

PERFORMANCE DATA

aeroblade grilles

MODELS: 271 / 272 / 111 / 112 / 121 / 122 / 131 & 132
PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nom. Duct Size (in.)	Nom. Duct Area (ft ²)	Core Area (ft ²)	Core Vel. Vel. Press. 0° 22.5° 45°	NC 20						NC 30		NC 40
				300	400	500	600	700	800	1000	1200	1400
				0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
6x6	0.25	0.19	Total Press.	0.011	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208
			0.016	0.029	0.045	0.065	0.089	0.116	0.181	0.260	0.354	
			cfm	57	76	95	114	133	152	190	228	266
			NC	-	-	-	11	15	19	26	31	36
8x6	0.33	0.26	0°	5-7-14	7-10-16	8-12-18	10-14-20	12-15-21	13-16-23	15-18-25	16-20-28	17-21-30
			22.5°	4-6-11	5-8-12	6-10-14	8-11-15	9-12-16	10-12-18	11-14-20	12-15-22	13-16-23
			45°	2-3-6	3-4-7	4-6-8	4-6-9	5-7-10	6-7-10	7-8-11	7-9-12	8-10-13
			Throw (ft)	78	104	130	156	182	208	260	312	364
10x6	0.42	0.34	0°	5-9-16	8-12-19	10-14-21	12-16-23	13-18-25	15-19-27	17-21-30	19-23-32	20-25-35
			22.5°	4-7-13	6-9-15	7-11-16	9-13-18	10-14-19	12-15-21	13-16-23	15-18-25	16-19-27
			45°	2-4-7	3-5-8	4-6-9	5-7-10	6-8-11	7-8-12	8-9-13	8-10-15	9-11-16
			Throw (ft)	102	136	170	204	238	272	340	408	476
8x8	0.44	0.37	0°	6-10-19	9-14-22	11-17-25	14-19-27	16-21-30	18-22-32	20-25-35	22-27-39	24-30-42
			22.5°	5-8-15	7-11-17	9-13-19	11-15-21	12-16-23	14-17-25	16-19-27	17-21-30	19-23-32
			45°	3-5-9	4-6-10	5-8-11	6-9-12	7-9-13	8-10-14	9-11-16	10-12-17	11-13-19
			Throw (ft)	111	148	185	222	259	296	370	444	518
12x6	0.50	0.41	0°	7-11-20	10-15-24	12-18-26	15-20-29	17-22-31	19-24-33	21-26-37	24-29-41	25-31-44
			22.5°	5-8-16	7-11-18	9-14-20	11-16-22	13-17-24	15-18-26	17-20-29	18-22-32	20-24-34
			45°	3-5-9	4-7-11	5-8-12	7-9-13	8-10-14	9-11-15	10-12-17	11-13-18	11-14-20
			Throw (ft)	123	164	205	246	287	328	410	492	574
14x6	0.58	0.48	0°	7-12-22	10-16-25	13-20-28	16-22-31	18-24-34	21-25-36	23-28-40	25-31-44	28-34-48
			22.5°	6-9-17	8-12-20	10-15-22	12-17-24	14-18-26	16-20-28	18-22-31	20-24-34	22-26-37
			45°	3-5-10	5-7-11	6-9-13	7-10-14	8-11-15	9-11-16	10-13-18	11-14-20	12-15-21
			Throw (ft)	144	192	240	288	336	384	480	576	672
16x6 12x8	0.67	0.57	0°	8-13-24	11-17-28	14-21-31	17-24-34	20-26-37	23-28-39	25-31-44	28-34-48	30-37-52
