

HIDDEN MULTI-SLOT LINEAR DIFFUSERS



Series EDLS-EDLSB

Hidden linear diffuser with single or multi slots, width 20 or 30 mm, with aluminium aerodynamic profile and adjustable deflectors for optimal air throw control. Also available with equalizer and sliding damper.

FEATURES

Material: aluminium;
EDLS finish: RAL9005 black painted aluminium;
EDLSB finish: RAL9016 white painted aluminium;
Slots number: from 1 to 3;
Slots width: 20 or 30 mm;

Installation: by plenum box with mounting bridge, ceiling finishing with anti-crack tape on the frame and subsequent plaster skimming.

Possible dimensions in one piece:

- Minimum length 300 mm;
- Maximum length 2000 mm;

USE

Diffuser suitable for both air supply and exhaust in large rooms. Its modularity allows great freedom of design.

MODELLI

- EDLS10-FA - EDLSB10-FA hidden linear diffusers 20 mm slot without deflectors (exhaust).
- EDLS20-FA - EDLSB20-FA hidden linear diffusers 20 mm slot with deflectors (supply).
- EDLS30-FA - EDLSB30-FA hidden linear diffusers 20 mm slot without deflectors, with sliding damper (exhaust).
- EDLS40-FA - EDLSB40-FA hidden linear diffusers 20 mm slot with deflectors and sliding damper (supply).
- EDLS10-FB - EDLSB10-FB hidden linear diffusers 30 mm slot without deflectors (exhaust).
- EDLS20-FB - EDLSB20-FB hidden linear diffusers 30 mm slot with deflectors (supply).
- EDLS30-FB - EDLSB30-FB hidden linear diffusers 30 mm slot without deflectors, with sliding damper (exhaust).
- EDLS40-FB - EDLSB40-FB hidden linear diffusers 30 mm slot with deflectors and sliding damper (supply).

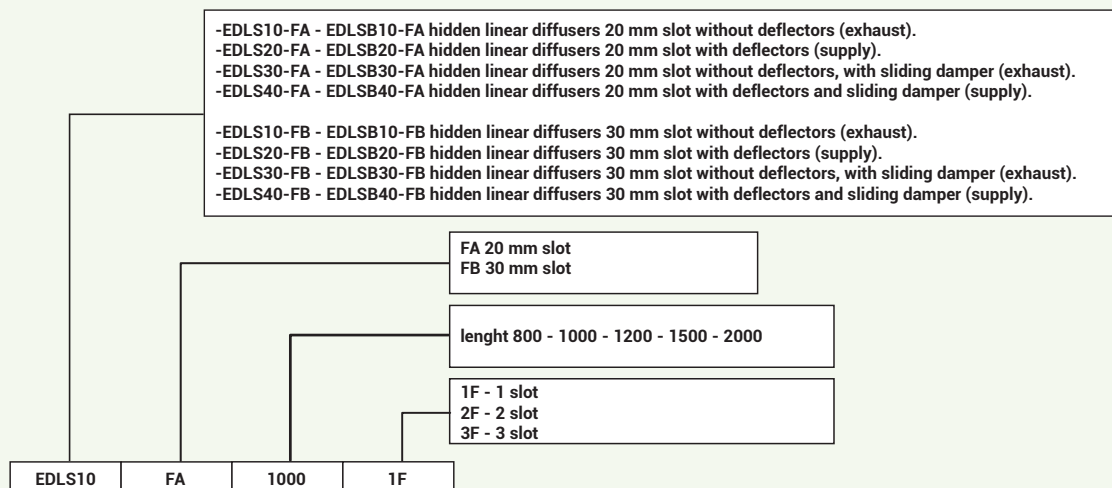
ACCESSORI

- galvanized plenum box;
- insulated plenum box;
- mounting bridge;
- continues line kit.

