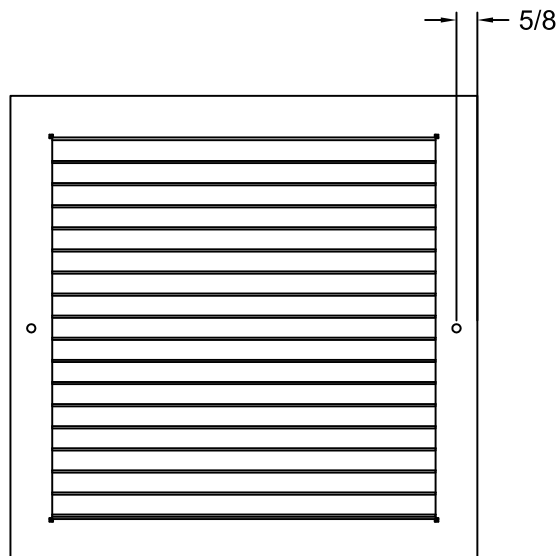
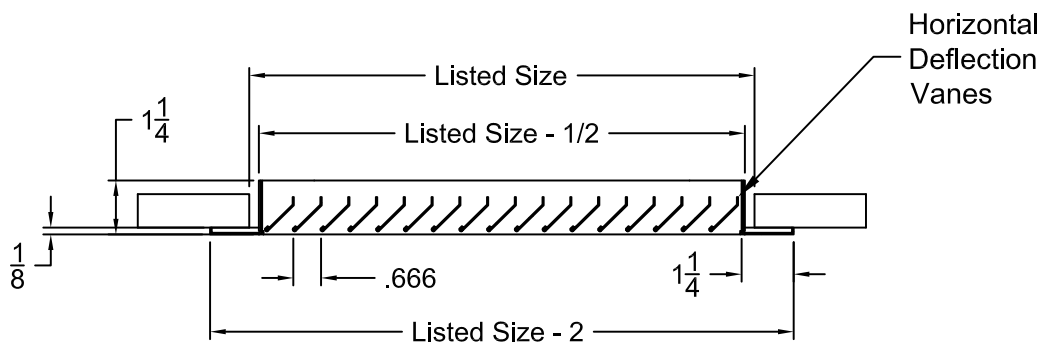


MODEL RHP

The RHP series grille is an economical one-piece stamped frame return. It combines the advantages of corrosive resistant aluminum construction and durability with an attractive design and solid performance.

- Economical pricing combined with solid performance
- Fixed horizontal blades at 40° deflection
- Optional opposed blade damper



Available Sizes	
8 x 4	12 x 8
8 x 6	14 x 4
10 x 4	14 x 6
10 x 6	14 x 8
10 x 8	16 x 6
12 x 4	16 x 8
12 x 6	

SERIES RHP SPECIFICATIONS

RETURN — FIXED HORIZONTAL BLADE — ALUMINUM — MODEL RHP

- Air inlets shall be model RHP manufactured by METALAIRE. Units shall be return or exhaust grilles of aluminum construction with a one-piece stamped frame and a single set of fixed deflection blades. The units shall be the size and quantity as outlined in the plans and specifications. The border shall be 1 1/4" wide with aerodynamically shaped deflector blades on 2/3" center set at 40°. The units are designed for surface mounting applications and be provided with screw holes in the face of the device.
- Optional opposed blade damper shall be constructed of steel (Model OBD) or aluminum (Model OBDA). Damper must be operable from the face of the register.

Performance Specification

The manufacturer shall provide published performance data. Data shall be tested in accordance to ANSI/ASHRAE Standard 70-2006.

Paint Specification

Process shall be anodic electro-deposition using an anodic acrylic paint. Units shall undergo pre-treatment including a pressurized spray stage using an alkaline cleaner and a de-ionized water rinse.

