

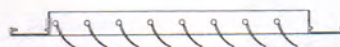
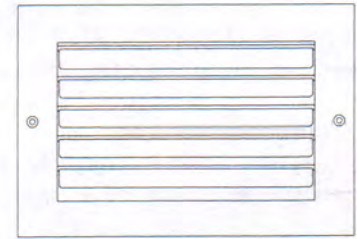
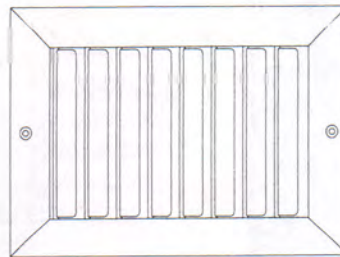
PRODUCT DESCRIPTION

Series C1S and C1L supply ceiling diffusers have individually adjustable curved blades arranged to provide a one-way ceiling air pattern. They are recommended for applications in ceiling locations for heating and cooling systems handling .75 to 1.75 cfm per square foot of room area.

Series C2S and C2L supply ceiling diffusers have individually adjustable curved blades arranged to provide a two-way ceiling air pattern. They are recommended for applications in ceiling locations for heating and cooling systems handling 1.0 to 2.0 cfm per square foot of room area.

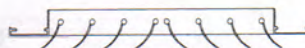
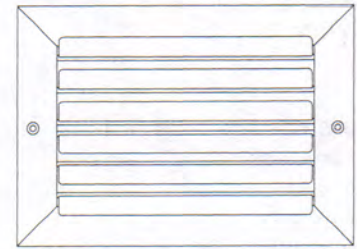
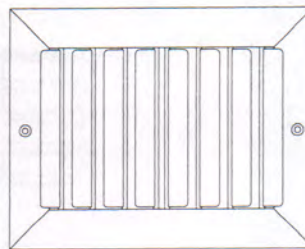
Both one-way and two-way pattern diffusers can be adjusted to a full or partial downblow position. The curved streamlined shaped blades are adjusted to a uniform partially closed position to deflect the air path while retaining an effective free area capacity of 35% of the neck area. In the full downblow position, diffuser effective area is increased to approximately 86% for the C1S and C1L and approximately 81% for the C2S and C2L.

TO ORDER: Order as W x H.



C1S

C1L



C2S

C2L

Available Options

For Opposed Blade Damper - add suffix "O" to any model.

Example: C1LO.

For Multishutter Damper - add suffix "M" to any model

Example: C1SM.

For 1 3/4" curve frame - add suffix "Z-WF" to any model.

Example: "C1LMZWF".

For 1 1/4" curve frame - add suffix "Z" to any model.

Example shown: "Z" frame.

For Tee-Bar application - add suffix "TB" to any model. Order as neck dimension.

Example: C1LOTB.

For Aluminum Lay-in Panel - specify size of "ALIP" plus necksize of unit.

Example: 10 x 10 C1SMZ in 24 x 24 ALIP.



CURVED BLADE CEILING DIFFUSERS

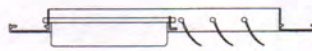
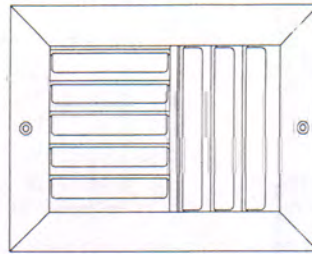
PRODUCT DESCRIPTION

Series C2BL and C2BR supply diffusers have individually adjustable curved blades arranged to provide a two-way ceiling air pattern. They are recommended for corner applications in ceiling locations for heating and cooling systems handling 1.0 to 2.0 cfms per square foot of room area.

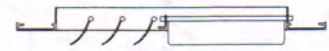
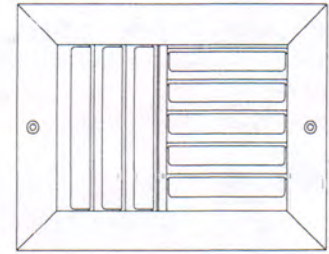
Series C3 and C3244 supply ceiling diffusers have individually adjustable curved blades arranged to provide a three-way ceiling air pattern. They are recommended for application in ceiling locations for heating and cooling systems handling 1.0 to 2.0 cfms per square foot of room area.

Both two-way and three-way ceiling diffusers can be adjusted from a full or partial downblow position. The curved streamlined blades can be adjusted to a uniform partially closed position to deflect the air while retaining an effective free area capacity of 35% of the neck area. In the full downblow position, diffuser effective area is increased to approximately 86% for the C2BL and C2BR and approximately 81% for the C3 and C3244.

