



DAM21R

Linear throw diffuser on rectangular panel with orthogonally arranged adjustable deflectors with a high induction ratio (mixing capacity) between the injected and the ambient air. Made up of a plate with holes inside which adjustable plastic deflectors are housed.

TECHNICAL SPECIFICATION AND USAGE LIMIT

INSTALLATION HEIGHT	APPLICATIONS	MATERIAL	SURFACE FINISH	COLOR	FASTENING
2,5 to 4 m	The DAM21 diffuser can be used in room heating and cooling for air delivery and return, in this case it is supplied without deflecting fins. The deflectors can also be oriented after the diffuser has been installed in order to make adjustments to optimise airflow in the room once the system is running.	Painted steel panel, ABS supports and black PVC deflectors	Epoxy powder coating resistant to impact and abrasion	RAL 9010 white. On request, coating in non-standard RAL colors.	by means of side screws or a central screw

GREEN BUILDING

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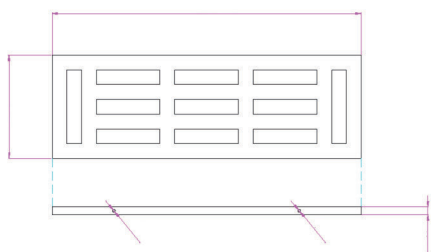
APPLICATIONS

Residential	Easy Pack	Calculation Method	REACH Certificate	RoHS Certificate	Industry	Building	Air Conditioning	Interior design