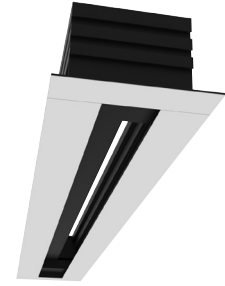
RHP MODEL NUMBER SPECIFICATION ALUMINUM STAMPED BORDER

Model		Neck					Available Finishes		
RHP-1	Surface Mount		6	8	10	12	14	Standard	
		4		X	X	X	X	01	White
		6	X	X	X	X	X	Optional	
		8		X	X	X	X	02	Satin Silver
		10			X			03	Black
		12					X		24
							28	Custom Color	

Available Accessories	
OBD	Steel Opposed Blade Damper
OBDA	Aluminum Opposed Blade Damper
PF	Plaster Frame
NSH	No Screw Holes
CM	Concealed Mounting

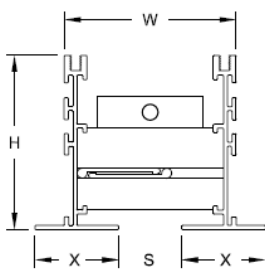
MODEL FAL

The Formations FAL series is engineered for supply, return or exhaust air distribution in heating, cooling and ventilating applications. It is designed for ceiling and sidewall installation, and works equally well in variable-volume or constant volume air distribution systems. Formations is suitable for both commercial and residential applications. Numerous frame styles allow the specifier to make an aesthetic statement.

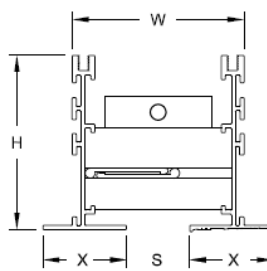


- Available with straight or combo pattern controllers
- Standard slot widths of 1", 1.5", 2", 2.5" and 3"
- Available in single section lengths up to 96"
- Available with one or two slots
- Available in 5 border configurations
- Quick installation with state of the art mounting hardware
- Can be curved to produce a ceiling flat, concave or convex face unit

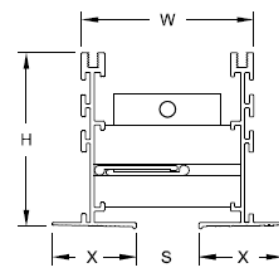
Models:	FAL-10	1" Slot
	FAL-15	1 1/2" Slot
	FAL-20	2" Slot
	FAL-25	2 1/2" Slot
	FAL-30	3" Slot



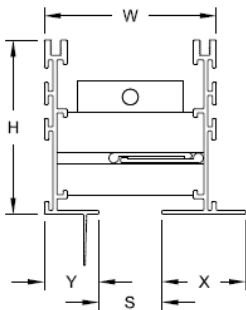
□ Border AA



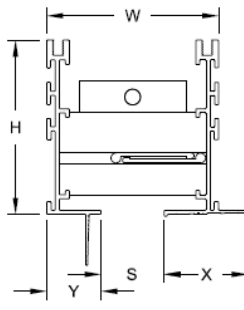
□ Border AC



□ Border CC

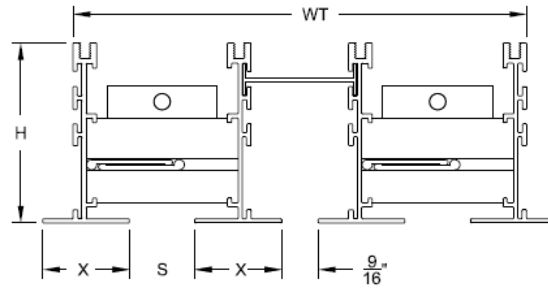


□ Border BA

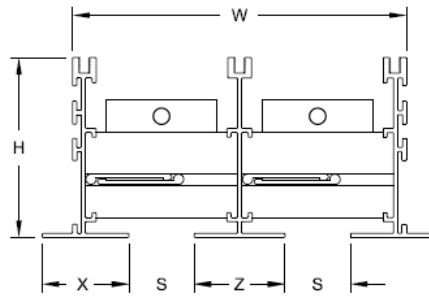


□ Border BC

Model	S Slot Width	W Width	X Border Width	Y Border Width	H Height
FAL-10	1"	2 3/4	1 5/16	7/8	2 3/4
FAL-15	1 1/2"	3 3/4	1 9/16	1 1/8	2 3/4
FAL-20	2"	4 3/4	1 13/16	1 3/8	2 3/4
FAL-25	2 1/2"	5 3/4	2 1/16	1 5/8	3 3/16
FAL-30	3"	6 3/4	1 13/16	2 5/16	3 5/8



