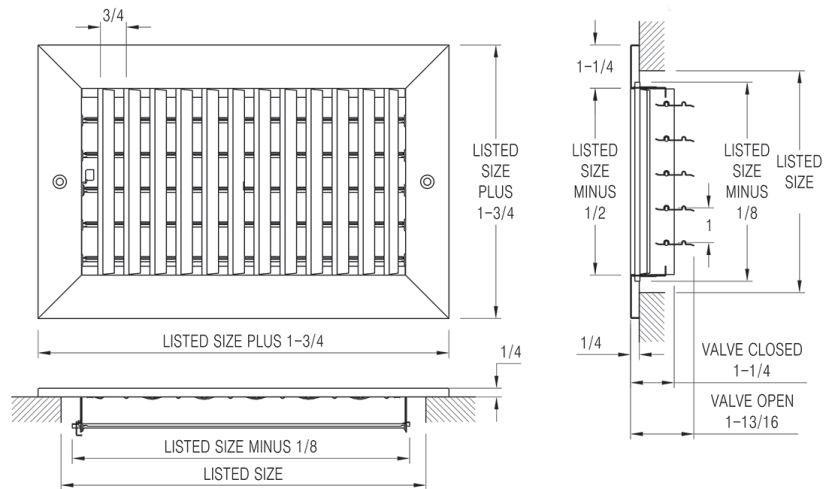


411 - Vertical Single Deflection Supply with Multi-Shutter Damper

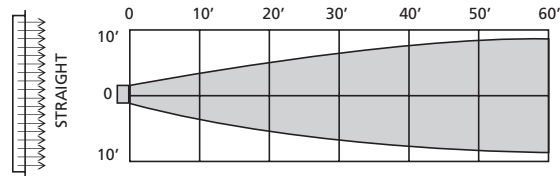
- Steel construction
- For sidewall or ceiling application
- Vertical, adjustable face bars
- Multi-shutter damper
- White durable finish



Available Sizes (in inches)											
HEIGHT	WIDTH										
	6	8	10	12	14	16	18	20	24	30	36
4		•	•	•	•	•					•
6	•	•	•	•	•	•	•	•	•	•	
8		•		•	•		•	•	•	•	
10			•	•	•		•	•	•	•	
12				•	•	•		•	•	•	
14					•			•			
16						•					
18							•				
20								•			
24									•		
25											

