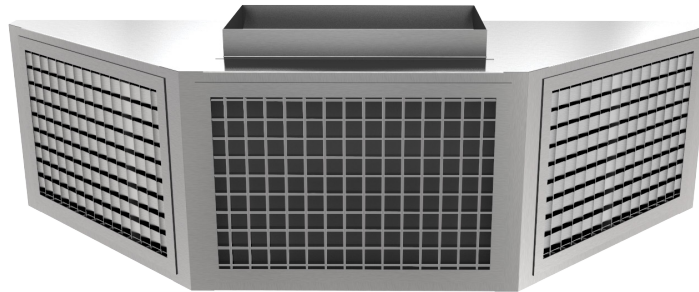




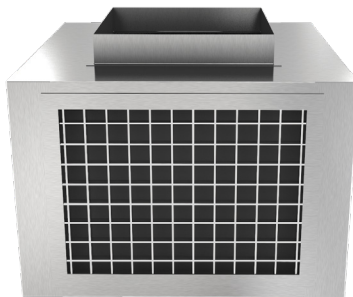
DROP BOX DIFFUSERS

3-Way, 4-Way and 6-Way

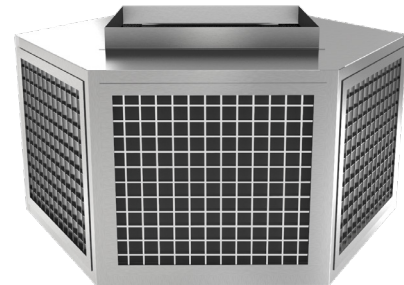
DBD-33



DBD-43/DBD-44



DBD-66



AVAILABLE FEATURES

AIR DISTRIBUTION

- Supply Grilles (see images above)
- Drum Louvers
- Up to 70,000 CFM
- Higher CFM upon request
- Pyramid Diverter

HOUSING

- Galvanized steel housing
- Aluminum housing
- Stainless steel housing

HOUSING CONSTRUCTION

- Single or double wall construction
- Stitch-welded or continuously welded
- Insulated or non-insulated

FINISH

- Mill Finish
- Painted (standard colors)
- Painted (custom colors)
- Satin polish (stainless steel)

MOUNTING

- Hanger brackets
- Perimeter mounting flange

DRAIN

- None
- Drain fitting in bottom
- Separate drain pan
- Separate drain pan with heat



TABLE OF CONTENTS

3-SIDED DROP BOX DIFFUSER MODELS

DBD-33 (3-Sided, 3-Way) with Grilles	3
DBD-33-SDP (3-Sided, 3-Way) with Grilles & Separate Drain Pan	4
DBD-33-DL (3-Sided, 3-Way) with Drum Louvers	5
DBD-33-DL-SDP (3-Sided, 3-Way) with Drum Louvers & Separate Drain Pan	6

4-SIDED DROP BOX DIFFUSER MODELS

DBD-43 (4-Sided, 3-Way) with Grilles	7
DBD-43-SDP (4-Sided, 3-Way) with Grilles & Separate Drain Pan	8
DBD-43-DL (4-Sided, 3-Way) with Drum Louvers	9
DBD-43-DL-SDP (4-Sided, 3-Way) with Drum Louvers & Separate Drain Pan	10
DBD-44 (4-Sided, 4-Way) with Grilles	11
DBD-44-SDP (4-Sided, 4-Way) with Grilles & Separate Drain Pan	12
DBD-44-DL (4-Sided, 4-Way) with Drum Louvers	13
DBD-44-DL-SDP (4-Sided, 4-Way) with Drum Louvers & Separate Drain Pan	14

6-SIDED DROP BOX DIFFUSER MODELS

DBD-66 (6-Sided, 6-Way) with Grilles	15
DBD-66-SDP (6-Sided, 6-Way) with Grilles & Separate Drain Pan	16
DBD-66-DL (6-Sided, 6-Way) with Drum Louvers	17
DBD-66-DL-SDP (6-Sided, 6-Way) with Drum Louvers & Separate Drain Pan	18

DRAIN PAN ONLY

DBD-SDP Separate Drain Pan	19
----------------------------	----

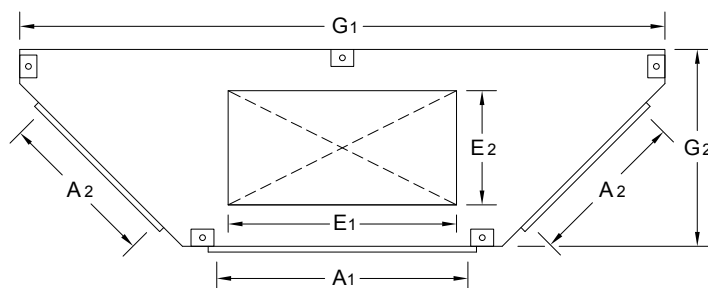
PERFORMANCE DATA

3-Sided, 3-Way Throw with Double Deflection Grilles	20
3-Sided, 3-Way Throw with Drum Louvers	21
4-Sided, 3-Way Throw with Double Deflection Grilles	22
4-Sided, 3-Way Throw with Drum Louvers	23
4-Sided, 4-Way Throw with Double Deflection Grilles	24
4-Sided, 4-Way Throw with Drum Louvers	25
6-Sided, 6-Way Throw with Double Deflection Grilles	26
6-Sided, 6-Way Throw with Drum Louvers	27



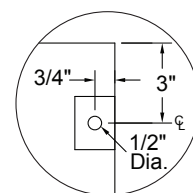
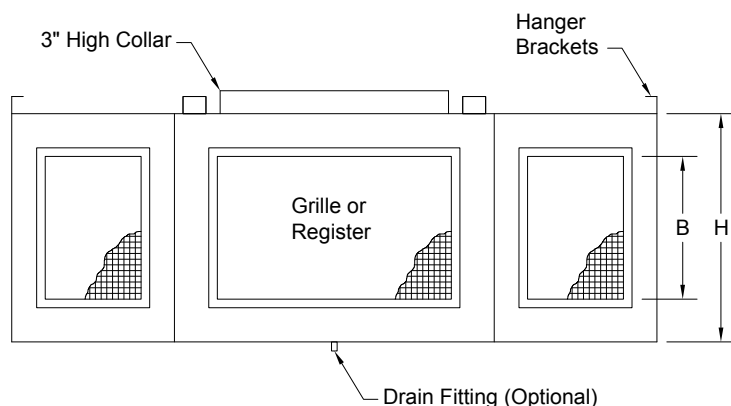
DROP BOX DIFFUSER WITH GRILLES

Model DBD-33 (3-Sided, 3-Way)

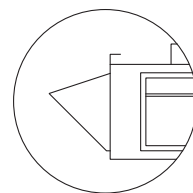


GRILLE OPTIONS

- Single deflection grilles
- Double deflection grilles
- Fixed blade grilles
- Eggcrate grilles
- Sub-frame for hinged or removeable
- Damper
- Angled face



Hanger Bracket Detail



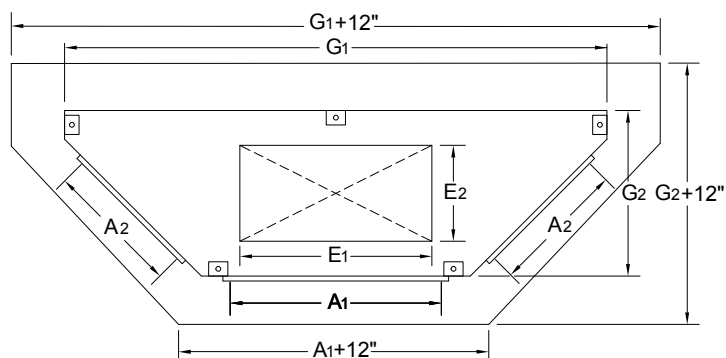
Angled Face (Optional)

A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
14	14	10	20	12	51	18	14	600 – 3,000
22	22	14	28	16	68	23	18	3,000 – 5,000
30	30	15	34	18	87	29	19	5,000 – 7,000
36	36	18	42	20	102	33	22	7,000 – 10,000
42	42	22	48	26	116	37	26	10,000 – 15,000
48	48	27	54	30	131	42	31	15,000 – 20,000
48	48	32	54	32	131	42	36	20,000 – 25,000
48	48	39	66	36	142	45	43	25,000 – 30,000



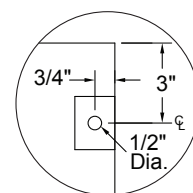
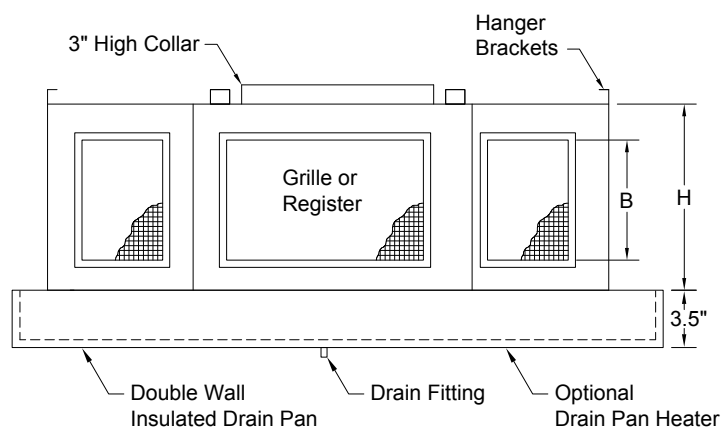
DROP BOX DIFFUSER WITH GRILLES & SEPARATE DRAIN PAN

Model DBD-33-SDP (3-Sided, 3-Way)

