

Linear Slot Diffusers

Introduction

Linear Slot Diffusers manufactured by KMC have been designed to satisfy architectural concepts that require continuous length applications without compromising air distribution performance.

These diffusers utilize an adjustable vane in each slot to control the direction of air discharge either parallel with or perpendicular to its face surface.

The adjustment from the face of the diffuser allows for pattern control in a full 180 degree range for either right or left parallel, intermediate or perpendicular.

Application

- Versatile supply linear diffuser for wall, ceiling or sill installation.
- Adjustable air discharge pattern for horizontal or vertical directions.
- Provides draft free comfort for both heating and cooling.
- Designed for efficient air distribution at cooling differentials up to 16°C.
- Can be used for combination - supply, return or return only.
- Continuous runs with active and inactive sections.

Product Features

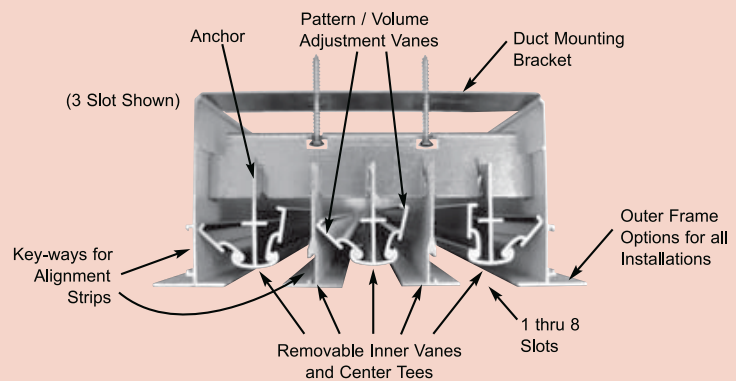
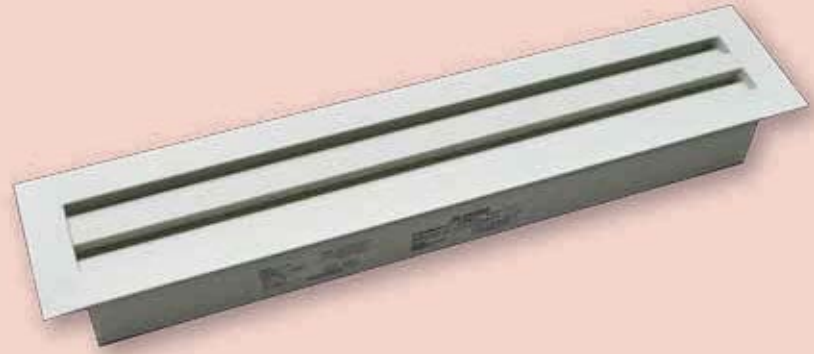
- Extruded aluminum construction with attractive, durable finish.
- Pattern control designed for easy adjustment of horizontal or vertical discharge.
- Outer flanges, center tees and end caps.
- Flat pattern control element and adjustment vanes for clean architectural look.
- Available in three slot widths, 12.5mm, 19mm, 25mm.
- Available in single piece lengths from 300mm to 2500mm.
- Units for continuous run applications provided with concealed key-ways and alignment strips for exact alignment and clean, neat appearance.

Diffuser Options

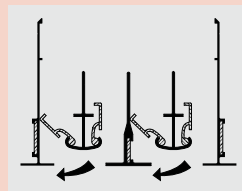
- Plenums—insulated or non-insulated.
- Mitered corners for ceiling or wall applications.
- Blank-off baffles.
- Powder Coated to RAL 9010 as standard
- Custom colors (provide RAL color codes)

Pattern & Volume Adjustment

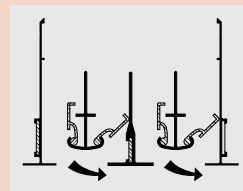
The adjustable vanes include an integral slot to allow the tool to engage the vane and by rotating the tool as shown, position the vane as required for the pattern and air volume required for the application.



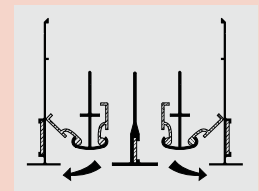
Pattern Control Flexibility



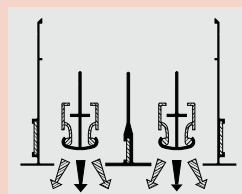
1 WAY LEFT - HORIZONTAL



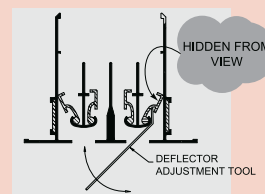
1 WAY RIGHT - HORIZONTAL



2 WAY OPPOSITE - HORIZONTAL



VERTICAL PROJECTION
(and other angles)



PATTERN & VOLUME
ADJUSTMENT

Product Selection Check List

- Select Unit length based on installation / performance requirements.
- Select outlet type (Slot Width) by Model No.
- Select Number of slots based on desired performance requirements.
- Select accessories
- Select end connection requirements.
- Select Finish

Miter Corners

Application

- Diffuser component to provide change in direction for KSLAD series linear diffusers and return units.
- Ceilings and walls (flat surfaces) – face miter
- Wall-wall corners or wall-ceiling corners.
- Inside corners (inside stack miter).
- Outside corners (outside stack miter).

