



# ENGINEERING DATA

## T50, T60, T52, T62, T54, T64

Nom Duct Size	Core Vel. (fpm)		300	400	500	600	700	800	1000	1200	1400
	Vel. Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
	Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
		22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
	45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606	

6x6	Airflow (CFM)		57	76	95	114	133	152	190	228	266
	Throw (ft.)	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
NC		-	-	-	15	20	24	31	36	41	

8x6	Airflow (CFM)		78	104	130	156	182	208	260	312	364
	Throw (ft.)	0°	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
		22.5°	4-7-13	6-9-15	8-11-16	9-13-18	11-14-19	12-15-21	13-16-23	15-18-25	16-19-27
		45°	2-4-7	3-5-8	4-7-9	5-7-10	6-8-11	7-8-12	8-9-13	8-10-15	9-11-16
NC		-	-	11	17	21	25	32	38	42	

10x6	Airflow (CFM)		102	136	170	204	238	272	340	408	476
	Throw (ft.)	0°	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
		22.5°	5-8-14	7-10-17	9-13-19	10-14-20	12-16-22	14-17-23	15-19-26	17-20-29	18-22-31
		45°	3-4-8	4-6-10	5-7-11	6-8-12	7-9-13	8-10-14	9-11-15	10-12-17	10-13-18
NC		-	-	12	18	23	27	33	39	43	

8x8	Airflow (CFM)		111	148	185	222	259	296	370	444	518
	Throw (ft.)	0°	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
		22.5°	5-8-15	7-11-17	9-13-19	11-15-21	13-16-23	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
NC		-	-	13	18	23	27	34	39	44	

12x6	Airflow (CFM)		123	164	205	246	287	328	410	492	574
	Throw (ft.)	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	8-11-18	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
NC		-	-	13	19	23	27	34	40	44	

14x6	Airflow (CFM)		144	192	240	288	336	384	480	576	672
	Throw (ft.)	0°	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
		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	21-26-37
		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
NC		-	-	14	19	24	28	35	40	45	

16x6 12x8	Airflow (CFM)		171	228	285	342	399	456	570	684	798
	Throw (ft.)	0°	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
		22.5°	6-10-19	9-13-22	11-17-24	13-19-26	16-20-28	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
NC		-	-	15	20	25	29	35	41	45	

**Notes:**

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition. Other inlet conditions may alter performance.
3. Performance data includes damper in the full open position.
4. 0°, 22.5° and 45° represent blade deflection angles.
5. Units: Face Velocity = fpm; Total Pressure = in. wc
6. Throw based on terminal velocities of 150 fpm, 100 fpm and 50 fpm.
7. NC is based upon 10dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands.
8. Dash "-" indicates NC value less than 10.



# ENGINEERING DATA

## T50, T60, T52, T62, T54, T64

Nom Duct Size	Core Vel. (fpm)		300	400	500	600	700	800	1000	1200	1400
	Vel. Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
	Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
		22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
	45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606	

10x10	Airflow (CFM)		177	236	295	354	413	472	590	708	826
	Throw (ft.)	0°	8-13-24	12-18-28	15-22-32	18-24-35	20-26-37	23-28-40	26-32-45	28-35-49	31-37-53
		22.5°	6-10-19	9-14-22	11-17-24	14-19-27	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
NC		-	-	15	20	25	29	35	41	46	

18x6	Airflow (CFM)		189	252	315	378	441	504	630	756	882
	Throw (ft.)	0°	8-14-25	12-18-29	15-23-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-51	32-39-55
		22.5°	7-11-20	9-14-23	12-18-25	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
NC		-	-	15	20	25	29	36	41	46	

20x6 12x10	Airflow (CFM)		216	288	360	432	504	576	720	864	1008
	Throw (ft.)	0°	9-15-27	13-19-31	16-24-35	19-27-38	23-29-41	25-31-44	28-35-49	31-38-54	24-41-58
		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°	4-7-12	6-9-14	7-11-16	9-12-17	10-13-19	11-14-20	13-16-22	14-17-24	15-19-26
NC		-	-	16	21	26	30	36	42	46	

22x6	Airflow (CFM)		231	308	385	462	539	616	770	924	1078
	Throw (ft.)	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	10-16-25	13-19-28	16-22-31	18-23-33	20-25-35	23-28-40	25-31-43	27-33-47
		45°	4-7-13	6-9-15	8-11-16	9-13-18	11-14-19	12-15-21	13-16-23	15-18-25	16-19-27
NC		-	-	16	21	26	30	37	42	47	

24x6 18x8 12x12	Airflow (CFM)		264	352	440	528	616	704	880	1056	1232
	Throw (ft.)	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	11-17-27	14-21-30	17-23-33	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
NC		-	-	16	22	26	30	37	43	47	

30x6 18x10	Airflow (CFM)		333	444	555	666	777	888	1110	1332	1554
	Throw (ft.)	0°	11-18-34	16-24-39	20-30-43	24-34-47	28-36-51	32-39-55	25-43-61	39-47-67	42-51-72
		22.5°	9-14-26	12-19-30	16-23-34	19-26-37	22-28-40	25-30-42	27-34-47	30-37-52	32-40-56
		45°	5-8-15	7-11-17	9-14-19	11-15-21	13-16-23	14-17-25	16-19-28	17-21-30	19-23-33
NC		-	-	17	23	27	31	38	44	48	

14x14	Airflow (CFM)		366	488	610	732	854	976	1220	1464	1708
	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
		22.5°	9-15-27	13-20-31	16-24-35	20-27-39	23-29-42	26-31-45	29-35-50	31-39-55	34-42-59
		45°	5-8-16	8-11-18	9-14-20	11-16-22	13-17-24	15-18-26	17-20-29	18-22-32	20-24-34
NC		-	11	18	23	28	32	39	44	49	

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition. Other inlet conditions may alter performance.
3. Performance data includes damper in the full open position.
4. 0°, 22.5° and 45° represent blade deflection angles.
5. Units: Face Velocity = fpm; Total Pressure = in. wc
6. Throw based on terminal velocities of 150 fpm, 100 fpm and 50 fpm.
7. NC is based upon 10dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands.
8. Dash "-" indicates NC value less than 10.