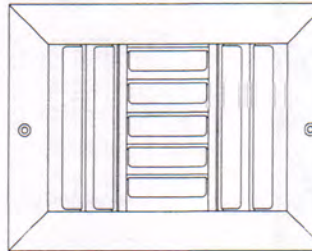
The construction is entirely of etched and anodized aluminum. #6 x 1 1/2" mounting screws are furnished.



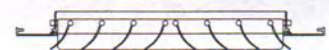
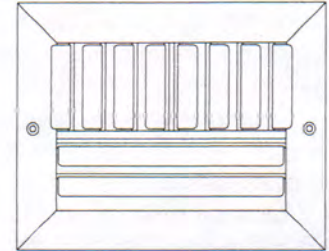
C2BR



C2BL



C3



C3244

Available Options

For Opposed Blade Damper - add suffix "O" to any model.

Example: C2BLO.

For Multishutter Damper - add suffix "M" to any model

Example: C3M.

For 1 3/4" curve frame - add suffix "Z-WF" to any model.

Example: "C2BLMZWF".

For 1 1/4" curve frame - add suffix "Z" to any model.

Example shown: "Z" frame.

For Tee-Bar application - add suffix "TB" to any model. Order as neck dimension.

Example: C3TB.

For Aluminum Lay-in Panel - specify size of "ALIP" plus necksize of unit.

Example: 10 x 10 C3244Z in 24 x 24 ALIP.

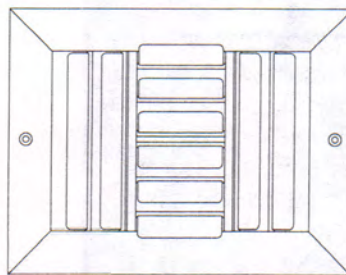


PRODUCT DESCRIPTION

Series C4 ceiling supply diffusers have individually adjustable curved blades arranged to provide a four-way ceiling air pattern. They are recommended for application in ceiling locations for heating and cooling systems handling 1.0 to 2.0 cfms per square foot of room area. Series C4 diffusers can be adjusted to a full or partial downblow position. The curved blades can be adjusted to a uniform partially closed position to deflect the air while retaining an effective free area capacity of 35% of the neck area. In the full downblow position, grille effective area is increased to approximately 81%.

This diffuser is constructed of etched and anodized extruded aluminum. Gasket and #6 x 1 1/2" mounting screws are provided.

TO ORDER: Order as W x H.



C4

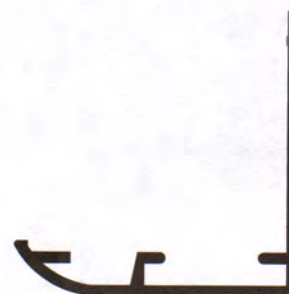
Available Options

For Opposed Blade Damper - add suffix "O" to any model.
Example: C4O.

For Multishutter Damper - add suffix "M" to any model
Example: C4M.

For Tee-Bar application - add suffix "TB" to any model. Order as neck dimension.
Example: C40TB.

For 1 1/4" curve frame - add suffix "Z" to any model.
Example shown: "Z" frame.





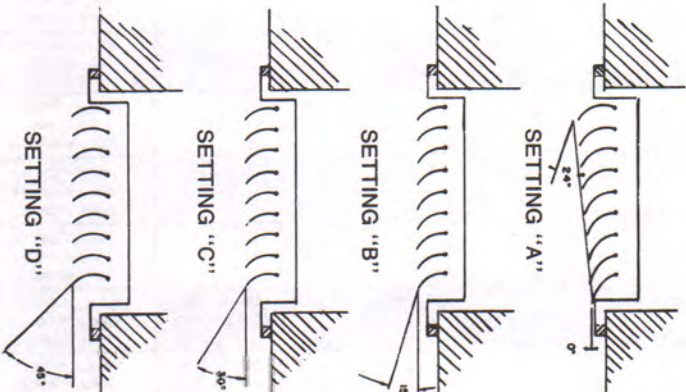
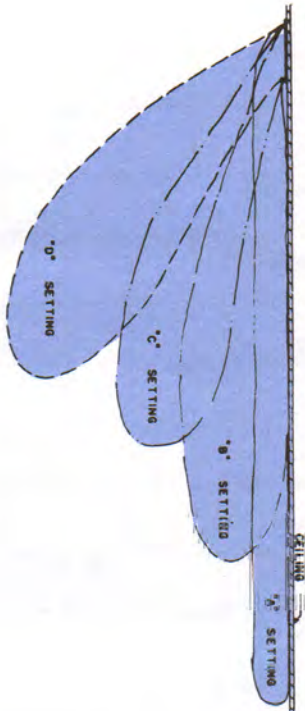
P R O D U C T S