Product Features

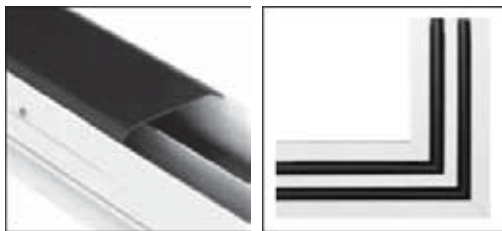
- Welded corner with standard 45° or 90° face miter or 90° stack miter.
- Constructed from the same aluminum extrusions provided on KSLAD diffusers and returns.
- Available to match any KSLAD mounting frame style, slot quantity, slot width.
- Alignment strips and keyways for precise alignment with mating linear units.
- Custom Angles available.

Selection Procedure

The selections can be made by means of a straight read-off from the “Performance Data” for the selected slot width.

- Determine the Air flow rate per linear meter by dividing the total air flow by the Diffuser length.
- Establish the required Throw (Refer Notes for Throw Pattern).
- Opposing Diffusers: Maximum Throw for each diffuser should be no more than 75% of half of the distance between them.
- Select the diffuser based on required Air flow rate against the limiting pressure drop and sound level requirements.

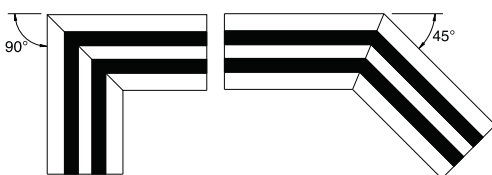
Accessories



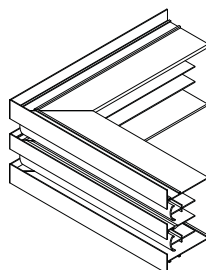
Blank Off Plates

Mitered Corners

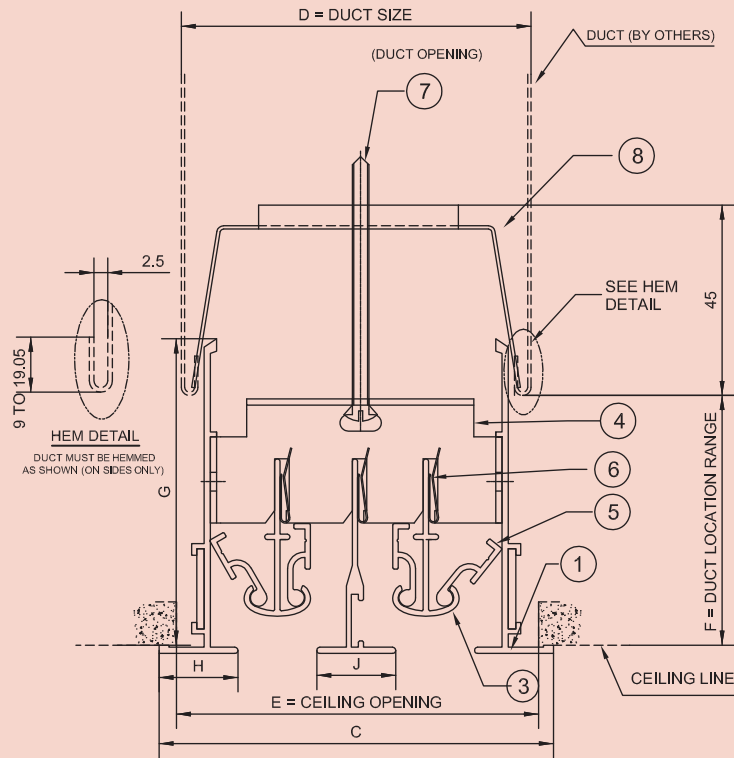
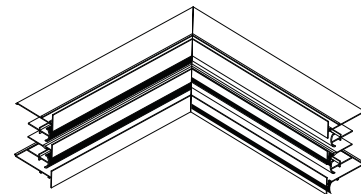
FACE MITER 90° AND 45°



STACK MITER (OUTSIDE)



STACK MITER (INSIDE)



DIFFUSER SIZE	KSLAD-FS-50						
	12.5MM SLOT WIDTH						
No. OF SLOTS	C	D	E	F	G	H	J
1	-	-	-	-	-	-	-
2	102	71	80	-	-	-	-
3	133	103	114	-	-	-	-
4	165	135	146	40	-	-	-
5	197	167	178	60	75	29	19
6	229	198	210	80	-	-	-
7	260	230	241	-	-	-	-
8	292	262	273	-	-	-	-

DIFFUSER SIZE	KSLAD-FS-75						
	19 MM SLOT WIDTH						
No. OF SLOTS	C	D	E	F	G	H	J
1	76	46	57	-	-	-	-
2	114	84	95	-	-	-	-
3	152	122	133	-	-	-	-
4	191	160	171	40	-	-	-
5	229	198	210	60	75	29	19
6	267	236	248	80	-	-	-
7	305	275	286	-	-	-	-
8	343	313	324	-	-	-	-

