



MG Grilles



MG GRILLES

MG GRILLES | Supply |

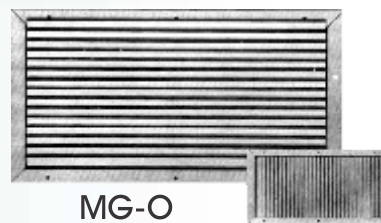
3/4-inch Spacing | Description

3/4-inch Spacing

• Aluminum

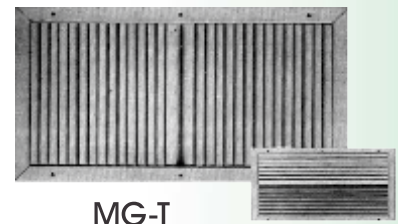
MG 1 • Single Deflection

MG 2 • Double Deflection



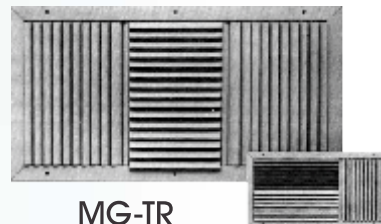
MG-O

FORM ONE WAY



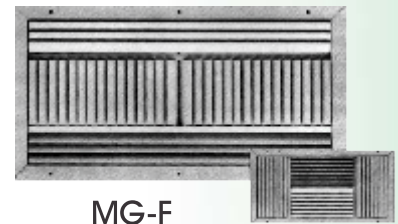
MG-T

FORM TWO WAY



MG-TR

FORM THREE WAY



MG-F

FORM FOUR WAY

301FS

- Great for areas with high humidity or subject to moisture.
- 3/4-inch blade spacing.
- Single deflection.
- Individually adjustable blades.
- Blades parallel to the short dimension.

300FS

- Great for areas with high humidity or subject to moisture.
- 3/4-inch blade spacing.
- Double deflection.
- Individually adjustable blades.
- Front blades parallel to the short dimension.

301FL

- Same as 301FS with blades parallel to the long dimension.

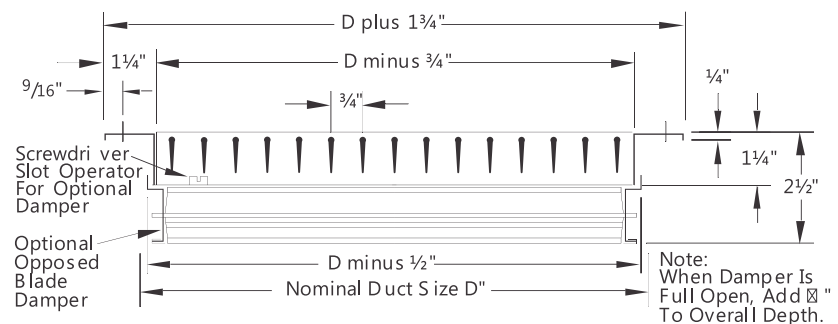
300FL

- Same as 300FS with front blades parallel to the long dimension.

These Products Include:

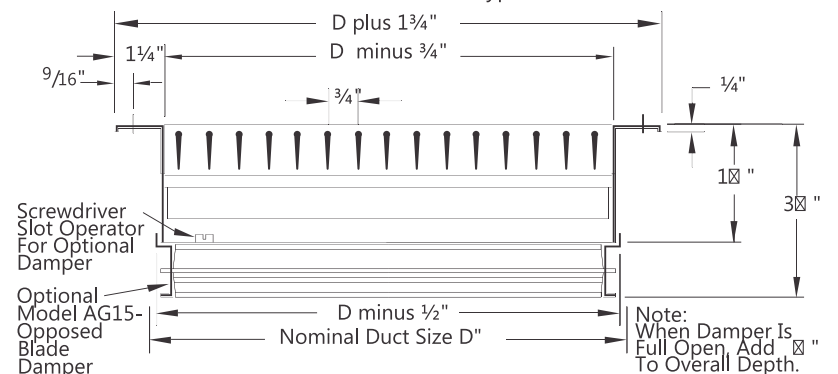
- Material: Roll-formed Aluminum Border and Blades on sizes up to 24 x 24 inches. Extruded Aluminum Border for Larger Sizes.
- 26# White Finish.
- Available Border Types: 1# - Surface Mount.
- Countersunk Screw Holes.
- 8# x 1 1/4-inch long Phillips Flat Head Sheet Metal Screws, Painted White.
- Optional Steel or Aluminum Opposed-Blade Damper.

Single Deflection Models 301FL/FS • Border Type 1



Available sizes (D" x D") are 6 x 4 inches through 48 x 48 inches in -2inch increments. Odd and fractional sizes are available at additional cost.

Double Deflection Models 300FL/FS • Border Type 1



Available sizes (D" x D") are 6 x 4 inches through 48 x 48 inches in -2inch increments. Odd and fractional sizes are available at additional cost.

