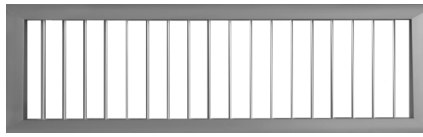


SINGLE DEFLECTION SUPPLY GRILLES AND REGISTERS

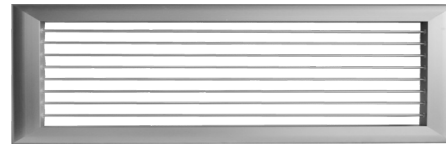
Model: WAG-1V, WAG-1H, WAG-1VR, WAG-1HR

For ceiling and sidewall installation

MODEL: WAG-1V



MODEL: WAG-1H



Order code

WAG - 1VF + OVD + BF +

1

2

3

4

5

5

1 Type

WAG-1V: Single deflection vertical front blades

WAG-1H: Single deflection horizontal front blades

WAG-1VR: Removable single deflection vertical front blades

WAG-1HR: Removable single deflection horizontal front blades

2 Air Diffusion Pattern

1-way individually adjustable

*Fixed-blade option is available

**Could be specified

3 Surface

Non-specify: Curve surface

F: Flat surface

*Could be specified

4 Volume Damper

OVD: Opposed blade volume damper

PVD: Parallel blade volume damper

5 Additional Accessories

BF: Black synthetic filter

WF: White synthetic filter

NF: Black nylon filter

AF: Aluminium filter

BFM: Black synthetic filter frame

WFM: White synthetic filter frame

INS: Aluminum wire mesh

*Could be specified

★ Features

- 1-way vertical or horizontal air diffusion pattern
- Removable snap-in directional cores (1VR, 1HR)
- Aluminium construction 6063 gauge extruded aluminium margins, mechanically interlocked with hairline corners, and quality moisture proof construction throughout
- Energy-efficient and acoustically optimised air discharge
- Sound level range of NC 11 to 54

+ General Optional Equipment and Accessories

- Opposed blade volume damper
- Air filter for air purification
- Aluminum wire mesh
- Tie off cable for fall protection

✂ Installation

1. Prepare the air duct edge size according to the neck size of diffuser
2. Fix diffuser frame to air duct with screws
3. Snap in diffuser core to the frame (1VR, 1HR)

🏆 Certification

- VIPAC
- NATA
- King Mongkut's University of Technology Thonburi

💡 Application

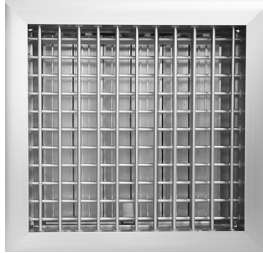
- Heating, ventilating & cooling, and space conditions requiring directional air diffusion patterns
- WAG-1V/1VR is recommended for adjustability in a single vertical plane sill grilles, side wall location at ceiling line, or heating application only
- WAG-1H/1HR is recommended for adjustability in a single horizontal plane sill grilles, side wall location at ceiling line, or heating application only
- Efficiently perform with temperature differentials of up to 18-20F cooling, 20-50F heating and for ventilating while handling 0.75 to 1.70 cfm of room area with draftless distribution
- Blades are adjustable to suit different local requirements
- Attractive and excellence design
- Special anodised or duranodic finished are available to match architectural requirements
- Satin anodised surface with special colour finishes can be applied
- Available in aluminium, stainless steel, and steel
- Customised design is available

DOUBLE DEFLECTION SUPPLY GRILLES AND REGISTERS

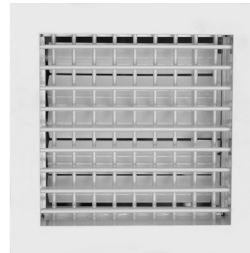
Model: WAG-2V, WAG-2H, WAG-2VR, WAG-2HR

For ceiling and sidewall installation

MODEL: WAG-2V



MODEL: WAG-2H



Order code

WAG - 2VF + OVD + BF +



1 Type

- WAG-2V: Double deflection vertical front blades
- WAG-2H: Double deflection horizontal front blades
- WAG-2VR: Removable double deflection vertical front blades
- WAG-2HR: Removable double deflection horizontal front blades