DIFFUSER SIZE	KSLAD-FS-100						
	25 MM SLOT WIDTH						
No. OF SLOTS	C	D	E	F	G	H	J
1	89	59	64	-	-	-	-
2	140	109	114	-	-	-	-
3	191	160	165	-	-	-	-
4	241	211	216	50	-	-	-
5	292	262	267	70	83	32	25
6	343	313	318	-	-	-	-
7	394	363	368	-	-	-	-
8	445	414	419	-	-	-	-

KSLAD - 75

19mm Slot - Horizontal Pattern - One Way

CMH per Mtr.	1 SLOT					2 SLOT					3 SLOT					4 SLOT					CMH per Mtr.
	Ps	NC	Throw			Ps	NC	Throw			Ps	NC	Throw			Ps	NC	Throw			
56	2.5	-	0.9	1.5	2.4															56	
84	5.0	-	1.5	2.4	3.7															84	
112	10.0	-	1.8	3.0	5.2															112	
139	15.0	17	2.1	3.7	5.8															139	
167	22.5	22	2.7	4.0	6.1	5.0	-	1.8	3.4	5.5										167	
195	30.0	26	3.0	4.6	6.7	7.5	-	2.1	4.0	6.7										195	
223	37.5	29	3.7	5.2	7.3	10.0	-	2.7	4.6	7.3										223	
251	50.0	32	4.0	5.5	7.6	12.5	-	3.0	4.9	7.6	5	-	2.1	4.0	6.7					251	
279	60.0	35	4.3	5.8	8.2	15.0	20	3.4	5.2	7.9	7.5	-	2.7	4.6	7.3	2.5	-	1.8	3.4	6.1	279
335	85.0	40	5.5	6.7	8.8	22.5	25	4.0	5.8	8.8	10	-	3.4	5.2	8.5	5.0	-	2.7	4.6	7.6	335
390						27.5	29	4.3	6.4	9.8	12.5	20	3.7	5.8	9.8	7.5	-	3.4	5.2	8.5	390
446						37.5	32	5.2	7.0	10.4	17.5	24	4.0	6.1	10.1	10.0	-	3.7	5.8	9.8	446
502						47.5	35	5.8	7.9	11.3	22.5	27	4.6	6.7	10.7	12.5	20	4.0	6.4	10.4	502
558						60.0	38	6.4	8.5	11.9	27.5	30	5.2	7.6	11.6	15.0	23	4.3	7.0	11.3	558
669						85.0	43	7.9	9.8	13.1	37.5	35	6.1	8.5	12.8	22.5	28	4.6	7.6	12.5	669
781											50	38	7.0	9.5	13.7	27.5	32	6.1	8.8	13.4	781
892											65	42	8.2	10.7	14.6	37.5	35	6.7	9.8	14.6	892
1004																47.5	38	7.9	10.7	15.5	1004
1115																60.0	41	8.5	11.6	16.5	1115

CMH per Mtr.	5 SLOT					6 SLOT					7 SLOT					8 SLOT					CMH per Mtr.
	Ps	NC	Throw			Ps	NC	Throw			Ps	NC	Throw			Ps	NC	Throw			
446	2.5	-	3.4	5.5	9.1																446
502	7.5	-	3.7	6.1	10.4																502
558	10.0	18	4.0	6.7	11.3	7.5	-	3.7	6.1	10.4											558
669	15.0	23	4.6	7.3	12.2	10.0	19	4.3	7.3	12.2	7.5	-	4.0	6.7	11.3						669
781	17.5	27	5.5	8.5	13.7	12.5	23	5.2	8.2	13.4	10.0	20	4.6	7.6	13.1	7.5	-	4.3	7.3	12.5	781
892	25.0	30	6.4	9.5	14.3	17.5	27	5.8	8.8	14.3	12.5	24	5.2	8.5	14.0	10.0	20	5.2	8.5	14.0	892
1004	30.0	33	7.0	10.1	15.5	22.5	30	6.4	9.8	15.2	17.5	27	5.8	9.1	14.9	12.5	23	5.8	9.1	14.9	1004
1115	37.5	36	7.9	11.0	16.5	25.0	33	7.0	10.4	16.5	20.0	30	6.4	10.1	16.2	15.0	26	6.4	9.8	15.9	1115
1227	45.0	39	8.5	11.6	17.1	32.5	35	7.9	11.3	16.8	22.5	32	7.0	10.7	16.8	17.5	28	6.7	10.4	16.8	1227
1338	55.0	41	9.1	12.5	18.0	37.5	37	8.5	11.9	17.7	27.5	34	7.9	11.6	17.7	20.0	31	7.6	11.3	17.7	1338
1450						45.0	39	9.1	12.5	18.3	32.5	36	8.5	12.2	18.3	25.0	33	8.2	11.9	18.3	1450
1561						52.5	41	10.4	13.7	19.2	37.5	38	9.1	12.8	18.9	30.0	35	8.5	12.2	18.9	1561
1673											42.5	40	10.1	13.7	19.8	32.5	36	9.1	13.1	19.8	1673
1812																37.5	39	10.1	14.0	20.7	1812
1952																45.0	41	10.7	14.6	21.3	1952