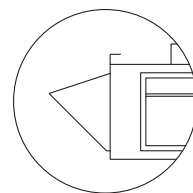


GRILLE OPTIONS

- Single deflection grilles
- Double deflection grilles
- Fixed blade grilles
- Eggcrate grilles
- Sub-frame for hinged or removeable
- Damper
- Angled face



Hanger Bracket Detail



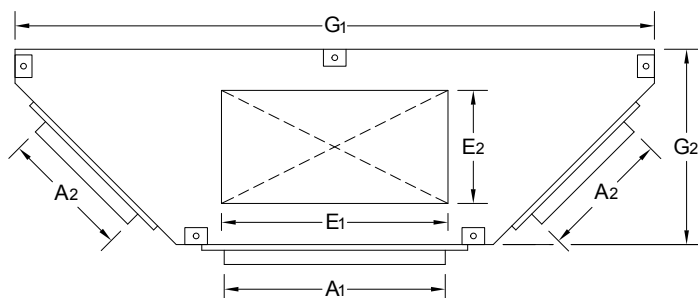
Angled Face (Optional)

A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
14	14	10	20	12	51	18	14	600 – 3,000
22	22	14	28	16	68	23	18	3,000 – 5,000
30	30	15	34	18	87	29	19	5,000 – 7,000
36	36	18	42	20	102	33	22	7,000 – 10,000
42	42	22	48	26	116	37	26	10,000 – 15,000
48	48	27	54	30	131	42	31	15,000 – 20,000
48	48	32	54	32	131	42	36	20,000 – 25,000
48	48	39	66	36	142	45	43	25,000 – 30,000



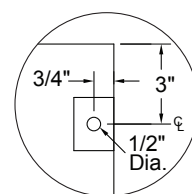
DROP BOX DIFFUSER WITH DRUM LOUVERS

Model DBD-33-DL (3-Sided, 3-Way)

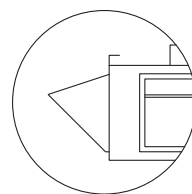


DRUM LOUVER OPTIONS

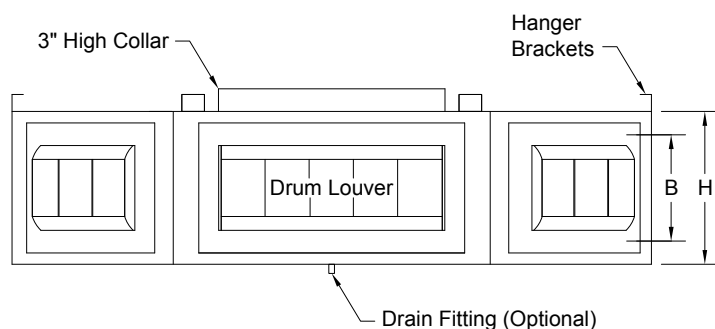
- Drum Louver
- Drum Louver with Split Drum
- Damper
- Angled face



Hanger Bracket Detail



Angled Face (Optional)

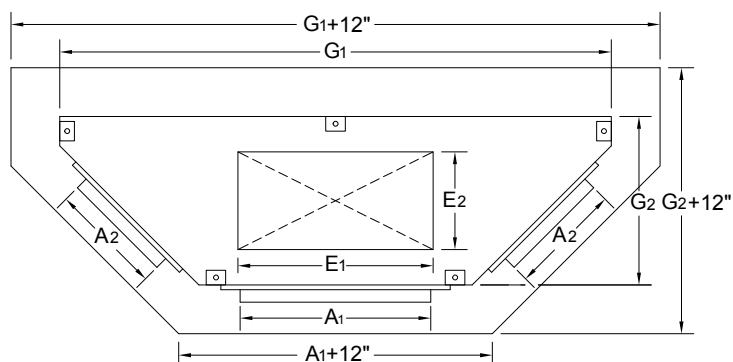


A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
18	18	10	22	12	71	24	15	600 – 3,000
24	24	10	28	16	85	28	15	3,000 – 5,000
36	36	10	34	18	114	37	15	5,000 – 7,000
42	42	10	42	20	128	41	15	7,000 – 10,000
48	48	12	48	26	143	45	17	10,000 – 15,000
54	54	15	54	30	159	49	20	15,000 – 20,000
60	60	15	58	36	174	54	20	20,000 – 25,000



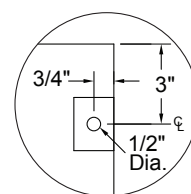
DROP BOX DIFFUSER WITH DRUM LOUVERS & SEPARATE DRAIN PAN

Model DBD-33-DL-SDP (3-Sided, 3-Way)

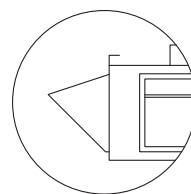


DRUM LOUVER OPTIONS

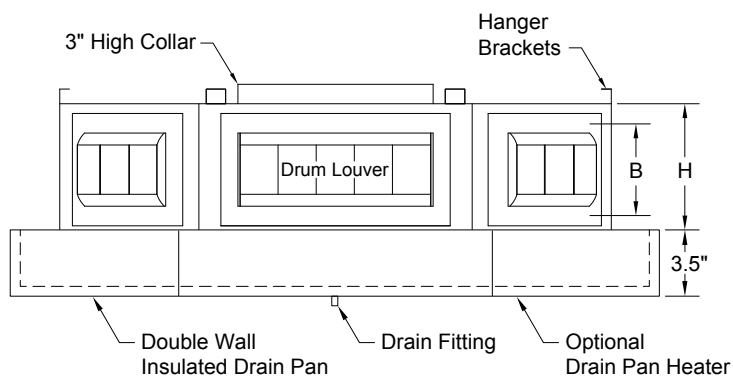
- Drum Louver
- Drum Louver with Split Drum
- Damper
- Angled face



Hanger Bracket Detail



Angled Face (Optional)

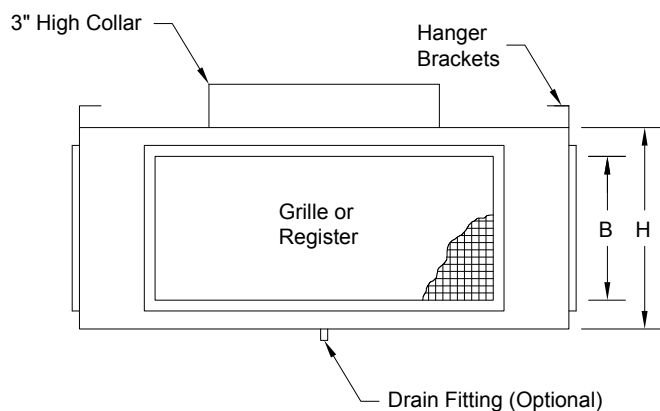
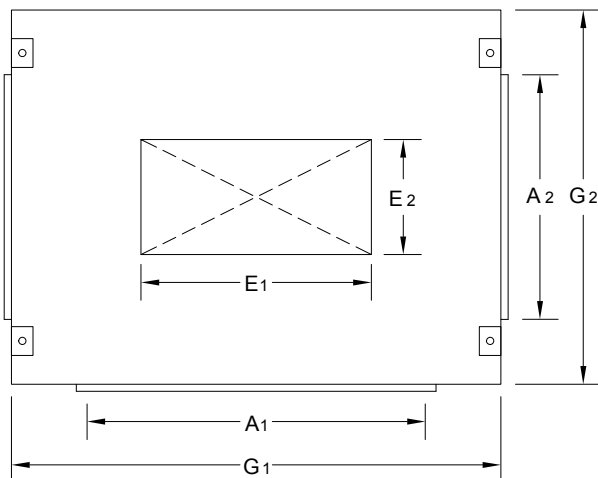


A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
18	18	10	22	12	71	24	15	600 – 3,000
24	24	10	28	16	85	28	15	3,000 – 5,000
36	36	10	34	18	114	37	15	5,000 – 7,000
42	42	10	42	20	128	41	15	7,000 – 10,000
48	48	12	48	26	143	45	17	10,000 – 15,000
54	54	15	54	30	159	49	20	15,000 – 20,000
60	60	15	58	36	174	54	20	20,000 – 25,000



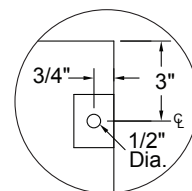
DROP BOX DIFFUSER WITH GRILLES

Model DBD-43 (4-Sided, 3-Way)

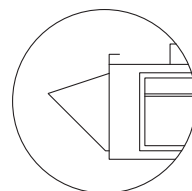


GRILLE OPTIONS

- Single deflection grilles
- Double deflection grilles
- Fixed blade grilles
- Eggcrate grilles
- Sub-frame for hinged or removeable
- Damper
- Angled face