2 Air Diffusion Pattern

- 2-way individually adjustable
- *Fixed-blade option is available
- **Could be specified

3 Surface

- Non-specify: Curve surface
- F: Flat surface

4 Volume Damper

- OVD: Opposed blade volume damper
- PVD: Parallel blade volume damper

5 Additional Accessories

- BF: Black synthetic filter
- WF: White synthetic filter
- NF: Black nylon filter
- AF: Aluminium filter
- BFM: Black synthetic filter frame
- WFM: White synthetic filter frame
- INS: Aluminum wire mesh
- *Could be specified

★ Features

- 2-way vertical and horizontal air diffusion pattern
- Removable snap-in directional cores (2VR, 2HR)
- Aluminium construction 6063 gauge extruded aluminium margins, mechanically interlocked with hairline corners, and quality moisture proof construction throughout
- Energy-efficient and acoustically optimised air discharge
- Sound level range of NC 11 to 54

+ General Optional Equipment and Accessories

- Opposed blade volume damper
- Air filter for air purification
- Aluminum wire mesh
- Tie off cable for fall protection

*Could be specified

✂ Installation

1. Prepare the air duct edge size according to the neck size of diffuser
2. Fix diffuser frame to air duct with screws
3. Snap in diffuser core to the frame (2VR, 2HR)

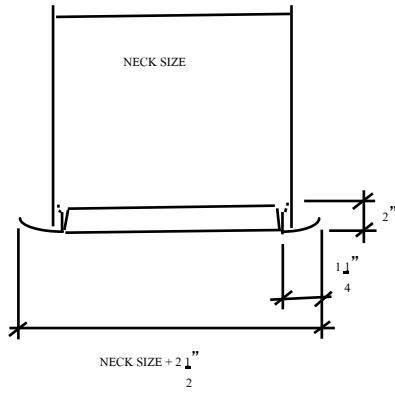
🏆 Certification

- VIPAC
- NATA
- King Mongkut's University of Technology Thonburi

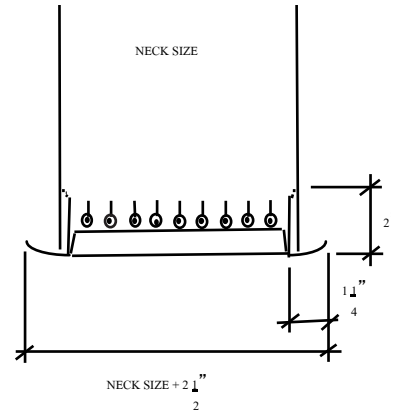
💡 Application

- Heating, ventilating & cooling, and space conditions requiring directional air diffusion patterns
- WAG-1V/1VR is recommended for adjustability in a single vertical plane sill grilles, side wall location at ceiling line, or heating application only
- WAG-1H/1HR is recommended for adjustability in a single horizontal plane sill grilles, side wall location at ceiling line, or heating application only
- Efficiently perform with temperature differentials of up to 20-22F cooling, 20-50F heating and for ventilating while handling 1.00 to 2.00 cfm of room area with draftless distribution
- Blades are adjustable to suit different local requirements
- Attractive and excellence design
- Special anodised or duranodic finished are available to match architectural requirements
- Satin anodised surface with special colour finishes can be applied
- Available in aluminium, stainless steel, and steel
- Customised design is available