ENGINEERING

A DEFLECTION

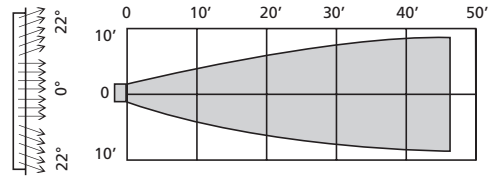


DEFLECTION A 411 - VERTICAL SINGLE DEFLECTION SUPPLY WITH MULTI-SHUTTER DAMPER

FACE VELOCITY		400	500	600	700	800	900	1000	1100	1200	1300	1400	1600	1800	2000
PRESSURE LOSS		0.012	0.016	0.024	0.032	0.040	0.052	0.064	0.076	0.092	0.108	0.124	0.164	0.204	0.252
8 x 4 Ak .162	cfm	65	81	97	113	130	146	162	178	194	211	227	259	292	324
	Throw	7	9	10	11	14	15	16	19	20	22	24	26	30	33
8 x 6 Ak .245	cfm	99	124	149	174	198	223	248	273	298	322	347	397	446	496
	Throw	8	11	13	14	16	19	20	23	24	27	29	33	37	41
10 x 6 Ak .315	cfm	126	157.5	189	220.5	252	283.5	315	346.5	378	409.5	441	504	567	630
	Throw	9	11	14	16	18	22	23	25	28	30	33	36	41	46
10 x 10 Ak .528	cfm	211	264	317	370	422	475	528	581	634	686	739	845	950	1056
	Throw	12	15	19	21	23	27	29	33	35	38	41	48	53	60
14 x 6 Ak .445	cfm	179	224	269	314	358	403	448	493	538	582	627	717	806	896
	Throw	11	13	16	19	23	24	27	30	33	35	39	43	50	54
14 x 8 Ak .591	cfm	236	296	355	414	473	532	591	650	709	768	827	946	1064	1182
	Throw	12	15	19	22	25	28	30	33	37	40	44	50	56	63
14 x 10 Ak .749	cfm	300	375	449	524	599	674	749	824	899	974	1049	1198	1348	1498
	Throw	14	17	20	24	27	31	34	38	41	45	48	55	62	69
14 x 14 Ak 1.071	cfm	428	536	643	750	857	964	1071	1178	1285	1392	1499	1714	1928	2142
	Throw	18	22	26	30	34	38	42	47	51	55	59	67	75	84
16 x 6 Ak .512	cfm	205	257	308	359	410	462	513	564	616	667	718	821	923	1026
	Throw	12	15	17	21	23	26	30	32	35	39	41	47	53	59
16 x 8 Ak .684	cfm	274	342	410	479	547	616	684	752	821	889	958	1094	1231	1368
	Throw	14	17	20	24	27	30	33	37	41	43	47	43	59	66
16 x 16 Ak 1.405	cfm	562	703	843	984	1124	1265	1405	1546	1686	1827	1967	2248	2529	2810
	Throw	19	24	29	34	39	45	50	54	59	64	68	77	86	95
18 x 6 Ak .570	cfm	228	285	342	399	456	513	570	627	684	741	798	912	1026	1140
	Throw	12	15	18	22	24	28	30	33	37	39	43	49	55	61
24 x 6 Ak .773	cfm	309	387	464	541	619	696	774	851	928	1006	1083	1238	1392	1547
	Throw	14	18	22	25	29	32	35	40	43	46	51	58	64	72
24 x 8 Ak 1.047	cfm	419	524	628	733	838	942	1047	1152	1256	1361	1466	1675	1885	2094
	Throw	17	21	25	30	33	37	42	46	50	54	59	66	75	83

ENGINEERING

C DEFLECTION

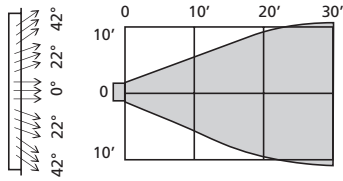


DEFLECTION C 411 - VERTICAL SINGLE DEFLECTION SUPPLY WITH MULTI-SHUTTER DAMPER

FACE VELOCITY		400	500	600	700	800	900	1000	1100	1200	1300	1400	1600	1800	2000
PRESSURE LOSS		0.012	0.016	0.024	0.032	0.040	0.052	0.064	0.076	0.092	0.108	0.124	0.164	0.204	0.252
8 x 4 Ak .412	cfm	57	71	85	99	114	128	142	156	170	185	199	227	256	284
	Throw	5	6	8	9	10	11	13	14	15	17	18	20	22	25
8 x 6 Ak .216	cfm	86	108	130	151	173	194	216	238	259	281	302	346	389	432
	Throw	6	8	10	11	13	14	15	17	18	21	22	24	28	30
10 x 6 Ak .277	cfm	111	139	166	194	222	249	277	305	332	360	388	443	499	554
	Throw	7	9	10	12	14	16	17	19	22	22	24	27	32	34
10 x 10 Ak .465	cfm	186	233	279	326	372	419	465	512	558	605	651	744	837	930
	Throw	9	11	14	16	18	20	22	26	27	29	32	36	40	45
14 x 6 Ak .393	cfm	157	197	236	275	314	354	393	432	472	511	550	629	707	786
	Throw	8	10	13	14	17	19	20	24	25	27	30	33	38	42
14 x 8 Ak .519	cfm	208	260	311	363	415	467	519	571	623	675	727	830	934	1038
	Throw	10	12	14	17	19	21	23	26	29	31	34	39	43	47
14 x 10 Ak .676	cfm	270	338	406	473	541	608	676	744	811	879	946	1082	1217	1352
	Throw	11	14	16	19	21	24	27	29	31	34	38	42	49	54
14 x 14 Ak .901	cfm	360	450	540	630	720	810	901	991	1081	1171	1261	1441	1621	1801
	Throw	14	16	20	23	26	29	33	37	39	42	46	52	59	65
16 x 6 Ak .450	cfm	180	225	270	315	360	405	450	495	540	585	630	720	810	900
	Throw	9	11	13	16	18	21	22	24	27	28	32	36	39	45
16 x 8 Ak .684	cfm	274	342	410	479	547	616	684	752	821	889	958	1094	1231	1368
	Throw	10	12	15	18	20	23	26	28	31	34	37	42	48	53
16 x 16 Ak 1.178	cfm	471	589	707	825	942	1060	1178	1296	1414	1531	1649	1885	2120	2356
	Throw	17	19	21	26	28	33	36	39	43	47	50	57	64	73
18 x 6 Ak .493	cfm	197	247	296	345	395	444	494	543	592	642	691	790	888	987
	Throw	9	11	14	17	18	22	24	26	29	31	32	38	42	47
24 x 6 Ak .66	cfm	264	330	396	462	528	594	660	726	792	858	924	1056	1188	1320
	Throw	12	15	16	20	21	25	27	31	32	35	39	43	50	55
24 x 8 Ak .882	cfm	353	441	529	617	706	794	882	970	1058	1147	1235	1411	1588	1764
	Throw	15	17	19	23	25	29	31	36	39	41	44	51	57	64