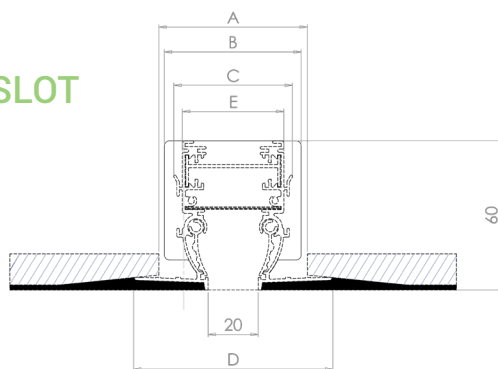
ON DEMAND

- Possibility of installation in continuity;
- Plenum box with ovalised rear connection.

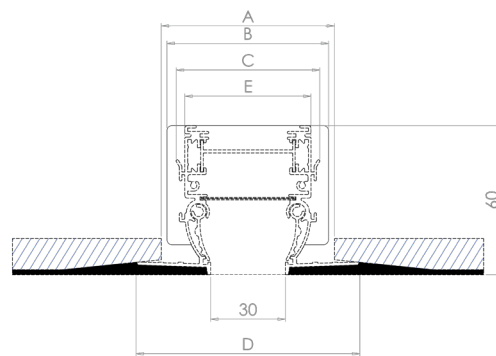
CODE



EDSH - EDLSB ONE SLOT DIMENSIONS



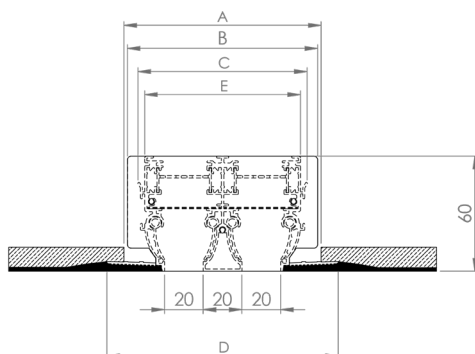
EDLS-FA 1 slot 20 mm
EDLSB-FA 1 slot 20 mm



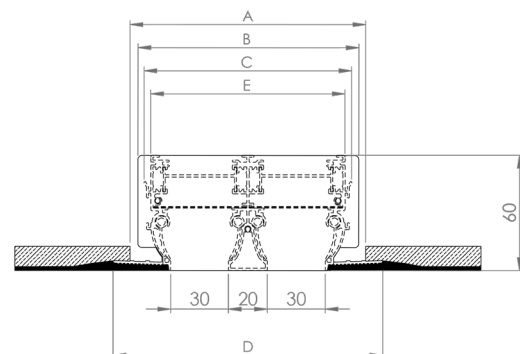
EDLS-FB 1 slot 30 mm
EDLSB-FB 1 slot 30 mm

Slot	L	A	B	C	E	D	number of fixing brackets
20 mm slot	800	60	55	48	41	80	2
	1000						2
	1200						2
	1500						2
	2000						2
30 mm slot	800	70	65	58	51	90	2
	1000						2
	1200						2
	1500						2
	2000						2

EDLS - EDLSB TWO SLOT DIMENSIONS



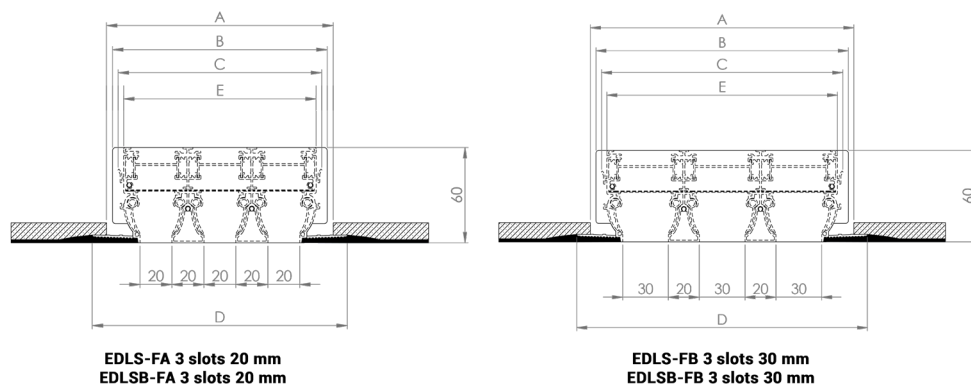
EDLS-FA 2 slots 20 mm
EDLSB-FA 2 slots 20 mm