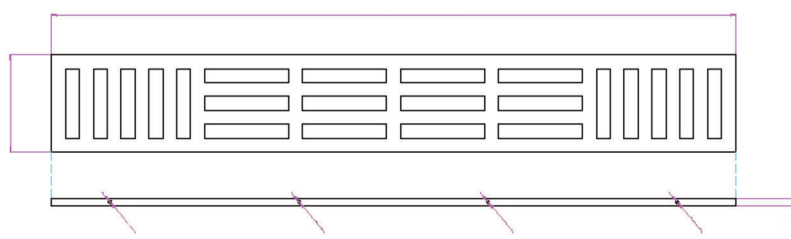
*on request

STANDARD MODELS AVAILABLE

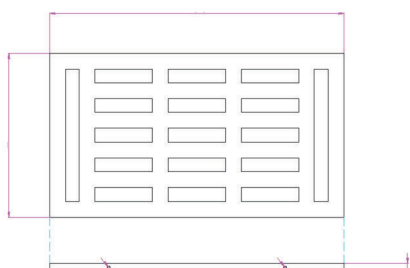
DAM 21 115x425



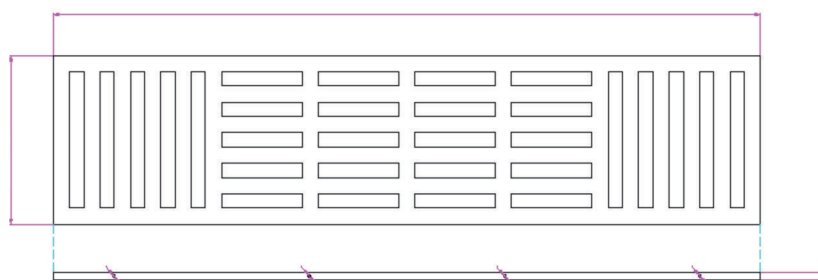
DAM 21 115x825



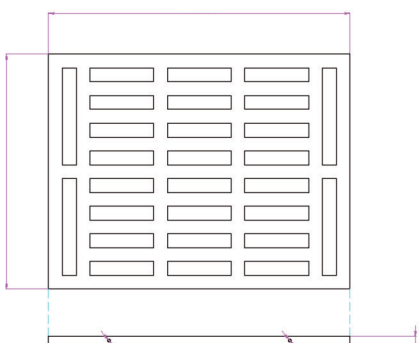
DAM 21 215x425



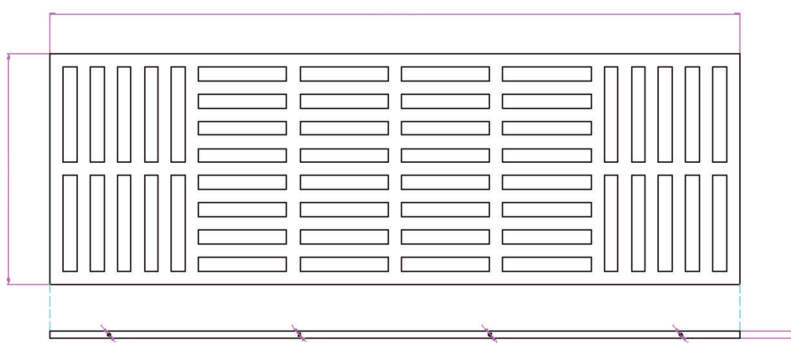
DAM 21 215x825



DAM 21 315x625



DAM 21 315x825



MODEL	DESCRIPTION	U.M.	Vi (m/sec)									
			1	2	3	4	5	6	7	8	9	10
DAM21R 425x115 Ak: 0,0147m ²	Flow Rate	m ³ /h	53	106	159	212	265	318	371	424	477	530
	Pressure Drop	Pa	3	13	30	53	83	119	162	211	267	330
	Horizontal Throw Vt 0,25m/s	mt	0,2	0,3	0,5	0,6	0,8	0,9	1,1	1,2	1,4	1,5
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 525x115 Ak: 0,0189m ²	Flow Rate	m ³ /h	68	136	204	272	340	408	476	544	612	680
	Pressure Drop	Pa	3	13	29	51	79	114	155	203	257	317
	Horizontal Throw Vt 0,25m/s	mt	0,2	0,4	0,6	0,8	0,9	1,1	1,3	1,5	1,7	1,9
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 625x115 Ak: 0,0229m ²	Flow Rate	m ³ /h	83	165	248	330	413	495	578	660	743	825
	Pressure Drop	Pa	3	12	28	49	77	111	150	196	249	307
	Horizontal Throw Vt 0,25m/s	mt	0,2	0,4	0,7	0,9	1,1	1,3	1,5	1,8	2,0	2,2
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 825x115 Ak: 0,0304m ²	Flow Rate	m ³ /h	110	219	329	438	548	657	767	876	986	1095
	Pressure Drop	Pa	3	12	26	47	73	105	144	188	237	293
	Horizontal Throw Vt 0,25m/s	mt	0,3	0,6	0,9	1,2	1,4	1,7	2,0	2,3	2,6	2,9
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 1025x115 Ak: 0,0379m ²	Flow Rate	m ³ /h	137	273	410	546	683	819	956	1092	1229	1365
	Pressure Drop	Pa	3	11	25	45	71	102	139	181	229	283
	Horizontal Throw Vt 0,25m/s	mt	0,3	0,6	1,0	1,3	1,6	1,9	2,2	2,6	2,9	3,2
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1

Note: the data indicated refer to operation in isothermal conditions

MODEL	DESCRIPTION	U.M.	Vi (m/sec)									
			1	2	3	4	5	6	7	8	9	10
DAM21R 425x215 Ak: 0,0248m ²	Flow Rate	m ³ /h	89	178	268	357	446	535	624	713	803	892
	Pressure Drop	Pa	3	12	27	49	76	109	149	195	246	304
	Horizontal Throw Vt 0,25m/s	mt	0,2	0,5	0,7	0,9	1,1	1,4	1,6	1,8	2,1	2,3
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 525x215 Ak: 0,0318m ²	Flow Rate	m ³ /h	114	229	343	458	572	687	801	915	1030	1144
	Pressure Drop	Pa	3	12	26	47	73	105	143	186	236	291
	Horizontal Throw Vt 0,25m/s	mt	0,3	0,6	0,8	1,1	1,4	1,7	1,9	2,2	2,5	2,8
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 625x215 Ak: 0,0356m ²	Flow Rate	m ³ /h	139	278	416	555	694	833	972	1111	1249	1388
	Pressure Drop	Pa	3	11	25	45	71	102	138	180	228	282
	Horizontal Throw Vt 0,25m/s	mt	0,3	0,6	0,9	1,2	1,5	1,8	2,1	2,4	2,7	3,0
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 825x215 Ak: 0,0512m ²	Flow Rate	m ³ /h	184	368	553	737	921	1105	1290	1474	1658	1842
	Pressure Drop	Pa	3	11	24	43	68	97	132	173	219	270
	Horizontal Throw Vt 0,25m/s	mt	0,4	0,8	1,2	1,6	2,0	2,3	2,7	3,1	3,5	3,9
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 1025x215 Ak: 0,0638m ²	Flow Rate	m ³ /h	230	459	689	919	1148	1378	1608	1837	2067	2297
	Pressure Drop	Pa	3	11	25	45	71	102	139	181	229	283
	Horizontal Throw Vt 0,25m/s	mt	0,4	0,8	1,3	1,7	2,1	2,5	2,9	3,3	3,8	4,2
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1

