



REGISTERS&GRILLES

YTA - Performance Data

CIRCULAR/ROUND CEILING DIFFUSER - YTA

EFFECTIVE AREA Ak(m²)

mm	100	150	200	250	300	350	400	450	500
Ak (m ²)	0,0040	0,0085	0,0157	0,0257	0,0381	0,0536	0,0730	0,0955	0,1150

CIRCULAR CEILING DIFFUSER QUICK SELECTION

Qv(m ³ /h)	ØD(mm)	100	150	200	250	300	350	400	450	500
	A (m²)	0,0040	0,0085	0,0157	0,0257	0,0381	0,0536	0,0730	0,0955	0,1150
150	Lt (m)	1,0	0,6							
	NR	48	32							
	Pt (Pa)	54,0	18,0							
	Vk (m/s)	9,0	5,4							
200	Lt (m)	1,3	1,0	0,5						
	NR	>50	40	22						
	Pt (Pa)	>70	32,0	9,4						
	Vk (m/s)	12,2	7,0	3,8						
250	Lt (m)		1,2	0,8	0,5					
	NR		45	27	<20					
	Pt (Pa)		48,0	13,4	5,0					
	Vk (m/s)		8,8	4,6	2,8					
300	Lt (m)		1,8	1,1	0,7					
	NR		>50	33	20					
	Pt (Pa)		>70	19,6	8,0					
	Vk (m/s)		10,8	5,7	3,5					
400	Lt (m)			1,4	1,1	0,8	0,5			
	NR			42	25	<20	<20			
	Pt (Pa)			38,0	12,2	6,0	<5			
	Vk (m/s)			7,6	4,5	3,1	2,2			
500	Lt (m)			1,6	1,3	1,1	0,9	0,6		
	NR			50	34	23	<20	<20		
	Pt (Pa)			58,0	21,0	9,6	<5	<5		
	Vk (m/s)			9,4	5,8	3,9	2,7	2,0		
600	Lt (m)				1,6	1,3	1,1	0,9	0,6	
	NR				40	27	<20	<20	<20	
	Pt (Pa)				30,0	13,6	6,4	<5	<5	
	Vk (m/s)				6,9	4,6	3,3	2,4	1,8	
800	Lt (m)				2,0	1,7	1,4	1,3	1,1	1,0
	NR				48	35	25	<20	<20	<20
	Pt (Pa)				56,0	25,0	12,0	6,2	<5	<5
	Vk (m/s)				9,2	6,2	4,4	3,2	2,4	2,0
1000	Lt (m)					2,0	1,7	1,5	1,3	1,2
	NR					43	32	23	<20	<20
	Pt (Pa)					39,0	19,0	10,0	5,6	<5
	Vk (m/s)					7,8	5,6	4,0	3,0	2,4
1500	Lt (m)						2,5	2,2	1,9	1,7
	NR						46	35	27	22
	Pt (Pa)						49,2	24,0	13,6	8,8
	Vk (m/s)						8,4	6,1	4,6	3,7
2000	Lt (m)							2,8	2,5	2,2
	NR							44	35	30
	Pt (Pa)							41,8	24,0	16,0
	Vk (m/s)							8,0	6,1	5,0
3000	Lt (m)								3,5	3,2
	NR								48	42
	Pt (Pa)								50,2	37,0
	Vk (m/s)								9,1	7,5

Table-1

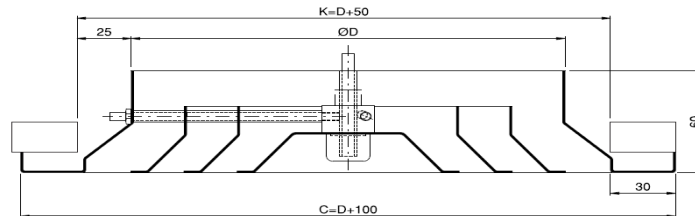
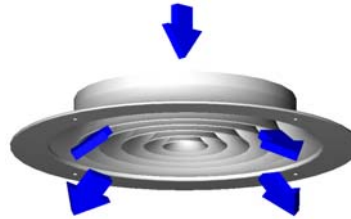
SELECTION CRITERIAS
 Ceiling Height H(m)=3±05
 With ceiling effect
 Damper %100 open