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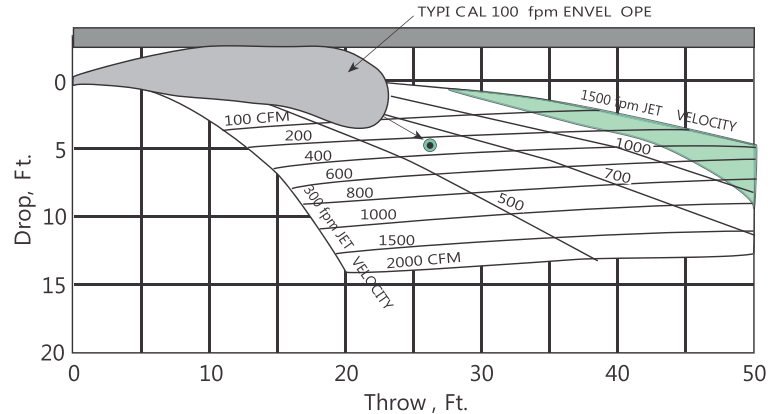
Performance Notes

- Performance data includes damper.
- Data obtained from tests conducted in accordance with ANSI/ASHRAE Standard 2006-70.
- All pressures are in inches of water.
- Core velocities are in feet per minute.
- Throw values given are for isothermal terminal velocities of 100, 150 and 50 fpm.
- Each NC value represents the noise criterion curve that will not be exceeded by the sound pressure in any of the octave bands, 2 through 7. Each NC value is based on a room absorption of 10 dB, re 10¹² watts. Each NC value is further based on grille operating at a °0 deflection. Settings of 22½° or °45, increase the stated sound levels by 1 or 7 NC, respectively.
- Bold dividing lines on K-8K12 denote ranges of NC values.
- The stated deflection settings refer to the horizontal setting of the blade's deflection angle. For a °20 upward deflection, use the throw rating for the °0 setting and the total pressure for the 22½° horizontal setting.
- Dash (–) in space indicates NC value less than 10.
- For additional information concerning drop and throw, see the Engineering Guidelines section of this catalog.

Variable Air Volume Applications

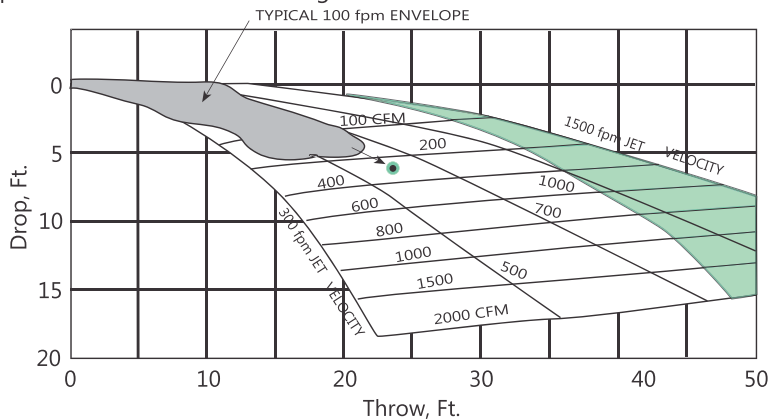
All Titus supply grilles can be applied to variable air volume systems with excellent results. For detailed selection methods, consult your Titus representative or the Engineering Guidelines section of this catalog.

Drop Versus Throw Showing Ceiling Effect • °20F DT Cooling



(Side view of air jet leaving wall mounted grille).

Drop Versus Throw without Ceiling Effect



(Side view of air jet leaving wall mounted grille).

Correction Factors for 301/300 Supply Grilles

Model	Damper	A_k / A_c	Throw	Total Pressure	NC
300R, 300F	With	0.77	1.00	1.00	0
301R, 301F	Without	0.82	0.98	0.88	2-

Note: Throw and total pressure corrections are multipliers. The NC correction is an addition. A_k is the flow factor. A_c is the core area from the main table.



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Performance Notes (continued)

Horizontal Deflection (Spread)

Supply Grilles

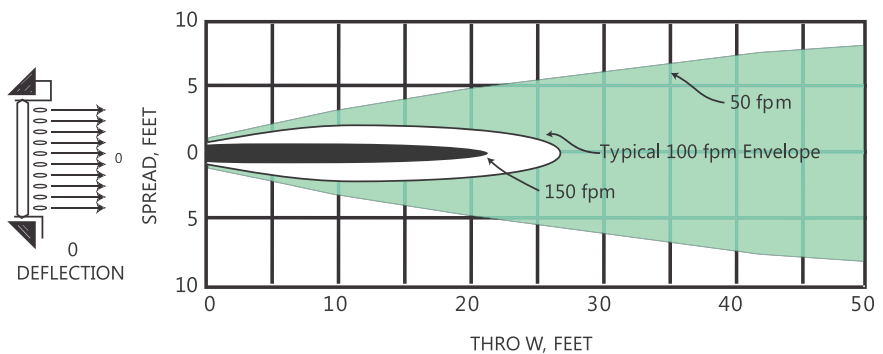
The figures depicting deflection, throw and drop are based on actual tests conducted by . They show the relationship of spread to throw for a typical high side-wall supply outlet selection.