EDLS-FB 2 slots 30 mm
EDLSB-FB 2 slots 30 mm

Two slots	L	A	B	C	D	E	number of fixing brackets
20 mm slots	800	100	95	88	120	81	2
	1000						2
	1200						2
	1500						2
	2000						2
30 mm slots	800	120	115	108	140	101	2
	1000						2
	1200						2
	1500						2
	2000						2

EDLS - EDLSB THREE SLOT DIMENSIONS



three slots	L	A	B	C	D	E	number of fixing brackets
20 mm slots	800	140	135	128	160	121	2
	1000						2
	1200						2
	1500						2
	2000						3
30 mm slots	800	170	165	158	190	151	2
	1000						2
	1200						2
	1500						2
	2000						3

OPERATING DATA

Data referring to 1m long diffusers, with a terminal throw speed $V_t=0.25$ m/s, in ceiling installations and with lateral launch with coanda effect.

Data referring to diffusers without damper or with open sliding damper.

Data referring to diffusers with deflectors in the working position with a 50% reduction of the air passage surface.

The position of the deflectors reduces the effective cross-section. When the deflectors are fully open, or when the diffuser is used for exhaust air, the flow rates (expressed in m^3/h) indicated in the table can change.

slots	slot dimen- sion	effective cross- section m²	Air flow and throw						
1 slot	20 mm slot	0,0097	m³/h	70	105	140	175	210	245
			L(m)	1.8	2.7	3.6	4.5	5.4	6.3
	30 mm slot	0,0146	m3/h	105	158	210	262	315	368
			L(m)	1,6	2,5	3,4	4,2	5	5,8
		noise level	dB(A)	<20	22	32	37	44	48
2 slots	20 mm slot	0,0194	m³/h	140	210	280	350	420	490
			L(m)	2,6	3,9	5,1	6,4	7,7	9,0
	f30 mm slot	0,0292	m³/h	210	316	420	524	630	736
			L(m)	2,3	3,6	4,9	6,0	7,1	8,3
		noise level	dB(A)	<20	24	34	39	46	50
3 slots	20 mm slot	0,0291	m³/h	210	315	420	525	630	735
			L(m)	3,9	5,8	7,7	9,6	11,6	13,5
	30 mm slot	0,0438	m³/h	315	474	630	786	945	1104
			L(m)	3,4	5,4	7,3	9,0	10,7	12,4
		noise level	dB(A)	<20	26	36	41	48	52
Vk			m/s	2	3	4	5	6	7
pressure drops			Pa	7	15	26	41	59	80