			22.5°	6-10-19	9-13-22	11-17-24	13-19-26	15-20-28	18-22-30	20-24-34	22-26-37	23-28-40
			45°	4-6-11	5-8-12	6-10-14	8-11-15	9-12-17	10-12-18	11-14-20	12-15-22	13-17-23
			Throw (ft)	171	228	285	342	399	456	570	684	798
10x10	0.69	0.59	0°	8-13-24	12-17-28	14-22-32	17-24-35	20-26-37	23-28-40	26-32-45	28-35-49	31-37-53
			22.5°	6-10-19	9-13-22	11-17-24	13-19-27	16-20-29	18-22-31	20-24-35	22-27-38	24-29-41
			45°	4-6-11	5-8-13	7-10-14	8-11-16	9-12-17	10-13-18	12-14-20	13-16-22	14-17-24
			Throw (ft)	177	236	295	354	413	472	590	708	826
18x6	0.75	0.63	0°	8-13-25	12-18-29	15-22-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-51	32-39-55
			22.5°	6-10-20	9-14-23	12-17-25	14-20-28	16-21-30	18-23-32	21-25-36	23-28-39	24-30-42
			45°	4-6-11	5-8-13	7-10-15	8-11-16	9-12-17	11-13-19	12-15-21	13-16-23	14-17-25
			Throw (ft)	189	252	315	378	441	504	630	756	882
20x6 12x10	0.83	0.72	0°	9-14-27	13-19-31	16-24-35	19-27-38	22-29-41	25-31-44	28-35-49	31-38-54	34-41-58
			22.5°	7-11-21	10-15-24	12-19-27	15-21-30	17-23-32	20-24-34	22-27-38	24-30-42	26-32-45
			45°	4-6-12	6-9-14	7-11-16	9-12-17	10-13-19	11-14-20	13-16-22	14-17-24	15-19-26
			Throw (ft)	216	288	360	432	504	576	720	864	1008
22x6	0.92	0.77	0°	9-15-28	13-20-32	17-25-36	20-28-40	23-30-43	26-32-46	29-36-51	32-40-56	35-43-60
			22.5°	7-12-22	10-15-25	13-19-28	15-22-31	18-23-33	20-25-35	23-28-40	25-31-43	27-33-47
			45°	4-7-13	6-9-15	7-11-16	9-13-18	10-14-19	12-15-21	13-16-23	15-18-25	16-19-27
			Throw (ft)	231	308	385	462	539	616	770	924	1078
24x6 18x8 12x12	1.00	0.88	0°	10-16-30	14-21-34	18-27-39	21-30-42	25-32-46	28-34-49	31-39-55	34-42-60	37-46-65
			22.5°	8-12-23	11-16-27	14-21-30	16-23-33	19-25-35	22-27-38	24-30-42	27-33-46	29-35-50
			45°	4-7-13	6-10-16	8-12-17	10-13-19	11-15-21	13-16-22	14-17-25	16-19-27	17-21-29
			Throw (ft)	264	352	440	528	616	704	880	1056	1232
30x6 18x10	1.25	1.11	0°	11-18-34	16-24-39	20-30-43	24-34-47	28-36-51	32-39-55	35-43-61	39-47-67	42-51-72
			22.5°	9-14-26	12-18-30	15-23-34	18-26-37	22-28-40	25-30-42	27-34-47	30-37-52	32-40-56
			45°	5-8-15	7-11-17	9-13-19	11-15-21	13-16-23	14-17-25	16-19-28	17-21-30	19-23-33
			Throw (ft)	333	444	555	666	777	888	1110	1332	1554