Notice the outer shaded area represents the 50 fpm isovel, the white area, the 100 fpm isovel, and the inner area, the 150 fpm isovel.

The spread angle also affects the airstream drop amount. Always consider for any given temperature, volume and core velocity; the wider spread results in a smaller drop. See section, Engineering Guidelines, for more drop, throw and spread relationship information.

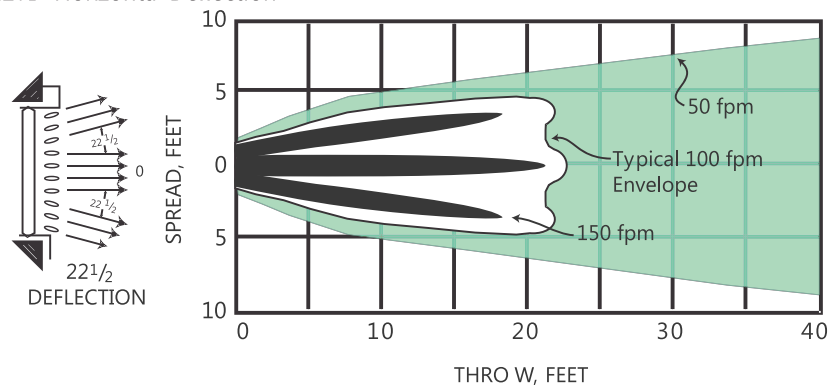
Titus grilles can be selected with a single set of blades for adjusting either horizontal or vertical deflection, or with two sets of blades for adjusting both horizontal and vertical deflections.

0° Horizontal Deflection



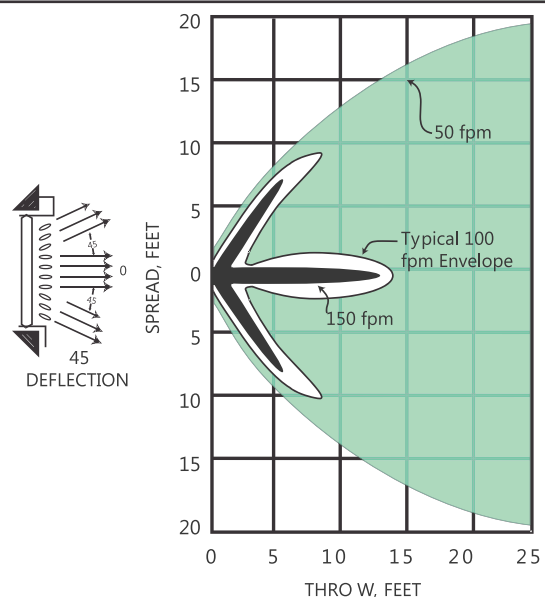
Spread versus throw at 0° horizontal deflection angle (Plan view of air jet leaving wall mounted grille).

22½° Horizontal Deflection



Spread versus throw at 22½° horizontal deflection angle (Plan view of air jet leaving wall mounted grille).

45° Horizontal Deflection



Spread versus throw at 45° horizontal deflection angle (Plan view of air jet leaving wall mounted grille).



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Performance Data

Performance based on nominal sizes shown in bold.

