



DIFFUSERS

JET DIFFUSER



The information given in this document is based on data and knowledge correct at the time of printing. Data is subject to change without prior notice for continual product improvement. Applications or installations outside general guidelines and code of practice are beyond our product performance guarantees.

JET DIFFUSER

JAD

ADF Jet Diffusers are specially designed for high velocity and large quantity of air supply to high ceiling applications.

DESIGN & CONSTRUCTION

ADF Jet Diffusers are circular in shape with two concentric cones at the centre which form the jet throw discharge of conditioned air. These centre cones are pivoted at their neck opening for easy adjustment by swinging them to specific angles so that desired direction of air throw can be achieved.

Constructed from Galvanised Steel and baked enamel finished, ADF Jet Diffusers are commonly used in theatres, sports centres or stadium, entertaining stage and other industrial spot cooling applications.

FEATURES

- Adjustable centre core to 45° deflection for desired air throw direction.
- Suitable for high velocity spot cooling.
- Simple connection and mounting system.
- Single or multiple unit installation.
- Ideal for high ceiling space.

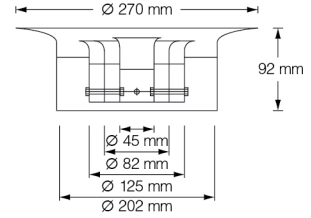
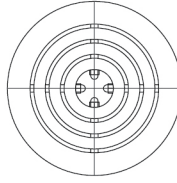


JET DIFFUSER

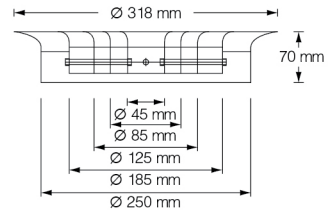
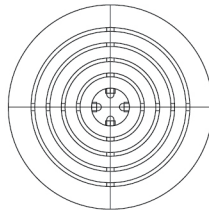
Model JAD

PHYSICAL DIMENSION

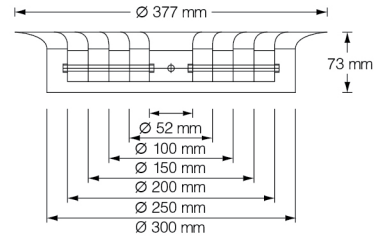
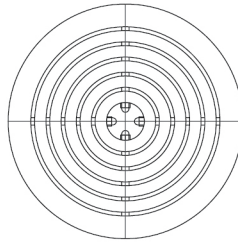
JAD200



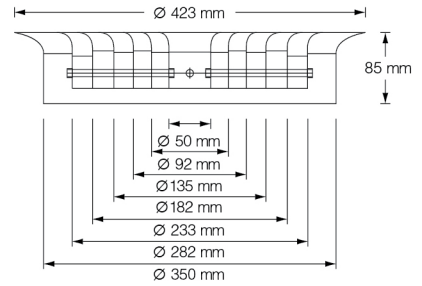
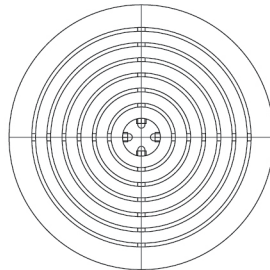
JAD250



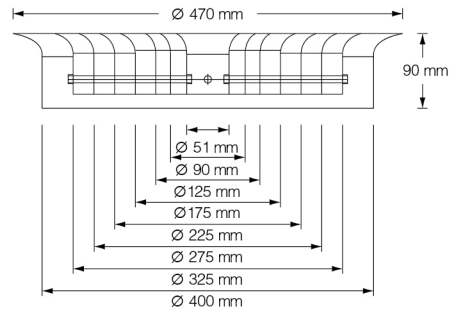
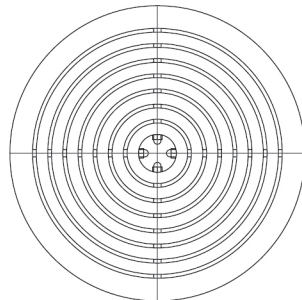
JAD300