Hanger Bracket Detail



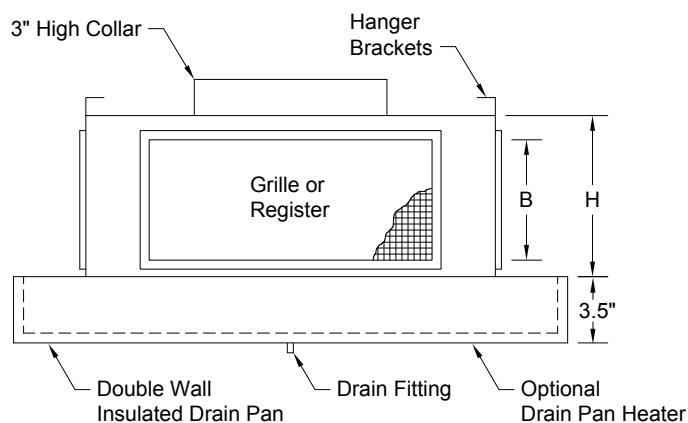
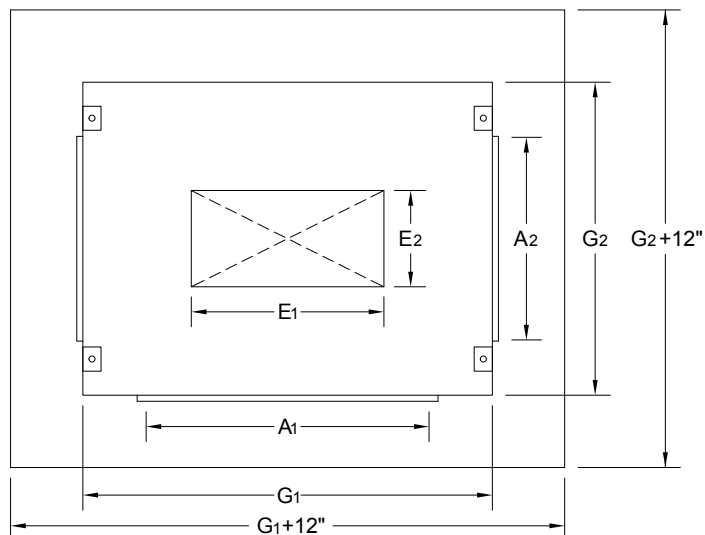
Angled Face (Optional)

A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
20	10	18	20	14	28	18	22	600 – 3,000
24	12	24	28	16	32	20	28	3,000 – 5,000
28	14	28	32	18	36	22	32	5,000 – 7,000
36	18	32	40	22	44	26	36	7,000 – 10,000
46	23	38	50	27	54	31	42	10,000 – 15,000
52	26	39	58	30	62	34	43	15,000 – 20,000
64	32	39	64	36	74	40	43	20,000 – 25,000
76	38	39	66	42	86	46	43	25,000 – 30,000
96	48	39	68	52	106	56	43	30,000 – 40,000



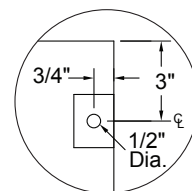
DROP BOX DIFFUSER WITH GRILLES & SEPARATE DRAIN PAN

Model DBD-43-SDP (4-Sided, 3-Way)

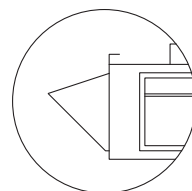


GRILLE OPTIONS

- Single deflection grilles
- Double deflection grilles
- Fixed blade grilles
- Eggcrate grilles
- Sub-frame for hinged or removeable
- Damper
- Angled face



Hanger Bracket Detail



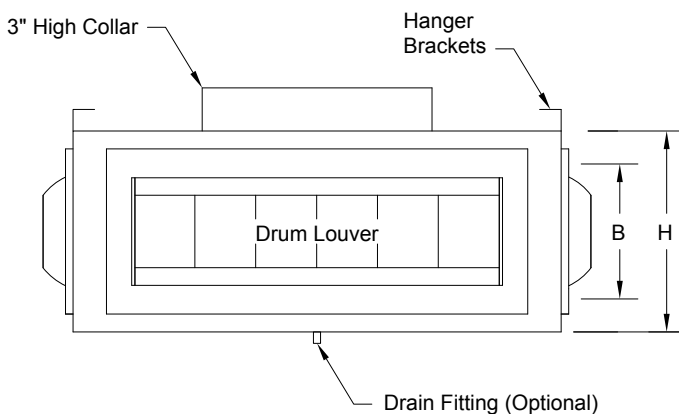
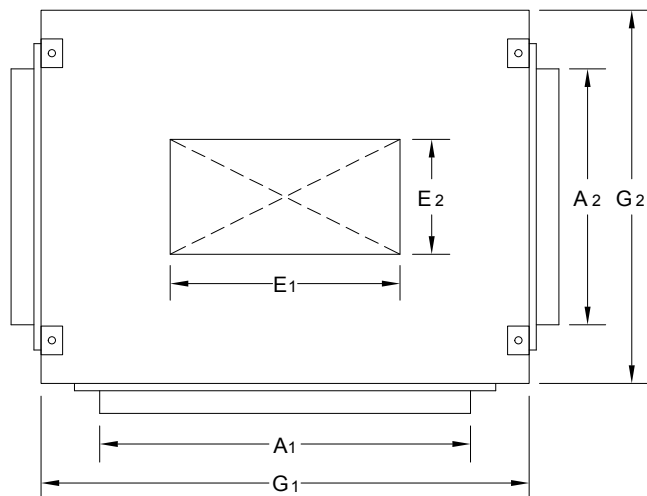
Angled Face (Optional)

A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
20	10	18	20	14	28	18	22	600 – 3,000
24	12	24	28	16	32	20	28	3,000 – 5,000
28	14	28	32	18	36	22	32	5,000 – 7,000
36	18	32	40	22	44	26	36	7,000 – 10,000
46	23	38	50	27	54	31	42	10,000 – 15,000
52	26	39	58	30	62	34	43	15,000 – 20,000
64	32	39	64	36	74	40	43	20,000 – 25,000
76	38	39	66	42	86	46	43	25,000 – 30,000
96	48	39	68	52	106	56	43	30,000 – 40,000



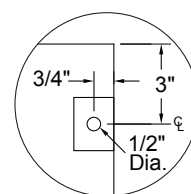
DROP BOX DIFFUSER WITH DRUM LOUVERS

Model DBD-43-DL (4-Sided, 3-Way)

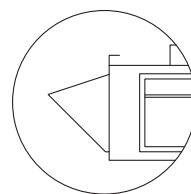


DRUM LOUVER OPTIONS

- Drum Louver
- Drum Louver with Split Drum
- Damper
- Angled face



Hanger Bracket Detail



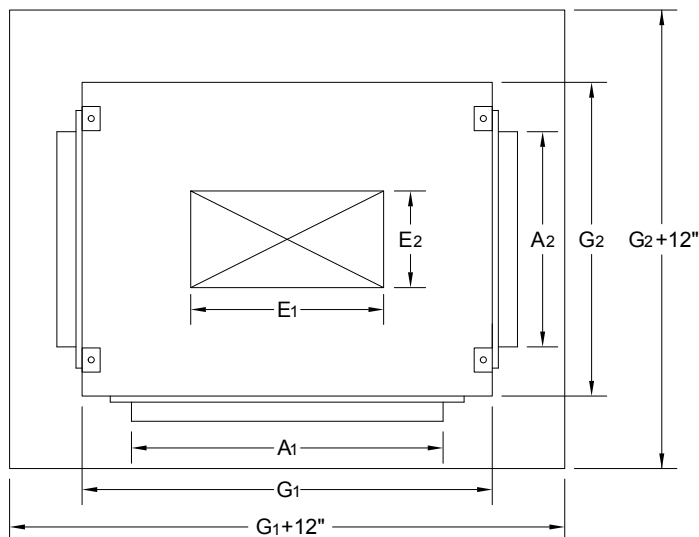
Angled Face (Optional)

A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
36	18	6	18	18	50	32	11	600 – 3,000
36	18	10	22	22	51	33	15	3,000 – 5,000
48	24	10	26	26	63	39	15	5,000 – 7,000
48	24	12	30	30	64	40	17	7,000 – 10,000
60	30	15	36	36	78	48	20	10,000 – 15,000
72	36	15	42	42	90	54	20	15,000 – 20,000
96	48	15	46	46	117	66	20	20,000 – 25,000
72	36	24	52	48	88	52	32	25,000 – 30,000
72	36	30	68	50	90	54	38	30,000 – 40,000



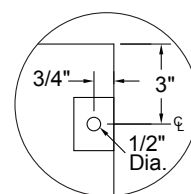
DROP BOX DIFFUSER WITH DRUM LOUVERS & SEPARATE DRAIN PAN

Model DBD-43-DL-SDP (4-Sided, 3-Way)

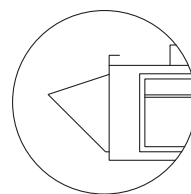


DRUM LOUVER OPTIONS

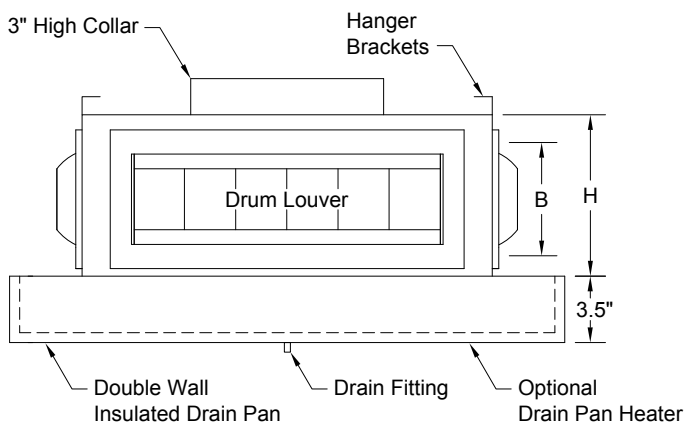
- Drum Louver
- Drum Louver with Split Drum
- Damper
- Angled face



Hanger Bracket Detail



Angled Face (Optional)