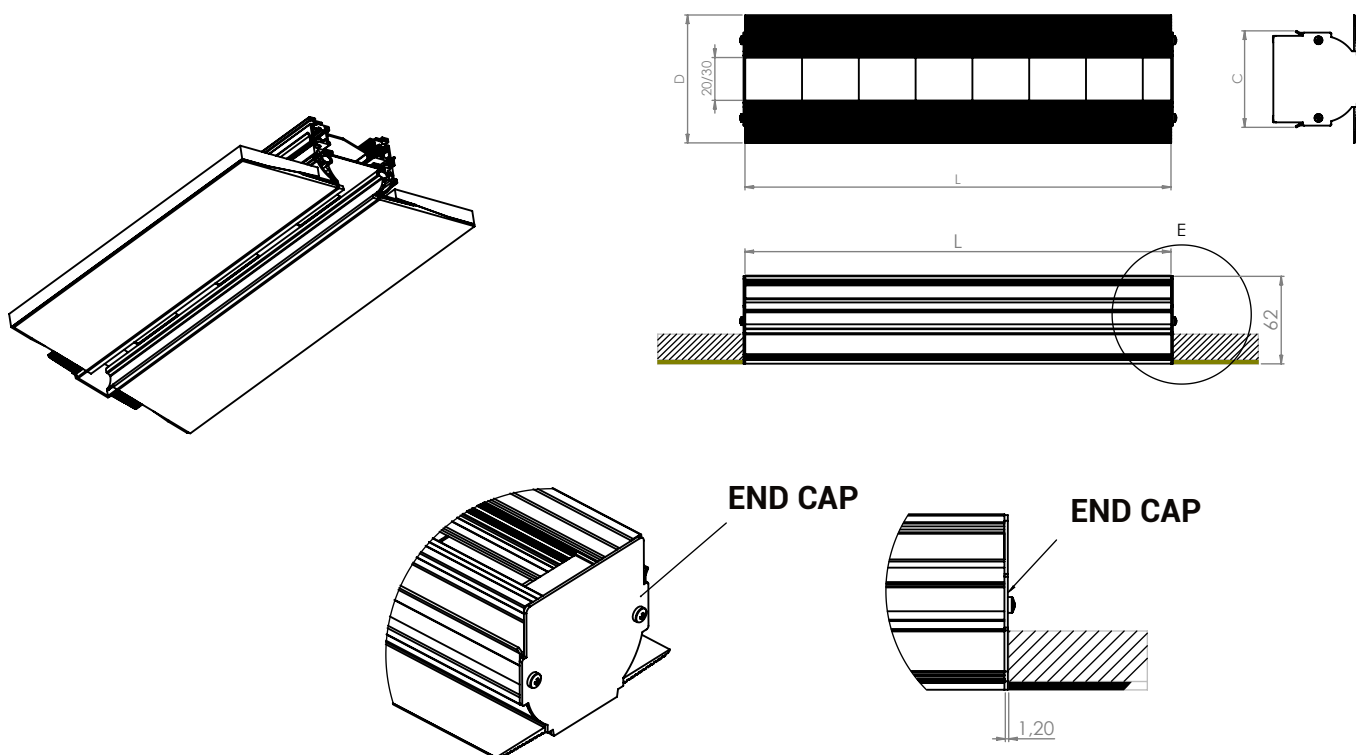
Vk: effective speed (m/s)
 m^3/h : air flow rate