JAD350



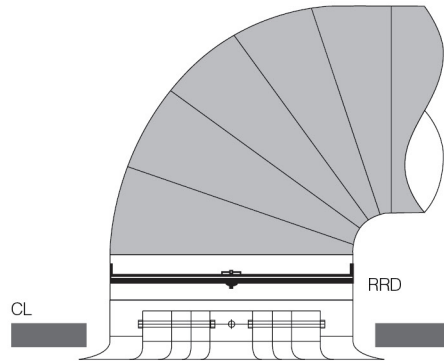
JAD400



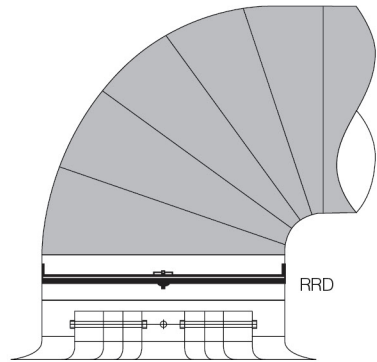
JET DIFFUSER

Model JAD

INSTALLATION GUIDE



Ceiling or sidewall Installation c/w RRD



Exposed duct system Installation c/w RRD

JET DIFFUSER

Model JAD

PERFORMANCE DATA

Model	Neck Velocity m/s	3	3.5	4	5	6	7	8
Neck area sq.m.	ΔP Pa	15	16	17	25	31	47	65
JAD200 0.031	Air flow, l/s	98	115	130	165	195	230	255
	Throw, m	6.5	7	8	9	10	15	18
	NR	<20	22	25	28	32	36	40
JAD250 0.049	Air flow, l/s	155	185	210	260	315	365	396
	Throw, m	8	9	10	11	12	17	20
	NR	<20	25	27	33	38	44	48
JAD300 0.071	Air flow, l/s	225	260	300	380	450	520	665
	Throw, m	9.5	10	10.5	12	12.5	13	21
	NR	<20	26	29	33	37	44	48
JAD350 0.096	Air flow, l/s	302	350	400	505	609	708	811
	Throw, m	11.5	12	12.5	13	15	17	20
	NR	<20	26	28	35	39	45	49
JAD400 0.126	Air flow, l/s	395	460	528	660	790	922	1050
	Throw, m	12.5	13	13.5	16	18.5	20.5	25
	NR	20	28	30	35	39	44	50

* Test data above based on Single Unit 0° deflection

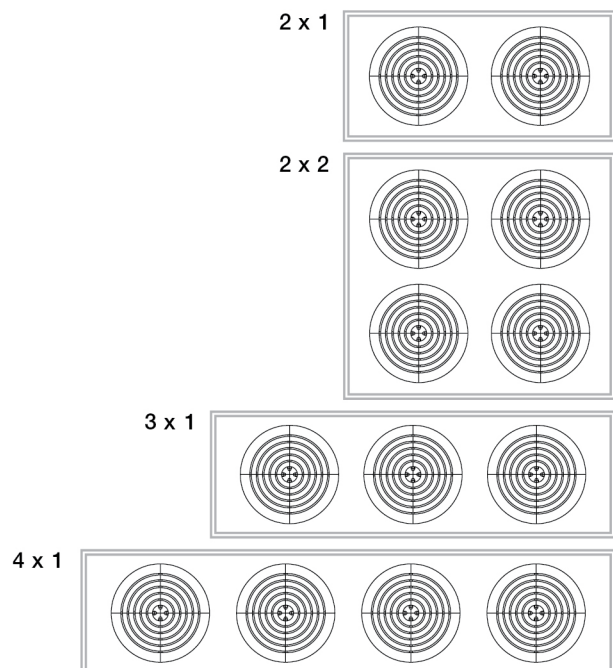
* Correction Factor for Single Unit 45° deflection:

