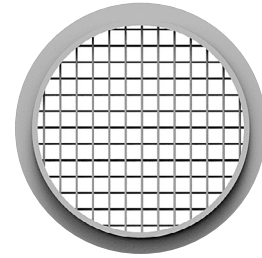


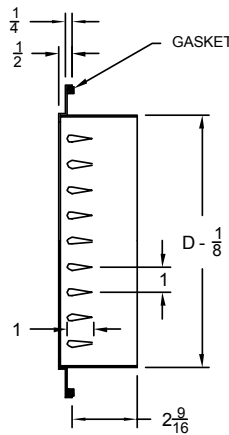
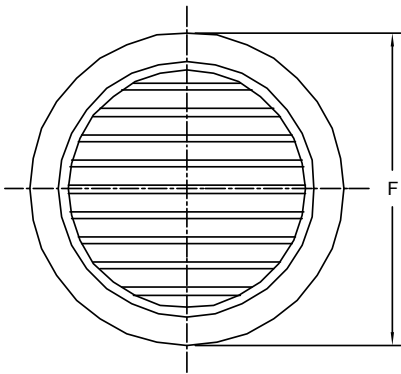
MODEL MRD



The MRD series is a round deflection supply or return grille with exceptional architectural appeal. It combines the aesthetics of a circular design with proven performance. The individually adjustable blades on the supply are designed so they can be adjusted to form a column of air or a widespread diffusion pattern. The MRD is suitable for applications requiring high velocity spot cooling or a dispersed airflow projection.

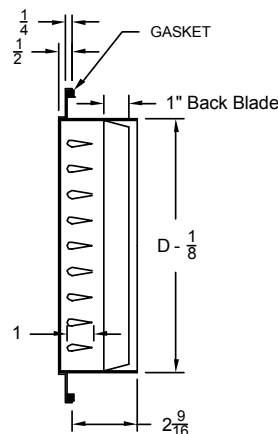
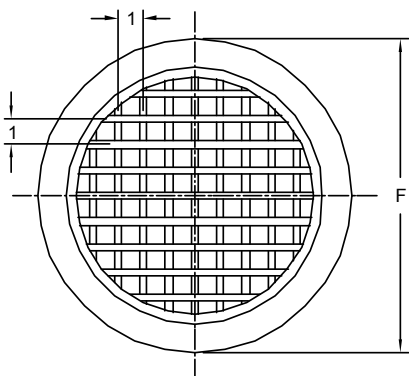
- Adjustable vertical and horizontal blades
- Long air throw
- Wide dispersion patterns
- Wall or ceiling mount
- Concealed mounting system
- Available in single, (MRDS) or double deflection, (MRDD)
- Return model MREC has low air resistance and low sound levels

□ Model: MRDS - Single Deflection Grille

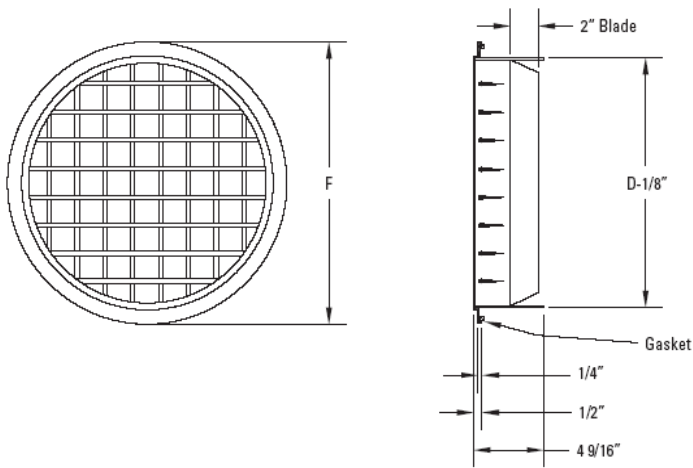


Available Sizes	D	F
6	6	8 1/4
8	8	10 1/4
10	10	12 1/4
12	12	14 1/4
14	14	16 1/4
16	16	18 1/4
18	18	20 1/4
20	20	22 1/4
22	22	24 1/4
24	24	26 1/4