ENGINEERING

E DEFLECTION

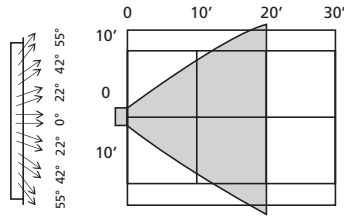


DEFLECTION E 411 - VERTICAL SINGLE DEFLECTION SUPPLY WITH MULTI-SHUTTER DAMPER

FACE VELOCITY		400	500	600	700	800	900	1000	1100	1200	1300	1400	1600	1800	2000
PRESSURE LOSS		0.012	0.016	0.024	0.032	0.040	0.052	0.064	0.076	0.092	0.108	0.124	0.164	0.204	0.252
8 x 4 Ak .125	cfm	50	63	75	88	100	113	125	138	150	163	175	200	225	250
	Throw	4	5	6	7	8	9	10	11	12	13	14	16	17	19
8 x 6 Ak .191	cfm	76	96	115	134	153	172	191	210	229	248	267	306	344	382
	Throw	5	6	7	8	10	11	12	13	14	15	16	18	20	23
10 x 6 Ak .246	cfm	98	123	148	172	197	221	246	271	295	320	344	394	443	492
	Throw	5	7	8	10	11	12	13	14	16	17	19	20	24	26
10 x 10 Ak .410	cfm	164	205	246	287	328	369	410	451	492	533	574	656	738	820
	Throw	7	9	10	11	14	15	17	19	20	22	23	27	31	34
14 x 6 Ak .347	cfm	139	174	208	243	278	312	347	382	416	451	486	555	625	694
	Throw	7	8	9	12	13	14	15	17	19	21	22	25	29	31
14 x 8 Ak .459	cfm	184	230	275	321	367	413	459	505	551	597	643	734	826	918
	Throw	7	9	11	12	14	16	18	19	21	22	25	28	32	35
14 x 10 Ak .581	cfm	232	291	349	407	465	523	581	639	697	755	813	930	1046	1162
	Throw	8	10	12	14	16	18	20	22	24	26	28	31	35	40
14 x 14 Ak .832	cfm	333	416	499	582	666	749	832	915	998	1082	1165	1331	1498	1664
	Throw	11	13	17	20	22	26	28	30	33	36	38	44	50	55
16 x 6 Ak .398	cfm	159	199	239	279	318	358	398	438	478	517	557	637	716	796
	Throw	7	8	10	12	13	15	17	18	19	22	23	27	30	32
16 x 8 Ak .531	cfm	212	266	319	372	425	478	531	584	637	690	743	850	956	1062
	Throw	8	10	12	14	16	18	20	22	23	25	27	31	35	40
16 x 16 Ak .091	cfm	436	546	655	764	873	982	1091	1200	1309	1418	1527	1746	1964	2182
	Throw	11	14	17	19	22	25	27	31	33	36	38	45	50	56
18 x 6 Ak .443	cfm	177	222	266	310	354	399	443	487	532	576	620	709	797	886
	Throw	7	9	10	12	14	15	18	21	22	23	24	29	31	35
24 x 6 Ak .599	cfm	240	300	359	419	479	539	599	659	719	779	839	958	1078	1198
	Throw	9	10	12	14	16	19	21	22	24	27	28	32	37	41
24 x 8 Ak .813	cfm	325	407	488	569	650	732	813	894	976	1057	1138	1301	1463	1626
	Throw	10	12	14	17	19	21	24	25	28	30	33	38	42	47