ENGINEERING DATA - CURVED BLADE
CEILING DIFFUSERS

STATIC PRESS. (In. H ₂ O)	4				6				8				10				12				14																			
NECK Vol. (FPM)	300	400	500	600	700	800	900	1000	300	400	500	600	700	800	900	1000	300	400	500	600	700	800	900	1000	300	400	500	600	700	800	900	1000								
CFM	87	89	111	134	156	178	200	223	100	134	167	201	234	268	301	334	133	178	222	267	311	356	400	444	200	267	334	400	467	534	600	668	250	334	416	500	584	668	750	834
1-Way Throw (ft.)	13	18	23	28	32	36	40	43	15	20	25	30	35	40	44	48	16	21	27	32	38	44	49	54	18	24	30	36	42	48	54	60	21	27	34	40	47	54	61	68
2-Way Throw (ft.)	12	15	19	23	27	30	33	37	13	17	21	26	29	33	37	41	13	18	23	27	31	35	40	44	15	20	25	30	35	40	45	50	18	23	28	33	38	43	48	53
3-Way Throw (ft.)	11	14	17	21	24	27	30	33	12	15	19	23	27	30	33	37	12	15	19	23	27	31	35	39	14	18	22	26	30	34	38	42	17	22	27	31	36	41	46	51
4-Way Throw (ft.)	10	13	16	19	22	25	28	31	11	14	17	21	25	28	31	34	12	15	19	23	27	31	35	39	14	18	22	26	30	34	38	42	17	22	27	31	36	41	46	51
CFM	94	111	139	167	195	223	250	278	125	167	200	230	262	292	324	354	167	222	278	333	389	444	500	555	208	278	347	417	486	555	625	695	250	334	416	500	584	668	750	834
1-Way Throw (ft.)	14	19	24	29	34	38	42	45	16	21	26	31	36	42	46	50	17	23	29	35	40	46	50	54	19	25	31	37	43	49	54	57	22	29	35	42	49	55	62	69
2-Way Throw (ft.)	13	16	20	25	28	32	35	38	14	18	22	27	30	35	39	42	15	19	25	28	33	37	42	46	17	22	27	32	36	42	46	51	20	26	32	38	43	48	53	58
3-Way Throw (ft.)	12	15	18	22	25	28	32	35	13	16	20	25	27	31	35	39	13	17	22	26	30	33	37	42	15	20	25	30	34	38	43	48	18	23	28	33	38	43	48	53
4-Way Throw (ft.)	11	13	17	20	24	26	28	30	12	15	19	23	26	29	32	35	12	16	20	24	28	31	35	39	14	18	22	26	30	34	38	42	17	22	27	31	36	41	46	51
CFM	100	134	167	210	234	268	301	334	150	200	250	300	350	400	450	500	200	267	333	400	467	533	600	667	250	334	416	500	584	668	750	834	300	400	500	600	700	800	900	1000
1-Way Throw (ft.)	15	20	25	30	35	40	44	48	17	22	27	32	37	42	46	50	18	24	30	36	42	48	54	60	21	27	34	40	47	54	61	68	24	30	37	44	51	58	65	72
2-Way Throw (ft.)	13	17	21	26	29	33	37	40	14	19	23	28	32	37	41	44	14	19	24	29	34	39	44	49	17	22	27	32	37	42	47	52	20	26	32	38	44	50	56	62
3-Way Throw (ft.)	12	15	19	23	26	30	33	37	12	16	20	24	27	31	35	39	12	16	20	24	28	32	36	40	14	18	22	26	30	34	38	42	17	22	27	31	36	41	46	51
4-Way Throw (ft.)	11	14	18	21	25	27	31	34	12	16	20	24	27	30	34	37	13	17	21	25	29	33	37	41	15	20	25	29	33	37	41	45	18	23	28	32	36	40	44	48
CFM	117	156	194	233	272	311	350	389	175	233	292	350	408	466	525	584	234	312	389	467	545	623	700	778	292	389	486	583	680	778	875	972	350	467	584	700	817	935	1050	1170
1-Way Throw (ft.)	16	21	26	31	36	41	46	50	18	23	29	34	40	46	50	54	19	25	32	37	44	49	55	60	22	29	35	42	49	55	62	69	26	33	40	47	54	61	68	74
2-Way Throw (ft.)	14	18	22	26	30	34	38	42	15	20	25	29	33	38	42	46	16	21	26	31	36	41	46	51	19	25	30	35	40	45	50	55	22	28	34	40	45	50	55	60