Pa: pressure drops
in Pascal

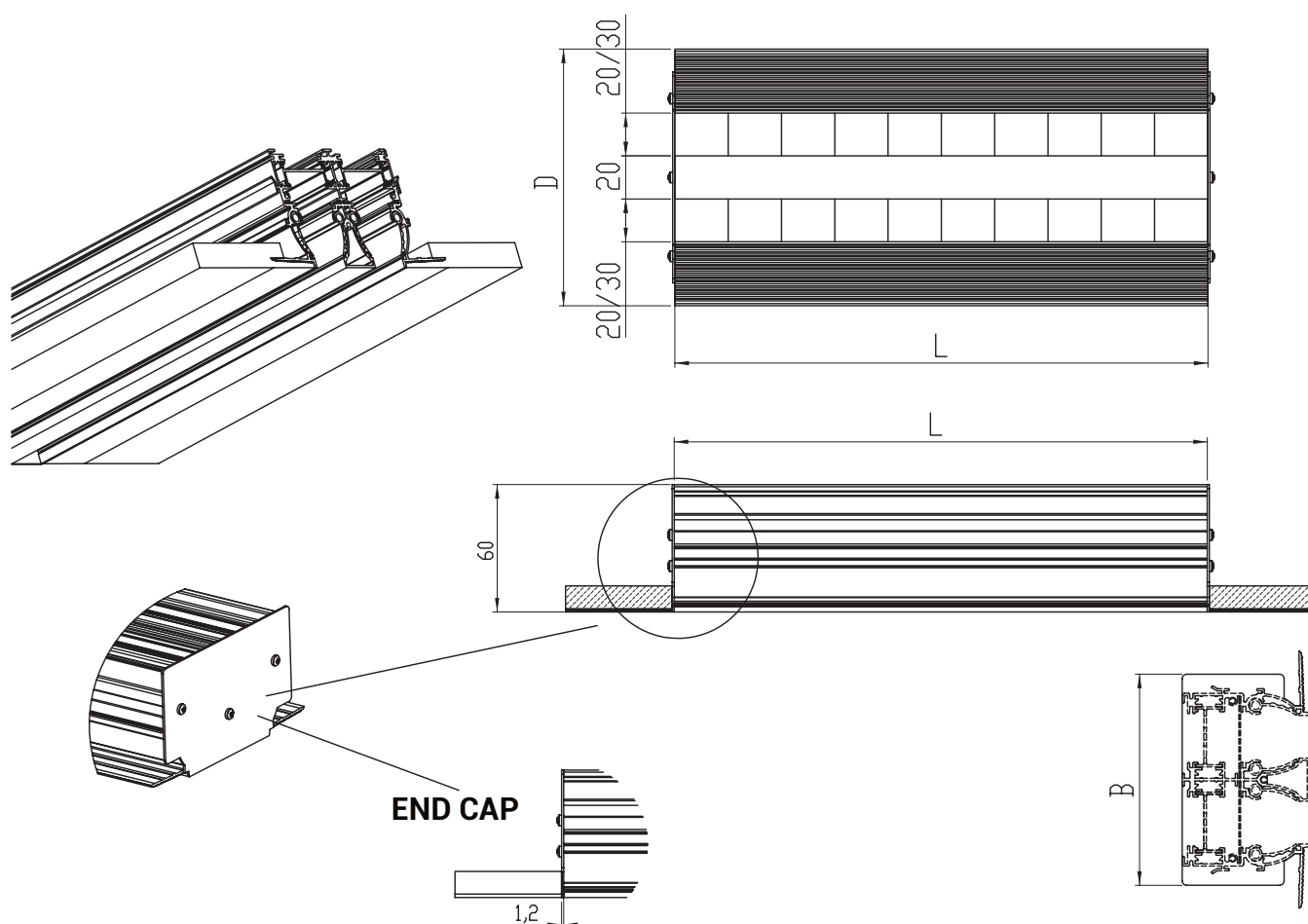
L(m): air throw in meters

dB(A): noise level

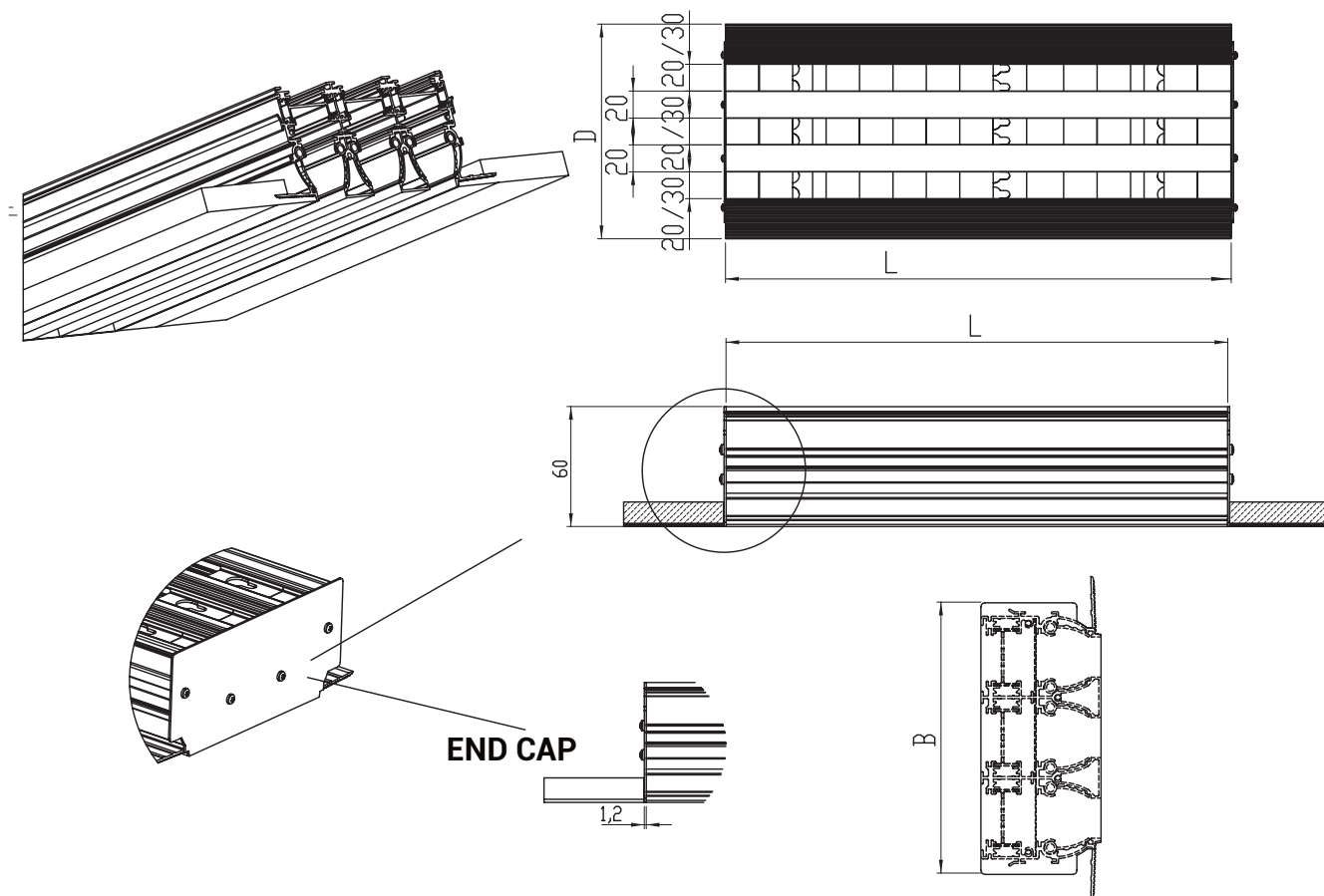
DIMENSIONAL DETAILS OF THE 1-SLOT DIFFUSER



