

DP1838 MODEL

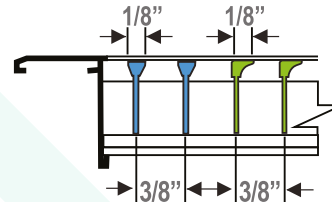
EXTRUDED ALUMINUM LINEAR BAR
GRILLE, 1/8" BARS, 3/8" SPACING,
0° DEFLECTION

66%
Free area



DEFLECTION to 0°:
DP18380 core only
DP18380-10 1" frame
DP18380-12 1/2" frame
DP18380-15 1.5" frame

DEFLECTION to 15°:
DP18385 core only
DP18385-10 1" frame
DP18385-12 1/2" frame
DP18385-15 1.5" frame



Deflection:
0° DP18380
15° DP18385

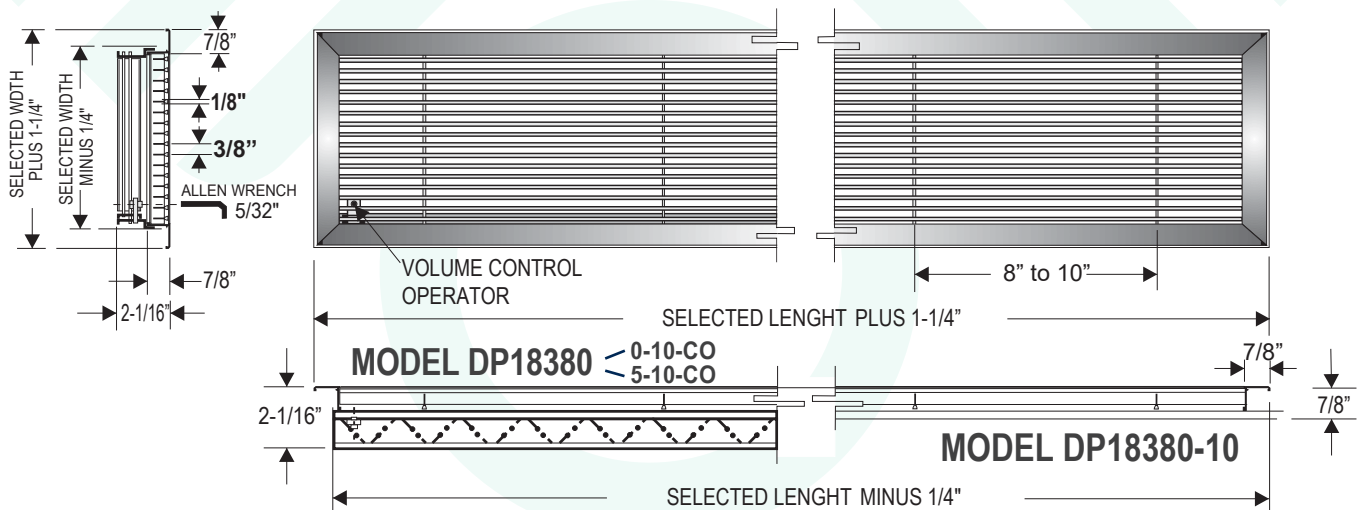
- 66% free nominal area
- Installation for lateral walls, false ceiling or shelf as a lineal diffuser.
- This diffuser operates with a low noise level and produce a long and thin air distribution pattern of optimal application where there are large areas of exposed glass.
- Ideal to overcome cold air currents during winter and to compensate for the radiant effect of glass surfaces during summer
- These grilles and diffusers can be used for both: supply and return, allowing installations of great aesthetic value.

CONSTRUCTION:
Extruded aluminum.

FINISH:
Standard white Anodic acrylic paint. Other colors available.

PERFORMANCE:
Operating efficiency, ensures reliable use with temperature differentials up to 25 ° F in heating and 20 ° F in cooling with a predictable low air movement in the area (35 feet / min).