□ Border AA 2T Slot

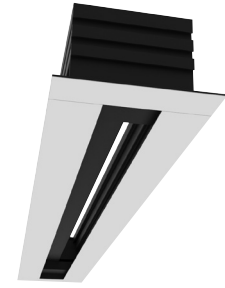


□ Border AA 2 Slot

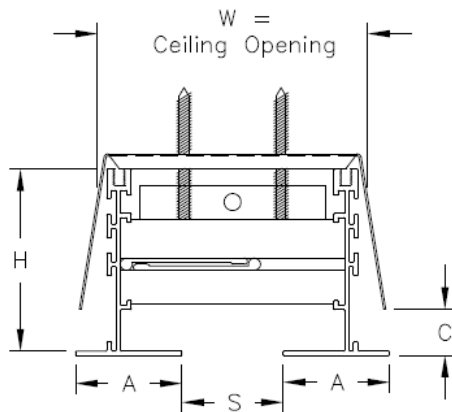
Model	S Slot Width	Z Border Width	Border Width	WT Border Width	H Height
FAL-10	1	1 3/8	5 1/8	6 15/16	2 3/4
FAL-15	1 1/2	1 7/8	7 1/8	8 15/16	2 3/4
FAL-20	2	2 3/8	9 1/8	10 15/16	2 3/4
FAL-25	2 1/2	2 7/8	11 1/8	12 15/16	3 3/16
FAL-30	3	3 3/8	13 1/8	14 15/16	3 5/8

MODEL FALC

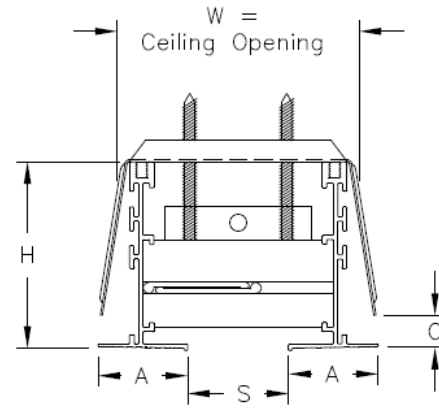
The Formations FALC series is engineered for supply, return or exhaust air distribution in heating, cooling and ventilating applications. It is designed for ceiling and sidewall installation, and works equally well in variable-volume or constant-volume air distribution systems. Formations is suitable for both commercial and residential applications. Numerous frame styles allow the specifier to make an aesthetic statement.



- Available with straight or combo pattern controllers in maximum 24" increments
- Standard slot widths of 1", 1.5", 2", 2.5" and 3"
- Available in single section lengths up to 96"
- Available with one or two slots
- Available in 2 border configurations
- Standard concealed mounting
- Can be curved to produce a flat face, concave or convex face unit

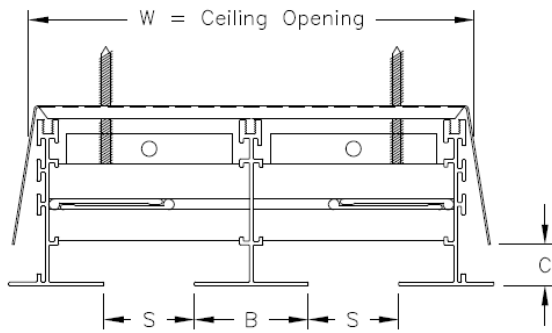


Border AA (1 Slot)

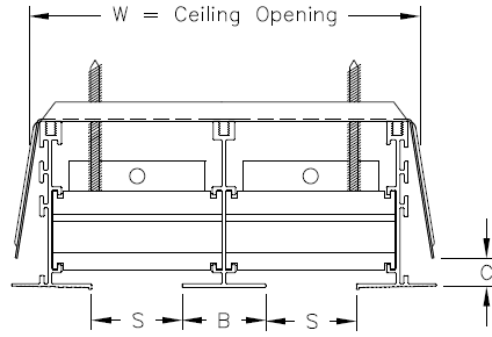


Border CC (1 Slot)