DIMENSIONAL DETAILS OF THE 2-SLOT DIFFUSER



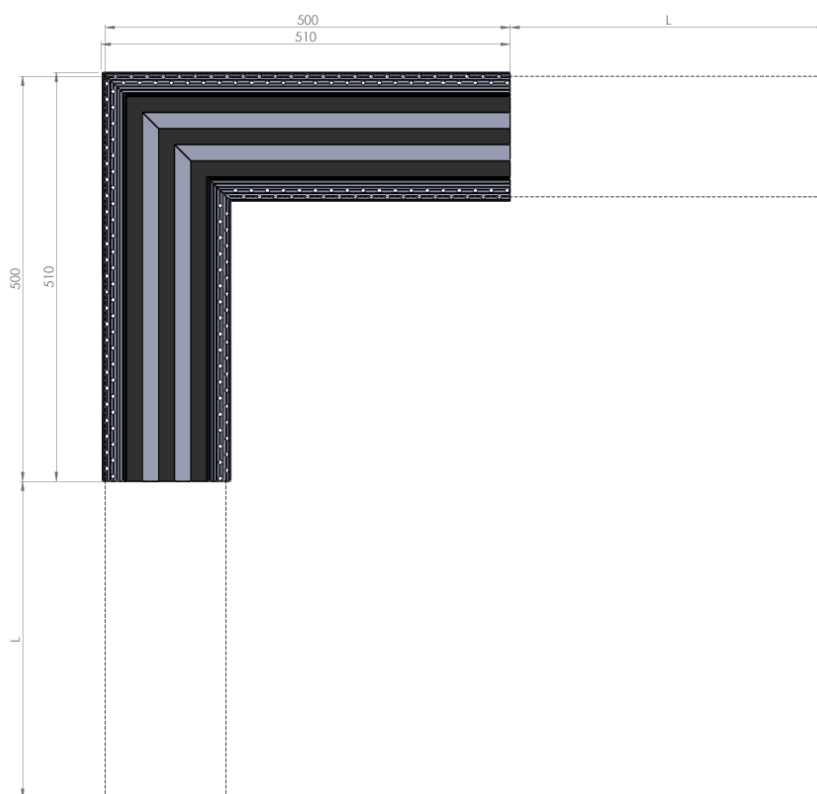
DIMENSIONAL DETAILS OF THE 3-SLOTS DIFFUSER