3-Way Throw (ft.)	12	16	20	24	27	31	35	38	14	17	22	26	30	34	38	42	14	19	24	28	32	36	40	44	17	22	27	31	35	40	44	48	20	26	31	36	40	44	48	52
4-Way Throw (ft.)	11	15	18	22	26	28	32	36	13	16	20	24	28	31	35	39	13	17	22	26	30	34	38	42	15	20	25	29	33	37	41	45	18	23	28	32	36	40	44	48
CFM	133	178	222	267	311	356	400	444	200	267	334	400	467	534	600	668	266	356	445	533	622	710	800	890	334	445	555	667	778	890	1000	1110	400	545	667	800	935	1070	1200	1335
1-Way Throw (ft.)	17	22	27	32	38	42	48	52	19	24	30	36	42	47	51	55	20	26	33	38	46	50	57	61	23	29	35	41	48	55	62	71	28	36	44	51	59	66	74	81
2-Way Throw (ft.)	14	18	23	27	31	35	40	43	16	20	25	30	34	39	43	48	17	22	27	32	37	42	46	52	20	26	32	38	44	50	56	62	24	30	37	43	49	55	61	67
3-Way Throw (ft.)	13	16	20	25	28	32	36	39	14	18	23	27	31	35	39	43	15	20	25	28	33	37	42	46	18	23	28	33	38	43	48	53	22	27	32	37	42	47	52	57
4-Way Throw (ft.)	12	15	19	23	26	30	33	37	13	17	21	25	29	32	36	40	14	18	23	27	31	35	39	43	16	21	26	30	34	38	42	46	19	24	29	33	37	41	45	49
CFM	150	200	250	300	350	400	450	500	225	300	375	450	525	600	675	750	300	400	500	600	700	800	900	1000	400	500	600	700	800	900	1000	1100	500	667	834	1000	1167	1334	1500	1667
1-Way Throw (ft.)	18	23	28	34	39	44	49	53	20	25	31	37	44	49	53	58	21	27	34	40	47	52	59	63	24	30	37	44	51	58	65	72	29	36	43	50	57	64	71	78
2-Way Throw (ft.)	15	19	24	28	32	36	41	44	16	21	26	31	36	40	44	48	17	22	28	33	38	43	48	53	20	26	32	38	44	50	56	62	24	30	36	42	48	54	60	66
3-Way Throw (ft.)	13	17	21	25	29	32	37	41	14	18	24	28	32	36	40	44	15	20	25	30	34	38	42	46	18	23	28	33	38	43	48	53	22	27	32	37	42	47	52	57
4-Way Throw (ft.)	12	16	20	24	27	30	34	38	13	17	22	26	30	33	37	41	14	19	23	28	32	36	40	44	16	21	26	30	34	38	42	46	19	24	29	33	37	41	45	49
CFM	187	222	278	333	389	444	500	555	250	334	416	500	584	668	750	834	334	445	555	667	778	890	1000	1110	417	555	695	834	973	1110	1250	1390	500	667	834	1000	1167	1334	1500	1667
1-Way Throw (ft.)	19	24	29	35	40	46	50	54	20	26	32	38	44	49	53	58	21	27	34	40	47	52	59	63	24	30	37	43	50	57	64	71	29	36	43	50	57	64	71	78
2-Way Throw (ft.)	15	20	25	28	33	37	42	46	17	22	27	32	36	41	46	51	18	23	28	34	39	44	50	54	21	27	33	39	45	51	57	63	25	31	37	43	49	55	61	67
3-Way Throw (ft.)	13	17	22	26	30	33	38	41	15	20	25	28	33	37	42	46	16	21	26	31	36	41	46	51	19	25	30	36	41	46	51	56	23	28	33	39	44	49	54	59
4-Way Throw (ft.)	12	16	20	25	27	31	35	38	13	18	22	27	31	35	38	42	15	20	24	29	33	37	41	45	18	23	28	32	36	40	44	48	22	27	31	35	39	43	47	51
CFM	200	267	333	400	467	534	600	667	300	400	500	600	700	800	900	1000	400	545	667	800	935	1070	1200	1335	500	667	834	1000	1167	1334	1500	1667	600	800	1000	1200	1400	1600	1800	2000
1-Way Throw (ft.)	19	25	30	36	43	48	52	56	21	27	34	40	47	52	59	63	22	28	36	42	49	57	63	69	26	33	40	47	54	61	68	75	32	40	48	56	64	72	80	88
2-Way Throw (ft.)	16	21	26	30	35	40	43	48	17	23	28	33	38	43	48	53	18	25	30	35	41	46	52																	