				NC20-				NC30-			NC40-		
Nom. Duct Size (in.)	Nom. Duct Area (ft²)	Core Area (ft²)	Core Vel.	300	400	500	600	700	800	1000	1200	1400	
			Vel. Press.	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122	
			°0	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358	
			°22.5 Press. °45	0.018 0.028	0.033 0.049	0.051 0.077	0.074 0.111	0.100 0.152	0.131 0.198	0.204 0.309	0.294 0.445	0.401 0.606	
6x6	0.25	0.19	cfm	57	76	95	114	133	152	190	228	266	
			NC	-	-	-	15	20	24	31	36	41	
			°0	14-7-5	16-10-7	18-12-8	20-14-10	21-15-12	23-16-13	25-18-15	28-20-16	30-21-17	
			Throw °22.5 (ft) °45	-6-411 6-3-2	12-8-5 7-4-3	14-10-6 8-6-4	-8115-1 9-6-4	16-12-9 10-7-5	18-12-10 10-7-6	120-14-1 -8-711	22-15-12 12-9-7	23-16-13 13-10-8	
8x6	0.33	0.26	cfm	78	104	130	156	182	208	260	312	364	
			NC	-	-	11	17	21	25	32	38	42	
			°0	16-9-5	19-12-8	21-15-10	23-16-12	25-18-14	27-19-15	30-21-17	32-23-19	35-25-20	
			Throw °22.5 (ft) °45	13-7-4 7-4-2	15-9-6 8-5-3	-8116-1 9-7-4	18-13-9 10-7-5	119-14-1 -8-611	21-15-12 12-8-7	23-16-13 13-9-8	25-18-15 15-10-8	27-19-16 -9116-1	
10x6	0.42	0.34	cfm	102	136	170	204	238	272	340	408	476	
			NC	-	-	12	18	23	27	33	39	43	
			°0	19-10-6	21-13-9	24-17-1	26-19-13	28-20-16	30-21-18	34-24-20	37-26-21	40-28-23	
			Throw °22.5 (ft) °45	14-8-5 8-4-3	17-10-7 10-6-4	19-13-9 -7-511	20-14-10 12-8-6	22-16-12 13-9-7	23-17-14 14-10-8	26-19-15 -9115-1	29-20-17 17-12-10	31-22-18 18-13-10	
8x8	0.44	0.37	cfm	111	148	185	222	259	296	370	444	518	
			NC	-	-	13	18	23	27	34	39	44	
			°0	19-10-6	22-14-9	25-17-12	27-19-14	30-21-16	32-22-18	35-25-20	39-27-22	42-30-24	
			Throw °22.5 (ft) °45	15-8-5 9-5-3	-7117-1 10-6-4	19-13-9 -8-511	121-15-1 12-9-6	23-16-13 13-9-7	25-17-14 14-10-8	27-19-16 -9116-1	30-21-17 17-12-10	32-23-19 119-13-1	
12x6	0.50	0.41	cfm	123	164	205	246	287	328	410	492	574	
			NC	-	-	13	19	23	27	34	39	44	
			°0	-7120-1	24-15-10	26-18-12	29-20-15	31-22-17	33-24-19	37-26-21	41-29-24	44-31-25	
			Throw °22.5 (ft) °45	16-8-5 9-5-3	-8118-1 -7-411	20-14-9 12-8-5	122-16-1 13-9-7	24-17-13 14-10-8	26-18-15 -9115-1	29-20-17 17-12-10	32-22-18 118-13-1	34-24-20 120-14-1	
14x6	0.58	0.48	cfm	144	192	240	288	336	384	480	576	672	
			NC	-	-	14	19	24	28	35	40	45	
			°0	22-12-7	125-16-1	28-20-13	31-22-16	34-24-18	36-25-21	40-28-23	44-31-25	48-34-28	
			Throw °22.5 (ft) °45	17-9-6 10-5-3	20-12-8 -7-511	22-15-10 13-9-6	24-17-12 14-10-7	26-18-14 -8115-1	28-20-16 -9116-1	31-22-18 18-13-10	34-24-20 120-14-1	37-26-21 21-15-12	
16x6 12x8	0.67	0.57	cfm	171	228	285	342	399	456	570	684	798	
			NC	-	-	15	20	25	29	35	41	45	
			°0	24-13-8	128-17-1	31-22-14	34-24-17	37-26-20	39-28-23	44-31-25	48-34-28	52-37-30	
			Throw °22.5 (ft) °45	19-10-6 -6-411	22-13-9 12-8-5	124-17-1 14-10-6	26-19-13 -8115-1	28-20-16 17-12-9	30-22-18 18-12-10	34-24-20 120-14-1	37-26-22 22-15-12	40-28-23 23-17-13	
10x10	0.69	0.59	cfm	177	236	295	354	413	472	590	708	826	
			NC	-	-	15	20	25	29	35	41	46	
			°0	24-13-8	28-18-12	32-22-15	35-24-18	37-26-20	40-28-23	45-32-26	49-35-28	53-37-31	
			Throw °22.5 (ft) °45	19-10-6 -6-411	22-14-9 13-8-5	124-17-1 14-10-7	27-19-14 -8116-1	29-20-16 17-12-9	31-22-18 18-13-10	35-24-20 120-14-1	38-27-22 22-16-13	41-29-24 24-17-14	
18x6	0.75	0.63	cfm	189	252	315	378	441	504	630	756	882	
			NC	-	-	15	20	25	29	36	41	46	
			°0	25-14-8	29-18-12	33-23-15	36-25-18	39-27-21	41-29-24	46-33-27	51-36-29	55-39-32	
			Throw °22.5 (ft) °45	-7120-1 -6-411	23-14-9 13-8-5	25-18-12 15-10-7	28-20-14 -8116-1	30-21-16 17-12-9	32-23-18 119-13-1	36-25-21 21-15-12	39-28-23 23-16-13	42-30-24 25-17-14	
20x6 12x10	0.83	0.72	cfm	216	288	360	432	504	576	720	864	1008	
			NC	-	-	16	21	26	30	36	42	46	
			°0	27-15-9	31-19-13	35-24-16	38-27-19	41-29-23	44-31-25	49-35-28	54-38-31	58-41-34	
			Throw °22.5 (ft) °45	-7121-1 12-7-4	24-15-10 14-9-6	27-19-12 -7116-1	30-21-15 17-12-9	32-23-17 19-13-10	34-24-20 120-14-1	38-27-22 22-16-13	42-30-24 24-17-14	45-32-26 26-19-15	
22x6	0.92	0.77	cfm	231	308	385	462	539	616	770	924	1078	
			NC	-	-	16	21	26	30	37	42	47	
			°0	28-15-9	32-20-13	36-25-17	40-28-20	43-30-23	46-32-26	51-36-29	56-40-32	60-43-35	
			Throw °22.5 (ft) °45	22-12-7 13-7-4	25-16-10 15-9-6	28-19-13 -8116-1	31-22-16 18-13-9	33-23-18 119-14-1	35-25-20 21-15-12	40-28-23 23-16-13	43-31-25 25-18-15	47-33-27 27-19-16	
24x6 18x8 12x12	1.00	0.88	cfm	264	352	440	528	616	704	880	1056	1232	
			NC	-	-	16	22	26	30	37	43	47	
			°0	30-16-10	34-21-14	39-27-18	42-30-21	46-32-25	49-34-28	55-39-31	60-42-34	65-46-37	
			Throw °22.5 (ft) °45	23-12-8 13-7-4	127-17-1 16-10-6	30-21-14 17-12-8	33-23-17 19-13-10	35-25-19 121-15-1	38-27-22 22-16-13	42-30-24 25-17-14	46-33-27 27-19-16	50-35-29 29-21-17	
30x6 18x10	1.25	1.11	cfm	333	444	555	666	777	888	1110	1332	1554	
			NC	-	11	17	23	27	31	38	44	48	
			°0	134-18-1	39-24-16	43-30-20	47-34-24	51-36-28	55-39-32	61-43-35	67-47-39	72-51-42	
			Throw °22.5 (ft) °45	26-14-9 15-8-5	30-19-12 -7117-1	34-23-16 19-14-9	37-26-19 121-15-1	40-28-22 23-16-13	42-30-25 25-17-14	47-34-27 28-19-16	52-37-30 30-21-17	56-40-32 33-23-19	



