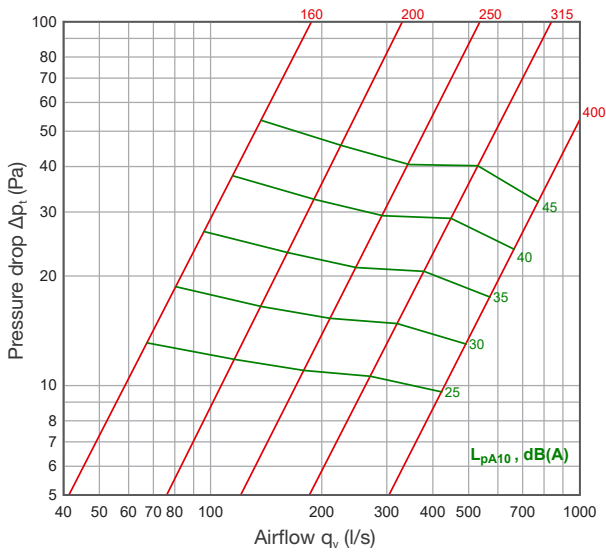


LTF 315.... 400



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
LTF 160-600	18,3	1	4	6	3	-2	-10	-16	-21
LTF 200-1200	34,6	0	-2	3	3	-2	-10	-18	-22
LTF 250-1400	58,9	3	2	4	3	-2	-9	-17	-22
LTF 315-1600	84,2	3	4	3	3	-2	-10	-18	-22
LTF 400-2000	157,0	4	4	2	3	-1	-11	-19	-22

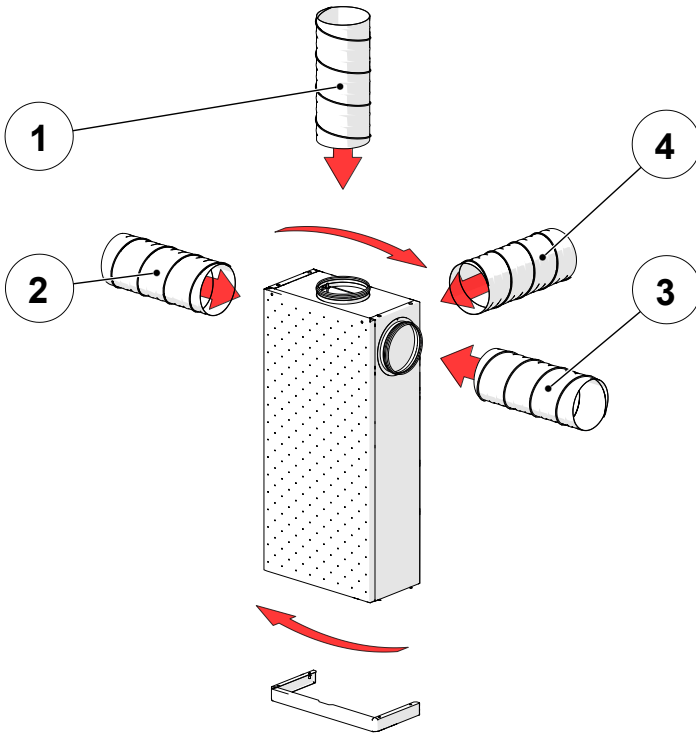
Product	Sound attenuation (dB)							
	Mean frequency of octave band (Hz)							
	63	125	250	500	1k	2k	4k	8k
LTF 160-600	20	9	6	7	4	2	2	2
LTF 200-1200	19	10	4	4	2	1	1	2
LTF 250-1400	17	8	3	2	2	1	1	3
LTF 315-1600	15	8	3	3	1	1	1	2
LTF 400-2000	13	4	3	2	1	1	2	2

Adjustment

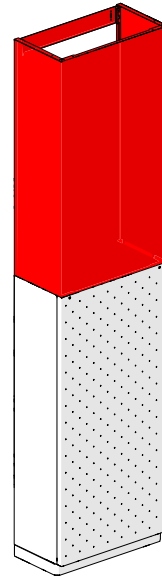
The LTF displacement diffuser allows quick evaluation of the supply air flow rate by measuring differential pressure from the measurement nipple. To accurately adjust the airflow, the diffuser can be equipped with a KRI measuring and adjustment damper. The damper should be installed at least three duct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

Installation

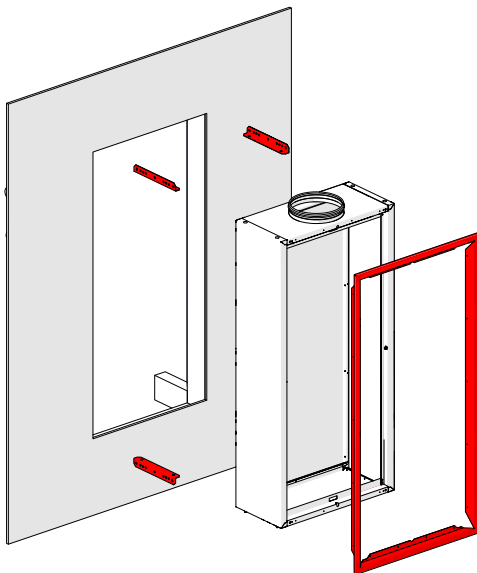
See LTF installation instructions.