ΔP , Pa	x 1.5
Throw, m	x 0.9
NR	+ 2

OPTIONAL MULTIPLE UNIT

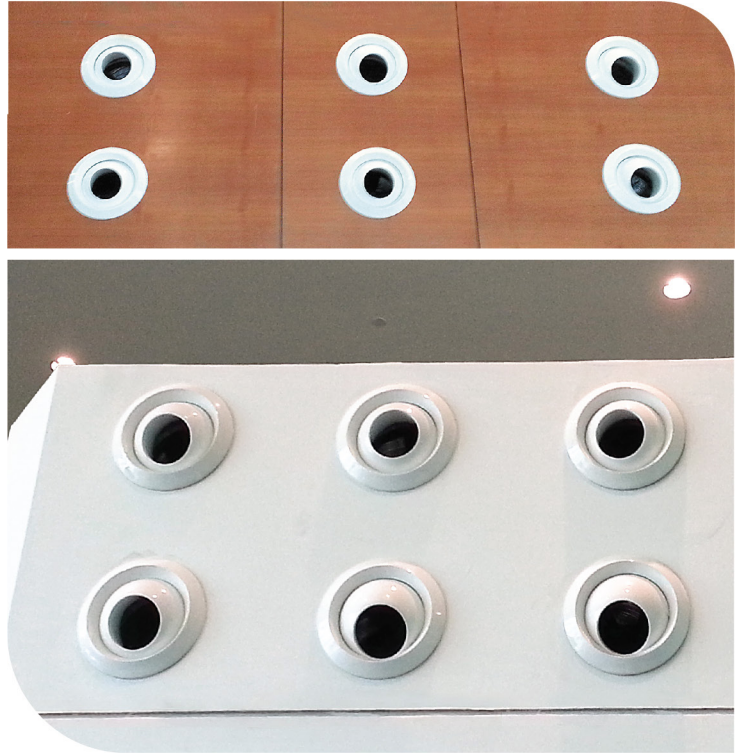
* Correction Factor for Multiple Unit 0° deflection:

Nos. of JAD	2	3	4
Throw, m	x 1.5	x 1.7	x 2.0
NR	+ 3	+ 4	+ 5



BALL JET DIFFUSER

JBD



ADF Ball Jet Diffuser is commendable in performance with low noise rating and pressure drop due to its structure design based on the theory of air flow dynamics.

The main feature of the ball jet diffuser is its nozzle or spout type of outlet that projects long distance air throw and high air volume for high ceiling headroom applications. The outlet of the diffuser functions like an eye-ball, can be regulated a full 360° at 30° deflection angle.

This range of products is constructed from aluminium and baked enamel finished. Architecture-preferred and aesthetically pleasant in appearance, it is ideally suitable for predictable directional control of conditioned air in room space such as shopping malls, convention halls, airport terminals, theatres, museums, sports arenas and atriums, etc.

FEATURES

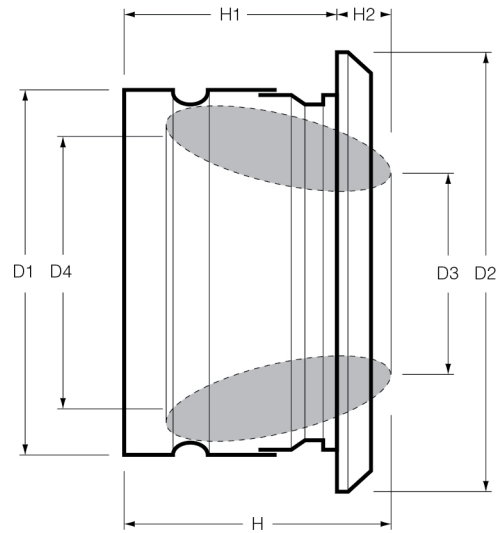
- Excellent functional and aesthetic design blends well with all interior.
- Targeted long distances air throw.
- Adjustable outlet gives full control of air throw directions.
- Low noise rating and pressure loss.
- Ideal for spot cooling.



