

Performance Data

Industrial Supply Grilles and Registers

MODELS: HI, HOBI, HMEI, HMEOBI, VI, VOBI, VMEI, VMEOBI, VHI, VHOB, HVI, HVIOB
 VHMEI, VHMEOBI, HVMEI, HVMEOBI, VHAFS, HVAFS

Listed Duct Size (inches)	Neck Velocity, FPM		500	600	700	800	1000	1200	1400	1600	1800
	VP		0.016	0.022	0.031	0.040	0.062	0.090	0.122	0.160	0.202
	TP	0°	.035	.050	.068	.088	.138	.198	.271	.354	.448
		22 1/2°	.039	.056	.076	.099	.155	.222	.305	.398	.503
		45	.059	.084	.115	.149	.233	.334	.458	.598	.757
18 x 4 14 x 5 12 x 6	CFM		250	300	350	400	500	600	700	800	900
	NC		—	—	—	—	26	30	34	38	41
	Ak	T	0°	13-20-28	15-22-31	17-24-34	19-26-36	22-28-39	24-30-42	26-32-45	28-34-48
22 1/2°			10-16-22	12-18-24	13-20-26	15-21-28	17-23-31	18-25-33	20-27-35	22-29-37	23-31-39
45			7-10-13	8-11-14	9-12-16	10-12-17	11-13-19	12-14-20	13-15-22	14-16-23	15-17-25
26 x 6 18 x 8 16 x 10 12 x 12	CFM		500	600	700	800	1000	1200	1400	1600	1800
	NC		—	—	—	23	29	34	38	41	44
	Ak	T	0°	17-26-37	20-29-41	23-32-45	26-35-49	29-38-53	33-42-58	36-45-62	39-48-66
22 1/2°			14-20-29	16-23-32	19-25-36	21-28-39	24-31-43	26-33-46	28-36-49	31-39-53	33-42-56
45			9-12-18	10-14-20	12-15-22	13-17-24	15-19-26	16-20-29	17-22-31	19-24-33	20-26-35
24 x 8 20 x 10 16 x 12 14 x 14	CFM		750	900	1050	1200	1500	1800	2100	2400	2700
	NC		—	—	22	25	31	36	40	43	46
	Ak	T	0°	24-35-48	28-38-53	31-42-58	35-45-63	39-49-69	42-52-74	46-56-79	50-59-84
22 1/2°			19-28-38	22-31-42	25-34-46	27-36-50	30-39-55	33-42-59	36-45-63	39-48-67	42-51-71
45			12-17-24	14-19-26	16-21-29	17-23-31	19-25-34	21-27-36	23-29-39	25-31-41	27-33-44
36 x 8 30 x 10 24 x 12 20 x 14 18 x 16	CFM		1000	1200	1400	1600	2000	2400	2800	3200	3600
	NC		—	—	23	26	32	37	41	44	48
	Ak	T	0°	25-37-54	29-41-60	34-46-66	39-51-73	43-55-79	48-60-85	52-64-92	57-69-98
22 1/2°			20-30-44	24-33-49	27-37-54	31-41-58	35-44-63	38-48-68	42-51-73	46-55-78	50-58-83
45			12-18-27	14-20-30	17-23-33	19-25-36	22-28-39	24-30-42	26-32-45	29-35-48	31-37-51
36 x 12 30 x 14 26 x 16 24 x 18	CFM		1500	1800	2100	2400	3000	3600	4200	4800	5400
	NC		—	21	25	28	34	39	43	46	49
	Ak	T	0°	30-44-66	36-50-74	42-56-81	47-62-89	53-68-97	59-74-104	65-80-112	71-86-120
22 1/2°			24-35-53	28-40-59	33-45-65	37-50-71	42-55-78	46-60-84	51-65-90	55-70-96	60-75-102
45			15-22-33	18-25-37	21-28-41	23-31-44	26-34-48	29-37-52	32-40-56	35-43-60	38-46-64
48 x 12 36 x 16 30 x 20 24 x 24	CFM		2000	2400	2800	3200	4000	4800	5600	6400	7200
	NC		—	22	26	30	36	40	44	48	51
	Ak	T	0°	33-49-76	40-56-85	47-63-94	53-70-102	60-77-111	67-85-120	74-92-129	81-99-138
22 1/2°			27-40-61	32-45-68	38-51-75	43-57-82	49-62-89	54-68-96	59-73-103	65-79-110	70-84-117
45			16-25-38	19-28-42	23-32-47	27-35-51	30-39-56	34-42-60	37-45-64	41-49-69	44-52-73
60 x 12 54 x 14 48 x 16 42 x 18 36 x 20 30 x 24	CFM		2500	3000	3500	4000	5000	6000	7000	8000	9000
	NC		—	23	27	31	37	41	45	49	52
	Ak	T	0°	38-56-87	45-64-96	52-72-105	60-79-115	67-87-124	74-95-133	82-103-143	89-111-152
22 1/2°			30-45-70	36-51-77	42-57-85	47-63-92	53-70-100	59-76-107	65-83-114	71-89-122	77-95-129
45			19-28-44	23-32-48	26-36-53	30-39-58	34-43-62	37-47-67	41-51-71	45-55-76	49-59-80
72 x 12 60 x 14 54 x 16 48 x 18 36 x 24	CFM		3000	3600	4200	4800	6000	7200	8400	9600	10800
	NC		—	24	28	32	38	42	46	50	53
	Ak	T	0°	42-62-95	50-70-105	58-79-115	66-88-126	74-96-136	82-105-146	90-113-157	98-122-167
22 1/2°			33-50-75	39-57-83	46-64-91	53-70-99	59-77-107	66-84-115	72-91-123	79-98-131	85-105-139
45			21-32-48	25-36-53	29-40-58	33-44-63	37-48-68	41-53-74	45-57-79	49-61-84	53-65-89
72 x 14 60 x 16 54 x 18 48 x 20 30 x 30	CFM		3500	4200	4900	5600	7000	8400	9800	11200	12600
	NC		20	25	29	32	38	43	47	50	54
	Ak	T	0°	44-55-101	53-66-112	62-77-124	70-88-136	79-99-147	88-111-159	97-122-170	106-133-182
22 1/2°			35-53-80	42-60-89	49-68-98	57-76-108	64-83-117	71-91-126	79-98-136	86-106-145	93-113-154
45			22-32-50	26-37-56	31-42-62	35-47-67	40-52-73	44-57-79	48-62-85	53-67-91	57-72-97