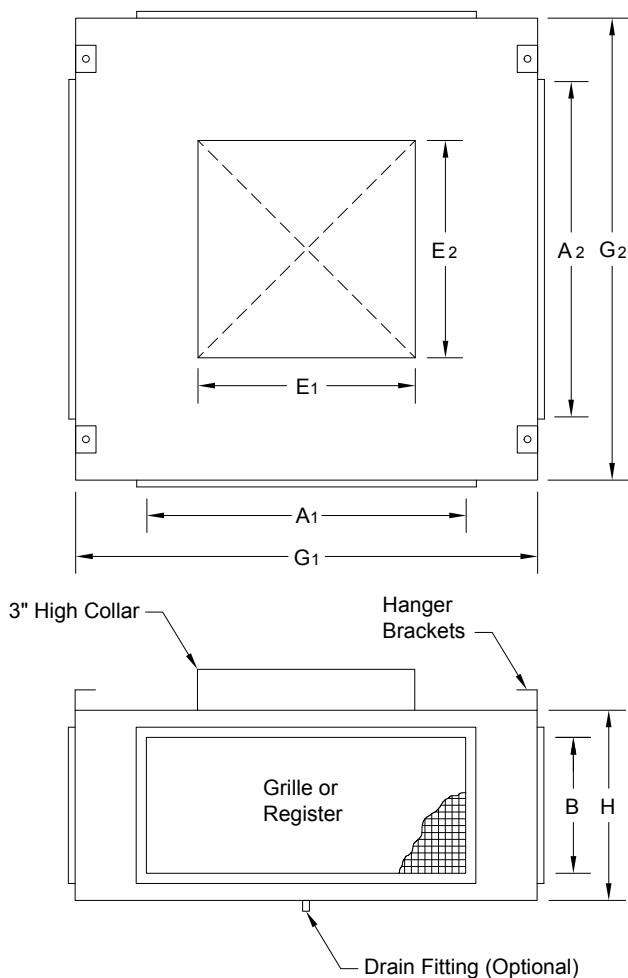


A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
36	18	6	18	18	50	32	11	600 – 3,000
36	18	10	22	22	51	33	15	3,000 – 5,000
48	24	10	26	26	63	39	15	5,000 – 7,000
48	24	12	30	30	64	40	17	7,000 – 10,000
60	30	15	36	36	78	48	20	10,000 – 15,000
72	36	15	42	42	90	54	20	15,000 – 20,000
96	48	15	46	46	117	66	20	20,000 – 25,000
72	36	24	52	48	88	52	32	25,000 – 30,000
72	36	30	68	50	90	54	38	30,000 – 40,000



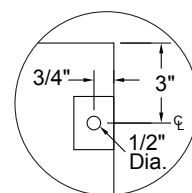
DROP BOX DIFFUSER WITH GRILLES

Model DBD-44 (4-Sided, 4-Way)

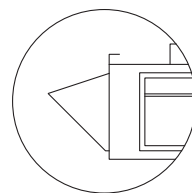


GRILLE OPTIONS

- Single deflection grilles
- Double deflection grilles
- Fixed blade grilles
- Eggcrate grilles
- Sub-frame for hinged or removeable
- Damper
- Angled face



Hanger Bracket Detail



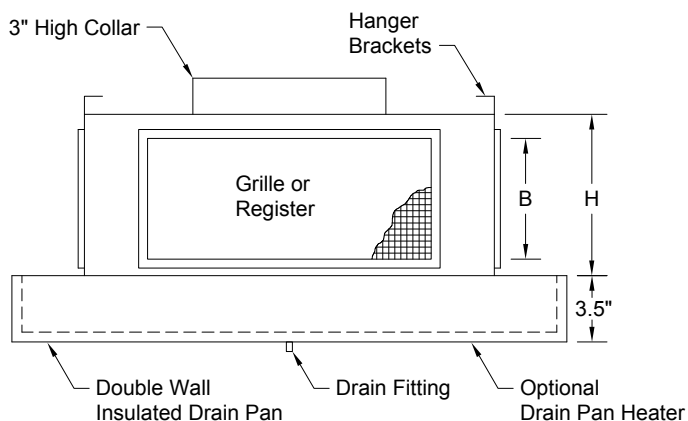
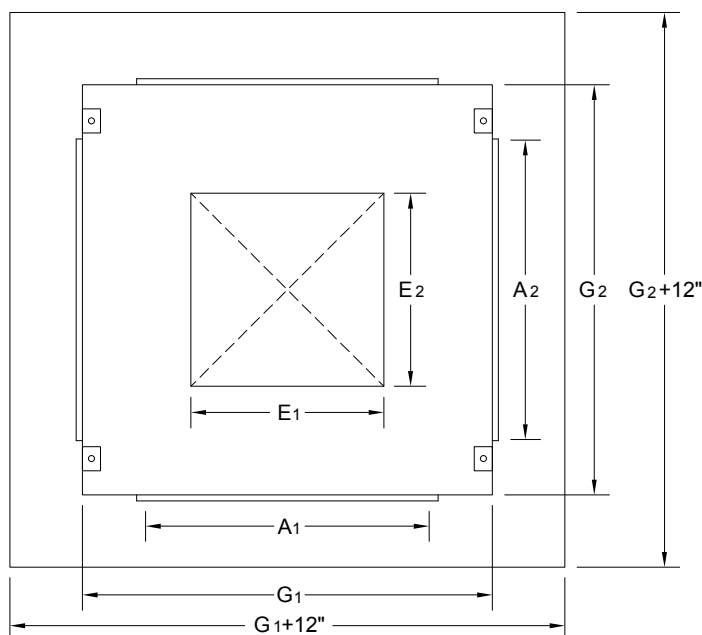
Angled Face (Optional)

A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
16	16	8	18	18	24	24	12	600 – 3,000
20	20	12	22	22	28	28	16	3,000 – 5,000
24	24	14	26	26	32	32	18	5,000 – 7,000
26	26	18	30	30	34	34	22	7,000 – 10,000
32	32	21	36	36	40	40	25	10,000 – 15,000
38	38	26	42	42	46	46	30	15,000 – 20,000
42	42	28	46	46	50	50	32	20,000 – 25,000
46	46	30	50	50	54	54	34	25,000 – 30,000
60	60	30	60	60	70	70	34	30,000 – 40,000
74	74	31	66	66	84	84	35	40,000 – 50,000
84	78	34	72	72	94	88	38	50,000 – 60,000
96	78	36	78	78	106	88	40	60,000 – 70,000



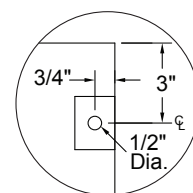
DROP BOX DIFFUSER WITH GRILLES & SEPARATE DRAIN PAN

Model DBD-44-SDP (4-Sided, 4-Way)

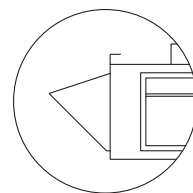


GRILLE OPTIONS

- Single deflection grilles
- Double deflection grilles
- Fixed blade grilles
- Eggcrate grilles
- Sub-frame for hinged or removeable
- Damper
- Angled face



Hanger Bracket Detail



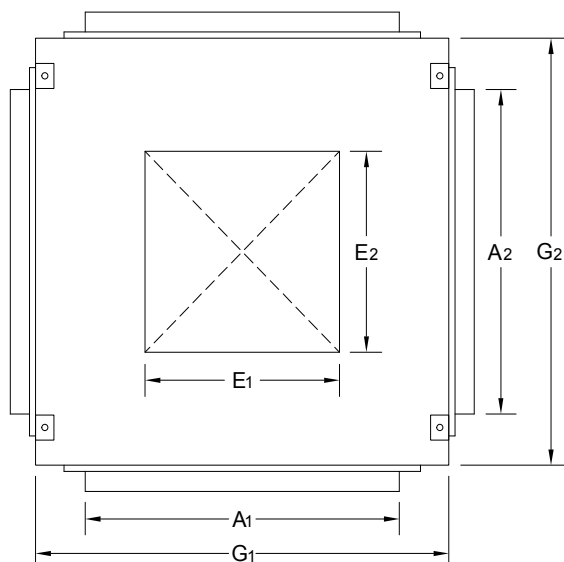
Angled Face (Optional)

A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
16	16	8	18	18	24	24	12	600 – 3,000
20	20	12	22	22	28	28	16	3,000 – 5,000
24	24	14	26	26	32	32	18	5,000 – 7,000
26	26	18	30	30	34	34	22	7,000 – 10,000
32	32	21	36	36	40	40	25	10,000 – 15,000
38	38	26	42	42	46	46	30	15,000 – 20,000
42	42	28	46	46	50	50	32	20,000 – 25,000
46	46	30	50	50	54	54	34	25,000 – 30,000
60	60	30	60	60	70	70	34	30,000 – 40,000
74	74	31	66	66	84	84	35	40,000 – 50,000
84	78	34	72	72	94	88	38	50,000 – 60,000
96	78	36	78	78	106	88	40	60,000 – 70,000



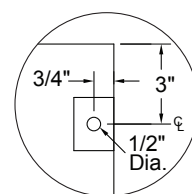
DROP BOX DIFFUSER WITH DRUM LOUVERS

Model DBD-44-DL (4-Sided, 4-Way)

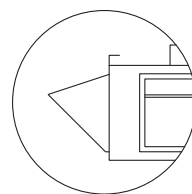


DRUM LOUVER OPTIONS

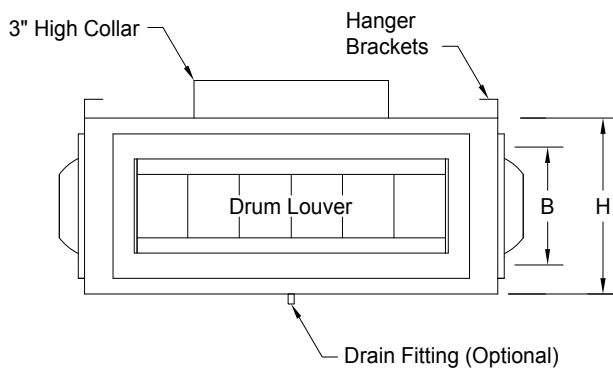
- Drum Louver
- Drum Louver with Split Drum
- Damper
- Angled face