- Performance notes appear at end of table
- See the table, Correction Factors for Various Models on page G22 to determine appropriate factor

MODELS: 271 / 272 / 111 / 112 / 121 / 122 / 131 & 132
PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

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

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MODELS: 271 / 272 / 111 / 112 / 121 / 122 / 131 & 132
PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nom. Duct Size (in.)	Nom. Duct Area (ft²)	Core Area (ft²)	NC 20				NC 30			NC 40			NC 50
			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	
			Total Press.	0.011	0.019	0.030	0.043	0.058	0.076	0.118	0.171	0.232	
48x10 30x16 24x20	3.33	3.11	cfm	933	1244	1555	1866	2177	2488	3110	3732	4354	
			NC	-	-	17	22	27	31	37	43	48	
			Throw (ft)	0°	18-30-56	27-40-65	33-50-72	40-56-79	47-61-86	53-65-92	59-72-103	65-79-112	70-86-121
			45°	14-23-44	21-31-50	26-39-56	31-44-62	36-47-66	41-50-71	46-56-79	50-62-87	54-66-94	
22x22	3.36	3.14	cfm	942	1256	1570	1884	2198	2512	3140	3768	4396	
			NC	-	-	17	22	27	31	38	43	48	
			Throw (ft)	0°	19-30-56	27-40-65	33-50-73	40-56-80	47-61-86	53-65-92	59-73-103	65-80-113	70-86-122
			45°	14-23-44	21-31-50	26-39-56	31-44-62	36-47-67	41-50-71	46-56-80	50-62-87	55-67-94	
42x12 36x14	3.50	3.22	cfm	966	1288	1610	1932	2254	2576	3220	3864	4508	
			NC	-	-	17	22	27	31	38	43	48	
			Throw (ft)	0°	19-30-57	27-41-66	34-51-74	41-57-81	47-62-87	54-66-93	60-74-104	66-81-114	71-87-123
			45°	15-24-44	21-31-51	26-39-57	31-44-63	37-48-68	42-51-72	47-57-81	51-63-89	55-68-96	
24x22	3.67	3.43	cfm	1029	1372	1715	2058	2401	2744	3430	4116	4802	
			NC	-	-	17	23	27	31	38	43	48	
			Throw (ft)	0°	19-31-59	28-42-68	35-52-76	42-59-83	49-64-90	56-68-96	62-76-108	68-83-118	74-90-127
			45°	15-24-46	22-33-53	27-41-59	33-46-65	38-49-70	43-53-75	48-59-83	53-65-91	57-70-99	
30x18	3.75	3.5	cfm	1050	1400	1750	2100	2450	2800	3500	4200	4900	
			NC	-	11	17	23	27	31	38	43	48	
			Throw (ft)	0°	20-32-60	28-42-69	35-53-77	42-60-84	49-64-91	56-69-97	63-77-109	69-84-119	74-91-129
			45°	15-25-46	22-33-53	27-41-60	33-46-65	38-50-71	44-53-75	49-60-84	53-65-92	58-71-100	
48x12 36x16 24x24	4.00	3.75	cfm	1125	1500	1875	2250	2625	3000	3750	4500	5250	
			NC	-	11	18	23	28	32	38	44	48	
			Throw (ft)	0°	20-33-62	29-44-71	37-55-80	44-62-87	51-67-94	58-71-101	65-80-113	71-87-123	77-94-133
			45°	16-25-48	23-34-55	28-42-62	34-48-68	40-52-73	45-55-78	50-62-87	55-68-96	60-73-103	
36x18	4.50	4.22	cfm	1266	1688	2110	2532	2954	3376	4220	5064	5908	
			NC	-	11	18	23	28	32	39	44	49	
			Throw (ft)	0°	21-35-65	31-47-76	39-58-84	47-65-93	54-71-100	62-76-107	69-84-119	76-93-131	82-100-141
			45°	17-27-51	24-36-59	30-45-65	36-51-72	42-55-77	48-59-83	53-65-93	59-72-101	63-77-110	
36x20 30x24	5.00	4.71	cfm	1413	1884	2355	2826	3297	3768	4710	5652	6594	
			NC	-	12	18	24	29	33	39	45	49	
			Throw (ft)	0°	23-37-69	33-49-80	41-61-89	49-69-98	57-75-106	65-80-113	73-89-126	80-98-138	86-106-149
			45°	18-29-54	25-38-62	32-48-69	38-54-76	44-58-82	50-62-87	56-69-98	62-76-107	67-82-116	
42x18	5.25	4.94	cfm	1482	1976	2470	2964	3458	3952	4940	5928	6916	
			NC	-	12	19	24	29	33	39	45	49	
			Throw (ft)	0°	23-38-71	34-50-82	42-63-91	50-71-100	59-76-108	67-82-116	75-91-129	82-100-142	88-108-153
			45°	18-29-55	26-39-63	33-49-71	39-55-78	46-59-84	52-63-90	58-71-100	63-78-110	68-84-118	
28x28	5.44	5.16	cfm	1548	2064	2580	3096	3612	4128	5160	6192	7224	
			NC	-	12	19	24	29	33	40	45	50	
			Throw (ft)	0°	24-39-72	34-51-84	43-64-93	51-72-102	60-78-110	68-84-118	76-93-132	84-102-145	90-110-156
			45°	18-30-56	27-40-65	33-50-72	40-56-79	47-61-86	53-65-92	59-72-102	65-79-112	70-86-121	
42x20 30x28	5.83	5.51	cfm	1653	2204	2755	3306	3857	4408	5510	6612	7714	
			NC	-	12	19	25	29	33	40	45	50	
			Throw (ft)	0°	25-40-75	35-53-86	44-66-96	53-75-106	62-81-114	70-86-122	79-96-136	86-106-149	93-114-161
			45°	19-31-58	27-41-67	34-51-75	41-58-82	48-63-88	55-67-95	61-75-106	67-82-116	72-88-125	
48x18 36x24	6.00	5.66	cfm	1698	2264	2830	3396	3962	4528	5660	6792	7924	
			NC	-	13	19	25	29	33	40	45	50	
			Throw (ft)	0°	25-40-76	36-54-87	45-67-98	54-76-107	63-82-116	71-87-124	80-98-138	87-107-152	94-116-164
			45°	19-31-59	28-42-68	35-52-76	42-59-83	49-63-90	55-68-96	62-76-107	68-83-117	73-90-127	
30x30	6.25	5.94	cfm	1782	2376	2970	3564	4158	4752	5940	7128	8316	
			NC	-	13	19	25	30	33	40	46	50	
			Throw (ft)	0°	25-41-78	37-55-90	46-69-100	55-78-110	64-84-119	73-90-127	82-100-142	90-110-155	97-119-168
			45°	20-32-60	29-43-69	36-53-78	43-60-85	50-65-92	57-69-98	63-78-110	69-85-120	75-92-130	

- Performance notes appear at end of table
- See the table, Correction Factors for Various Models on page G22 to determine appropriate factor