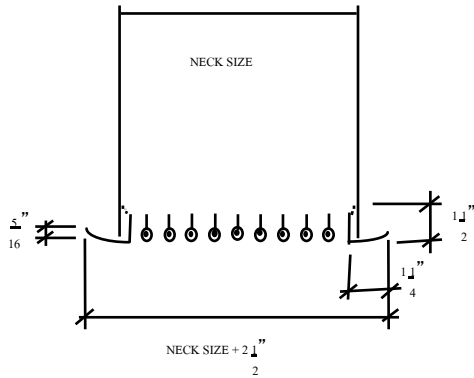
SECTION DETAILS



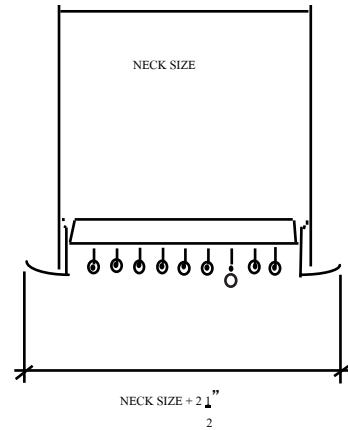
MODEL : WAG-1H



MODEL : WAG-2H

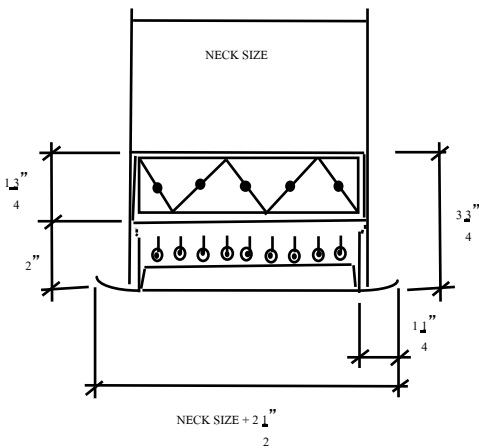


MODEL : WAG-1V

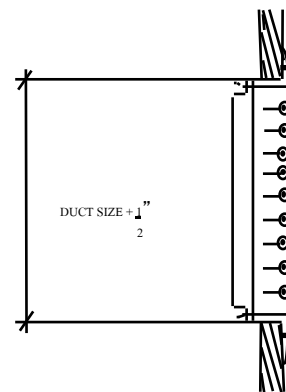


MODEL : WAG-2V

INSTALLATION DETAILS

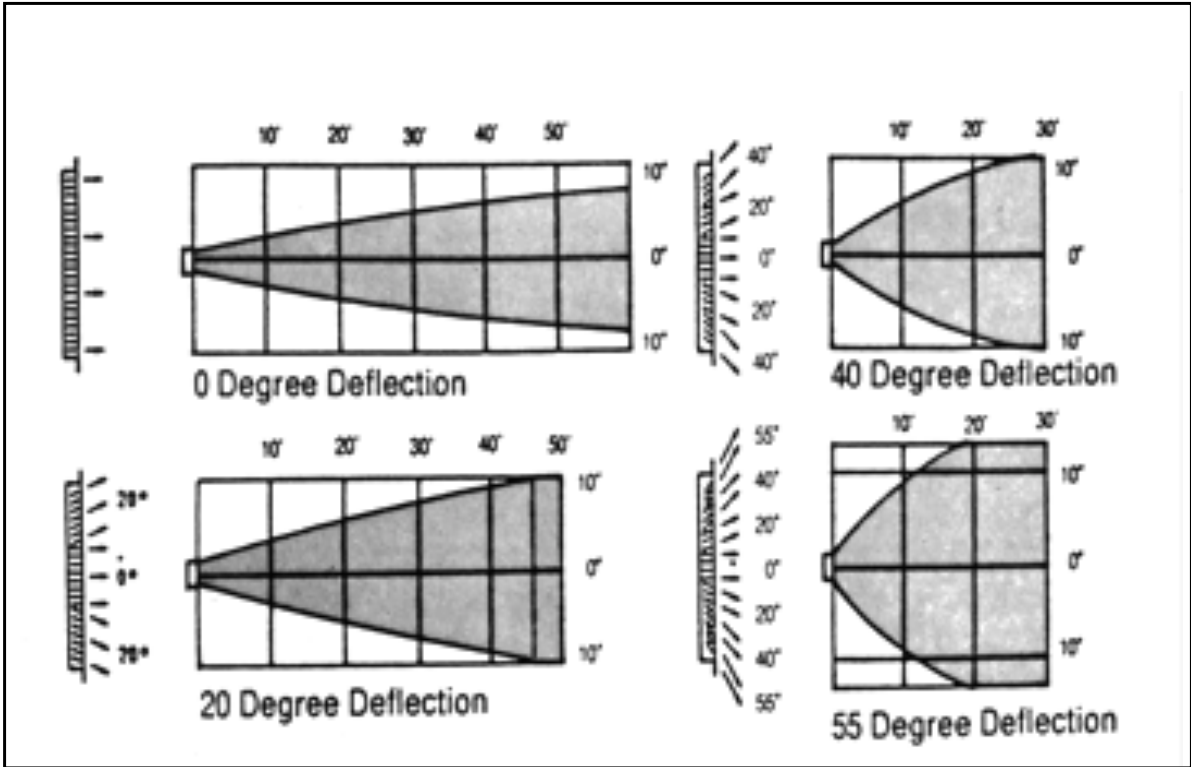


MODEL : WAG-2H+OVD



MODEL : WAG-2V

DEFLECTION SETTINGS & AIR PATTERNS



SUPPLY GRILLES & REGISTER PERFORMANCE DATA

Size (In.)	core Area (ft.)	Core Velocity (fpm)	300	400	500	600	700	800	1000	1200	1400
		Velocity Pressure (in.wg.)	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
		Total Pressure (in.wg.)	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
6x6	0.19	CFM	57	76	95	114	133	152	190	228	266
		Throw (ft)	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
8x6	0.26	CFM	78	104	130	156	182	208	260	312	364
		Throw (ft)	5-9-16	8-12-19	10-15-21	12-16-23	14-18-25	15-19-27	17-21-30	19-23-32	20-25-35
10X6	0.34	CFM	102	136	170	204	238	272	340	408	476
		Throw (ft)	6-10-19	9-13-21	11-17-24	13-19-26	16-20-28	18-21-30	20-24-34	21-26-37	23-28-40
8x8	0.37	CFM	111	148	185	222	259	296	370	444	518
		Throw (ft)	6-10-19	9-14-22	12-17-25	14-19-27	16-21-30	18-22-32	20-25-35	22-27-39	24-30-42
12x6	0.41	CFM	123	164	205	246	287	328	410	492	574
