

# LINEAR DIFFUSER

## FEATURES

- KYODO series IT-K are designed for both heating and cooling application, supply as well as return.
- Slim profile that goes with modern architectural design.
- Specially designed for sectional or continuous installation.
- Both the direction and volume of the discharge air can be adjusted gradually by moving the pattern controllers.
- Deflector can easily be adjusted without special tool after installation to give many kinds of throw pattern and air volume.
- Diffuser face is easily removable for maintenance if optional air plenum box is used.
- Optional plenum box is available on request for supply and return air purposes for quiet operation and more even distribution of air.
- One piece construction up to 3.0 metre.
- Material is extruded aluminium.

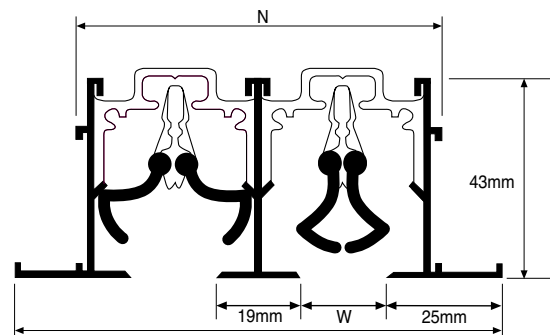
## FINISH

Standard finish in baked enamel for diffuser. Black anodizes for deflector.

## ORDER KEY

<u>19mm Slot Width</u>	<u>25mm Slot Width</u>
IT – KS – 1 Slot	ITKS – 25 – 1 Slot
IT – KD – 2 Slot	ITKD – 25 – 2 Slot
IT – KT – 3 Slot	ITKT – 25 – 3 Slot
IT – KK – 4 Slot	ITKK – 25 – 4 Slot
IT – K5 – 5 Slot	ITK5 – 25 – 5 Slot
IT – K6 – 6 Slot	ITK6 – 25 – 6 Slot

## MODEL: IT-K



## SLOT LINEAR DIFFUSER

## DIMENSION

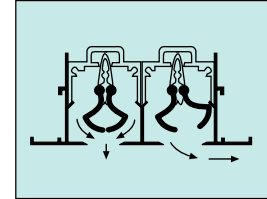
SLOT WIDTH	19mm		25mm	
	N	F	N	F
IT-KS (1 SLOT)	46	70	52	76
IT-KD (2 SLOT)	84	108	96	120
IT-KT (3 SLOT)	122	146	140	164
IT-KK (4 SLOT)	161	185	185	209
IT-K5 (5 SLOT)	199	223	229	253
IT-K6 (6 SLOT)	238	261	273	297

Dimensions are in mm.

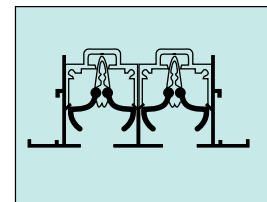
# TECHNICAL PERFORMANCE DATA

## MODEL: IT-K

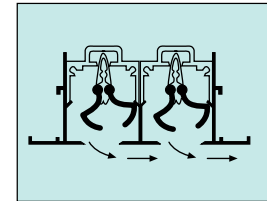
NO OF SLOT	CAP l/s	30	40	50	60	70	80	90	100	120	140	160	180	200	225	250	275	300	325	350	375	400	
1	S. P.	13.5	21	30	40	51.5	63.5	76	90	120													
	NR	<10	16	24	30	36	41	46	50	57													
	THROW	4	4.8	5.6	6.2	6.8	7.4	8	8.4	9.4													
2	S. P.	4.5	7	10	13.5	17	21	25.5	30	40	51.5	63.5	76	90	108.5								
	NR	<10	<10	12	15	17	20	24	28	35	41	46	51	55	59								
	THROW	3.2	4	4.6	5	5.6	6	6.6	7	7.8	8.4	9	9.6	10.2	10.8								
3	S. P.			5.5	7	9	11	13.5	16	21	27	33.5	40	47.5	57	67.5	78.5	90					
	NR			<10	12	14	16	18	20	23	29	34	38	42	47	51	54	58					
	THROW			3.8	4.4	4.8	5.2	5.6	6	6.8	7.4	8	8.6	9	9.6	10.2	10.8	11.2					
4	S. P.				4.5	6	7	8.5	10	13.5	17	21	25.5	30	36.5	43	50	57	65	73	81	90	
	NR				10	12	14	16	18	21	23	25	29	33	38	42	46	49	52	55	57	60	
	THROW				3.8	4.4	4.6	5	5.4	6	6.6	7.2	7.8	8.2	8.8	9.4	9.8	10.4	10.8	11.2	11.6	12	
5	S. P.				3	4	5	6	7	9.5	12	15	18	21	25.5	30	35	40	45.5	51.5	57	63.5	
	NR				<10	11	13	15	16	19	21	23	25	27	31	35	39	42	45	48	50	53	
	THROW				3.4	3.8	4.2	4.6	5	5.6	6.2	6.6	7.2	7.6	8.2	8.6	9.2	9.6	10	10.4	10.8	11.2	
6	S. P.					3	4	4.5	5.5	7	9	11	13.5	16	19	22.5	26.5	30	34	38.5	43	47.5	
	NR					<10	11	13	15	18	20	22	24	26	27	29	33	36	39	42	45	47	
	THROW					3.6	3.8	4.2	4.6	5.2	5.6	6.2	6.6	7.2	7.6	8.2	8.6	9	9.4	9.8	10.2	10.6	