19mm Slot - Vertical Pattern

CMH per Mtr.	1 SLOT					2 SLOT					3 SLOT					4 SLOT					CMH per Mtr.
	Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		
			H	C			H	C			H	C			H	C					
84	2.5	-	1.2	2.1																	84
112	5.0	-	1.5	2.7																	112
139	7.5	-	1.8	3.0																	139
167	10.0	-	2.1	3.7	2.5	-	1.2	2.7													167
195	15.0	18	2.4	4.0	2.5	-	1.5	2.7													195
223	17.5	21	2.7	4.3	5.0	-	1.8	3.0													223
251	25.0	24	3.0	4.9	5.0	-	2.1	3.7	2.5	-	1.8	3.0									251
279	30.0	27	3.4	5.5	7.5	-	2.4	4.0	2.5	-	2.1	3.7									279
335	40.0	32	4.0	6.4	10.0	17	3.0	4.9	5.0	-	2.4	4.0	2.5	-	2.1	3.7					335
390	55.0	36	4.9	7.6	15.0	21	3.4	5.5	7.5	-	2.7	4.3	2.5	-	2.4	4.0					390
446	75.0	39	5.5	8.8	17.5	25	4.0	6.4	7.5	-	3.0	4.9	5.0	-	2.7	4.3					446
502	92.5	42	6.1	9.8	22.5	28	4.6	7.0	10.0	19	3.7	5.8	5.0	-	3.0	4.9					502
558					27.5	30	4.9	7.6	12.5	22	4.0	6.4	7.5	-	3.4	5.5					558
669					40.0	35	5.8	9.1	17.5	27	4.6	7.0	10.0	20	4.3	6.7					669
781					55.0	39	6.7	10.7	25.0	30	5.5	8.8	15.0	24	4.9	7.6					781
892									32.5	34	6.4	10.4	17.5	26	5.5	8.8					892
1004									40.0	37	7.0	11.3	25.0	30	6.1	9.8					1004
1115									50.0	39	7.9	12.5	30.0	33	6.7	10.7					1115
1255													37.5	36	7.6	12.2					1255

CMH per Mtr.	5 SLOT					6 SLOT					7 SLOT					8 SLOT					CMH per Mtr.
	Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		
			H	C			H	C			H	C			H	C					
446	2.5	-	2.7	4.3																	446
558	5.0	-	3.4	5.5	2.5	-	3.0	4.9													558
669	7.5	-	3.7	5.8	5.0	-	3.7	5.8	2.5	-	3.4	5.5									669
781	10.0	19	4.3	6.7	5.0	-	4.0	6.4	5.0	-	3.7	5.8	2.5	-	3.4	5.5					781
892	12.5	22	4.9	7.6	7.5	19	4.6	7.0	5.0	-	4.0	6.4	5.0	-	3.7	5.8					892
1004	15.0	25	5.5	8.8	10.0	22	5.2	8.2	7.5	19	4.6	7.0	5.0	-	4.0	6.4					1004
1115	17.5	28	6.1	9.8	12.5	24	5.5	8.8	10.0	21	4.9	7.6	7.5	18	4.6	7.0					1115
1255	22.5	31	6.7	10.7	15.0	27	6.1	9.8	12.5	24	5.5	8.8	10.0	21	5.2	8.2					1255
1394	30.0	34	7.6	12.2	20.0	30	6.7	10.7	15.0	27	6.4	10.4	10.0	23	6.1	9.8					1394
1533	35.0	36	8.2	13.1	22.5	32	7.6	12.2	17.5	30	7.0	11.3	12.5	26	6.7	10.7					1533
1673	42.5	39	8.8	14.0	27.5	35	8.2	13.1	20.0	33	7.6	12.2	15.0	28	7.3	11.6					1673
1812	50.0	41	9.5	15.2	32.5	37	8.8	14.0	25.0	34	8.2	13.1	20.0	30	7.6	12.2					1812
1952					40.0	39	9.5	14.6	30.0	36	8.8	14.0	22.5	32	8.2	13.1					1952
2230					50.0	42	11.0	16.5	37.5	39	10.1	15.5	30.0	36	9.5	15.2					2230

*In the interest of product development, KMC reserves the right to make changes without notice.