Hanger Bracket Detail



Angled Face (Optional)

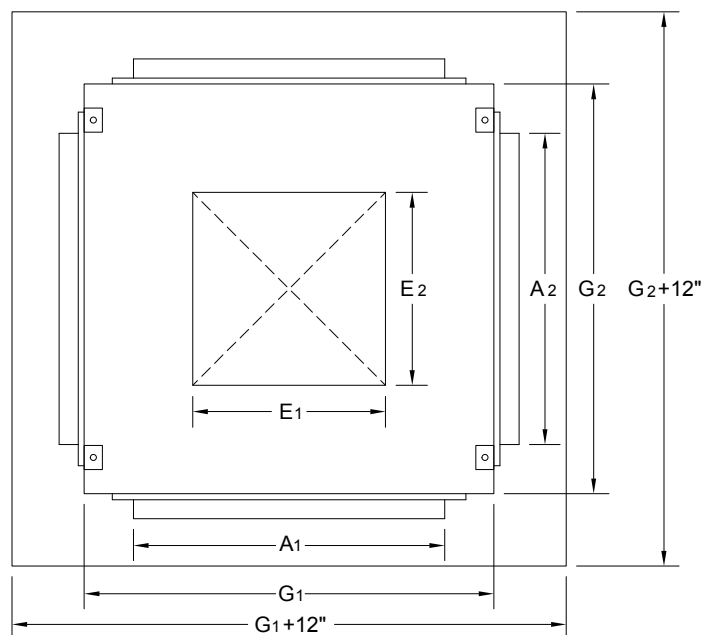


A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
18	18	6	18	18	32	32	11	600 – 3,000
18	18	10	22	22	33	33	15	3,000 – 5,000
24	24	10	26	26	39	39	15	5,000 – 7,000
30	30	12	30	30	46	46	17	7,000 – 10,000
30	30	15	36	36	48	48	20	10,000 – 15,000
36	36	15	42	42	54	54	20	15,000 – 20,000
48	48	15	46	46	66	66	20	20,000 – 25,000
60	60	15	50	50	78	78	20	25,000 – 30,000
72	72	15	60	60	90	90	20	30,000 – 40,000
60	60	24	66	66	76	76	31	40,000 – 50,000
72	72	24	72	72	88	88	31	50,000 – 60,000
72	72	30	78	78	90	90	37	60,000 – 70,000



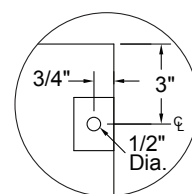
DROP BOX DIFFUSER WITH DRUM LOUVERS & SEPARATE DRAIN PAN

Model DBD-44-DL-SDP (4-Sided, 4-Way)

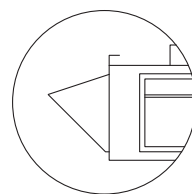


DRUM LOUVER OPTIONS

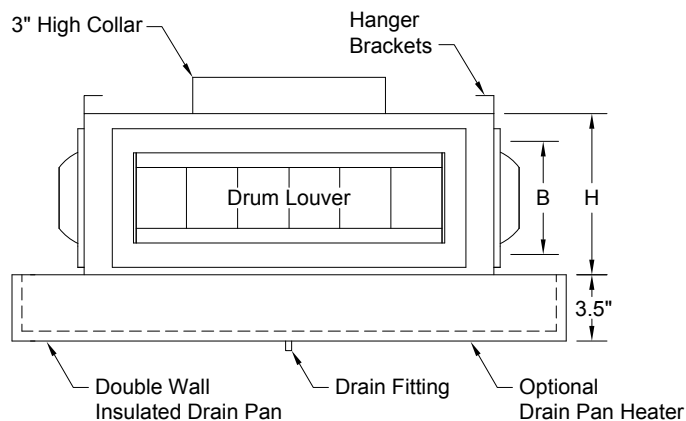
- Drum Louver
- Drum Louver with Split Drum
- Damper
- Angled face



Hanger Bracket Detail



Angled Face (Optional)

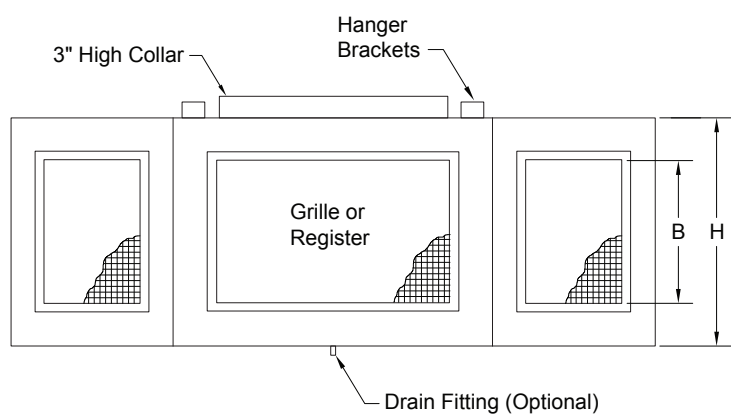
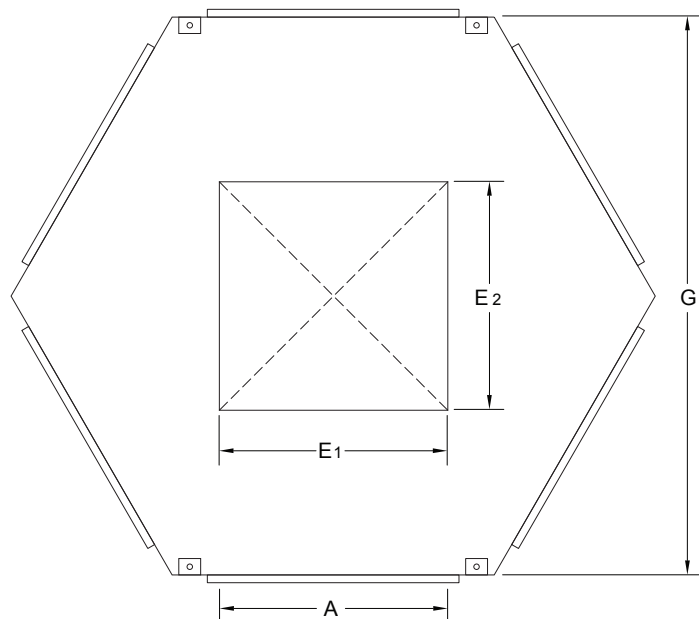


A ₁	A ₂	B	E ₁	E ₂	G ₁	G ₂	H	CFM RANGE
18	18	6	18	18	32	32	11	600 – 3,000
18	18	10	22	22	33	33	15	3,000 – 5,000
24	24	10	26	26	39	39	15	5,000 – 7,000
30	30	12	30	30	46	46	17	7,000 – 10,000
30	30	15	36	36	48	48	20	10,000 – 15,000
36	36	15	42	42	54	54	20	15,000 – 20,000
48	48	15	46	46	66	66	20	20,000 – 25,000
60	60	15	50	50	78	78	20	25,000 – 30,000
72	72	15	60	60	90	90	20	30,000 – 40,000
60	60	24	66	66	76	76	31	40,000 – 50,000
72	72	24	72	72	88	88	31	50,000 – 60,000
72	72	30	78	78	90	90	37	60,000 – 70,000



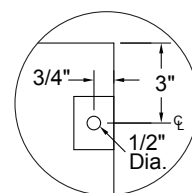
DROP BOX DIFFUSER WITH GRILLES

Model DBD-66 (6-Sided, 6-Way)

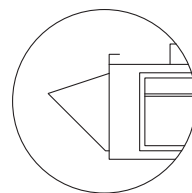


GRILLE OPTIONS

- Single deflection grilles
- Double deflection grilles
- Fixed blade grilles
- Eggcrate grilles
- Sub-frame for hinged or removeable
- Damper
- Angled face



Hanger Bracket Detail



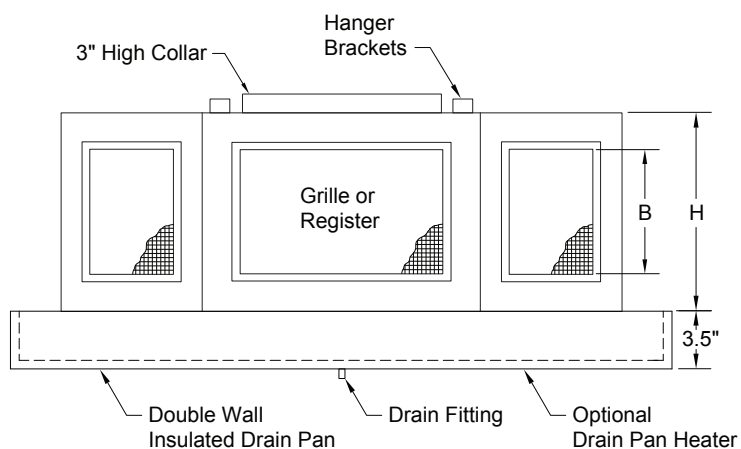
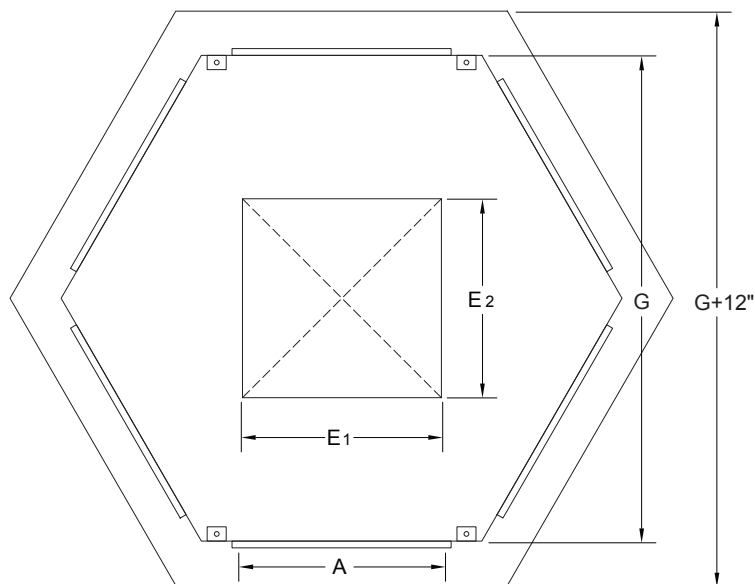
Angled Face (Optional)