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YTA - Performance Data

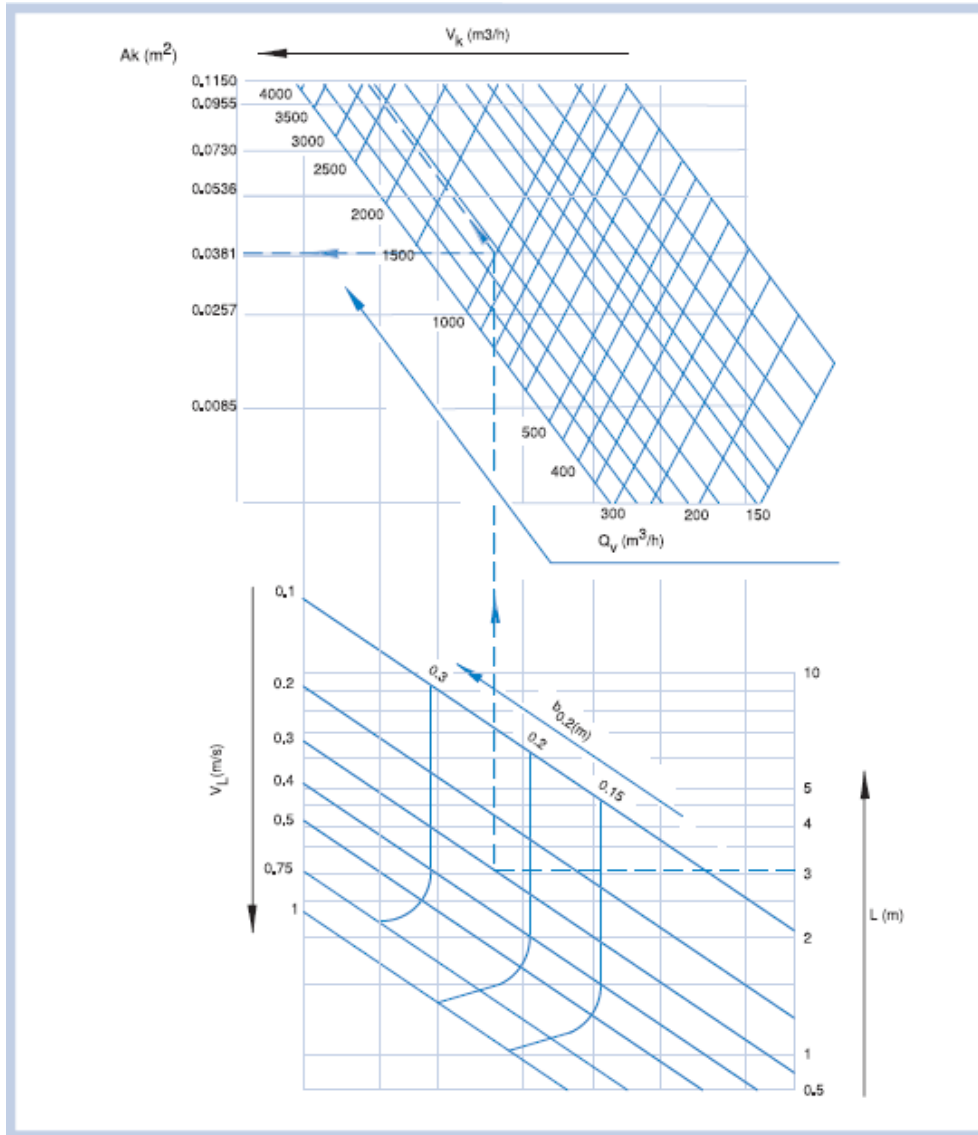
CIRCULAR CEILING DIFFUSER SELECTION



Neck Size Dimension ØDmm	Effective Area m ²	AIR VELOCITY m/s																			
		1,5			2,0			2,5			3,0			4,0							
150	0,0085	45,90	m ³ /h	27,0	cfm	61,20	m ³ /h	36,0	cfm	76,50	m ³ /h	45,0	cfm	91,80	m ³ /h	54,0	cfm	122,40	m ³ /h	72,0	cfm
200	0,0157	84,78	m ³ /h	49,9	cfm	113,04	m ³ /h	66,5	cfm	141,30	m ³ /h	83,2	cfm	169,56	m ³ /h	99,8	cfm	226,08	m ³ /h	133,0	cfm
250	0,0257	138,78	m ³ /h	81,7	cfm	185,04	m ³ /h	108,9	cfm	231,30	m ³ /h	136,1	cfm	277,56	m ³ /h	163,3	cfm	370,08	m ³ /h	217,8	cfm
300	0,0381	205,74	m ³ /h	121,1	cfm	274,32	m ³ /h	161,4	cfm	342,90	m ³ /h	201,8	cfm	411,48	m ³ /h	242,2	cfm	548,64	m ³ /h	322,9	cfm
350	0,0536	289,44	m ³ /h	170,3	cfm	385,92	m ³ /h	227,1	cfm	482,40	m ³ /h	283,9	cfm	578,88	m ³ /h	340,7	cfm	771,84	m ³ /h	454,2	cfm
400	0,0730	394,20	m ³ /h	232,0	cfm	525,60	m ³ /h	309,3	cfm	657,00	m ³ /h	386,6	cfm	788,40	m ³ /h	464,0	cfm	1051,20	m ³ /h	618,6	cfm
450	0,0955	515,70	m ³ /h	303,5	cfm	687,60	m ³ /h	404,7	cfm	859,50	m ³ /h	505,8	cfm	1031,40	m ³ /h	607,0	cfm	1375,20	m ³ /h	809,3	cfm
500	0,1150	621,00	m ³ /h	365,5	cfm	828,00	m ³ /h	487,3	cfm	1035,00	m ³ /h	609,1	cfm	1242,00	m ³ /h	730,9	cfm	1656,00	m ³ /h	974,6	cfm
550	0,1920	1036,80	m ³ /h	610,2	cfm	1382,40	m ³ /h	813,5	cfm	1728,00	m ³ /h	1016,9	cfm	2073,60	m ³ /h	1220,3	cfm	2764,80	m ³ /h	1627,1	cfm