KSLAD - 100

25mm Slot - Horizontal Pattern - One Way

CMH per Mtr.	1 SLOT					2 SLOT					3 SLOT					4 SLOT					CMH per Mtr.
	Ps	NC	Throw			Ps	NC	Throw			Ps	NC	Throw			Ps	NC	Throw			
112	5.0	-	1.5	2.7	4.6																112
139	7.5	-	6	3.4	5.5																139
167	12.5	-	2.1	3.7	6.1																167
195	15.0	22	2.7	4.3	6.7																195
223	20.0	25	3.4	4.9	7.3	5.0	-	2.1	3.7	6.4											223
279	32.5	31	4.0	5.5	8.2	7.5	-	3.0	4.9	7.6	2.5	-	2.1	4.0	6.7						279
335	45.0	36	4.6	6.1	8.8	12.5	21	3.4	5.5	8.8	5.0	-	2.7	4.6	7.6	2.5	-	1.8	3.7	6.4	335
390	62.5	40	5.5	7.0	9.8	15.0	25	4.0	6.1	9.8	7.5	-	3.0	5.2	8.5	5.0	-	2.7	4.6	7.6	390
446						20.0	28	4.3	6.4	10.4	10.0	20	3.7	6.1	10.4	5.0	-	3.4	5.5	8.8	446
502						25.0	31	5.2	7.3	11.0	12.5	23	4.0	6.7	11.0	7.5	-	3.7	6.1	10.1	502
558						32.5	34	5.8	7.9	11.6	15.0	26	4.6	7.3	11.6	7.5	19	4.0	6.7	11.0	558
613						40.0	37	6.1	8.2	12.2	17.5	29	5.2	7.9	12.2	10.0	22	4.3	7.0	11.9	613
669						45.0	39	6.4	8.8	12.8	20.0	31	5.5	8.2	12.8	12.5	24	4.6	7.6	12.5	669
781						62.5	43	7.9	10.1	13.7	27.5	35	6.4	9.1	13.7	15.0	28	5.5	8.5	13.7	781
892											35.0	38	7.0	9.8	14.6	20.0	31	6.1	9.1	14.6	892
1004											45.0	41	7.9	10.7	15.5	27.5	34	6.7	10.1	15.5	1004
1115																32.5	37	7.9	11.0	16.5	1115
1227																40.0	40	8.5	11.9	17.4	1227

CMH per Mtr.	5 SLOT					6 SLOT					7 SLOT					8 SLOT					CMH per Mtr.
	Ps	NC	Throw			Ps	NC	Throw			Ps	NC	Throw			Ps	NC	Throw			
669	12.5	20	4.6	7.6	12.5	12.5	-	4.0	7.0	11.0											669
781	12.5	22	4.9	7.9	13.4	15.0	-	4.6	7.6	12.5	5.0	-	4.6	7.3	11.6						781
892	12.5	24	5.5	9.1	14.6	20.0	23	5.5	8.8	14.6	5.0	20	4.9	7.9	13.4	5.0	-	4.9	7.6	12.5	892
1004	15.0	25	6.1	9.5	15.2	25.0	26	5.8	9.5	15.5	7.5	23	5.2	8.8	14.6	7.5	19	5.2	8.5	14.3	1004
1115	20.0	28	6.7	10.4	16.5	32.5	29	6.4	10.1	16.2	12.5	26	5.8	9.8	16.2	7.5	22	5.5	9.5	15.5	1115
1227	25.0	32	7.6	11.3	17.4	40.0	32	7.0	11.0	17.4	12.5	30	6.1	10.4	16.8	10.0	25	6.1	10.1	16.8	1227
1338	30.0	35	8.2	11.9	18.0	45.0	34	7.6	11.3	18.0	15.0	31	7.3	11.6	18.3	12.5	27	6.4	10.7	17.7	1338
1450	35.0	38	9.1	12.8	18.9	50.0	36	7.9	11.9	18.6	17.5	33	7.9	11.9	18.9	15.0	29	7.3	11.6	18.6	1450
1561						62.5	38	8.8	12.8	19.5	20.0	35	8.2	12.2	19.5	15.0	31	7.9	12.2	19.5	1561
1673											22.5	37	8.5	12.8	20.1	17.5	33	8.2	12.8	20.1	1673
1812											27.5	40	9.1	13.4	20.7	20.0	34	8.8	13.1	20.7	1812
1952																25.0	36	9.8	14.3	22.3	1952
2091																30.0	38	10.4	14.9	22.9	2091
2230																32.5	40	11.3	15.5	23.5	2230

25mm Slot - Vertical Pattern

CMH per Mtr.	1 SLOT					2 SLOT					3 SLOT					4 SLOT					CMH per Mtr.
	Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		
			H	C			H	C			H	C			H	C					
112	2.5	-	1.2	2.1																	112
139	5.0	-	1.5	2.7																	139
167	5.0	-	1.8	3.4																	167
223	10.0	-	2.4	3.7	2.5	-	1.8	3.0													223
279	15.0	22	3.0	4.9	5.0	-	2.1	3.7													279
335	22.5	27	3.7	6.1	5.0	-	2.7	4.3	2.5	-	2.1	3.7									335
390	32.5	31	4.3	7.0	7.5	-	3.0	4.9	2.5	-	2.4	4.0									390
446	42.5	35	4.9	7.6	10.0	19	3.7	6.1	5.0	-	2.7	4.3	2.5	-	2.4	4.0					446
502	52.5	39	5.5	8.8	12.5	22	4.0	6.4	5.0	-	3.0	4.9	2.5	-	2.7	4.3					502
558					15.0	25	4.6	7.0	7.5	-	3.7	6.1	5.0	-	3.0	4.9					558
669					22.5	30	5.2	8.2	10.0	22	4.3	6.7	5.0	-	3.7	6.1					669
781					32.5	34	6.1	9.8	15.0	26	4.9	7.6	7.5	19	4.3	6.7					781
892					42.5	38	6.7	10.7	17.5	29	5.5	8.8	10.0	22	4.9	7.6					892
1004									22.5	32	6.4	10.4	12.5	25	5.5	8.8					1004
1115									27.5	35	7.0	11.3	17.5	28	6.1	9.8					1115
1227									32.5	38	7.6	12.2	20.0	31	6.7	10.7					1227