Note: the data indicated refer to operation in isothermal conditions

MODEL	DESCRIPTION	U.M.	Vi (m/sec)									
			1	2	3	4	5	6	7	8	9	10
DAM21R 425x315 Ak: 0,0147m ²	Flow Rate	m ³ /h	135	269	404	538	673	807	942	1077	1211	1346
	Pressure Drop	Pa	3	11	25	45	71	102	139	181	229	283
	Horizontal Throw Vt 0,25m/s	mt	0,3	0,6	1,0	1,3	1,6	1,9	2,2	2,6	2,9	3,2
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 525x315 Ak: 0,0189m ²	Flow Rate	m ³ /h	173	345	518	691	863	1036	1209	1381	1554	1727
	Pressure Drop	Pa	3	11	24	43	68	97	132	173	219	270
	Horizontal Throw Vt 0,25m/s	mt	0,4	0,7	1,1	1,4	1,8	2,2	2,5	2,9	3,3	3,6
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 625x315 Ak: 0,0229m ²	Flow Rate	m ³ /h	209	419	628	838	1047	1257	1466	1676	1885	2095
	Pressure Drop	Pa	3	11	24	42	66	95	129	169	214	264
	Horizontal Throw Vt 0,25m/s	mt	0,4	0,9	1,3	1,7	2,2	2,6	3,0	3,5	3,9	4,3
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 825x315 Ak: 0,0304m ²	Flow Rate	m ³ /h	278	556	834	1112	1390	1668	1946	2224	2502	2780
	Pressure Drop	Pa	3	11	24	43	68	97	132	173	219	270
	Horizontal Throw Vt 0,25m/s	mt	0,5	1,1	1,6	2,2	2,7	3,3	3,8	4,3	4,9	5,4
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1
DAM21R 1025x315 Ak: 0,0379m ²	Flow Rate	m ³ /h	347	693	1040	1386	1733	2080	2426	2773	3119	3466
	Pressure Drop	Pa	2	10	22	39	61	87	119	156	197	243
	Horizontal Throw Vt 0,25m/s	mt	0,7	1,3	2,0	2,6	3,3	3,9	4,6	5,2	5,9	6,5
	Noise Level	dB(A)	15	20	25	30	35	40	45	50	55	60
	Min. Installation Height	m	2,5	2,6	2,7	2,8	2,9	3,0	3,1	3,2	3,3	3,4
	Max. Installation Height	m	3,2	3,3	3,4	3,5	3,6	3,7	3,8	3,9	4,0	4,1

Note: the data indicated refer to operation in isothermal conditions

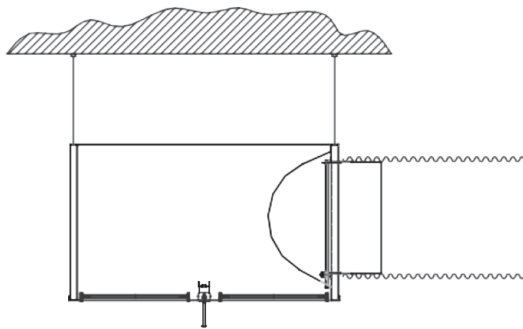


FIG. 1

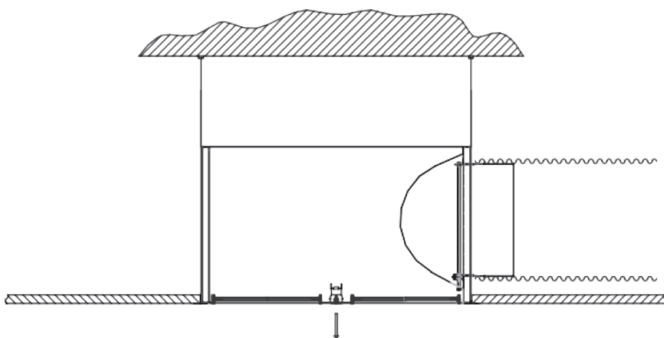


FIG. 2

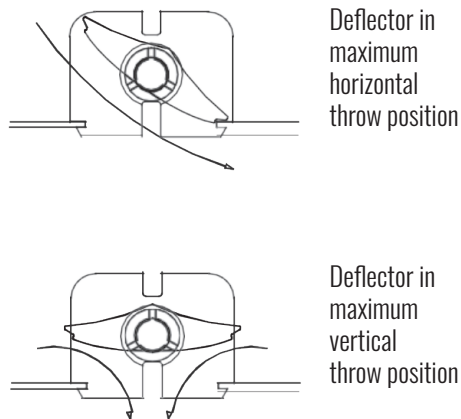


FIG. 3

Easy installation, adjustments and maintenance. The diffusers are fastened to the plenum by means of side screws or a central screw.

Adjustment

The airflow distribution is manually adjusted by acting on the deflectors that are fitted with a snap positioning device so that they stay in position during operation.

Fig. 1 Installation with plenum fastened on the ceiling

- Hang the plenum on the ceiling using brackets or chains fastened on the plenum whose outer edge can be drilled.
- Fit the flexible duct on the connecting sleeve and fasten it with a hose clamp.
- Make a preliminary adjustment to the damper by acting on the pin with Allen screw and tightening the hexagonal-head screw that fastens the pin.
- Fit the diffuser using either a central screw screwing it onto the plenum bridge (if provided) or 4 self-tapping side screws.

Fig. 2 Installation on the false ceiling

- Hang the false ceiling elements on the ceiling.
- Make a preliminary adjustment to the damper by acting on the pin with Allen screw and tightening the hexagonal-head screw that fastens the pin.
- Fit the flexible duct on the connecting sleeve and fasten it with a hose clamp.
- Fit the diffuser using either a central screw screwing it onto the plenum bridge (if provided) or 4 self-tapping side screws.
- Rest the diffuser pre-fitted on the plenum on the square space of the false ceiling.

Fig. 3 Movable deflector adjustment

- The movable deflectors can be adjusted from an angle of 0° (maximum vertical throw position used in heating) to a maximum angle (maximum horizontal throw position used in cooling).

The deflectors are fitted with a snap positioning device in order to guarantee accuracy and always correct positioning even with high flow rates and velocities.