□ Model: MRDD - Double Deflection Grille

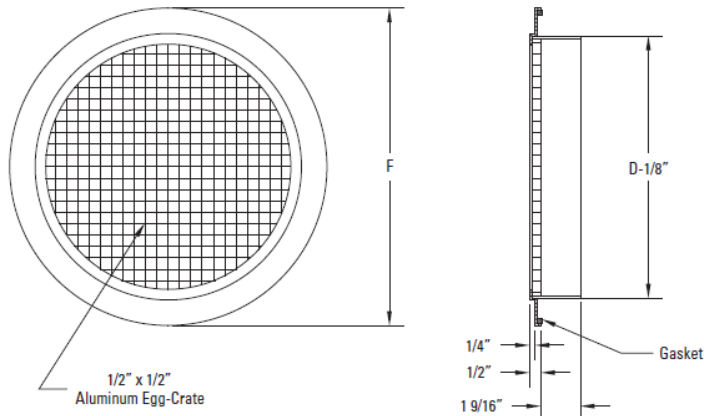


MRDW - Double Deflection Grille - Wide Blade Spacing



Model	Available Sizes	D	F
MRDW-08	8	8	10 1/4
MRDW-10	10	10	12 1/4
MRDW-12	12	12	14 1/4
MRDW-14	14	14	16 1/4
MRDW-16	16	16	18 1/4
MRDW-18	18	18	20 1/4
MRDW-20	20	20	22 1/4
MRDW-22	22	22	24 1/4
MRDW-24	24	24	26 1/4
MRDW-30	30	30	32 1/4

MREC - Round CC5 Grille



Model	Available Sizes	D	F
MRDW-06	6	6	8 1/4
MRDW-08	8	8	10 1/4
MRDW-10	10	10	12 1/4
MRDW-12	12	12	14 1/4
MRDW-14	14	14	16 1/4
MRDW-16	16	16	18 1/4
MRDW-18	18	18	20 1/4
MRDW-20	20	20	22 1/4
MRDW-22	22	22	24 1/4
MRDW-24	24	24	26 1/4
MRDW-30	30	30	32 1/4

SERIES MRD SPECIFICATIONS

ROUND SUPPLY/RETURN — ALUMINUM — MODELS MRSD/MRDD/MRDW/MREC

- Air outlets shall be model MRSD/MRDD/MRDW/MREC by METALAIRE. Units shall be round single deflection (MRSD) or double deflection (MRDD/MRDW) supply with extruded aluminum blades on 1" spacing. Deflector blades shall be individually adjustable. The return (MREC) shall have a 1/2" x 1/2" aluminum egg crate core of heavy gauge aluminum. Units shall be designed for concealed mounting and allow installation for both hard and flexible ductwork. Units shall also include a foam gasket to seal the border and mounting surface. The units shall be the size and quantity as outlined in the plans and specifications.

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.

MRD MODEL NUMBER SPECIFICATION

Model		Neck										Available Finishes	
MRDD	Round Double Deflection	6	8	10	12	14	16	18	20	22	24	Standard	
MRDW	Round Double Deflection- Wide Spacing	X	X	X	X	X	X	X	X	X	X	01	White
MRSD	Round Single Deflection											Optional	
MREC	Round Egg Crate											02	Satin Silver
												03	Black
												24	Mill
												28	Custom Color