DIFFERENCE IN DROP AND THROW PATTERNS FROM FOUR BASIC BLADE SETTINGS

SKETCH OF AIR PATTERNS FROM VARIOUS BLADE SETTINGS



This is the blade setting on which the tabulated data is based and delivers the maximum throw possible for this type of diffuser, the air pattern stays flat against the ceiling.

This blade setting delivers an air pattern which has a throw that is 70% of the tabulated throw, and which drops a distance equal to 10% of the tabulated throw.

This blade setting delivers an air pattern which has a throw that is approximately 55% of the tabulated throw and which drops a distance equal to approximately 20% of the tabulated throw.

This blade setting delivers an air pattern which has a throw that is approximately 45% of the tabulated throw and which drops a distance equal to approximately 33% of the tabulated throw.

Mounting Height In Feet	Maximum CFM One Way	Maximum CFM Two Way	Neck Velocity
8	280	560	300
9	385	770	350
10	525	1050	400
12	1050	2100	450
14	1750	3500	500
16	3150	6300	600

NOTE: When Diffuser is mounted away from ceiling (IE: Exposed Duct), throw is reduced approx. 15-20% and drop is increased 5-15%.
 NOTE: All performance data shown is based on 0 degrees temperature differential between the ducted and room air.

STATIC PRESS. (In. H ₂ O)	16										18										20										24										30										36									
	0.033	0.055	0.088	1.00	1.173	2.224	2.877	3.555	0.033	0.055	0.088	1.00	1.173	2.224	2.877	3.555	0.033	0.055	0.088	1.00	1.173	2.224	2.877	3.555	0.033	0.055	0.088	1.00	1.173	2.224	2.877	3.555	0.033	0.055	0.088	1.00	1.173	2.224	2.877	3.555	0.033	0.055	0.088	1.00	1.173	2.224	2.877	3.555												
NECK Vel. (FPM)	300	400	500	600	700	800	900	1000	300	400	500	600	700	800	900	1000	300	400	500	600	700	800	900	1000	300	400	500	600	700	800	900	1000	300	400	500	600	700	800	900	1000	300	400	500	600	700	800	900	1000												
CFM	524	710	890	1070	1245	1425	1600	1780	675	900	1125	1350	1575	1800	2025	2250	835	1110	1390	1670	1945	2220	2500	2780	1000	1335	1670	2000	2335	2670	3000	3335	1250	1680	2110	2540	2970	3400	3830	4260	1500	2000	2500	3000	3500	4000	4500	5000												
1-Way Throw (ft.)	23	31	38	45	52	60	67	78	25	32	40	47	55	63	72	86	28	34	42	50	59	67	80	95	30	38	46	56	66	79	95	110	32	41	51	62	74	91	118	155	33	43	54	67	81	103	138	180												
2-Way Throw (ft.)	20	26	32	38	43	50	56	62	21	27	33	39	46	52	57	63	22	29	35	42	49	56	63	72	23	30	37	45	54	64	76	90	24	32	40	49	59	70	83	100																				
3-Way Throw (ft.)	17	23	29	34	40	44	50	55	18	24	30	35	41	46	52	57	19	25	31	37	42	48	54	61	20	27	33	39	46	53	61	71																												
4-Way Throw (ft.)	16	21	27	32	36	41	46	51	17	22	28	33	38	43	50	54	18	23	29	34	39	44	51	58	19	25	31	37	42	49	56	63																												

The following recommendations will serve as a safe guide in determining the maximum neck velocities and air quantities for typical applications

Under 200 CFM	200-550 CFM	550-2000 CFM	Sound Studios	Libraries	Private Offices	Residences	Churches	Gen. Offices	Stores	Restaurants	Public Bldgs.	Factories	Kitchens
400 FPM	300 FPM	200 FPM	400 FPM	300 FPM	500 FPM	400 FPM	300 FPM	600 FPM	500 FPM	400 FPM	500 FPM	1200 FPM	1000 FPM