		Throw (ft)	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
14x6	0.48	CFM	144	192	240	288	336	384	480	576	672
		Throw (ft)	7-12-22	11-16-25	13-20-28	16-22-31	18-24-34	21-25-36	23-28-40	25-31-44	28-34-48
16 x 6 12 x 8	0.57	CFM	171	228	285	342	399	456	570	684	798
		Throw (ft)	8-13-24	11-17-28	14-22-31	17-24-34	20-26-37	23-28-39	25-31-44	28-34-48	30-37-52
10 x 10	0.59	CFM	177	236	295	354	413	472	590	708	826
		Throw (ft)	8-13-24	12-18-28	15-22-32	18-24-35	22-26-37	23-28-40	26-32-45	28-35-49	32-37-53
18 x 6	0.63	CFM	189	252	315	378	441	504	630	756	882
		Throw (ft)	8-14-25	12-18-29	15-23-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-51	32-39-51
20 x 6 12 x 10	0.72	CFM	216	288	360	432	504	576	720	864	1008
		Throw (ft)	9-15-27	13-19-31	16-24-35	19-27-38	23-29-41	25-31-44	25-35-49	31-38-54	34-41-58
22 x 6	0.77	CFM	231	308	385	462	539	616	770	924	1078
		Throw (ft)	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
24 x 6 18 x 8 12 x 12	0.88	CFM	264	352	440	528	616	704	880	1056	1232
		Throw (ft)	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
30 x 6 18 x 10	1.11	CFM	333	444	555	666	777	888	1110	1332	1554
		Throw (ft)	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
14 x 14	1.22	CFM	366	488	610	732	854	976	1220	1464	1708