CMH per Mtr.	5 SLOT					6 SLOT					7 SLOT					8 SLOT					CMH per Mtr.
	Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		Ps	NC	PROJ		
			H	C			H	C			H	C			H	C					
669	5.0	-	3.4	5.5	2.5	-	3.0	4.9													669
781	5.0	-	3.7	6.1	2.5	-	3.4	5.2	2.5	-	3.4	5.2									781
892	5.0	18	4.6	7.0	5.0	-	4.0	6.7	2.5	-	3.7	5.8	2.5	-	3.4	5.5					892
1004	7.5	20	4.9	7.6	5.0	19	4.6	7.6	5.0	-	4.0	6.4	2.5	-	4.0	6.1					1004
1115	10.0	23	5.5	8.5	7.5	21	4.9	7.9	5.0	19	4.6	7.3	5.0	-	4.3	7.0					1115
1227	12.5	26	6.1	9.8	7.5	23	5.5	8.8	5.0	21	4.9	7.9	5.0	-	4.9	7.6					1227
1338	15.0	28	6.4	10.4	10.0	25	6.1	9.5	7.5	23	5.8	8.8	5.0	18	5.2	8.5					1338
1450	17.5	31	7.0	11.3	12.5	27	6.4	10.1	7.5	24	6.1	9.5	7.5	20	5.5	9.1					1450
1561					15.0	29	7.0	11.3	10.0	25	6.4	10.1	7.5	22	6.1	9.5					1561
1673									12.5	27	6.7	11.0	10.0	24	6.4	10.1					1673
1812									15.0	29	7.3	11.6	10.0	26	7.0	10.7					1812
1952													12.5	27	7.6	12.5					1952
2091													15.0	29	8.2	13.1					2091
2230													17.5	31	8.5	13.7					2230

*In the interest of product development, KMC reserves the right to make changes without notice.

KRLAD - 50

12.5mm Slot - Return Air

CMH per Mtr.	1 SLOT		2 SLOT		3 SLOT		4 SLOT		5 SLOT		6 SLOT		7 SLOT		8 SLOT		CMH per Mtr.
	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	
112	7.5	-	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	112
167	15.0	-	5.0	-	2.5	-	-	-	-	-	-	-	-	-	-	-	167
195	20.0	-	5.0	-	2.5	-	-	-	-	-	-	-	-	-	-	-	195
223	25.0	14	7.5	-	5.0	-	2.5	-	-	-	-	-	-	-	-	-	223
251	32.5	18	7.5	-	5.0	-	2.5	-	2.5	-	-	-	-	-	-	-	251
279	40.0	21	10.0	-	5.0	-	2.5	-	2.5	-	2.5	-	-	-	-	-	279
335			15.0	-	7.5	-	5.0	-	2.5	-	2.5	-	2.5	-	-	-	335
446			25.0	17	12.5	-	7.5	-	5.0	-	5.0	-	2.5	-	2.5	-	446
502			32.5	21	15.0	-	10.0	-	5.0	-	5.0	-	2.5	-	2.5	-	502
558					17.5	13	10.0	-	7.5	-	5.0	-	5.0	-	2.5	-	558
669					25.0	19	15.0	-	10.0	-	7.5	-	5.0	-	5.0	-	669
781					35.0	24	20.0	16	12.5	-	10.0	-	7.5	-	5.0	-	781
892							25.0	20	17.5	14	12.5	-	10.0	-	7.5	-	892
1004							35.0	24	20.0	18	15.0	-	12.5	-	10.0	-	1004
1115							40.0	27			17.5	16	15.0	-	10.0	-	1115
1394													20.0	20	15.0	15	1394
1673													30.0	26	22.5	21	1673
1952															30.0	26	1952
2230															40.0	31	2230

KRLAD - 75

19mm Slot - Return Air

CMH per Mtr.	1 SLOT		2 SLOT		3 SLOT		4 SLOT		5 SLOT		6 SLOT		7 SLOT		8 SLOT		CMH per Mtr.
	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	
167	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	167
195	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	195
223	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	223
251	12.5	-	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	251
279	15.0	-	5.0	-	-	-	-	-	-	-	-	-	-	-	-	-	279
335	22.5	17	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	335
390	30.0	22	7.5	-	5.0	-	-	-	-	-	-	-	-	-	-	-	390
446	40.0	27	10.0	-	5.0	-	-	-	-	-	-	-	-	-	-	-	446
502			12.5	-	7.5	-	5.0	-	-	-	-	-	-	-	-	-	502
558			15.0	14	7.5	-	5.0	-	-	-	-	-	-	-	-	-	558
669			22.5	20	10.0	-	7.5	-	5.0	-	-	-	-	-	-	-	669
781			32.5	25	15.0	14	7.5	-	5.0	-	5.0	-	-	-	-	-	781
892					17.5	18	10.0	-	7.5	-	5.0	-	5.0	-	-	-	892
1004					22.5	22	12.5	13	10.0	-	7.5	-	5.0	-	5.0	-	1004
1115							15.0	17	10.0	-	7.5	-	7.5	-	5.0	-	1115
1394							27.5	25	15.0	18	12.5	-	10.0	-	7.5	-	1394
1673									22.5	24	15.0	19	12.5	15	10.0	-	1673
1952											22.5	25	17.5	20	12.5	15	1952
2230											27.5	29	20.0	25	17.5	20	2230
2509													27.5	28	20.0	24	2509
2788															25.0	28	2788