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Performance Data

Performance based on nominal sizes shown in bold.

Nom. Duct Size (in.)	Nom. Duct Area (ft ²)	Core Area (ft ²)	NC20-				NC30-		NC40-		NC50-	
			Core Vel.	300	400	500	600	700	800	1000	1200	1400
			Vel. Press.	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
			°0	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
			Total °22.5	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
			Press. °45	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606
14x14	1.36	1.22	cfm	366	488	610	732	854	976	1220	1464	1708
			NC	-	11	18	23	28	32	39	44	49
			°0	35-19-12	41-25-17	45-31-21	50-35-25	54-38-29	57-41-33	64-45-37	70-50-41	76-54-44
			Throw °22.5 (ft)	27-15-9	31-20-13	35-24-16	39-27-20	42-29-23	45-31-26	50-35-29	55-39-31	59-42-34
			°45	16-8-5	8-11-8	20-14-9	122-16-1	24-17-13	26-18-15	29-20-17	32-22-18	34-24-20
36x6 27x8 18x12	1.50	1.35	cfm	405	540	675	810	945	1080	1350	1620	1890
			NC	-	12	18	24	28	32	39	44	49
			°0	37-20-12	43-26-18	48-33-22	52-37-26	57-40-31	60-43-35	68-48-39	74-52-43	80-57-46
			Throw °22.5 (ft)	29-15-10	33-21-14	37-26-17	41-29-21	44-31-24	47-33-27	52-37-30	57-41-33	62-44-36
			°45	17-9-6	19-12-8	21-15-10	24-17-12	25-18-14	27-19-16	30-21-18	33-24-19	36-25-21
22x10	1.53	1.37	cfm	411	548	685	822	959	1096	1370	1644	1918
			NC	-	12	18	24	28	32	39	44	49
			°0	37-20-12	43-27-18	48-33-22	53-37-27	57-40-31	61-43-35	68-48-39	75-53-43	81-57-46
			Throw °22.5 (ft)	29-16-10	33-21-14	37-26-17	41-29-21	44-31-24	47-33-27	53-37-30	58-41-33	62-44-36
			°45	17-9-6	19-12-8	22-15-10	24-17-12	26-18-14	27-19-16	31-22-18	34-24-19	36-26-21
30x8 24x10	1.67	1.49	cfm	447	596	745	894	1043	1192	1490	1788	2086
			NC	-	12	19	24	29	33	39	45	49
			°0	39-21-13	45-28-19	50-35-23	55-39-28	59-42-32	63-45-37	71-50-41	78-55-45	84-59-48
			Throw °22.5 (ft)	30-16-10	35-22-14	39-27-18	43-30-22	46-33-25	49-35-28	55-39-32	60-43-35	65-46-38
			°45	17-9-6	20-13-8	23-16-10	25-17-13	27-19-15	29-20-16	32-23-18	35-25-20	38-27-22
42x6 18x14	1.75	1.59	cfm	477	636	795	954	1113	1272	1590	1908	2226
			NC	-	12	19	24	29	33	40	45	50
			°0	40-22-13	46-29-19	52-36-24	57-40-29	61-43-34	66-46-38	73-52-42	80-57-46	87-61-50
			Throw °22.5 (ft)	31-17-10	36-22-15	40-28-19	44-31-22	48-34-26	51-36-29	57-40-33	62-44-36	67-48-39
			°45	18-10-6	21-13-9	23-16-10	26-18-13	28-20-15	30-21-17	33-23-19	36-26-21	39-28-23
16x16	1.78	1.62	cfm	486	648	810	972	1134	1296	1620	1944	2268
			NC	-	12	19	24	29	33	40	45	50
			°0	41-22-14	47-29-19	52-36-24	57-41-29	62-44-34	66-47-38	74-52-43	81-57-47	88-62-51
			Throw °22.5 (ft)	31-17-11	36-22-15	41-28-19	44-31-22	48-34-26	51-36-30	57-41-33	63-44-36	68-48-39