		Throw (ft)	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
36 x 5 27 x 8 18 x 12	1.35	CFM	405	540	675	810	945	1080	1350	1620	1890
		Throw (ft)	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
22 x 10	1.37	CFM	411	548	685	822	959	1096	1370	1644	1981
		Throw (ft)	12-20-37	18-27-43	22-33-48	27-37-53	31-40-57	35-43-61	39-48-68	43-53-75	65-57-81
30 x 8 24 x 10	1.49	CFM	447	596	745	894	1043	1192	1490	1788	2086
		Throw (ft)	13-21-39	19-28-45	23-35-50	28-39-55	32-42-59	37-45-63	41-50-71	45-55-78	48-59-84
42 X 6 18 X 14	1.59	CFM	477	636	795	954	1113	1272	1590	1908	2226
		Throw (ft)	13-22-40	19-29-46	24-36-52	29-40-57	34-43-61	38-46-66	42-52-73	46-57-80	50-61-87
16 x16	1.62	CFM	486	648	810	972	1134	1296	1620	1944	2268
		Throw (ft)	14-22-41	19-29-47	24-36-52	29-41-57	34-44-62	38-47-66	43-52-74	47-57-81	51-62-88
48 x 6 36 x 8 24 x 12 18 x16	1.82	CFM	546	728	910	1092	1274	1456	1820	2184	2548
		Throw (ft)	14-23-43	20-31-50	26-38-55	31-43-61	36-44-66	41-50-70	45-55-78	50-61-86	54-66-93
18 x 18	2.07	CFM	621	828	1035	1242	1449	1656	2070	2484	2898
		Throw (ft)	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
42 x 8 24 x14	2.14	CFM	642	856	1070	1284	1498	1712	2140	2568	2996
		Throw (ft)	16-25-47	22-33-54	28-42-60	33-47-66	39-50-71	44-54-76	49-60-85	54-66-93	58-71-101