MODELS: 271 / 272 / 111 / 112 / 121 / 122 / 131 & 132
PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nom. Duct Size (in.)	Nom. Duct Area (ft²)	Core Area (ft²)	NC 20			NC 30			NC 40			NC 50		
			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°	0.010	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208		
			Total Press.	0.011	0.019	0.030	0.043	0.058	0.076	0.118	0.171	0.232		
			45°	0.016	0.029	0.045	0.065	0.089	0.116	0.181	0.260	0.354		
42x24 36x28	7.00	6.66	cfm	1998	2664	3330	3996	4662	5328	6660	7992	9324		
			NC	-	13	20	25	30	34	41	46	51		
			Throw (ft)	0° 27-44-82	39-58-95	49-73-106	58-82-116	68-89-126	77-95-134	87-106-150	95-116-164	102-126-178		
			22.5°	21-34-64	30-45-74	38-57-82	45-64-90	53-69-97	60-74-104	67-82-116	74-90-127	79-97-138		
			45°	12-20-37	18-26-43	22-33-48	26-37-52	31-40-56	35-43-60	39-48-68	43-52-74	46-56-80		
46x22	7.03	6.68	cfm	2004	2672	3340	4008	4676	5344	6680	8016	9352		
			NC	-	13	20	25	30	34	41	46	51		
			Throw (ft)	0° 27-44-82	39-59-95	49-73-106	59-82-116	68-89-126	78-95-134	87-106-150	95-116-165	103-126-178		
			22.5°	21-34-64	30-45-74	38-57-82	45-64-90	53-69-97	60-74-104	67-82-116	74-90-128	80-97-138		
			45°	12-20-37	18-26-43	22-33-48	26-37-52	31-40-57	35-43-60	39-48-68	43-52-74	46-57-80		
32x32	7.11	6.78	cfm	2034	2712	3390	4068	4746	5424	6780	8136	9492		
			NC	-	13	20	25	30	34	41	46	51		
			Throw (ft)	0° 27-44-83	39-59-96	49-74-107	59-83-117	69-90-127	78-96-135	87-107-151	96-117-166	103-127-179		
			22.5°	21-34-64	30-46-74	38-57-83	46-64-91	53-69-98	61-74-105	68-83-117	74-91-129	80-98-139		
			45°	12-20-37	18-27-43	22-33-48	27-37-53	31-40-57	35-43-61	39-48-68	43-53-75	47-57-81		
36x30	7.50	7.16	cfm	2148	2864	3580	4296	5012	5728	7160	8592	10024		
			NC	-	14	20	26	30	34	41	46	51		
			Throw (ft)	0° 28-45-85	40-61-98	50-76-110	61-85-121	71-92-130	80-98-139	90-110-156	98-121-170	106-130-184		
			22.5°	22-35-66	31-47-76	39-59-85	47-66-93	55-71-101	62-76-108	70-85-121	76-93-132	82-101-143		
			45°	13-20-38	18-27-44	23-34-50	27-38-54	32-41-59	36-44-63	40-50-70	44-54-77	48-59-83		
48x24 36x32	8.00	7.63	cfm	2289	3052	3815	4578	5341	6104	7630	9156	10682		
			NC	-	14	20	26	31	35	41	47	51		
			Throw (ft)	0° 29-47-88	42-63-102	52-78-114	63-88-124	73-95-134	83-102-144	93-114-161	102-124-176	110-134-190		
			22.5°	22-36-68	32-48-79	40-61-88	48-68-96	57-74-104	64-79-111	72-88-124	79-96-136	85-104-147		
			45°	13-21-40	19-28-46	23-35-51	28-40-56	33-43-60	37-46-65	42-51-72	46-56-79	49-60-86		
34x34	8.03	7.68	cfm	2304	3072	3840	4608	5376	6144	7680	9216	10752		
			NC	-	14	21	26	31	35	41	47	51		
			Throw (ft)	0° 29-47-88	42-63-102	52-78-114	63-88-125	73-95-135	83-102-144	93-114-161	102-125-176	110-135-191		
			22.5°	22-36-68	32-49-79	41-61-88	49-68-97	57-74-104	64-79-112	72-88-125	79-97-137	85-104-148		
			45°	13-21-40	19-28-46	24-35-51	28-40-56	33-43-61	37-46-65	42-51-73	46-56-79	50-61-86		