Performance Data

Industrial Supply Grilles and Registers

MODELS: HI, HOBI, HMEI, HMEOBI, VI, VOBI, VMEI, VMEOBI, VHI, VHOBI, HVI, HVIOB
 VHMEI, VHMEOBI, HVMEI, HVMEOBI, VHAFS, HVAFS

Listed Duct Size (inches)	Neck Velocity, FPM		500	600	700	800	1000	1200	1400	1600	1800	
	VP		0.016	0.022	0.031	0.040	0.062	0.090	0.122	0.160	0.202	
	TP	0°	.035	.050	.068	.088	.138	.198	.271	.354	.448	
		22 1/2°	.039	.056	.076	.099	.155	.222	.305	.398	.503	
		45	.059	.084	.115	.149	.233	.334	.458	.598	.757	
64 x 18 58 x 20 54 x 22 48 x 24 44 x 26 38 x 30	CFM		4000	4800	5600	6400	8000	9600	11200	12800	14400	
	NC		21	26	30	33	39	44	48	51	54	
	Ak	6.10	0°	47-59-108	56-71-120	66-83-132	75-94-145	85-106-157	94-118-169	103-130-182	113-142-194	122-154-206
		5.90	T 22 1/2°	37-57-85	45-65-95	53-73-105	60-81-115	68-89-125	76-97-135	84-105-145	92-113-155	100-121-165
		4.71	45	23-34-53	28-39-59	33-44-65	37-50-72	42-55-78	47-60-84	52-66-91	57-71-97	62-76-103
72 x 18 60 x 22 54 x 24 48 x 28 36 x 36	CFM		4500	5400	6300	7200	9000	10800	12600	14400	16200	
	NC		22	26	30	34	40	44	48	52	55	
	Ak	6.94	0°	50-63-115	60-76-128	70-88-141	80-101-154	90-113-167	100-126-181	110-139-194	120-151-207	130-164-220
		6.72	T 22 1/2°	39-61-91	47-69-101	56-78-112	64-87-123	73-95-133	81-104-144	89-112-154	98-121-165	106-129-175
		5.36	45	25-36-56	30-42-63	35-47-69	40-53-76	45-59-83	51-64-89	56-70-96	61-76-103	66-82-110

CFM - cubic feet per minute

FPM - feet per minute velocity

TP - total pressure - inches w.g.

VP - velocity pressure - inches w.g.

T - throw in feet

NC - Noise Criteria (values) based on 10 dB room absorption, re 10⁻¹² watts.

Ak - flow factor

Performance Notes:

1. Throws are given at 150, 100 and 50 fpm terminal velocities under isothermal conditions.

2. Total pressures are based upon a grille without an opposed blade damper. Correction for grille with OBD- Multiply total pressure by 1.12.

3. NC values are based upon a grille without an opposed blade damper and a 0° deflection.

Correction for grille with OBD
 - Add 5 dB to NC.

Correction for 22 1/2° deflection
 - Add 1 dB to NC.

Correction for 45° deflection
 - Add 7 dB to NC.

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