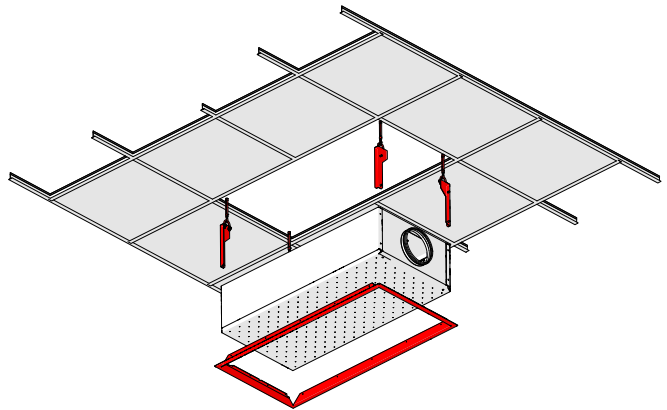
LTFT Duct cover



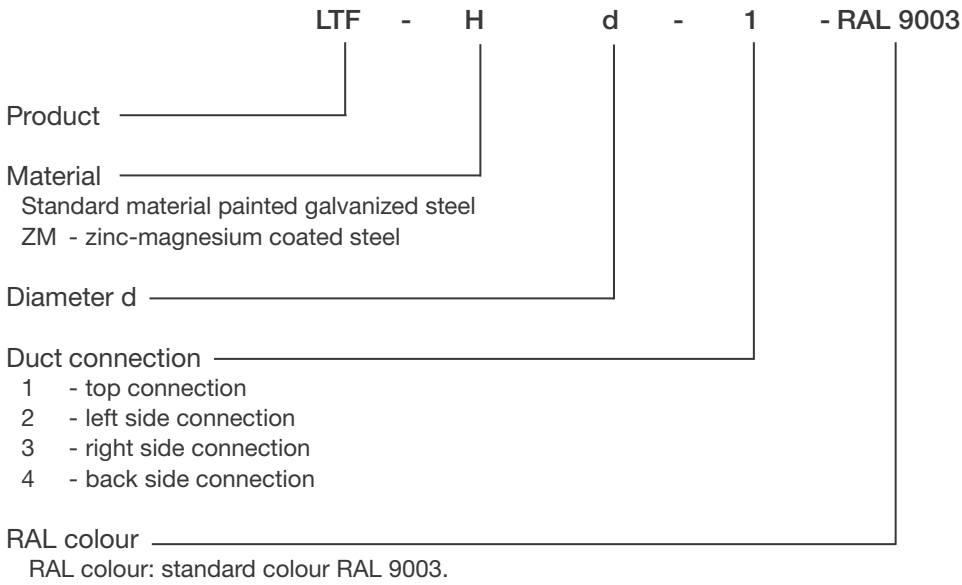
LTFP Wall mounting kit



LTFL Ceiling mounting kit



Product marking



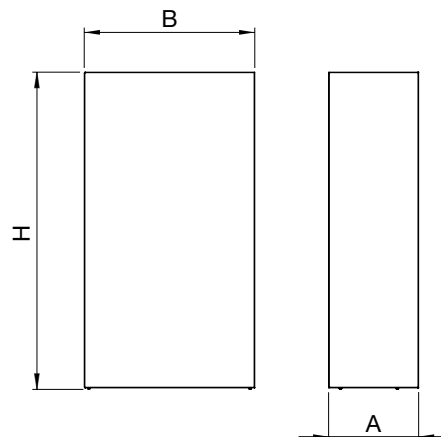
Example: LTF 160-1-RAL 9003

Accessories

LTFS Base (h=50 mm)	LTFT Duct cover	LTFL Ceiling mounting kit	LTFP Wall mounting kit
LTFS 160	LTFT 160	LTFL 160	LTFP 160
LTFS 200	LTFT 200	LTFL 200	LTFP 200
LTFS 250	LTFT 250	LTFL 250	LTFP 250
LTFS 315	LTFT 315	LTFL 315	LTFP 315
LTFS 400	LTFT 400	LTFL 400	LTFP 400

LTFT Duct cover dimensions

Product	A (mm)	B (mm)	H (mm)
LTFT 160	285	540	1000
LTFT 200	285	540	1000
LTFT 250	335	660	1000
LTFT 315	395	830	1000
LTFT 400	495	995	1000



LTFL/LTFP Mounting kit dimensions

Product	B (mm)	H (mm)	A (mm)
LTFL/LTFP 160	595	595	285
LTFL/LTFP 200	595	1195	285
LTFL/LTFP 250	715	1405	335
LTFL/LTFP 315	885	1605	395
LTFL/LTFP 400	1050	2005	495