36x34	8.50	8.14	cfm	2442	3256	4070	4884	5698	6512	8140	9768	11396		
			NC	-	14	21	26	31	35	41	47	52		
			Throw (ft)	0° 30-48-91	43-65-105	54-81-117	65-91-128	75-98-139	86-105-148	96-117-166	105-128-182	113-139-196		
			22.5°	23-38-70	33-50-81	42-63-91	50-70-100	58-76-108	66-81-115	74-91-129	81-100-141	88-108-152		
			45°	13-22-41	19-29-47	24-36-53	29-41-58	34-44-62	39-47-67	43-53-75	47-58-82	51-62-88		
42x30	8.75	8.38	cfm	2514	3352	4190	5028	5866	6704	8380	10056	11732		
			NC	-	14	21	26	31	35	42	47	52		
			Throw (ft)	0° 30-49-92	44-66-106	55-82-119	66-92-130	76-100-141	87-106-151	97-119-168	106-130-184	115-141-199		
			22.5°	23-38-71	34-51-82	42-64-92	51-71-101	59-77-109	67-82-117	75-92-130	82-101-143	89-109-154		
			45°	14-22-41	20-29-48	25-37-54	29-41-59	34-45-63	39-48-68	44-54-76	48-59-83	52-63-90		
36x36	9.00	8.63	cfm	2589	3452	4315	5178	6041	6904	8630	10356	12082		
			NC	-	14	21	26	31	35	42	47	52		
			Throw (ft)	0° 31-50-94	44-67-108	55-83-121	67-94-132	78-101-143	88-108-153	99-121-171	108-132-187	117-143-202		
			22.5°	24-39-72	34-52-84	43-64-94	52-72-103	60-78-111	68-84-118	76-94-132	84-103-145	90-111-157		
			45°	14-22-42	20-30-49	25-37-54	30-42-60	35-45-64	40-49-69	44-54-77	49-60-84	53-64-91		
42x34 48x30	10.00	9.6	cfm	2880	3840	4800	5760	6720	7680	9600	11520	13440		
			NC	-	15	21	27	32	35	42	48	52		
			Throw (ft)	0° 32-53-99	47-70-114	58-88-127	70-99-140	82-107-151	93-114-161	104-127-180	114-140-197	123-151-213		
			22.5°	25-41-76	36-54-88	45-68-99	54-76-108	63-83-117	72-88-125	81-99-140	88-108-153	95-117-165		
			45°	15-24-44	21-32-51	26-39-57	32-44-63	37-48-68	42-51-73	47-57-81	51-63-89	55-68-96		
38x38	10.03	9.64	cfm	2892	3856	4820	5784	6748	7712	9640	11568	13496		
			NC	-	15	21	27	32	36	42	48	52		
			Throw (ft)	0° 32-53-99	47-70-114	59-88-128	70-99-140	82-107-151	93-114-161	104-128-181	114-140-198	123-151-214		
			22.5°	25-41-77	36-54-88	45-68-99	54-77-108	64-83-117	72-88-125	81-99-140	88-108-153	96-117-166		
			45°	15-24-44	21-32-51	26-40-57	32-44-63	37-48-68	42-51-73	47-57-81	51-63-89	55-68-96		
42x36	10.50	10.1	cfm	3030	4040	5050	6060	7070	8080	10100	12120	14140		
			NC	-	15	22	27	32	36	42	48	52		
			Throw (ft)	0° 33-54-101	48-72-117	60-90-131	72-101-143	84-109-155	95-117-165	107-131-185	117-143-202	126-155-219		
			22.5°	26-42-78	37-56-91	46-70-101	56-78-111	65-85-120	74-91-128	83-101-143	91-111-157	98-120-169		
			45°	15-24-46	22-32-53	27-40-59	32-46-64	38-49-70	43-53-74	48-59-83	53-64-91	57-70-98		
46x34	10.86	10.45	cfm	3135	4180	5225	6270	7315	8360	10450	12540	14630		
			NC	-	15	22	27	32	36	43	48	53		
			Throw (ft)	0° 34-55-103	49-73-119	61-92-133	73-103-146	85-111-157	97-119-168	109-133-188	119-146-206	128-157-222		
			22.5°	26-43-80	38-57-92	47-71-103	57-80-113	66-86-122	75-92-130	84-103-146	92-113-160	99-122-172		
			45°	15-25-46	22-33-53	27-41-60	33-46-66	38-50-71	44-53-76	49-60-85	53-66-93	58-71-100		