SERIES MRD PERFORMANCE DATA
MODELS MRSD/MRDD/MRDW

Size	fpm	400	600	800	1000	1200	1400	1600
	Pv	.010	.022	.040	.062	.090	.122	.160
6	CFM	79	118	157	196	236	275	314
	Ps	.021	.047	.073	.133	.185	.254	.322
	NC	<15	<15	15	23	29	35	40
	Throw	4-8-15	6-12-21	8-14-24	10-16-28	13-21-30	15-22-32	17-24-34
8	CFM	140	209	279	349	419	489	559
	Ps	.016	.038	.067	.105	.150	.205	.266
	NC	<15	<15	<15	21	27	33	38
	Throw	5-10-20	8-16-27	11-21-32	14-25-36	17-28-39	20-30-41	21-32-45
10	CFM	218	327	436	545	655	764	873
	Ps	.014	.033	.059	.092	.131	.180	.234
	NC	<15	<15	<15	20	26	32	36
	Throw	6-12-24	9-17-32	14-26-37	17-31-45	21-34-47	25-37-52	29-40-56
12	CFM	314	471	628	786	943	1100	1257
	Ps	.014	.031	.053	.085	.120	.165	.213
	NC	<15	<15	<15	19	25	31	35
	Throw	7-15-30	12-24-40	16-33-47	20-37-53	25-41-59	29-45-65	33-48-74
14	CFM	428	641	855	1069	1283	1497	1711
	Ps	.013	.029	.050	.077	.114	.154	.201
	NC	<15	<15	<15	19	25	31	35
	Throw	8-18-37	14-28-17	18-38-55	23-44-61	30-48-70	34-52-74	38-56-83
16	CFM	559	838	1117	1396	1676	1955	2234
	Ps	.013	.027	.048	.076	.108	.147	.191
	NC	<15	<15	<15	19	25	31	35
	Throw	10-20-40	15-30-53	22-44-65	28-50-72	34-54-80	40-60-85	45-64-90
18	CFM	707	1060	1414	1767	2121	2474	2828
	Ps	.012	.027	.046	.072	.104	.142	.185
	NC	<15	<15	<15	20	26	32	36
	Throw	11-22-44	18-36-61	25-50-72	31-57-80	40-63-89	45-67-95	50-71-101
20	CFM	873	1309	1746	2182	2618	3055	3491
	Ps	.012	.026	.045	.070	.101	.137	.177
	NC	<15	<15	<15	20	26	32	36
	Throw	12-24-49	20-40-68	27-53-80	35-63-89	44-68-99	51-74-105	56-78-112
22	CFM	1056	1584	2112	2640	3168	3696	4224
	Ps	.011	.025	.043	.068	.097	.133	.173
	NC	<15	<15	<15	21	27	33	37
	Throw	13-27-54	22-44-74	30-57-85	37-68-98	47-76-110	57-85-120	60-87-123
24	CFM	1257	1885	2514	3142	3770	4399	5027
	Ps	.011	.024	.042	.068	.096	.130	.170
	NC	<15	<15	15	22	29	34	38
	Throw	14-29-60	24-48-81	33-66-95	41-75-106	50-84-116	58-88-124	66-95-130

CONTINUED

SERIES MRD PERFORMANCE DATA MODEL MREC

Size	fpm	400	600	800	1000	1200	1400	1600
	Pv	.010	.022	.040	.062	.090	.122	.160
6	CFM	79	118	157	196	236	275	314
	Ps	.040	.091	.162	.255	.363	.500	.652
	NC	<15	22	32	39	45	50	54
8	CFM	140	209	279	349	419	489	559
	Ps	.036	.080	.142	.223	.320	.432	.568
	NC	<15	22	31	38	44	49	53
10	CFM	218	327	436	545	655	764	873
	Ps	.033	.073	.130	.203	.293	.397	.522
	NC	<15	22	31	38	44	48	52
12	CFM	314	471	628	786	943	1100	1257
	Ps	.031	.070	.123	.194	.278	.384	.495
	NC	<15	22	32	38	45	49	53
14	CFM	428	641	855	1069	1283	1497	1711
	Ps	.030	.067	.119	.186	.267	.365	.475
	NC	<15	23	32	39	45	50	54
16	CFM	559	838	1117	1396	1676	1955	2234
	Ps	.029	.065	.116	.181	.260	.354	.465
	NC	<15	23	33	40	45	50	54
18	CFM	707	1060	1414	1767	2121	2474	2828
	Ps	.028	.064	.114	.177	.255	.346	.454
	NC	<15	23	33	40	45	50	54
20	CFM	873	1309	1746	2182	2618	3055	3491
	Ps	.028	.063	.111	.174	.250	.342	.446
	NC	<15	25	35	41	47	52	56
22	CFM	1056	1584	2112	2640	3168	3696	4224
	Ps	.027	.061	.110	.171	.246	.336	.439
	NC	<15	25	35	41	47	52	56
24	CFM	1257	1885	2514	3142	3770	4399	5027
	Ps	.027	.061	.108	.170	.244	.331	.435
	NC	<15	25	35	41	47	52	56

PERFORMANCE NOTES FOR SERIES MREC/MRD

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

DEFINITION OF UNITS

CFM Cubic Feet per Minute (air)

fpm Velocity of air stream in Feet per Minute

Ps Static pressure = $P_t - P_v$ (inches of water column)

Throw Non-isothermal horizontal throw (supply air temperature 15°F colder than average room temperature); values are for 50, 100 and 200fpm velocities

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

Pv Velocity pressure (inches of water column)