			°45	18-10-6	21-13-9	24-16-11	26-18-13	28-20-15	30-21-17	33-24-19	36-26-21	39-28-23
48x6 36x8 24x12 18x16	2.00	1.82	cfm	546	728	910	1092	1274	1456	1820	2184	2548
			NC	-	13	19	25	30	34	40	46	50
			°0	43-23-14	50-31-20	55-38-26	61-43-31	66-46-36	70-50-41	78-55-45	86-61-50	93-66-54
			Throw °22.5 (ft)	133-18-1	38-24-16	43-30-20	47-33-24	51-36-28	54-38-31	61-43-35	67-47-38	72-51-42
			°45	19-10-6	22-14-9	25-17-12	27-19-14	30-21-16	32-22-18	35-25-20	39-27-22	42-30-24
18x18	2.25	2.07	cfm	621	828	1035	1242	1449	1656	2070	2484	2898
			NC	-	13	20	25	30	34	41	46	51
			°0	46-25-15	53-33-22	59-41-27	65-46-33	70-49-38	75-53-43	84-59-48	92-65-53	99-70-57
			Throw °22.5 (ft)	36-19-12	41-25-17	46-32-21	50-36-25	54-38-30	58-41-33	65-46-37	71-50-41	77-54-44
			°45	7-12-1	24-15-10	27-18-12	29-21-15	31-22-17	34-24-19	38-27-22	41-29-24	45-31-26
42x8 24x14	2.33	2.14	cfm	642	856	1070	1284	1498	1712	2140	2568	2996
			NC	-	13	20	26	30	34	41	46	51
			°0	47-25-16	54-33-22	60-42-28	66-47-33	71-50-39	76-54-44	85-60-49	93-66-54	101-71-58
			Throw °22.5 (ft)	36-19-12	42-26-17	47-32-22	51-36-26	55-39-30	59-42-34	66-47-38	72-51-42	78-55-45
			°45	7-12-1	24-15-10	27-19-13	30-21-15	32-23-18	34-24-20	38-27-22	42-30-24	45-32-26
36x10 30x12	2.50	2.29	cfm	687	916	1145	1374	1603	1832	2290	2748	3206
			NC	-	14	20	26	30	34	41	47	51
			°0	48-26-16	56-34-23	62-43-29	68-48-34	74-52-40	79-56-45	88-62-51	96-68-56	104-74-60
			Throw °22.5 (ft)	37-20-12	43-27-18	48-33-22	53-37-27	57-40-31	61-43-35	68-48-39	75-53-43	81-57-47
			°45	22-12-7	25-16-10	28-19-13	31-22-16	33-23-18	35-25-20	40-28-23	43-31-25	47-33-27
48x8 24x16	2.67	2.46	cfm	738	984	1230	1476	1722	1968	2460	2952	3444
			NC	-	14	21	26	31	35	41	47	51
			°0	50-27-17	58-36-24	64-45-30	71-50-36	76-54-42	82-58-47	91-64-53	100-71-58	108-76-62
			Throw °22.5 (ft)	39-21-13	45-28-18	50-35-23	55-39-28	59-42-32	63-45-36	71-50-41	77-55-45	84-59-48
			°45	22-12-8	126-16-1	29-20-13	32-22-16	34-24-19	37-26-21	41-29-24	45-32-26	49-34-28
20x20	2.78	2.57	cfm	771	1028	1285	1542	1799	2056	2570	3084	3598
			NC	-	14	21	26	31	35	42	47	52
			°0	51-27-17	59-37-24	66-46-30	72-51-37	78-55-43	83-59-48	93-66-54	102-72-59	78-64-110
			Throw °22.5 (ft)	40-21-13	46-28-19	51-35-24	56-40-28	60-43-33	65-46-37	72-51-42	79-56-46	85-60-49
			°45	23-12-8	127-16-1	30-21-14	32-23-16	35-25-19	38-27-22	42-30-24	46-32-27	50-35-29
36x12 24x18	3.00	2.75	cfm	825	1100	1375	1650	1925	2200	2750	3300	3850
			NC	-	15	21	27	31	35	42	47	52
			°0	53-28-18	61-38-25	68-47-31	75-53-38	81-57-44	86-61-50	96-68-56	106-75-61	81-66-114
			Throw °22.5 (ft)	41-22-14	47-29-20	53-37-24	58-41-29	63-44-34	67-47-39	75-53-43	82-58-47	88-63-51
			°45	24-13-8	127-17-1	31-21-14	34-24-17	36-26-20	39-27-22	43-31-25	48-34-27	51-36-30