A	B	E ₁	E ₂	G	H	CFM RANGE
18	8	18	18	40	12	900 – 4,500
20	12	26	26	44	16	4,000 – 7,500
26	12	30	30	54	16	6,000 – 10,000
32	15	36	36	64	19	9,500 – 15,000
33	20	42	42	66	24	13,000 – 21,000
39	22	48	48	77	26	18,000 – 28,000
45	24	54	54	87	28	23,000 – 35,000
45	30	60	60	87	34	30,000 – 45,000
48	38	65	65	93	42	40,000 – 60,000



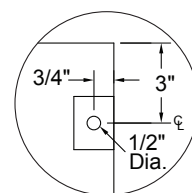
DROP BOX DIFFUSER WITH GRILLES & SEPARATE DRAIN PAN

Model DBD-66-SDP (6-Sided, 6-Way)

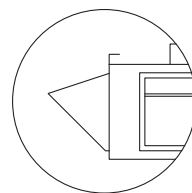


GRILLE OPTIONS

- Single deflection grilles
- Double deflection grilles
- Fixed blade grilles
- Eggcrate grilles
- Sub-frame for hinged or removeable
- Damper
- Angled face



Hanger Bracket Detail



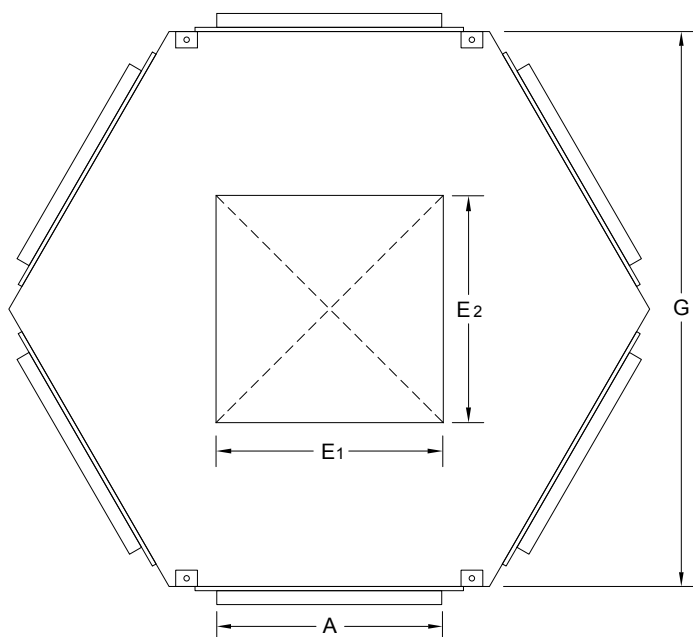
Angled Face (Optional)

A	B	E ₁	E ₂	G	H	CFM RANGE
18	8	18	18	40	12	900 – 4,500
20	12	26	26	44	16	4,000 – 7,500
26	12	30	30	54	16	6,000 – 10,000
32	15	36	36	64	19	9,500 – 15,000
33	20	42	42	66	24	13,000 – 21,000
39	22	48	48	77	26	18,000 – 28,000
45	24	54	54	87	28	23,000 – 35,000
45	30	60	60	87	34	30,000 – 45,000
48	38	65	65	93	42	40,000 – 60,000



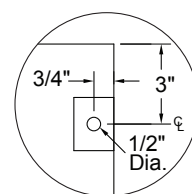
DROP BOX DIFFUSER WITH DRUM LOUVERS

Model DBD-66-DL (6-Sided, 6-Way)

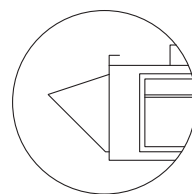


DRUM LOUVER OPTIONS

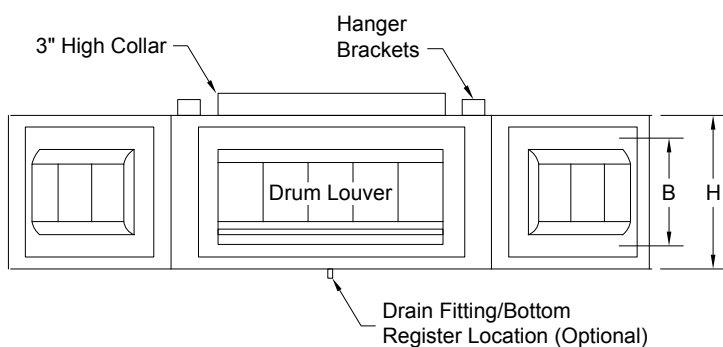
- Drum Louver
- Drum Louver with Split Drum
- Damper
- Angled face



Hanger Bracket Detail



Angled Face (Optional)

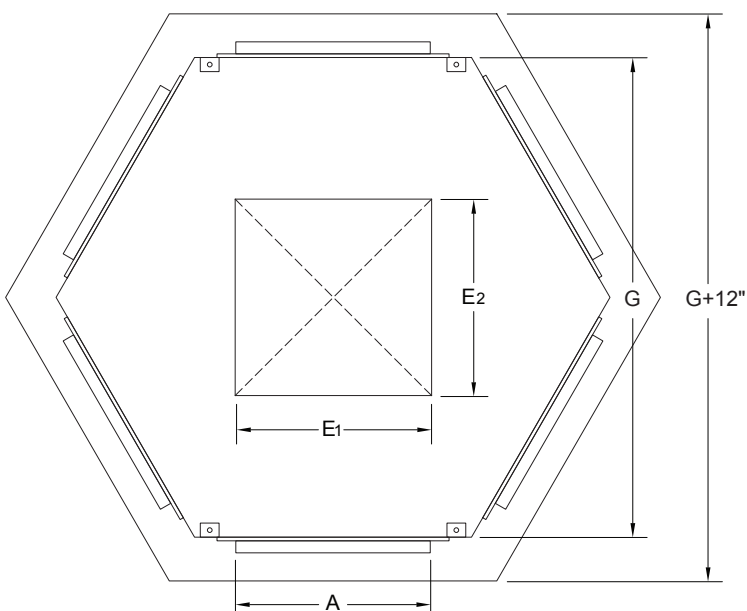


A	B	E ₁	E ₂	G	H	CFM RANGE
18	6	18	18	40	11	900 – 4,500
18	10	26	26	44	15	4,000 – 7,500
24	10	30	30	54	15	6,000 – 10,000
30	12	36	36	64	17	9,500 – 15,000
30	15	42	42	66	20	13,000 – 21,000
36	15	48	48	77	20	18,000 – 28,000
42	15	54	54	87	20	23,000 – 35,000
36	24	60	60	87	31	30,000 – 45,000
42	30	65	65	93	37	40,000 – 60,000



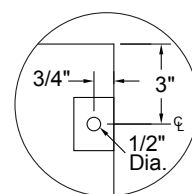
DROP BOX DIFFUSER WITH DRUM LOUVERS & SEPARATE DRAIN PAN

Model DBD-66-DL-SDP (6-Sided, 6-Way)

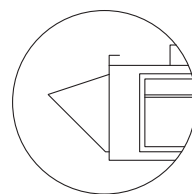


DRUM LOUVER OPTIONS

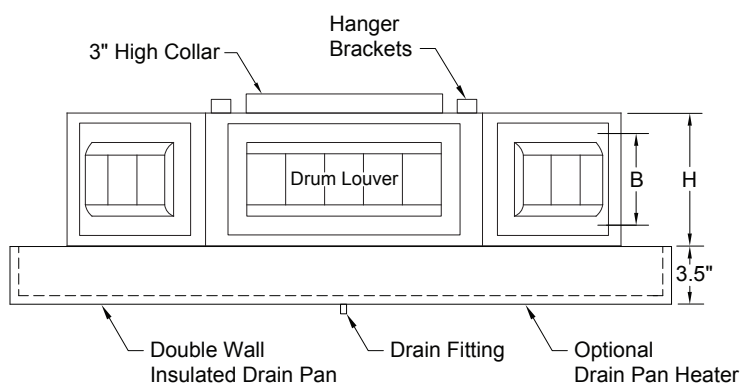
- Drum Louver
- Drum Louver with Split Drum
- Damper
- Angled face



Hanger Bracket Detail



Angled Face (Optional)