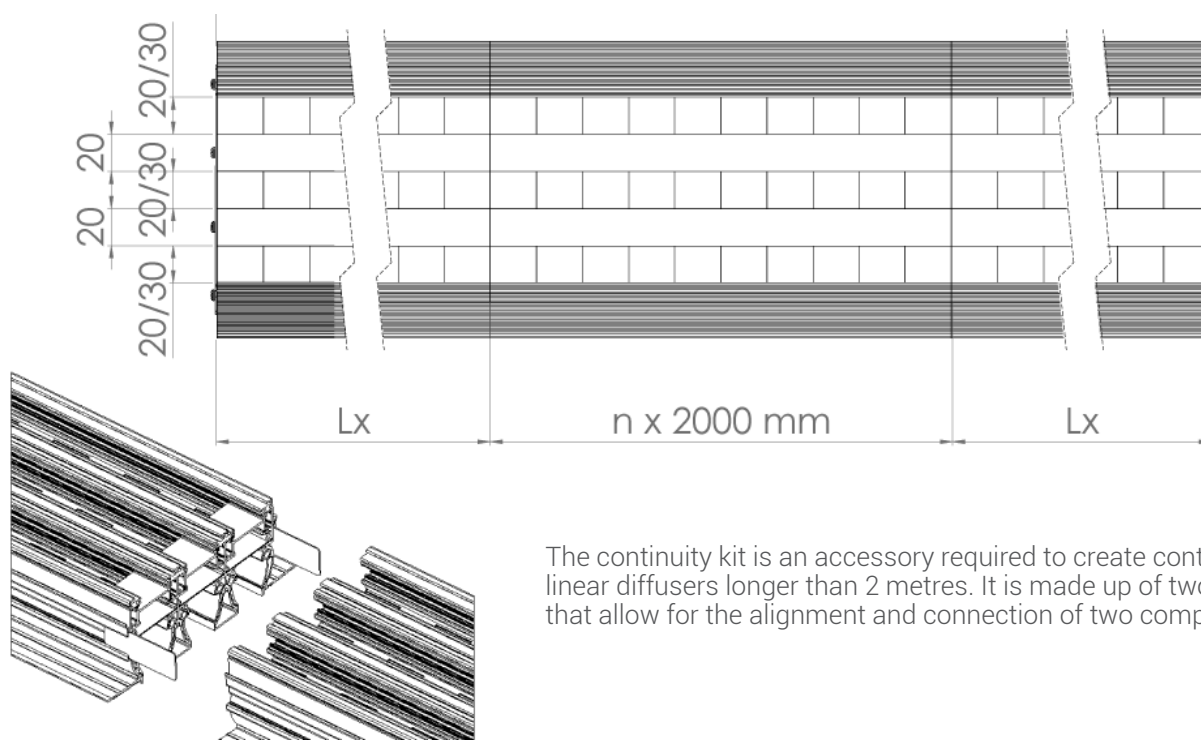
CORNER CONNECTION

Aesthetic connecting element between the two linear diffuser lines with a 90° angle and 500 mm length on each side. It has no ventilation features.