MG GRILLES

MG GRILLES | Supply | Performance Data

Performance Data

Performance based on nominal sizes shown in bold.

			NC20-			NC30-		NC40-		NC50-		
Nom. Duct Size (in.)	Nom. Duct Area (ft²)	Core Area (ft²)	Core Vel.	300	400	500	600	700	800	1000	1200	1400
			Vel. Press.	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
			°0	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
			Total °22.5 Press. °45	0.018 0.028	0.033 0.049	0.051 0.077	0.074 0.111	0.100 0.152	0.131 0.198	0.204 0.309	0.294 0.445	0.401 0.606
48x10 30x16 24x20	3.33	3.11	cfm	933	1244	1555	1866	2177	2488	3110	3732	4354
			NC	-	15	22	27	32	36	42	48	52
			°0	56-30-19	65-40-27	72-50-33	79-56-40	86-61-47	92-65-53	103-72-59	-79-65112	121-86-70
			Throw °22.5 (ft) °45	44-23-15 25-14-8	50-31-21 29-18-12	56-39-26 33-23-15	62-44-31 36-25-18	66-47-36 39-27-21	71-50-41 41-29-24	79-56-46 46-33-27	87-62-50 51-36-29	94-66-54 55-39-32
22x22	3.36	3.14	cfm	942	1256	1570	1884	2198	2512	3140	3768	4396
			NC	-	15	22	27	32	36	42	48	53
			°0	56-30-19	65-40-27	73-50-34	80-56-40	86-61-47	92-65-53	103-73-59	-80-65113	122-86-70
			Throw °22.5 (ft) °45	44-23-15 25-14-8	50-31-21 29-18-12	56-39-26 33-23-15	62-44-31 36-25-18	67-47-37 39-27-21	71-50-41 41-29-24	80-56-46 46-33-27	87-62-50 51-36-29	94-67-55 55-39-32
42x12 36x14	3.50	3.22	cfm	966	1288	1610	1932	2254	2576	3220	3864	4508
			NC	-	15	22	27	32	36	43	48	53
			°0	57-31-19	66-41-27	74-51-34	81-57-41	87-62-48	93-66-54	104-74-60	-81-66114	123-87-71
			Throw °22.5 (ft) °45	44-24-15 26-14-9	51-32-21 30-18-12	57-40-26 33-23-15	63-44-32 36-26-18	68-48-37 39-28-21	72-51-42 42-30-24	81-57-47 47-33-27	89-63-51 51-36-30	96-68-55 56-39-32
24x22	3.67	3.43	cfm	1029	1372	1715	2058	2401	2744	3430	4116	4802
			NC	-	15	22	28	32	36	43	48	53
			°0	59-32-20	68-42-28	76-53-35	83-59-42	90-64-49	96-68-56	108-76-62	-83-68118	127-90-74
			Throw °22.5 (ft) °45	46-25-15 27-14-9	53-33-22 31-19-13	59-41-27 34-24-16	65-46-33 38-27-19	70-49-38 41-29-22	75-53-43 43-31-25	83-59-48 48-34-28	91-65-53 53-38-31	99-70-57 57-41-33
30x18	3.75	3.5	cfm	1050	1400	1750	2100	2450	2800	3500	4200	4900
			NC	-	16	22	28	32	36	43	48	53
			°0	60-32-20	69-43-28	77-53-36	84-60-43	91-64-50	97-69-56	109-77-63	-84-69119	129-91-74
			Throw °22.5 (ft) °45	46-25-15 27-14-9	53-33-22 31-19-13	60-41-28 35-24-16	65-46-33 38-27-19	71-50-39 41-29-22	75-53-44 44-31-25	84-60-49 49-35-28	92-65-53 54-38-31	100-71-58 58-41-33
48x12 36x16 24x24	4.00	3.75	cfm	1125	1500	1875	2250	2625	3000	3750	4500	5250
			NC	-	16	22	28	33	37	43	49	53
			°0	62-33-21	71-44-29	80-55-37	87-62-44	94-67-51	101-71-58	-80-65113	123-87-71	133-94-77
			Throw °22.5 (ft) °45	48-26-16 28-15-9	55-34-23 32-20-13	62-43-29 36-25-17	68-48-34 39-28-20	73-52-40 42-30-23	78-55-45 45-32-26	87-62-50 51-36-29	96-68-55 55-39-32	103-73-60 60-42-35