KRLAD - 100

25mm Slot - Return Air

CMH per Mtr.	1 SLOT		2 SLOT		3 SLOT		4 SLOT		5 SLOT		6 SLOT		7 SLOT		8 SLOT		CMH per Mtr.
	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	-Ps	NC	
223	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	223
335	15.0	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	335
446	27.5	26	7.5	-	-	-	-	-	-	-	-	-	-	-	-	-	446
558	40.0	32	10.0	16	5.0	-	-	-	-	-	-	-	-	-	-	-	558
669			15.0	21	7.5	-	5.0	-	-	-	-	-	-	-	-	-	669
781			20.0	25	10.0	16	5.0	-	-	-	-	-	-	-	-	-	781
892			27.5	29	12.5	20	7.5	-	-	-	-	-	-	-	-	-	892
1004			32.5	32	15.0	23	10.0	16	5.0	-	-	-	-	-	-	-	1004
1115					20.0	26	10.0	19	7.5	-	-	-	-	-	-	-	1115
1227					22.5	29	12.5	21	7.5	17	5.0	-	-	-	-	-	1227
1338					27.5	31	15.0	24	10.0	19	7.5	15	-	-	-	-	1338
1450					30.0	33	17.5	26	10.0	21	7.5	17	-	-	-	-	1450
1561							20.0	28	12.5	23	7.5	19	7.5	15	-	-	1561
1673							22.5	30	15.0	25	10.0	21	7.5	17	5.0	-	1673
1952							32.5	34	20.0	29	12.5	25	10.0	22	7.5	17	1952
2230									25.0	33	17.5	29	12.5	25	10.0	21	2230
2509									32.5	37	22.5	33	17.5	29	12.5	24	2509
2788									40.0	40	27.5	35	20.0	32	17.5	27	2788
3346									57.5	45	40.0	40	30.0	37	25.0	32	3346
3903											55.0	45	40.0	41	32.5	37	3903
4461													52.5	45	42.5	40	4461

*In the interest of product development, KMC reserves the right to make changes without notice.

Notes

Standard

ANSI / ASHRAE standard 70

Sound Levels

- NC is noise criteria curve that will not be exceeded at the operating point. This is determined by assuming a 10dB (ref: 10⁻¹² watts) room attenuation that is subtracted from the power levels in each of the 2nd thru 7th octave bands
- NC shown is based on 1.2m diffuser length. For other active lengths, use the following adjustment factors:

If Diffuser Length is:	0.6	1.2	1.8	2.4	3.0+
Add to NC value:	-3	0	+2	+3	+4

Throw

- For ceiling installed KSLAD, large numbers of slots in a single direction should be carefully studied for drop effects.
- The numbers shown in table are throw distances in meter, measured along the jet trajectory axis relating to terminal velocities of 0.75m/s, 0.5m/s, & 0.25m/s, with the jet attached to a surface for a 3m+ active length. These are ONE way patterns. For other active lengths, use the following throw adjustment factors:

If Diffuser Length is:	0.6	1.2	1.8	2.4	3.0+
Multiply Throw Dist by:	0.45	0.65	0.8	0.9	1

- For two way applications, determine proportion of air in each direction and refer to throw distance for number of slots in the same direction.

Terminal velocity is the air speed, in meter per second, measured in the supply air stream

High Sidewall Applications

KSLAD diffuser when used in a high sidewall the air can be:

- Projected vertically up the side wall to the ceiling. In this case use the horizontal pattern data, subtracting the KSLAD to ceiling distance from the throw distance given. This is the preferred method.
- Directed horizontally and attaches itself to the ceiling via the Coanda effect. In this case, use the vertical projection throw (average of heating and cooling value) times 1.4 when the KSLAD is located close to the ceiling. Decrease the factor 1.4 by .1 (down to a minimum of 1.0) for every 300mm the KSLAD is located below the ceiling. The drop effect must also be studied closely when cooling is used in conjunction with this high sidewall KSLAD mounted more than 300mm – 600mm below the ceiling.

Vertical Projection

- The numbers shown in table are projection distances, in meters, measured along the jet trajectory axis relating to a terminal velocity of 0.25m/s, for a 1.2m active length. H based on a heating differential of 12° C. C based on a cooling differential of 12° C. For other active lengths, use the following projection adjustment factors:

If Diffuser Length is:	0.6	1.2	1.8	2.4	3.0+
Multiply Proj Dist by:	0.7	1	1.2	1.4	1.5

Terminal velocity is the air speed, in meter per second, measured in the supply air stream.