Dimensional Data



LINEAR BAR DIFFUSER & REGISTERS

TABLE N°1

PERFORMANCE DATA

NOMINAL WIDTH INCHES	OUTLET VELOCITY (V _k)	400	500	600	700	800	900	1000	1200	
OULET AREA/ FT	TOTAL PRESSURE (TP)	0.014	0.020	0.028	0.039	0.052	0.066	0.081	0.113	
2" AK / FT = 0.114	CFM / Feet	45	57	68	80	91	102	114	137	
	THROW - FT	SILL	5 - 7	7 - 8	11 - 13	13 - 15	14 - 18	17 - 20	19 - 22	21 - 24
		SIDE WALL	10 - 16	15 - 20	17 - 23	19 - 25	20 - 27	23 - 31	25 - 33	27 - 35
	NC	-	10	13	16	20	22	25	28	
3" AK / FT = 0.166	CFM / Feet	66	83	99	116	133	149	166	199	
	THROW - FT	SILL	8 - 9	10 - 11	14 - 15	15 - 17	18 - 21	20 - 22	23 - 24	25 - 27
		SIDE WALL	12 - 21	15 - 24	19 - 27	21 - 28	23 - 32	26 - 34	29 - 36	30 - 38
	NC	-	6	10	13	16	18	21	25	
4" AK / FT = 0.218	CFM / Feet	87	109	130	152	174	196	218	261	
	THROW - FT	SILL	10 - 11	12 - 14	14 - 18	17 - 20	19 - 21	22 - 24	24 - 25	26 - 28
		SIDE WALL	14 - 19	16 - 23	20 - 26	22 - 31	25 - 33	27 - 35	30 - 37	32 - 40
	NC	-	8	11	14	18	20	22	27	
5" AK / FT = 0.280	CFM / Feet	112	140	168	196	224	252	280	336	
	THROW - FT	SILL	11 - 13	12 - 15	16 - 19	19 - 21	21 - 23	23 - 25	25 - 27	27 - 29
		SIDE WALL	16 - 20	19 - 24	21 - 27	24 - 33	26 - 34	28 - 36	30 - 38	32 - 43
	NC	-	8	11	14	18	21	23	28	
6" AK / FT = 0.333	CFM / Feet	133	166	200	233	266	300	333	400	
	THROW - FT	SILL	12 - 14	14 - 16	17 - 20	20 - 22	22 - 24	24 - 27	26 - 29	28 - 31
		SIDE WALL	18 - 24	20 - 26	22 - 29	25 - 35	26 - 36	29 - 38	31 - 40	33 - 44
	NC	-	10	13	16	19	22	26	29	
8" AK / FT = 0.488	CFM / Feet	195	244	293	342	390	439	488	585	
	THROW - FT	SILL	13 - 15	16 - 19	19 - 21	20 - 23	23 - 26	25 - 29	28 - 31	30 - 34
		SIDE WALL	16 - 21	19 - 24	21 - 28	23 - 31	24 - 33	28 - 35	30 - 36	33 - 39
	NC	-	13	16	19	22	26	29	32	
10" AK / FT = 0.552	CFM / Feet	221	276	331	386	442	497	552	-	
	THROW - FT	SILL	14 - 17	18 - 20	20 - 23	22 - 26	25 - 29	27 - 31	28 - 33	-
		SIDE WALL	18 - 23	20 - 26	23 - 30	25 - 32	27 - 35	30 - 36	31 - 38	-
	NC	-	14	18	21	24	27	30	-	
12" AK / FT = 0.666	CFM / Feet	266	333	400	466	533	600	-	-	
	THROW - FT	SILL	15 - 19	19 - 22	22 - 25	24 - 30	27 - 33	29 - 35	-	-
		SIDE WALL	20 - 26	21 - 28	24 - 32	28 - 38	29 - 39	32 - 41	-	-
	NC	14	16	19	22	26	29	-	-	

NOTES:

1- TOTAL PRESSURE IS IN INCHES H2O

2- THROW VALUES ARE GIVEN FOR TERMINAL VELOCITIES OF 100 & 50 FPM AND ARE BASED ON AN ACTIVE SECTION 4 FEET LONG., FOR OTHER LENGHTS REFER TO ENGINEERING DATA

3- WHEN THE PERIMETRAL DIFFUSER IS USED AS A RETURN INTAKE, THE NC VALUES HAS AN AVERAGE INCREMENT OF 2 NC AND THE LISTED TOTAL PRESSURE VALUES IN 20%

LINEAR BAR DIFFUSER & REGISTERS

TABLE No. 2 PERFORMANCE DATA

NOMINAL WIDTH INCHES OUTLET AREA/ FT	OUTLET VELOCITY (V _k)		400	500	600	700	800	900
	TOTAL PRESSURE (TP)		0.014	0.020	0.028	0.039	0.052	0.066
14" AK / FT = 0.788	CFM / Feet		315	394	473	552	630	709
	THROW - FT.	SILL	16 - 20	20 - 23	22 - 26	25 - 30	28 - 33	30 - 35
		SIDE WALL	20 - 26	22 - 29	25 - 33	29 - 36	30 - 40	33 - 41
	NC		16	18	20	23	28	30
16" AK / FT = 0.976	CFM / Feet		390	488	586	683	780	
	THROW - FT.	SILL	17 - 21	21 - 24	23 - 27	26 - 31	29 - 34	
		SIDE WALL	21 - 27	23 - 30	26 - 34	26 - 38	31 - 41	
	NC		17	19	22	24	30	
18" AK / FT = 0.996	CFM / Feet		398	498	598	697		
	THROW - FT.	SILL	18 - 22	22 - 25	24 - 28	27 - 32		
		SIDE WALL	22 - 28	24 - 31	27 - 34	27 - 39		
	NC		-	14	18	21		
20" AK / FT = 1.104	CFM / Feet		442	552	662	773		
	THROW - FT.	SILL	19 - 23	23 - 26	25 - 29	28 - 33		
		SIDE WALL	23 - 29	25 - 32	28 - 35	29 - 40		
	NC		19	21	24	26		

NOTES:

- 1- TOTAL PRESSURE IS IN INCHES H₂O
- 2- THROW VALUES ARE GIVEN FOR TERMINAL VELOCITIES OF 100 & 50 FPM AND ARE BASED ON AN ACTIVE SECTION 4 FEET LONG. FOR OTHER LENGTHS REFER TO ENGINEERING DATA
- 3- WHEN THE PERIMETRAL DIFFUSER IS USED AS A RETURN INTAKE, THE NC VALUES HAS AN AVERAGE INCREMENT OF 2 NC AND THE LISTED TOTAL PRESSURE VALUES IN 20%