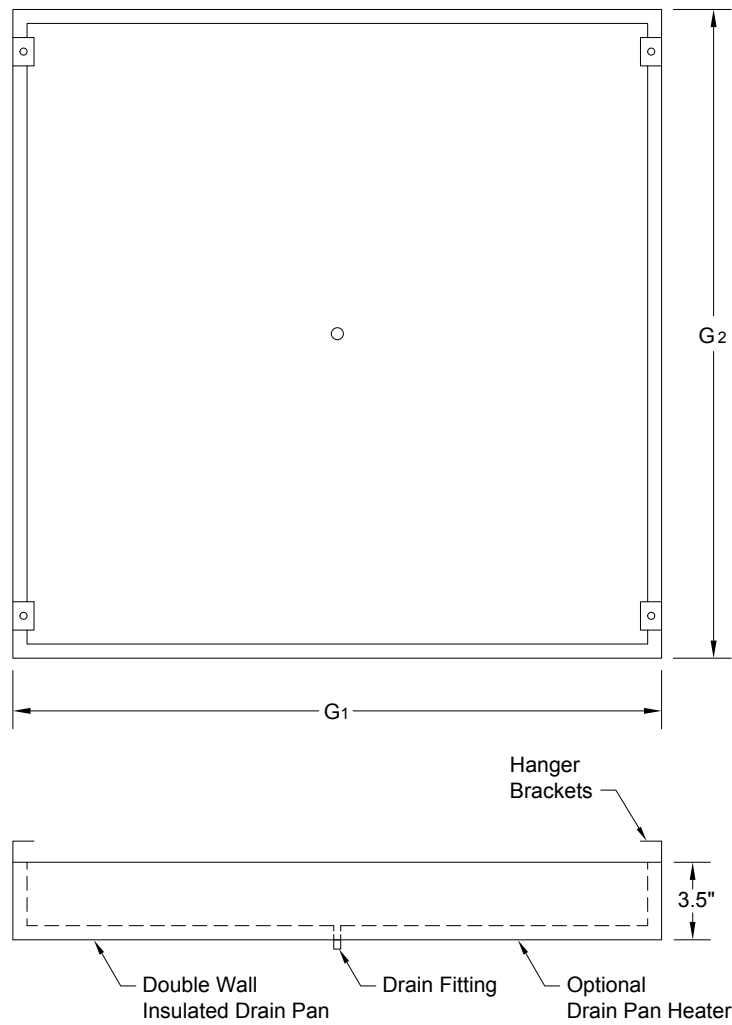


A	B	E ₁	E ₂	G	H	CFM RANGE
18	6	18	18	40	11	900 – 4,500
18	10	26	26	44	15	4,000 – 7,500
24	10	30	30	54	15	6,000 – 10,000
30	12	36	36	64	17	9,500 – 15,000
30	15	42	42	66	20	13,000 – 21,000
36	15	48	48	77	20	18,000 – 28,000
42	15	54	54	87	20	23,000 – 35,000
36	24	60	60	87	31	30,000 – 45,000
42	30	65	65	93	37	40,000 – 60,000



SEPARATE DRAIN PAN FOR DROP BOX DIFFUSERS

Model DBD-SDP





MODEL DBD-33 SUPPLY PERFORMANCE DATA

3-Sided, 3-Way Throw with Double Deflection Grilles

GRILLE SIZE	CFM	Pt	THROW	NC
14 x 10	600	0.06	9-14-26	>20
	1,800	0.10	21-27-39	23
	3,000	0.18	29-36-51	36
22 x 14	3,000	0.09	22-33-48	>20
	4,000	0.11	29-40-57	26
	5,000	0.15	36-44-62	33
30 x 15	5,000	0.10	28-42-61	>20
	6,000	0.13	36-50-71	29
	7,000	0.15	40-51-73	32
36 x 18	7,000	0.11	35-53-77	22
	8,500	0.14	42-58-83	30
	10,000	0.15	48-63-89	33
42 x 22	10,000	0.11	41-61-89	23
	12,500	0.14	49-69-98	33
	15,000	0.17	73-89-126	43
48 x 27	15,000	0.13	42-75-105	27
	17,500	0.15	60-84-117	35
	20,000	0.17	70-88-125	37
48 x 32	20,000	0.15	67-94-132	32
	22,500	0.16	77-102-143	33
	25,000	0.17	82-106-148	38
48 x 39	25,000	0.16	74-104-146	33
	27,500	0.17	86-112-158	37
	30,000	0.18	97-120-168	40

CORRECTION FACTOR

Deflection	Pt	Throw	NC
22.5°	x 1.15	x .85	+ 2
45°	x 1.75	x .73	+ 7

Pt – Total Pressure, inches w.g.

NC – Noise Criteria based on room attenuation of 10 dB

Throw – Distance, in feet, to terminal velocities of
150, 100, 50 fpm under isothermal conditions

PERFORMANCE NOTES:

– Pt, throw and NC are based on 0° deflection.

Correction factors for other conditions are listed above.

– Data derived from tests conducted in accordance with
ANSI/ASHRAE Standard 70 - 2006.

– Consult factory for performance when a damper is included.



MODEL DBD-33-DL SUPPLY PERFORMANCE DATA

3-Sided, 3-Way Throw with Drum Louvers

DRUM LOUVER SIZE	CFM	Pt	THROW	NC
18 x 10	600	0.08	15-20-32	<20
	1,800	0.14	21-28-45	<20
	3,000	0.25	34-44-74	33
24 x 10	3,000	0.23	30-42-64	23
	4,000	0.29	35-46-74	34
	5,000	0.43	47-60-97	45
36 x 10	5,000	0.31	44-60-100	35
	6,000	0.38	50-68-105	40
	7,000	0.47	56-76-115	47
42 x 10	7,000	0.41	54-72-110	42
	8,500	0.52	60-80-120	48
	10,000	0.66	66-86-140	55
48 x 12	10,000	0.49	58-78-125	38
	12,500	0.64	75-100-170	45
	15,000	0.80	80-110-190	50
54 x 15	15,000	0.50	72-100-175	35
	17,500	0.59	80-112-195	40
	20,000	0.71	95-130-225	44
60 x 15	20,000	0.56	85-115-200	42
	22,500	0.65	100-135-240	46
	25,000	0.76	110-150-260	50

CORRECTION FACTOR

Deflection	Pt	Throw	NC
15°	x 1.5	x .85	+ 4
30°	x 1.9	x .73	+ 9

Pt – Total Pressure, inches w.g.

NC – Noise Criteria based on room attenuation of 10 dB

Throw – Distance, in feet, to terminal velocities of
150, 100, 50 fpm under isothermal conditions

PERFORMANCE NOTES:

– Pt, throw and NC are based on 0° deflection.

Correction factors for other conditions are listed above.

– Data derived from tests conducted in accordance with
ANSI/ASHRAE Standard 70 - 2006.

– Consult factory for performance when a damper is included.



MODEL DBD-43 SUPPLY PERFORMANCE DATA

4-Sided, 3-Way Throw with Double Deflection Grilles

GRILLE SIZE	CFM	Pt	THROW-FRONT	THROW-SIDES	NC
20 x 18 10 x 18	600	0.02	11-18-34	9-14-26	>20
	1,800	0.04	21-31-56	16-25-39	>20
	3,000	0.07	31-43-61	20-30-43	27
24 x 24 12 x 24	3,000	0.04	29-36-62	18-27-44	>20
	4,000	0.05	33-48-70	22-33-48	22
	5,000	0.08	45-59-83	32-40-58	31
28 x 28 14 x 28	5,000	0.05	38-56-82	24-36-58	23
	6,000	0.06	45-63-90	34-48-68	27
	7,000	0.08	53-69-97	40-51-73	32
36 x 32 18 x 32	7,000	0.04	46-69-100	33-48-70	23
	8,500	0.06	50-74-105	36-52-73	28
	10,000	0.09	60-80-112	42-57-80	33
46 x 38 23 x 38	10,000	0.06	46-69-112	33-49-80	22
	12,500	0.08	58-86-125	41-61-89	28
	15,000	0.10	75-100-145	49-69-98	34
52 x 39 26 x 39	15,000	0.08	63-95-138	45-68-98	28
	17,500	0.09	76-107-151	54-76-108	32
	20,000	0.11	89-116-163	63-82-116	37
64 x 39 32 x 39	20,000	0.08	80-113-159	57-79-111	33
	22,500	0.11	94-122-173	65-85-121	35
	25,000	0.13	106-131-185	73-88-125	39
76 x 39 38 x 39	27,500	Consult Factory			
96 x 39 48 x 39	35,000	Consult Factory			

CORRECTION FACTOR

Deflection	Pt	Throw	NC
22.5°	x 1.15	x .85	+ 2
45°	x 1.75	x .73	+ 7

Pt – Total Pressure, inches w.g.

NC – Noise Criteria based on room attenuation of 10 dB

Throw – Distance, in feet, to terminal velocities of
150, 100, 50 fpm under isothermal conditions

PERFORMANCE NOTES:

- Pt, throw and NC are based on 0° deflection.
- Correction factors for other conditions are listed above.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 - 2006.
- Consult factory for performance when a damper is included.