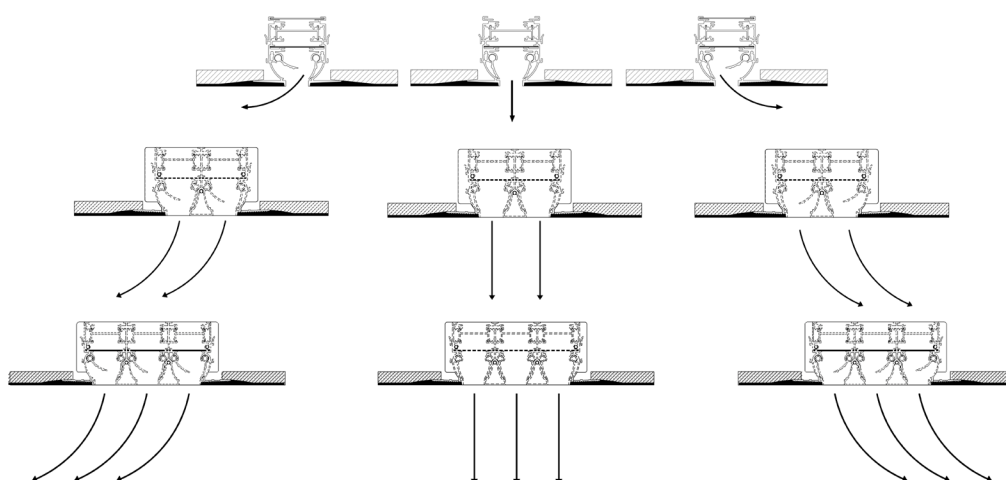
All measurements are expressed in mm.



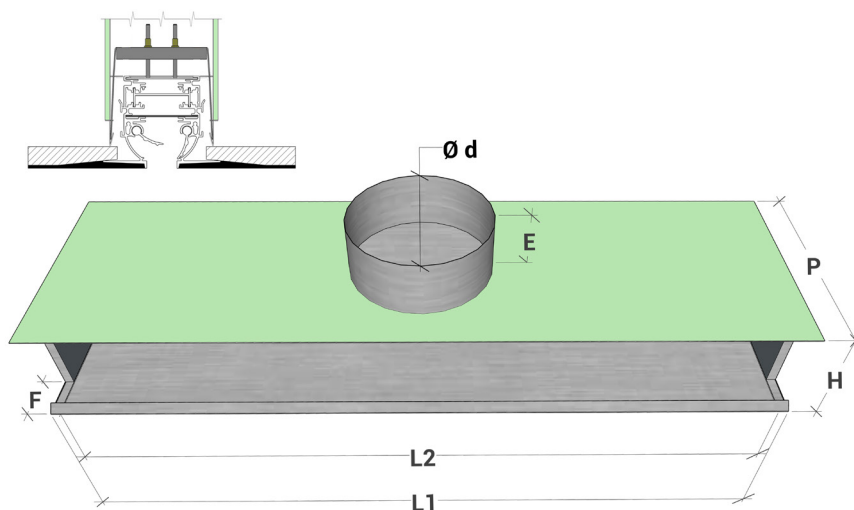
CONTINUITY KIT



AIR THROW CHARACTERISTICS



PLENUM DIMENSIONS AND FIXING BRACKET SYSTEM



1 SLOT	L	Plenum dimensions							
		L1	L2	No. of con- nections	Ø d	P	H	E	F
20 mm slot	800	800	770	1	145	240	65	80	49
	1000	1000	970	1					
	1200	1200	1170	2					
	1500	1500	1470	2					
	2000	2000	1970	2					
30 mm slot	800	800	770	1	145	240	75	80	49
	1000	1000	970	1					
	1200	1200	1170	2					
	1500	1500	1470	2					
	2000	2000	1970	2					

2 SLOTS	L	Plenum dimensions							
		L1	L2	No. of con- nections	Ø d	P	H	E	F
20 mm slot	800	800	770	2	145	300	105	80	49
	1000	1000	970	2					
	1200	1200	1170	2					
	1500	1500	1470	2					
	2000	2000	1970	2					
20 mm slot	800	800	770	2	198	300	125	80	49
	1000	1000	970	2					
	1200	1200	1170	2					
	1500	1500	1470	2					
	2000	2000	1970	2					

3 SLOTS	L	Plenum dimensions							
		L1	L2	No. of con- nections	Ø d	P	H	E	F
20 mm slot	800	800	770	2	198	300	145	80	49
	1000	1000	970	2					
	1200	1200	1170	2					
	1500	1500	1470	2					
	2000	2000	1970	2					
30 mm slot	800	800	770	2	198	300	165	80	49
	1000	1000	970	2					
	1200	1200	1170	2					
	1500	1500	1470	2					
	2000	2000	1970	2					