BALL JET DIFFUSER

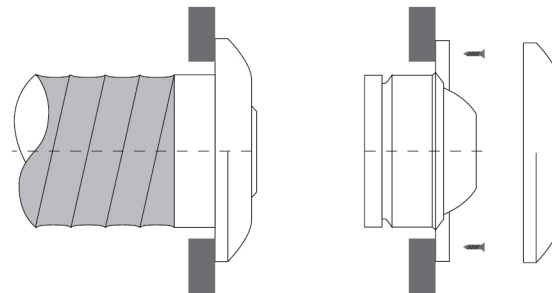
Model JBD

PHYSICAL DIMENSION



Model	D1 Neck Size mm Ø	D2 Face Size mm Ø	D3 Outlet Size mm Ø	D4 Inlet Size mm Ø	H1 Neck Height mm	H2 Frame Height mm	H Overall Height mm
JBD150	151	199	76	108	110	23	133
JBD200	203	265	107	152	138	27	165
JBD250	252	310	128	195	175	26	201
JBD300	318	378	180	240	200	30	230
JBD350	347	433	185	277	190	31	221
JBD400	399	468	223	330	227	31	258
JBD450	448	523	275	375	220	32	252
JBD500	464	583	285	430	250	35	285
JBD600	625	700	295	550	320	37	357

INSTALLATION GUIDE



BALL JET DIFFUSER

Model JBD

PERFORMANCE DATA

Model	Neck Velocity m/s	3	4	5	6	7	8	9	10	13	15	17	20
JBD150	Air flow, l/s	21	28	35	42	49	55	61	69	90	104	118	139
	Throw, m	4.3	5.5	7.1	8.5	9.9	11	12.7	14.1	17	20	22.5	25
	ΔP , Pa	6	9	12	13	16	19	22	25	33	37	44	55
	NR	<15	<15	15	16	17	18	20	22	26	31	37	42
JBD200	Air flow, l/s	26	34	43	51	60	69	78	86	111	128	144	171
	Throw, m	5.5	7.9	9.6	12	13.3	14.9	17	18.5	20	23	25	30
	ΔP , Pa	6	8	10	12	15	17	19	21	28	34	38	47
	NR	<15	15	16	17	19	20	22	24	30	35	39	43
JBD250	Air flow, l/s	43	57	71	85	100	114	128	142	183	213	240	282
	Throw, m	7.7	10.2	12.5	14.8	17.2	19.6	22	24	28	30	33.4	35
	ΔP , Pa	9	11	13	15	16	18	20	22	28	33	38	48
	NR	<15	15	17	19	20	22	24	28	33	38	42	46
JBD315	Air flow, l/s	79	105	131	157	183	209	235	261	339	390	443	520
	Throw, m	8	10	12.5	15	18	20	23	25	29	35	39.7	42
	ΔP , Pa	10	12	14	16	19	21	23	25	32	37	44	53
	NR	<15	16	19	20	22	24	28	32	40	45	50	55
JBD350	Air flow, l/s	100	131	166	188	222	251	285	314	420	469	532	625
	Throw, m	8.5	11.7	13	17	19.6	22.5	27	30	35	40	45	47
	ΔP , Pa	10	12	14	16	19	21	23	25	32	37	44	53
	NR	17	19	22	24	26	29	33	36	44	49	54	59
JBD400	Air flow, l/s	125	166	208	250	292	333	375	417	540	624	707	830
	Throw, m	9	14	16.5	19	22.4	26	31.7	35	42	45	49	52
	ΔP , Pa	6	7	8	10	12	15	18	23	31	35	43	51
	NR	19	22	24	27	31	33	36	40	48	53	58	63
JBD450	Air flow, l/s	159	211	379	456	370	426	480	530	688	794	900	1058
	Throw, m	10	15	18	20.8	24	27	34.4	37	43	47	50.5	57
	ΔP , Pa	6	7	8	11	13	16	19	24	32	36	45	52
	NR	19	23	26	28	32	34	37	41	49	54	59	63
JBD500	Air flow, l/s	193	256	322	387	450	519	584	645	836	964	1093	1286
	Throw, m	11	16	19	22.5	25.3	28	36	40	44.5	48.3	52	58.5
	ΔP , Pa	7	8	9	12	14	17	20	24	32	37	47	53
	NR	20	24	27	30	33	35	39	42	49	55	60	65
JBD630	Air flow, l/s	513	665	857	1024	1195	1389	1553	1848	2220	2560	-	-
	Throw, m	15	20	23	25	27.6	30	38	42.2	47	50	-	-
	ΔP , Pa	11	20	28	35	40	45	50	57	65	75	-	-
	NR	30	36	39	44	47	50	53	57	64	70	-	-