MODEL DBD-43-DL SUPPLY PERFORMANCE DATA

4-Sided, 3-Way Throw with Drum Louvers

DRUM LOUVER SIZE	CFM	Pt	THROW-FRONT	THROW-SIDES	NC
36 x 6 18 x 6	600	0.09	20-26-40	12-16-27	>20
	1,800	0.21	32-41-64	21-27-45	24
	3,000	0.38	44-55-90	31-42-70	39
36 x 10 18 x 10	3,000	0.19	40-55-90	27-38-58	30
	4,000	0.27	50-68-105	34-44-74	40
	5,000	0.39	58-78-117	40-52-85	50
48 x 10 24 x 10	5,000	0.25	54-75-112	33-44-70	38
	6,000	0.35	60-80-120	44-54-94	45
	7,000	0.44	66-90-140	50-65-100	52
48 x 12 24 x 12	7,000	0.36	59-88-135	42-60-105	38
	8,500	0.48	75-100-170	52-72-120	45
	10,000	0.68	86-115-200	65-85-140	50
60 x 15 30 x 15	10,000	0.47	76-105-180	47-68-115	40
	12,500	0.36	90-120-210	60-84-140	31
	15,000	0.44	100-135-240	66-94-160	46
72 x 15 36 x 15	15,000	0.38	95-132-235	57-82-140	41
	17,500	0.46	100-140-250	62-88-150	45
	20,000	0.61	125-170-305	72-100-175	50
96 x 15 48 x 15	27,500	Consult Factory			
72 x 24 36 x 24	27,500	Consult Factory			
72 x 30 36 x 30	35,000	Consult Factory			

CORRECTION FACTOR

Deflection	Pt	Throw	NC
15°	x 1.5	x .85	+ 4
30°	x 1.9	x .73	+ 9

Pt – Total Pressure, inches w.g.

NC – Noise Criteria based on room attenuation of 10 dB

Throw – Distance, in feet, to terminal velocities of
150, 100, 50 fpm under isothermal conditions

PERFORMANCE NOTES:

- Pt, throw and NC are based on 0° deflection.
- Correction factors for other conditions are listed above.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 - 2006.
- Consult factory for performance when a damper is included.



MODEL DBD-44 SUPPLY PERFORMANCE DATA

4-Sided, 4-Way Throw with Double Deflection Grilles

GRILLE SIZE	CFM	Pt	THROW	NC
16 x 8	600	0.02	8-13-25	>20
	1,800	0.05	13-20-29	20
	3,000	0.11	23-28-41	30
20 x 12	3,000	0.04	18-29-43	>20
	4,000	0.06	25-35-50	23
	5,000	0.09	31-39-55	30
24 x 14	5,000	0.06	25-38-55	22
	6,000	0.07	29-40-57	26
	7,000	0.09	35-45-64	31
26 x 18	7,000	0.06	32-47-70	24
	8,500	0.07	36-50-71	29
	10,000	0.11	45-56-80	33
32 x 21	10,000	0.07	38-55-80	24
	12,500	0.10	49-65-91	31
	15,000	0.12	55-68-95	36
38 x 26	15,000	0.08	46-68-97	27
	17,500	0.10	51-72-102	31
	20,000	0.12	60-78-111	36
42 x 28	20,000	0.09	55-77-109	31
	22,500	0.12	64-84-118	33
	25,000	0.13	68-88-123	38
46 x 30	25,000	0.11	68-92-130	34
	27,500	0.12	73-95-134	36
	30,000	0.14	83-101-143	40
60 x 30**	35,000	Consult Factory		
74 x 31**	45,000	Consult Factory		
81 x 34**	55,000	Consult Factory		
87 x 36**	65,000	Consult Factory		

** Consists of two grilles with a mullion in between

CORRECTION FACTOR

Deflection	Pt	Throw	NC
22.5°	x 1.15	x .85	+ 2
45°	x 1.75	x .73	+ 7

Pt – Total Pressure, inches w.g.

NC – Noise Criteria based on room attenuation of 10 dB

Throw – Distance, in feet, to terminal velocities of
150, 100, 50 fpm under isothermal conditions

PERFORMANCE NOTES:

– Pt, throw and NC are based on 0° deflection.

Correction factors for other conditions are listed above.

– Data derived from tests conducted in accordance with
ANSI/ASHRAE Standard 70 - 2006.

– Consult factory for performance when a damper is included.



MODEL DBD-44-DL SUPPLY PERFORMANCE DATA

4-Sided, 4-Way Throw with Drum Louvers

DRUM LOUVER SIZE	CFM	Pt	THROW	NC
18 x 6	600	0.08	12-16-27	<20
	1,800	0.18	21-27-45	20
	3,000	0.41	31-42-70	35
18 x 10	3,000	0.17	29-38-58	30
	4,000	0.27	34-44-74	33
	5,000	0.33	40-52-84	42
24 x 10	5,000	0.25	36-48-76	32
	6,000	0.32	44-54-94	43
	7,000	0.40	50-65-100	47
30 x 12	7,000	0.29	40-60-100	30
	8,500	0.33	45-65-110	32
	10,000	0.45	54-75-125	39
30 x 15	10,000	0.26	45-64-110	29
	12,500	0.36	54-75-130	35
	15,000	0.52	73-102-150	42
36 x 15	15,000	0.38	59-82-120	40
	17,500	0.47	66-94-160	43
	20,000	0.57	75-105-180	47
48 x 15	20,000	0.39	75-105-175	40
	22,500	0.44	80-110-190	42
	25,000	0.51	90-130-220	45
60 x 15	25,000	0.40	85-115-200	40
	27,500	0.43	90-120-210	43
	30,000	0.47	95-130-235	45
72 x 15	30,000	0.41	95-135-235	43
	35,000	0.49	108-145-265	46
	40,000	0.64	120-170-300	50
60 x 24**	40,000 - 50,000	Consult Factory		
72 x 24**	50,000 - 60,000	Consult Factory		
72 x 30**	60,000 - 70,000	Consult Factory		

**Consists of two drum louvers stacked vertically

CORRECTION FACTOR

Deflection	Pt	Throw	NC
15°	x 1.5	x .85	+ 4
30°	x 1.9	x .73	+ 9

Pt – Total Pressure, inches w.g.

NC – Noise Criteria based on room attenuation of 10 dB

Throw – Distance, in feet, to terminal velocities of
150, 100, 50 fpm under isothermal conditions

PERFORMANCE NOTES:

- Pt, throw and NC are based on 0° deflection.
Correction factors for other conditions are listed above.
- Data derived from tests conducted in accordance with
ANSI/ASHRAE Standard 70 - 2006.
- Consult Factory for performance when a damper is included.



MODEL DBD-66 SUPPLY PERFORMANCE DATA

6-Sided, 6-Way Throw with Double Deflection Grilles

GRILLE SIZE	CFM	Pt	THROW	NC
18 x 8	900	0.04	8-13-20	<20
	2,700	0.06	15-23-33	<20
	4,500	0.14	30-23-43	31
20 x 12	4,000	0.04	12-16-39	<20
	5,750	0.08	26-36-51	24
	7,500	0.14	34-41-58	33
26 x 12	6,000	0.06	24-36-52	<20
	8,000	0.09	31-41-60	26
	10,000	0.15	38-47-66	33
32 x 15	9,500	0.08	29-45-65	21
	12,250	0.12	39-52-74	28
	15,000	0.16	47-58-82	35
33 x 20	13,000	0.09	35-52-75	22
	17,000	0.12	46-60-86	30
	21,000	0.18	56-69-96	37
39 x 22	18,000	0.10	42-62-88	25
	23,000	0.15	55-71-100	33
	28,000	0.19	64-78-109	38
45 x 24	23,000	0.12	48-71-102	26
	29,000	0.15	60-80-114	32
	35,000	0.19	73-89-126	40
45 x 30	30,000	0.13	57-79-111	30
	37,500	0.16	72-89-127	38
	45,000	0.22	80-98-135	43
48 x 38	40,000	0.12	64-92-133	30
	50,000	0.16	81-105-149	37
	60,000	0.21	96-120-165	43

CORRECTION FACTOR

Deflection	Pt	Throw	NC
22.5°	x 1.15	x .85	+ 2
45°	x 1.75	x .73	+ 7

Pt – Total Pressure, inches w.g.

NC – Noise Criteria based on room attenuation of 10 dB

Throw – Distance, in feet, to terminal velocities of 150, 100, 50 fpm under isothermal conditions

PERFORMANCE NOTES:

– Pt, throw and NC are based on 0° deflection.

Correction factors for other conditions are listed above.

– Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 - 2006.

– Consult factory for performance when a damper is included.



MODEL DBD-66-DL SUPPLY PERFORMANCE DATA

6-Sided, 6-Way Throw with Drum Louvers

DRUM LOUVER SIZE	CFM	Pt	THROW	NC
18 x 6	900	0.04	8-13-20	<20
	2,700	0.06	15-23-33	<20
	4,500	0.14	30-23-43	31
18 x 10	4,000	0.04	12-16-39	<20
	5,750	0.08	26-36-51	24
	7,500	0.14	34-41-58	33
24 x 10	6,000	0.06	24-36-52	<20
	8,000	0.09	31-41-60	26
	10,000	0.15	38-47-66	33
30 x 12	9,500	0.08	29-45-65	21
	12,250	0.12	39-52-74	28
	15,000	0.16	47-58-82	35
30 x 15	13,000	0.09	35-52-75	22
	17,000	0.12	46-60-86	30
	21,000	0.18	56-69-96	37
36 x 15	18,000	0.10	42-62-88	25
	23,000	0.15	55-71-100	33
	28,000	0.19	64-78-109	38
42 x 15	23,000	0.12	48-71-102	26
	29,000	0.15	60-80-114	32
	35,000	0.19	73-89-126	40
36 x 12**	30,000-45,000	Consult Factory		
42 x 15**	40,000-60,000	Consult Factory		

** Consists of two drum louvers stacked vertically

CORRECTION FACTOR

Deflection	Pt	Throw	NC
15°	x 1.5	x .85	+ 4
30°	x 1.9	x .73	+ 9

PERFORMANCE NOTES:

- Pt, throw and NC are based on 0° deflection.
- Correction factors for other conditions are listed above.
- Data derived from tests conducted in accordance with ANSI/ASHRAE Standard 70 - 2006.
- Consult factory for performance when a damper is included.