SUPPLY GRILLES & REGISTER PERFORMANCE DATA

Size (In.)	core Area (ff.)	Core Velocity (fpm)	300	400	500	600	700	800	1000	1200	1400
		Velocity Pressure (in.wg.)	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
		Total Pressure (in.wg.)	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
36 x 10 30 x 12	2.29	CFM	687	916	1145	1374	1603	1832	2290	2748	3206
		Throw (ft)	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
48 x 8 24 x 16	2.46	CFM	738	984	1230	1476	1722	1968	2460	2952	3444
		Throw (ft)	17-27-50	24-36-58	30-45-64	36-50-71	42-54-76	47-58-82	53-64-91	58-71-100	62-76-108
20 x 20	2.57	CFM	771	1028	1285	1542	1799	2056	2570	3084	3598
		Throw (ft)	17-27-51	24-37-59	30-46-66	37-51-72	43-55-78	48-59-83	54-66-93	59-72-102	64-78-110
36 x 12 24 x 18	2.75	CFM	825	1100	1375	1650	1925	2200	2750	3300	3850
		Throw (ft)	18-28-53	25-38-61	31-47-68	38-53-75	44-57-81	50-61-86	56-68-96	61-75-106	66-81-114
48 x 10 30 x 16 24 x 20	3.11	CFM	933	1244	1555	1866	2177	2488	3110	3732	4354
		Throw (ft)	19-30-56	27-40-65	33-50-72	40-56-79	47-61-86	53-65-92	59-72-103	65-79-112	70-86-121
22 x 22	3.14	CFM	942	1256	1570	1884	2198	2512	3140	3678	4396
		Throw (ft)	19-30-56	27-40-65	34-50-73	40-56-80	47-61-86	53-65-92	59-73-103	65-80-113	70-86-122
42 x 12 36 x 14	3.22	CFM	966	1288	1610	1932	2254	2576	3220	3864	4508
		Throw (ft)	19-31-57	27-41-66	34-51-74	41-57-81	48-62-87	54-66-93	60-74-104	66-81-114	71-87-123
24 x 22	3.43	CFM	1029	1372	1715	2058	2401	2744	3430	4116	4802
		Throw (ft)	20-32-59	28-42-68	35-53-76	42-59-83	49-64-90	56-68-96	62-79-108	68-83-118	74-90-127
30 x 18	3.5	CFM	1050	1400	1750	2100	2450	2800	3500	4200	4900
		Throw (ft)	20-32-60	28-43-69	36-53-77	43-60-84	50-64-91	56-69-97	63-77-109	69-84-119	74-91-129
48 x 12 36 x 16 24 x 24	3.75	CFM	1125	1500	1875	2250	2625	3000	3750	4500	5250
		Throw (ft)	21-33-62	29-44-71	37-55-80	44-62-87	51-67-94	58-71-101	65-80-113	71-87-123	77-94-133
36 x 18	4.22	CFM	1266	1688	2110	2532	2954	3376	4220	5064	5908
		Throw (ft)	22-35-65	31-47-76	39-59-83	47-65-93	55-71-100	62-76-107	69-84-119	76-93-131	82-100-141
36 x 20 30 x 24	4.71	CFM	1413	1884	2355	2826	3297	3768	4710	5652	6594
		Throw (ft)	23-37-69	33-49-80	41-62-89	49-69-98	58-75-106	65-80-113	73-89-126	80-98-138	86-106-149
42 x 18	4.94	CFM	1482	1976	2470	2964	3458	3952	4940	5928	6916
		Throw (ft)	24-38-71	34-51-82	42-63-91	51-71-100	59-76-108	67-82-116	75-91-129	82-100-142	88-108-153
28 x 28	5.16	CFM	1548	2064	2580	3098	3612	4128	5160	6192	7224
		Throw (ft)	24-39-72	35-52-84	43-65-93	52-72-102	60-78-110	68-84-118	76-93-132	84-102-145	90-110-156
42 x 20 30 x 28	5.51	CFM	1653	2204	2755	3306	3857	4408	5510	6612	7714
		Throw (ft)	25-40-75	36-54-86	45-67-96	54-75-106	62-81-114	70-86-122	79-96-136	86-106-149	93-114-161
48 x 18 36 x 24	5.66	CFM	1698	2264	2830	3396	3962	4528	5660	6792	7924
		Throw (ft)	25-41-76	36-54-87	45-68-98	54-76-107	63-82-116	71-87-124	80-98-138	87-107-152	94-116-164
30 x 30	5.94	CFM	1782	2376	2970	3564	4158	4752	5940	7128	8316
		Throw (ft)	26-42-78	37-56-90	46-69-100	56-78-110	65-84-119	73-90-127	82-100-142	90-110-155	97-119-168
42 x 24 36 x 28	6.66	CFM	1998	2664	3330	3996	4662	5328	6660	7992	9324
		Throw (ft)	28-44-82	39-59-95	49-74-106	59-82-116	69-89-126	77-95-134	87-106-150	95-116-164	102-126-178
46 x 22	6.68	CFM	2004	2672	3340	4008	4676	5344	6680	8016	9352
		Throw (ft)	28-44-82	39-59-95	49-74-106	59-82-116	69-89-126	78-95-134	87-106-150	95-116-165	103-126-178
32 x 32	6.78	CFM	2034	2712	3390	4068	4746	5424	6780	8136	9492
		Throw (ft)	28-45-83	40-59-96	49-74-107	59-83-117	69-90-127	78-96-135	87-107-151	96-117-166	103-127-179
36 x 30	7.16	CFM	2148	2864	3580	4296	5012	5728	7160	8592	10024
		Throw (ft)	29-46-85	41-61-98	51-76-110	61-85-121	71-92-130	80-98-139	90-110-156	98-121-170	106-130-184
48 x 24 36 x 32	7.63	CFM	2289	3052	3815	4578	5341	6104	7630	9156	10682
		Throw (ft)	29-47-88	42-63-102	52-79-114	63-88-124	73-95-134	83-102-144	93-114-161	102-124-176	110-134-190