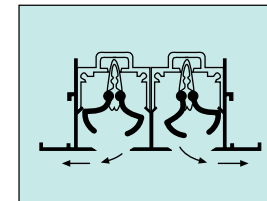
VERTICAL & HORIZONTAL



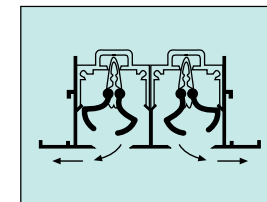
FULLY DAMPERED



ONE WAY



OPPOSED UNEQUAL FLOW  
(ONE SLOT DAMPERED)



OPPOSED

## MODEL: ITK-25

NO OF SLOT	CAP l/s	30	40	50	60	70	80	90	100	120	140	160	180	200	225	250	275	300	325	350	375	400	
1	S. P.	9	14.5	21.5	29.5	38.5	48.5	59.5	71.5	98.5	128.5	162											
	NR	-	13	18	23	27	30	33	36	43	49	54											
	THROW	0.6	1.4	2.2	2.8	3.6	4.2	4.8	5.4	6.2	7	7.6											
2	S. P.		4.5	6.5	9	11.5	14.5	18	21.5	29.5	38.5	48.5	59.5	71.5	88								
	NR		-	-	11	14	17	20	22	27	31	34	38	42	46								
	THROW		0.4	0.8	1.2	1.6	2	2.4	2.8	3.6	4.2	4.8	5.2	5.8	6.2								
3	S. P.			3	4.5	5.5	7	9	10.5	14.5	19	24	29.5	35.5	43.5	52	61.5	71.5	82.5	93.5	105.5	118	
	NR			-	-	-	11	14	16	20	23	26	29	32	35	38	42	45	48	51	53	56	
	THROW			0.4	0.6	1	1.2	1.6	1.8	2.4	3	3.6	4	4.4	4.8	5.2	5.6	5.8	6	6.4	6.4	6.6	
4	S. P.				2.5	3.5	4.5	5.5	6.5	9	11.5	14.5	18	21.5	26.5	31.5	37.5	43.5	50	57	64	71.5	
	NR				-	-	-	-	12	16	19	22	25	27	29	32	34	37	40	42	45	47	
	THROW				0.6	0.6	0.8	1.2	1.4	1.8	2.4	2.8	3.2	3.6	4	4.4	4.6	5	5.2	5.4	5.6	5.8	
5	S. P.					2.5	3	3.5	4.5	6	8	10	12	14.5	18	21.5	25.5	29.5	34	38.5	43.5	48.5	
	NR					-	-	-	-	13	16	19	21	24	26	29	31	33	34	36	39	41	
	THROW					0.6	0.8	1	1.4	1.8	2.2	2.6	3	3.4	3.8	4	4.4	4.6	4.8	5.2	5.4		
6	S. P.							2.5	3	4.5	5.5	6.5	7	10.5	13	15.5	18.5	21.5	24.5	28	31.5	35.5	
	NR							-	-	-	-	13	15	16	21	24	26	28	30	32	34	37	
	THROW							0.8	1	1.2	1.6	1.8	2	2.6	3	3.4	3.6	4	4.2	4.4	4.6	4.8	

- Performance data is based on 1.2m active length
- Result of performance is tested under NATA, in accordance with ADC 10621 GRD-84
- SP – Static Pressure drops are in Pascals
- NR – Noise rating in dB re 10<sup>-12</sup> watts. Room correction of -10dB
- CAP – Capacity of flow in litre per second
- Throw – Throw at 0.5 m/s Terminal Velocity in metres