• Performance notes appear at end of table
• See the table, Correction Factors for Various Models on page G22 to determine appropriate factor

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PERFORMANCE DATA

MODELS: 271 / 272 / 111 / 112 / 121 / 122 / 131 & 132
PERFORMANCE BASED ON NOMINAL SIZES SHOWN IN BOLD

Nom. Duct Size (in.)	Nom. Duct Area (ft ²)	Core Area (ft ²)	NC 20			NC 30			NC 40			NC 50		
			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°	0.010	0.017	0.027	0.038	0.052	0.068	0.106	0.153	0.208		
Total Press.	22.5°	0.011	0.019	0.030	0.043	0.058	0.076	0.118	0.171	0.232				
45°	0.016	0.029	0.045	0.065	0.089	0.116	0.181	0.260	0.354					
42x38	11.08	10.67	cfm	3201	4268	5335	6402	7469	8536	10670	12804	14938		
			NC	-	15	22	27	32	36	43	48	53		
			Throw 0°	34-55-104	49-74-120	62-92-134	74-104-147	86-112-159	98-120-170	110-134-190	120-147-208	130-159-225		
			22.5°	26-43-81	38-57-93	48-72-104	57-81-114	67-87-123	76-93-132	85-104-147	93-114-161	101-123-174		
			45°	15-25-47	22-33-54	28-42-60	33-47-66	39-51-71	44-54-76	49-60-85	54-66-94	58-71-101		
40x40	11.11	10.7	cfm	3210	4280	5350	6420	7490	8560	10700	12840	14980		
			NC	-	15	22	27	32	36	43	48	53		
			Throw 0°	34-56-104	49-74-120	62-93-134	74-104-147	86-113-159	98-120-170	110-134-190	120-147-208	130-159-225		
			22.5°	26-43-81	38-57-93	48-72-104	57-81-114	67-87-123	76-93-132	85-104-147	93-114-161	101-123-174		
			45°	15-25-47	22-33-54	28-42-61	33-47-66	39-51-72	44-54-77	49-61-86	54-66-94	58-72-101		
48x36	12.00	11.57	cfm	3471	4628	5785	6942	8099	9256	11570	13884	16198		
			NC	-	16	22	28	32	36	43	48	53		
			Throw 0°	36-58-108	51-77-125	64-96-140	77-108-153	90-117-165	102-125-177	114-140-198	125-153-217	135-165-234		
			22.5°	28-45-84	40-60-97	50-75-108	60-84-119	70-91-128	79-97-137	88-108-153	97-119-168	105-128-181		
			45°	16-26-49	23-35-56	29-43-63	35-49-69	40-53-74	46-56-80	51-63-89	56-69-97	61-74-105		
42x42	12.25	11.82	cfm	3546	4728	5910	7092	8274	9456	11820	14184	16548		
			NC	-	16	22	28	32	36	43	48	53		
			Throw 0°	36-58-109	52-78-126	65-97-141	78-109-155	91-118-167	103-126-179	115-141-200	126-155-219	137-167-236		
			22.5°	28-45-85	40-60-98	50-75-110	60-85-120	70-92-130	80-98-139	89-110-155	98-120-170	106-130-183		
			45°	16-26-49	23-35-57	29-44-64	35-49-70	41-53-75	46-57-80	52-64-90	57-70-99	61-75-106		
44x44	13.44	12.99	cfm	3897	5196	6495	7794	9093	10392	12990	15588	18186		
			NC	-	16	23	28	33	37	43	49	53		
			Throw 0°	38-61-115	54-82-133	68-102-148	82-115-162	95-124-175	108-133-187	121-148-210	133-162-230	143-175-248		
			22.5°	29-47-89	42-63-103	53-79-115	63-89-126	74-96-136	84-103-145	94-115-162	103-126-178	111-136-192		
			45°	17-28-52	24-37-60	31-46-67	37-52-73	43-56-79	49-60-84	54-67-94	60-73-103	64-79-112		
48x42	14.00	13.54	cfm	4062	5416	6770	8124	9478	10832	13540	16248	18956		
			NC	-	16	23	28	33	37	43	49	54		
			Throw 0°	38-62-117	56-83-135	69-104-151	83-117-166	97-127-179	110-135-191	124-151-214	135-166-234	146-179-253		
			22.5°	30-48-91	43-65-105	54-81-117	65-91-128	75-98-139	86-105-148	96-117-166	105-128-182	113-139-196		
			45°	17-28-53	25-37-61	31-47-68	37-53-75	44-57-81	50-61-86	56-68-96	61-75-105	66-81-114		
46x46	14.69	14.22	cfm	4266	5688	7110	8532	9954	11376	14220	17064	19908		
			NC	-	16	23	29	33	37	44	49	54		
			Throw 0°	39-64-120	57-85-139	71-107-155	85-120-170	100-130-183	113-139-196	127-155-219	139-170-240	150-183-259		
			22.5°	31-50-93	44-66-107	55-83-120	66-93-132	77-101-142	88-107-152	98-120-170	107-132-186	116-142-201		
			45°	18-29-54	26-38-62	32-48-70	38-54-76	45-58-83	51-62-88	57-70-99	62-76-108	67-83-117		
48x46	15.33	14.85	cfm	4455	5940	7425	8910	10395	11880	14850	17820	20790		
			NC	-	17	23	29	33	37	44	49	54		
			Throw 0°	40-65-123	58-87-142	73-109-158	87-123-174	102-133-187	116-142-200	129-158-224	142-174-245	153-187-265		
			22.5°	31-51-95	45-68-110	56-85-123	68-95-134	79-103-145	90-110-155	100-123-174	110-134-190	119-145-205		
			45°	18-29-55	26-39-64	33-49-71	39-55-78	46-60-84	52-64-90	58-71-101	64-78-110	69-84-119		
48x48	16.00	15.50	cfm	4650	6200	7750	9300	10850	12400	15500	18600	21700		
			NC	-	17	23	29	34	37	44	50	54		
			Throw 0°	41-67-125	59-89-145	74-111-162	89-125-177	104-135-192	118-145-205	132-162-229	145-177-251	156-192-271		
			22.5°	32-52-97	46-69-112	58-86-125	69-97-137	81-105-148	92-112-159	102-125-177	112-137-194	121-148-210		
			45°	19-30-56	27-40-65	33-50-73	40-56-80	47-61-86	53-65-92	59-73-103	65-80-113	70-86-122		