SUPPLY GRILLES & REGISTER PERFORMANCE DATA

Size (In.)	core Area (ft)	Core Velocity (fpm)	300	400	500	600	700	800	1000	1200	1400
		Velocity Pressure (in.wg.)	0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
		Total Pressure (in.wg.)	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
34 x 34	7.68	CFM	2304	3072	3840	4608	5376	6144	7680	9216	10752
		Throw (ft)	30-47-88	42-63-102	53-79-114	63-88-125	74-95-135	83-102-144	93-114-161	102-125-176	110-135-191
36 x 34	8.14	CFM	2442	3256	4070	4884	5698	6512	8140	9768	11396
		Throw (ft)	30-49-91	43-65-105	54-81-117	65-91-128	76-98-139	86-105-148	98-117-166	105-128-182	113-139-196
42 x 30	8.38	CFM	2514	3325	4190	5028	5866	6704	8380	10056	11732
		Throw (ft)	31-49-92	44-66-106	55-82-119	66-92-130	77-100-141	87-106-151	97-119-168	106-130-184	115-141-199
36 x 36	8.63	CFM	2589	3452	4315	5178	6041	6904	8630	10356	12082
		Throw (ft)	31-50-94	45-67-108	56-84-121	67-94-132	78-101-143	88-108-153	99-121-171	108-132-187	117-143-202
42 x 34 48 x 30	9.6	CFM	2880	3840	4800	5760	6720	7680	9600	11520	13440
		Throw (ft)	33-53-99	47-71-114	59-88-127	71-99-140	82-107-151	93-114-161	104-127-180	114-140-197	123-151-213
38 x 38	9.64	CFM	2892	3856	4820	5784	6748	7712	9640	11568	13496
		Throw (ft)	33-53-99	47-71-114	59-88-128	71-99-140	83-107-151	93-114-161	104-128-181	114-140-198	123-151-214
42 x 36	10.1	CFM	3030	4040	5050	6060	7070	8080	10100	12120	14140
		Throw (ft)	34-54-101	48-72-117	60-91-131	72-101-143	85-109-155	95-117-165	107-131-185	117-143-202	126-155-219
46 x 34	10.45	CFM	3135	4180	5225	6270	7315	8360	10450	12540	14630
		Throw (ft)	34-55-103	49-74-119	61-92-113	74-103-146	86-111-157	97-119-168	109-133-188	119-146-206	128-157-222
42 x 38	10.67	CFM	3201	4268	5335	6402	7469	8536	10670	12804	14938
		Throw (ft)	35-56-104	50-74-120	62-93-134	74-104-147	87-112-159	98-120-170	110-134-190	120-147-208	130-159-225
40 x 40	10.7	CFM	3210	4280	5350	6420	7490	8560	10700	12840	14980
		Throw (ft)	35-56-104	50-75-120	62-93-134	75-104-147	87-113-159	98-120-170	110-134-190	120-147-208	130-159-225
48 x 36	11.57	CFM	3471	4628	5785	6942	8099	9256	11570	13884	16198
		Throw (ft)	36-58-108	52-78-125	65-97-140	78-108-153	90-117-165	102-125-177	114-140-198	125-153-217	135-165-234
42 x 42	11.82	CFM	3546	4728	5910	7092	8274	9456	11820	14184	16548
		Throw (ft)	37-59-109	52-78-126	65-98-141	78-109-155	91-118-167	103-126-179	115-141-200	126-155-219	137-167-236
44 x 44	12.99	CFM	3897	5196	6495	7794	9093	10392	12990	15588	18186
		Throw (ft)	38-62-115	55-82-133	68-103-148	82-115-162	96-124-175	108-133-187	121-148-210	133-162-230	143-175-248
48 x 42	13.54	CFM	4062	5416	6770	8124	9478	10832	13540	16748	18956
		Throw (ft)	39-63-117	56-84-135	70-105-151	84-117-66	98-127-189	110-135-191	124-151-214	135-166-234	146-179-253
46 x 46	14.22	CFM	4266	5688	7110	8532	9954	11376	14220	17064	19908
		Throw (ft)	40-64-120	57-86-139	72-107-155	86-120-170	100-130-183	113-139-196	127-115-219	139-170-240	150-183-259
48 x 46	14.85	CFM	4455	5940	7425	8910	10395	11880	14850	17820	20790
		Throw (ft)	41-66-123	59-88-142	73-110-158	88-123-174	102-133-187	116-142-200	129-158-224	142-174-245	153-187-265
48 x 48	15.50	CFM	4650	6200	7750	9300	10850	12400	15500	18600	21700
		Throw (ft)	42-67-125	60-90-145	75-112-162	90-125-177	105-135-192	118-145-205	132-162-229	145-177-251	156-192-271

Performance Notes

1. Data in table for 0° deflection.
2. Performance data includes damper.
3. All Pressure are in inches of water.
4. Core Velocities are in feet per minute.
5. Throw values are measured in feet for terminal velocities of 150 fpm (minimum), 100 fpm (middle), 50 fpm (maximum).
6. Throw data is based on supply air and room air being at isothermal conditions.

Correction Factor for WAG

Model	Damper	A _k /A _c	Throw	Total Pressure
WAG-2V, WAG-H	With	0.77	1.00	1.00
WAG-1V, WAG-1H	Without	0.82	0.98	0.88

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

Note: According to the tests of products, the data in this report had been conducted under Smart Flow Industry Co., Ltd. in a laboratory by the expert. The materials and equipment were selected and installed accurately. In order to acquire the result of the test especially. The use of product and installation in other types and surroundings would get the different results. Please use only these information as guidance or estimation.