36x18	4.50	4.22	cfm	1266	1688	2110	2532	2954	3376	4220	5064	5908
			NC	-	16	23	28	33	37	44	49	54
			°0	65-35-22	76-47-31	84-59-39	93-65-47	100-71-55	107-76-62	-84-69119	131-93-76	141-100-82
			Throw °22.5 (ft) °45	51-27-17 29-16-10	59-36-24 34-21-14	65-45-30 38-26-18	72-51-36 42-29-21	77-55-42 45-32-25	83-59-48 48-34-28	93-65-53 54-38-31	101-72-59 59-42-34	-77-63110 64-45-37
36x20 30x24	5.00	4.71	cfm	1413	1884	2355	2826	3297	3768	4710	5652	6594
			NC	-	17	23	29	33	37	44	50	54
			°0	69-37-23	80-49-33	89-62-41	98-69-49	106-75-58	-80-65113	126-89-73	138-98-80	149-106-86
			Throw °22.5 (ft) °45	54-29-18 31-17-10	62-38-26 36-22-15	69-48-32 40-28-19	76-54-38 44-31-22	82-58-45 48-34-26	87-62-50 51-36-29	98-69-56 57-40-33	107-76-62 62-44-36	-82-67116 67-48-39
42x18	5.25	4.94	cfm	1482	1976	2470	2964	3458	3952	4940	5928	6916
			NC	-	17	24	29	34	38	44	50	54
			°0	71-38-24	82-51-34	91-63-42	100-71-51	108-76-59	-82-67116	129-91-75	142-100-82	153-108-88
			Throw °22.5 (ft) °45	55-29-18 132-17-1	63-39-26 37-23-15	71-49-33 41-28-19	78-55-39 45-32-23	84-59-46 49-34-27	90-63-52 52-37-30	100-71-58 58-41-34	-78-63110 64-45-37	-84-68118 69-49-40
28x28	5.44	5.16	cfm	1548	2064	2580	3096	3612	4128	5160	6192	7224
			NC	-	17	24	29	34	38	45	50	55
			°0	72-39-24	84-52-35	93-65-43	102-72-52	-78-60110	-84-68118	132-93-76	145-102-84	-901156-10
			Throw °22.5 (ft) °45	56-30-19 133-17-1	65-40-27 38-23-16	72-50-33 42-29-19	79-56-40 46-33-23	86-61-47 50-35-27	92-65-53 53-38-31	102-72-59 59-42-34	-79-65112 65-46-38	121-86-70 70-50-41
42x20 30x28	5.83	5.51	cfm	1653	2204	2755	3306	3857	4408	5510	6612	7714
			NC	-	17	24	30	34	38	45	50	55
			°0	75-40-25	86-54-36	96-67-45	106-75-54	-81-62114	122-86-70	136-96-79	149-106-86	-931161-14
			Throw °22.5 (ft) °45	58-31-19 134-18-1	67-41-28 39-24-16	75-52-35 43-30-20	82-58-41 48-34-24	88-63-48 51-36-28	95-67-55 55-39-32	106-75-61 61-43-35	-82-67116 67-48-39	125-88-72 73-51-42
48x18 36x24	6.00	5.66	cfm	1698	2264	2830	3396	3962	4528	5660	6792	7924
			NC	-	18	24	30	34	38	45	50	55
			°0	76-41-25	87-54-36	98-68-45	107-76-54	-82-63116	124-87-71	138-98-80	152-107-87	-941164-16
			Throw °22.5 (ft) °45	59-32-20 134-18-1	68-42-28 39-24-16	76-53-35 44-31-20	83-59-42 48-34-24	90-63-49 52-37-28	96-68-55 56-39-32	107-76-62 62-44-36	-83-68117 68-48-39	127-90-73 74-52-43
30x30	6.25	5.94	cfm	1782	2376	2970	3564	4158	4752	5940	7128	8316
			NC	-	18	24	30	34	38	45	51	55
			°0	78-42-26	90-56-37	100-69-46	-78-56110	-84-65119	127-90-73	142-100-82	-901155-10	-971168-19
			Throw °22.5 (ft) °45	60-32-20 35-19-12	69-43-29 40-25-17	78-54-36 45-31-21	85-60-43 49-35-25	92-65-50 53-38-29	98-69-57 57-40-33	-78-63110 64-45-37	120-85-69 70-49-40	130-92-75 75-53-44