- 0°, 22.5°, and 45° represent blade deflection angles
- Performance data is based on duct sizes in bold, the performance varies slightly for duct sizes not shown in bold
- See the section, Engineering Guidelines, for drop information, when selecting larger supply grilles for cooling purposes
- See the "Performance Notes" portion in this section for notes and correction factors
- See the section, Engineering Guidelines for catalog throw information
- Each NC value represents the noise criteria curve that will not be exceeded by the sound pressure in any of the octave bands, 2 through 7, with a room absorption of 10 dB, re 10⁻¹² watts

Note: The performance data for Correction Factors by Model is on page G22

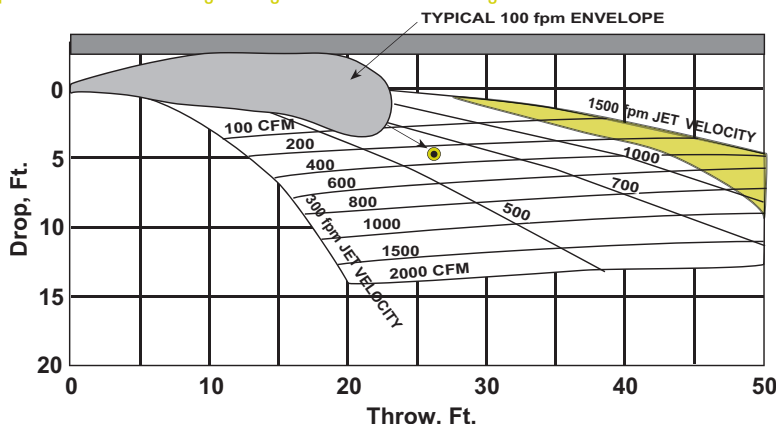
PERFORMANCE NOTES

- Performance data includes damper
- Data obtained from tests conducted in accordance with ANSI/ASHRAE Standard 70-2006
- All pressures are in inches of water
- Core velocities are in feet per minute
- Throw values are given for isothermal terminal velocities of 150, 100 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 further based on a grille operating at a 0° deflection. For deflection settings of 22½° or 45°, increase the stated sound levels by 1 or 7 NC, respectively.
- Bold dividing lines on each table 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.
- See the section, Engineering Guidelines for drop and throw information
- Dash (—) in space indicates NC value less than 10

VARIABLE AIR VOLUME APPLICATIONS

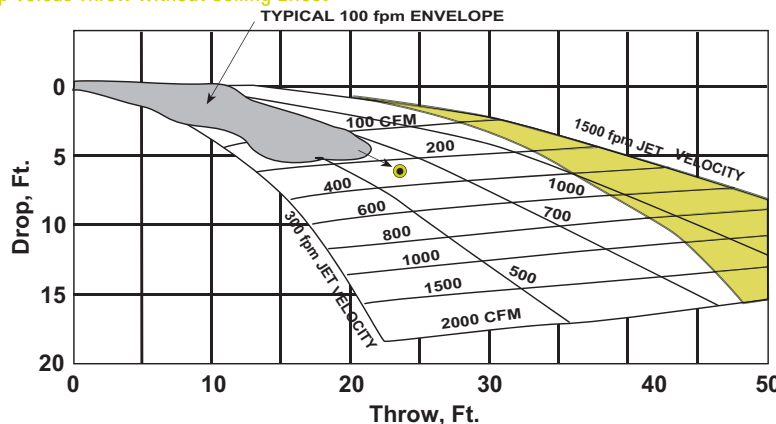
All Titus supply grilles can be applied to variable air volume systems with excellent results. For detailed selection methods, consult your Titus representative or the Engineering Guidelines section of this catalog.