One Slot Formations					
Model	Formation Unit Slot Width	W (width)	A Border (width)	B Border (width)	H Height
FALC-10	1	3 3/4	1 15/16	7/8	2 3/4
FALC-15	1 1/2	4 1/4	1 9/16	1 1/8	2 3/4
FALC-20	2	5 1/4	1 13/16	1 3/8	2 3/4
FALC-25	2 1/2	6 1/4	2 1/16	1 5/8	3 3/16
FALC-30	3	7 1/4	2 5/16	1 7/8	3 5/8



Border AA (2 Slot)



Border CC (2 Slot)

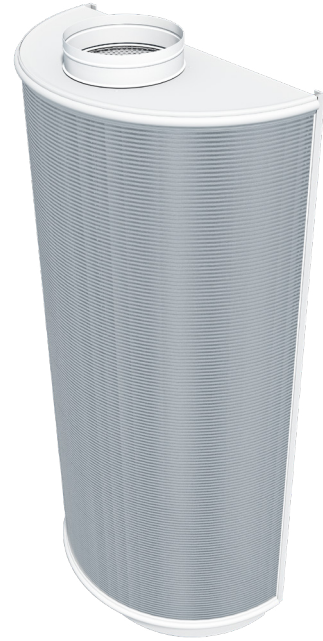
Two Slot Formations				
Model	Formation Unit Slot Width	W (width)	B Border (width)	H Height
FALC-10	1	5 5/8	1 3/8	2 3/4
FALC-15	1 1/2	7 5/8	1 7/8	2 3/4
FALC-20	2	9 5/8	2 3/8	2 3/4
FALC-25	2 1/2	11 5/8	2 7/8	3 3/16
FALC-30	3	13 5/8	3 3/8	3 5/8

DD-RD-180

The Model DD-RD-180 is a semi-round displacement diffuser with a 180 degree airflow designed for wall mounting around the periphery of a room. Our uniquely designed mounting system allows for quick and easy installation of these wall mount displacement diffusers. The DD-RD-180 is offered in 18", 24", 30" and 36" diameters in a variety of heights to accommodate various flow requirements.

Optional bases and duct covers are available to complete the installation.

- Steel Construction
- 23% Perforated Face
- Designed to match the DD-RD-360 and DD-RD-90



DISPLACEMENT VENTILATION PERFORMANCE DATA MODEL DD-RD-180

Unit Size (w x h)	Inlet Size	Neck Velocity	200	300	400	500	600	700	800
		Velocity Pressure	0.002	0.006	0.010	0.016	0.022	0.031	0.04
18"x24"	6" Dia.	CFM	70	105	140	175	210	245	280
		P _t	0.004	0.010	0.017	0.027	0.038	0.049	0.064
		Throw	3	5	5	8	7	7	9
		NC	-	-	-	-	-	-	15
24"x24"	8" Dia.	CFM	70	105	140	175	210	245	280
		P _t	0.004	0.009	0.017	0.026	0.037	0.051	0.066
		Throw	5	7	8	9	11	12	13
		NC	-	-	-	-	-	-	-
24"x36"	8" Dia.	CFM	70	105	140	175	210	245	280
		P _t	0.004	0.009	0.017	0.026	0.037	0.051	0.066
		Throw	5	7	8	10	11	11	13
		NC	-	-	-	-	-	-	16
24"x48"	10" Dia.	CFM	110	165	220	275	325	380	435
		P _t	0.004	0.009	0.017	0.026	0.036	0.050	0.065
		Throw	6	9	12	14	15	16	17
		NC	-	-	-	-	-	-	16
30"x24"	10" Dia.	CFM	110	165	220	275	325	380	435
		P _t	0.004	0.009	0.017	0.026	0.036	0.050	0.065
		Throw	6	8	10	12	14	15	16
		NC	-	-	-	-	-	-	17
30"x36"	10" Dia.	CFM	110	165	220	275	325	380	435
		P _t	0.004	0.009	0.017	0.026	0.036	0.050	0.065
		Throw	9	10	12	14	17	18	22
		NC	-	-	-	-	14	22	29

PERFORMANCE NOTES FOR MODEL DD-RD-180

All data is tested in accordance with ANSI/ASHRAE 70-2006.