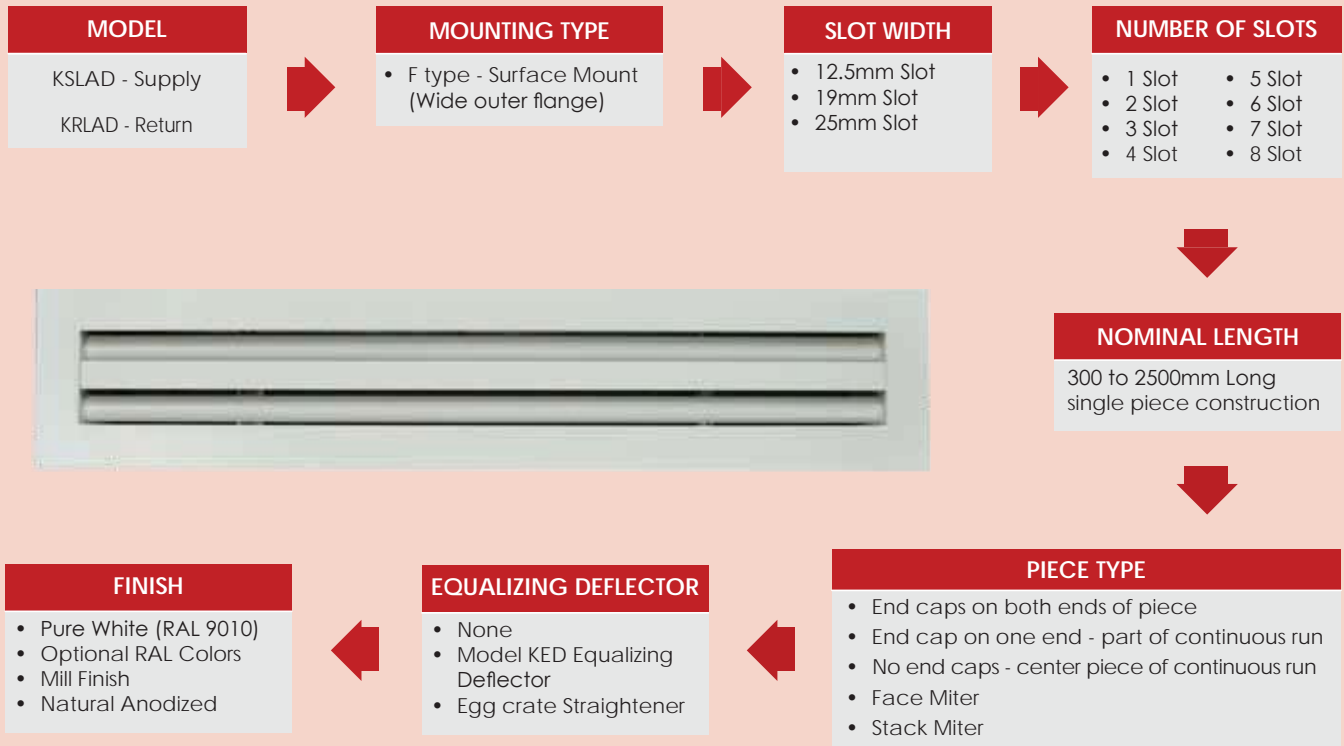
Pressure

Ps represents Static Pressure, Pa

Model KRLAD Return Data

Sound and pressure data shown for return unit without internal components.

Linear Slot Diffusers



Typical Specification (Model : KSLAD / RLAD)

Aluminum linear slot supply diffusers shall be KMC Model KSLAD Straight Line Adjustable Diffusers, Model KRLAD matching returns (without pattern control vanes. Outer frame type shall conform and integrate with the floor, wall, or ceiling type shown. Linear diffusers shall be available up to 2000mm in single-piece length, and have 1 to 8 slots, with a slot width of 12.5mm, 19.0mm and 25.0mm as scheduled for the appearance and performance requirements as shown.

Diffuser runs greater than 2000mm long shall consist of multiple diffusers aligned end-to-end using alignment strips within the diffuser keyways, to form a continuous slot appearance. Alignment strips shall be provided by the diffuser manufacturer (KMC).

Diffusers and matching returns shall consist of extruded aluminum frames, tees, and pattern control components assembled using heavy gauge, coated steel cross members for rigidity. All movable air control components shall be extruded aluminum -steel and plastic control components are not acceptable. Inverted tee members and pattern control components shall be secured to the steel cross members with heavy-duty springs. These components shall be removable, without tools, providing access to the plenum to install as detailed.

The aluminum extruded flow control vanes utilized in supply diffusers shall be independently adjustable within each slot

to control air volume and pattern (direction) for vertical or horizontal directions. Inactive sections shall be blanked-off utilizing flow control vanes. Diffuser lengths greater than 1000mm shall include multiple piece flow control vanes. The physical appearance of the face of supply diffusers shall not change regardless of these adjustments. Supply diffusers and return units shall also be identical in appearance from the face. Ice tong designs are not acceptable.

Concealed mounting brackets, accessible by removal of inner assemblies, shall be provided for attaching to the supply duct / plenum without any visible mounting screws.

Finish shall be KMC Standard color (RAL 9010) or color as scheduled or selected by the Architect with flat black pattern / volume control elements.

KSLAD Accessories

KMC Model KED Equalizing Deflectors shall be provided, for field installation and adjustment, for lateral control of the air pattern at 90° to the axis of continuous runs of units, or for spread pattern control of single units. (Optional) 12.7 mm x 12.7 mm x 12.7mm aluminum egg crate material shall be provided in the neck of the supply linear diffusers to improve directional control of the supply air stream.