## END FABRICATION

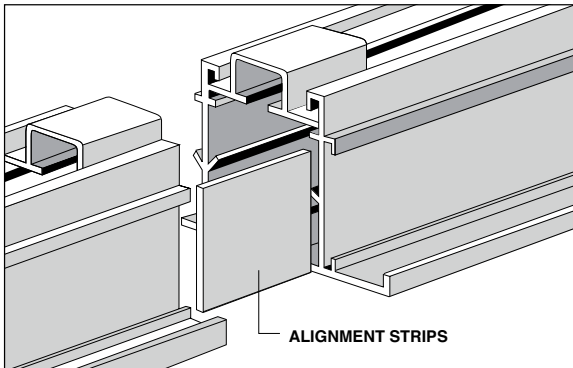


**A) OPEN END**



**B) C/W END CAP**

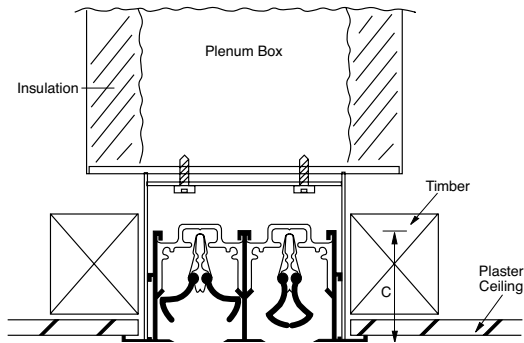
## ALIGNMENT STRIPS



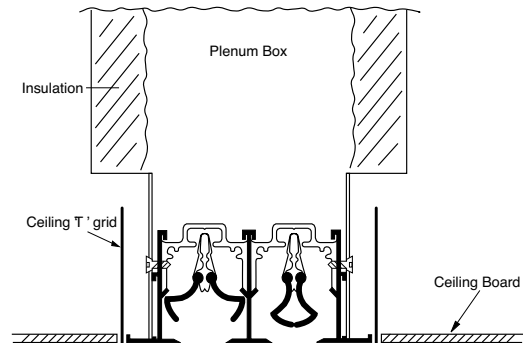
## CORNER FABRICATION



## INSTALLATION DETAILS:

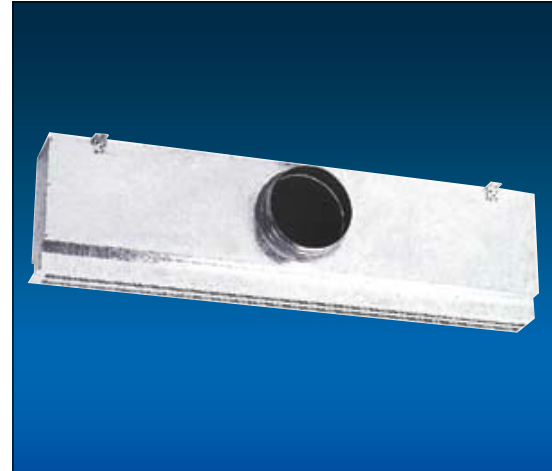
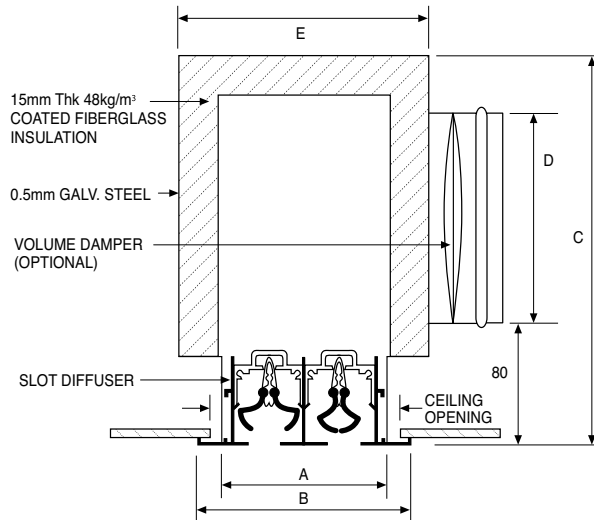


**A) CONCEALED MOUNTING**



**B) LAY-IN TYPE**

# SLOT DIFFUSER MOUNTED ON AIR PLENUM BOX: IT-K / ITK-25



## STANDARD CONSTRUCTION FOR IT-K

Slot	A	B	C	D	E	Ceiling Opening	Inlet Dia
1	46	70	245	150	92	56	150
2	84	108	295	200	130	94	200
3	122	146	345	250	168	132	250
4	161	185	395	300	207	171	300
5	199	223	395	300	245	209	300
6	238	261	395	300	284	248	300

## SPECIAL CONSTRUCTION (OVAL INLET) FOR IT-K

Slot	A	B	C	D	E	Ceiling Opening	Inlet Dia
1	46	70	245	150	92	56	150 (Oval)
2	84	108	295	150	130	94	200 (Oval)
3	122	146	295	200	168	132	250 (Oval)
4	161	185	295	200	207	171	300 (Oval)
5	199	223	295	200	245	209	300 (Oval)
6	238	261	295	200	284	248	300 (Oval)

## STANDARD CONSTRUCTION FOR ITK-25

Slot	A	B	C	D	E	Ceiling Opening	Inlet Dia
1	52	76	295	200	98	62	200
2	96	120	345	250	142	106	250
3	140	164	345	250	186	150	250
4	185	209	395	300	231	195	300
5	229	253	395	300	275	239	300
6	273	297	445	350	319	283	350

## SPECIAL CONSTRUCTION (OVAL INLET) FOR ITK-25

Slot	A	B	C	D	E	Ceiling Opening	Inlet Dia
1	52	76	245	150	98	62	200 (Oval)
2	96	120	295	200	142	106	250 (Oval)
3	140	164	295	200	186	150	250 (Oval)
4	185	209	295	200	231	195	300 (Oval)
5	229	253	295	200	275	239	300 (Oval)
6	273	297	295	200	319	283	350 (Oval)