Drop Versus Throw Showing Ceiling Effect - 20°F ΔT 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 AeroBlade Supply Grilles

Model	Damper	A _k / A _c	Throw	Total Pressure	NC
271, 272	With	0.78	1.00	1.00	0
	Without	0.83	0.97	0.88	-4
111,112	With	0.87	0.95	0.81	0
	Without	0.92	0.92	0.72	-5
121,122	With	0.92	0.92	0.72	0
	Without	0.98	0.89	0.64	-5
131,132	With	0.92	0.92	0.72	0
	Without	0.98	0.89	0.64	-5

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.

HORIZONTAL DEFLECTION (SPREAD)

SUPPLY GRILLES

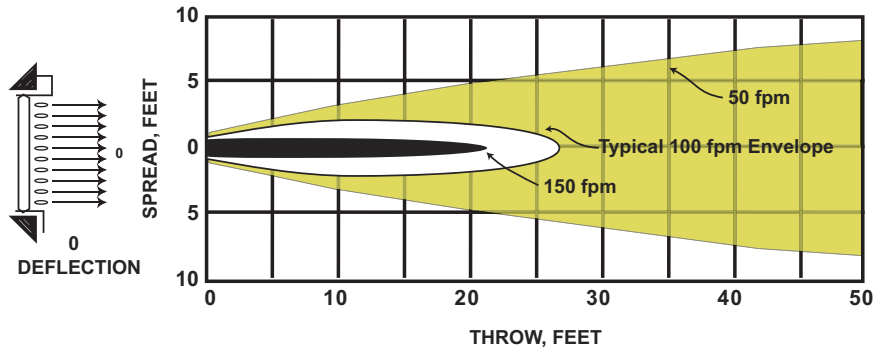
Diagrams are based on actual tests conducted by Titus. They show the relationship of spread to throw for a typical high side-wall supply outlet selection.

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 amount of drop of the airstream. For a given temperature, volume, and core velocity, the wider the spread the smaller the drop. See the section, Engineering Guidelines for drop and throw information.

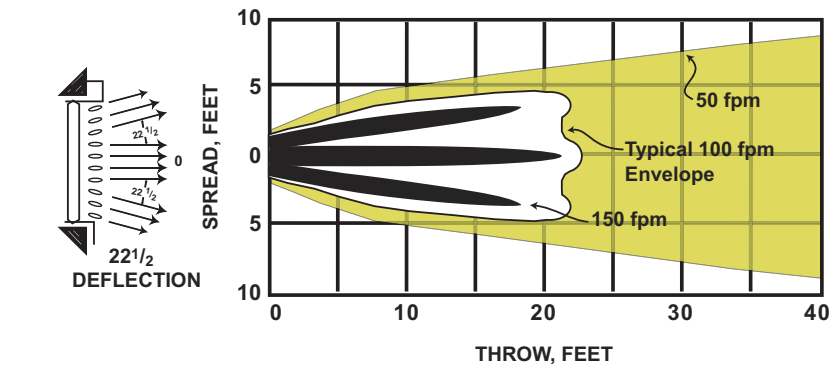
Titus grilles can be selected with a single set of blades for adjusting either horizontal or vertical deflection, or with two sets of blades for adjusting both horizontal and vertical deflections.

0° Horizontal Deflection



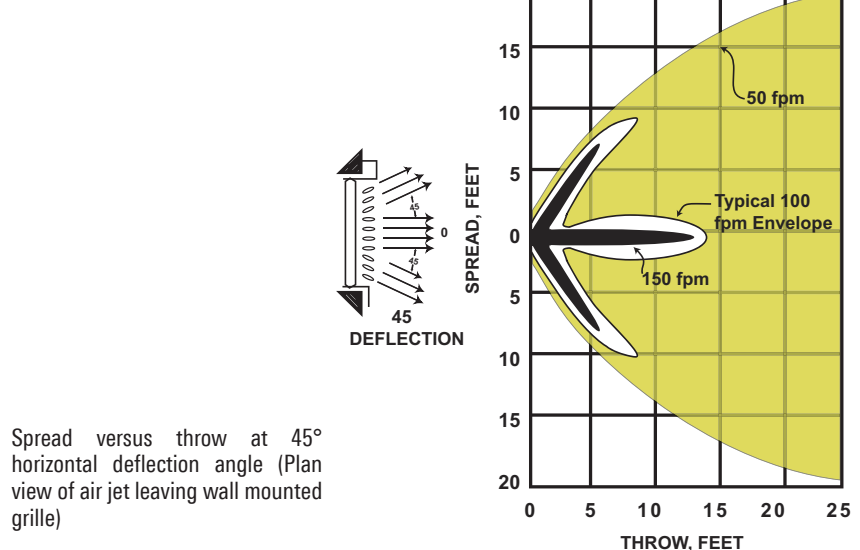
Spread versus throw at 0° horizontal deflection angle
(Plan view of air jet leaving wall mounted grille)

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)