ENGINEERING

G DEFLECTION



DEFLECTION G 411 - VERTICAL SINGLE DEFLECTION SUPPLY WITH MULTI-SHUTTER DAMPER

FACE VELOCITY		400	500	600	700	800	900	1000	1100	1200	1300	1400	1600	1800	2000
PRESSURE LOSS		0.012	0.016	0.024	0.032	0.040	0.052	0.064	0.076	0.092	0.108	0.124	0.164	0.204	0.252
8 x 4 Ak .120	cfm	48	60	72	84	96	108	120	132	144	156	168	192	216	240
	Throw	3	4	5	5	6	7	7	8	9	10	10	11	13	14
8 x 6 Ak .175	cfm	70	88	105	123	140	158	175	193	210	228	245	280	315	350
	Throw	3	4	5	6	7	8	8	9	10	11	12	13	14	16
10 x 6 Ak .224	cfm	90	112	134	157	179	202	224	246	269	291	314	358	403	448
	Throw	4	5	6	7	8	8	9	10	11	12	13	14	16	17
10 x 10 Ak .374	cfm	150	187	224	262	299	337	374	411	449	486	524	598	673	748
	Throw	5	6	7	8	9	10	11	13	14	15	16	18	21	23
14 x 6 Ak .323	cfm	127	159	191	223	254	286	318	350	382	413	445	509	572	636
	Throw	5	6	7	8	9	10	11	12	13	14	15	16	19	20
14 x 8 Ak .419	cfm	168	210	251	293	335	377	419	461	503	545	587	670	754	838
	Throw	5	7	7	8	10	11	12	13	14	15	16	19	21	23
14 x 10 Ak .530	cfm	212	265	318	371	424	477	530	583	636	689	742	848	954	1060
	Throw	5	7	8	9	11	12	13	15	16	18	19	21	24	27
14 x 14 Ak 768	cfm	307	384	460	537	614	690	767	844	920	997	1074	1227	1381	1534
	Throw	7	8	9	2	13	15	16	18	19	21	22	26	29	31
16 x 6 Ak 362	cfm	145	181	217	253	290	326	362	398	434	471	507	579	652	724
	Throw	5	6	7	8	9	10	12	13	14	15	16	17	20	23
16 x 8 Ak 485	cfm	194	243	291	340	388	437	485	534	582	631	679	776	873	970
	Throw	5	6	8	9	10	11	12	15	16	17	19	21	23	26
16 x 16 Ak .990	cfm	396	495	594	693	792	891	990	1089	1188	1287	1386	1584	1782	1980
	Throw	7	9	12	13	15	17	19	20	22	24	26	30	34	37
18 x 6 Ak .403	cfm	161	202	242	282	322	363	403	443	484	524	564	645	725	806
	Throw	5	6	7	8	9	10	11	13	14	15	17	18	22	24
24 x 6 Ak .547	cfm	219	274	328	383	438	492	547	602	656	711	766	875	985	1094
	Throw	6	7	8	10	11	12	14	15	17	18	20	21	25	27
24 x 8 Ak .741	cfm	296	371	445	519	593	667	741	815	889	963	1037	1186	1334	1482
	Throw	7	8	10	11	14	15	16	18	19	20	23	26	28	32

Terminal Velocity of 75fpm