Table-2

SELECTION DIAGRAM



SELECTION CRITERIAS
 Ceiling Height H(m)=3±05
 With ceiling effect
 Damper %100 open

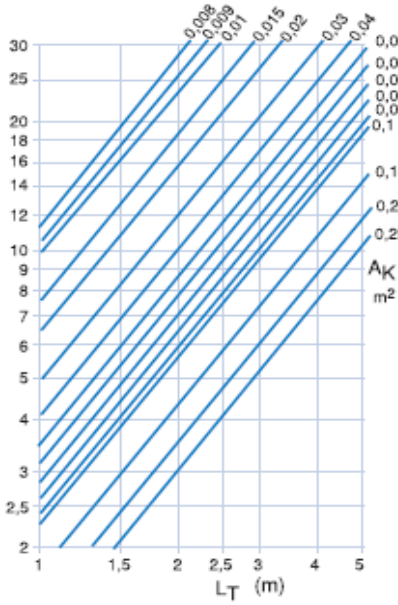


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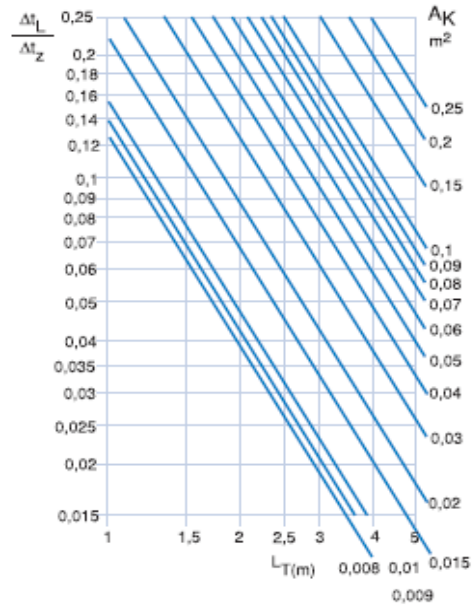
YTA - Performance Data

TEMPERATURE VARIABLES

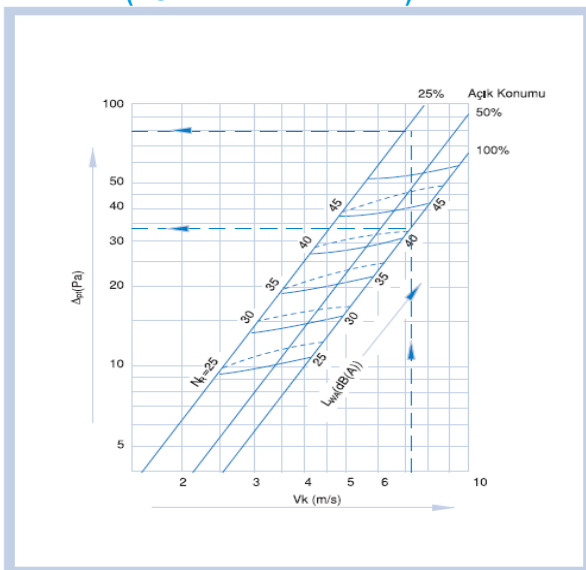
INDUCTION SELECTION DIAGRAM



TEMPERATURE VARIABLE SELECTION



SOUND LEVEL AND PRESSURE LOSS DIAGRAM (BUTTERFLY DAMPER)



ROOM VOICE DELIVERY DIAGRAM