DEFINITION OF UNITS

CFM Cubic Feet per Minute (air)

P_t Total pressure (inches of water column)

Throw Distance in feet @50fpm terminal velocity with 10°FΔT cooling differential.

NC Noise criterion, sound pressure level NC ratings are based on sound power level (Lw) re: 10⁻¹² watts minus a 10dB room attenuation in all octave bands

DD-RD 90

The Model DD-RD-90 is a radiused displacement diffuser designed for corner mounting. This unit provides 90 degree coverage allowing for low velocity displacement diffusion and is the perfect choice for corner coverage with minimal footprint. The DD-RD-90 is offered in 12", 15", 18" and 24" widths in 2' to 4' heights

Optional bases and duct covers are available to complete the installation.

- Steel Construction
- 23% Perforated Face
- Designed to match the DD-RD-360 and DD-RD-180



DISPLACEMENT VENTILATION PERFORMANCE DATA MODEL DD-RD 90

Unit Size (w x h)	Inlet Size	Neck Velocity	100	200	300	400	500	600	700
		Velocity Pressure	0.001	0.002	0.006	0.010	0.016	0.022	0.031
18"x24"	6" Dia.	CFM	20	40	60	80	100	120	135
		P _t	0.001	0.004	0.010	0.017	0.027	0.038	0.049
		Throw	2	2	3	3	3	4	5
		NC	-	-	-	-	-	-	15
24"x24"	8" Dia.	CFM	35	70	105	140	175	210	245
		P _t	0.001	0.004	0.009	0.017	0.026	0.037	0.051
		Throw	2	3	4	5	6	7	7
		NC	-	-	-	-	-	-	-
24"x36"	8" Dia.	CFM	35	70	105	140	175	210	245
		P _t	0.001	0.004	0.009	0.017	0.026	0.037	0.051
		Throw	2	3	4	5	6	7	7
		NC	-	-	-	-	-	-	16
24"x48"	10" Dia.	CFM	55	110	165	220	275	325	380
		P _t	0.001	0.004	0.009	0.017	0.026	0.036	0.050
		Throw	4	5	6	7	7	8	8
		NC	-	-	-	-	-	-	16
30"x24"	10" Dia.	CFM	55	110	165	220	275	325	380
		P _t	0.001	0.004	0.009	0.017	0.026	0.036	0.050
		Throw	3	5	6	7	8	9	9
		NC	-	-	-	-	-	-	17
30"x36"	10" Dia.	CFM	55	110	165	220	275	325	380
		P _t	0.001	0.004	0.009	0.017	0.026	0.036	0.050
		Throw	5	6	7	8	9	10	11
		NC	-	-	-	-	-	-	17
36"x60"	12" Dia.	CFM	80	155	235	315	395	470	550
		P _t	0.001	0.004	0.009	0.017	0.026	0.037	0.050
		Throw	4	5	7	7	9	10	11
		NC	-	-	-	-	-	-	18
30"x60"	12" Dia.	CFM	80	155	235	315	395	470	550
		P _t	0.001	0.004	0.009	0.017	0.026	0.037	0.050
		Throw	5	6	7	8	9	10	11
		NC	-	-	-	-	-	-	17

PERFORMANCE NOTES FOR MODEL DD-RD 90

All data is tested in accordance with ANSI/ASHRAE 70-2006.

DEFINITION OF UNITS

CFM Cubic Feet per Minute (air)

P_t Total pressure (inches of water column)

Throw Distance in feet @50fpm terminal velocity with 10°FΔT cooling differential.

NC Noise criterion, sound pressure level NC ratings are based on sound power level (L_w) re: 10⁻¹² watts minus a 10dB room attenuation in all octave bands