# ENGINEERING DATA

## T50, T60, T52, T62, T54, T64

Nom Duct Size	Core Vel. (fpm)		300	400	500	600	700	800	1000	1200	1400
	Vel. Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
	Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
		22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
	45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606	

36x6 27x8 18x12	Airflow (CFM)		405	540	675	810	945	1080	1350	1620	1890
	Throw (ft.)	0°	12-20-37	18-26-43	22-33-48	26-37-52	31-40-57	25-43-60	39-48-68	43-52-74	46-57-80
		22.5°	10-15-29	14-21-33	17-26-37	21-29-41	24-31-44	27-33-47	30-37-52	33-41-57	36-44-62
		45°	6-9-17	8-12-19	10-15-21	12-17-24	14-18-25	16-19-27	18-21-30	19-24-33	21-25-36
NC		-	12	18	24	28	32	39	44	49	

22x10	Airflow (CFM)		411	548	685	822	959	1096	1370	1644	1918
	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
		22.5°	10-16-29	14-21-33	17-26-37	21-29-41	24-31-44	27-33-47	30-37-53	33-41-58	36-44-62
		45°	6-9-17	8-12-19	10-15-22	12-17-24	14-18-26	16-19-27	18-22-31	19-24-34	21-26-36
NC		-	12	18	24	28	32	39	44	49	

30x8 24x10	Airflow (CFM)		447	596	745	894	1043	1192	1490	1788	2086
	Throw (ft.)	0°	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
		22.5°	10-16-30	14-22-35	18-27-39	22-30-43	25-33-46	28-35-49	32-39-55	35-43-60	38-46-65
		45°	6-9-17	8-13-20	10-16-23	13-17-25	15-19-27	16-20-29	18-23-32	20-25-35	22-27-38
NC		-	12	19	24	29	33	39	45	49	

42x6 18x14	Airflow (CFM)		477	636	795	954	1113	1272	1590	1908	2256
	Throw (ft.)	0°	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
		22.5°	10-17-31	15-22-36	19-28-40	22-31-44	26-34-48	29-36-51	33-40-57	36-44-62	39-48-67
		45°	6-10-18	9-13-21	11-16-23	13-18-26	15-20-28	17-21-30	19-23-33	21-26-36	23-28-39
NC		-	12	19	24	29	33	40	45	50	

16x16	Airflow (CFM)		486	648	810	972	1134	1296	1620	1944	2268
	Throw (ft.)	0°	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
		22.5°	11-17-31	15-22-36	19-28-41	23-31-44	26-34-48	30-36-51	33-41-57	36-44-63	39-48-68
		45°	6-10-18	9-13-21	11-16-24	13-18-26	15-20-28	17-21-30	19-24-33	21-26-36	23-28-39
NC		-	12	19	24	29	33	40	45	50	

48x6 36x8 24x12 18x16	Airflow (CFM)		546	728	910	1092	1274	1456	1820	2184	2548
	Throw (ft.)	0°	14-23-43	20-31-50	26-38-55	31-43-61	36-46-66	41-50-70	45-55-78	50-61-86	54-66-93
		22.5°	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
		45°	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
NC		-	13	19	25	30	34	40	46	50	

18x18	Airflow (CFM)		621	828	1035	1242	1449	1656	2070	2484	2898
	Throw (ft.)	0°	15-25-46	22-33-53	27-41-59	33-46-65	38-49-70	43-53-75	48-59-84	53-65-92	57-70-99
		22.5°	12-19-36	17-25-41	21-32-46	25-36-50	30-38-54	33-41-58	37-46-65	41-50-71	44-54-77
		45°	7-11-21	10-15-24	12-18-27	15-21-29	17-22-31	19-24-34	22-27-38	24-29-41	26-31-45
NC		-	13	20	25	30	34	41	46	51	

**Notes:**

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition. Other inlet conditions may alter performance.
3. Performance data includes damper in the full open position.
4. 0°, 22.5° and 45° represent blade deflection angles.
5. Units: Face Velocity = fpm; Total Pressure = in. wc
6. Throw based on terminal velocities of 150 fpm, 100 fpm and 50 fpm.
7. NC is based upon 10dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands.
8. Dash "-" indicates NC value less than 10.



# ENGINEERING DATA

## T50, T60, T52, T62, T54, T64

Nom Duct Size	Core Vel. (fpm)		300	400	500	600	700	800	1000	1200	1400
	Vel. Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
	Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
		22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
	45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606	

42x8 24x14	Airflow (CFM)		642	856	1070	1284	1498	1712	2140	2568	2996
	Throw (ft.)	0°	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
		22.5°	12-19-36	17-26-42	22-32-47	26-36-51	30-39-55	32-42-59	38-47-66	45-51-72	45-55-78
		45°	7-11-21	10-15-24	13-19-27	15-21-30	18-23-32	20-24-34	22-27-38	24-30-42	26-32-45
NC		-	13	20	26	30	34	41	46	51	

36x10 30x12	Airflow (CFM)		687	916	1145	1374	1603	1832	2290	2748	3206
	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
		22.5°	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
		45°	7-12-22	10-16-25	13-19-28	16-22-31	18-23-33	20-25-35	23-28-40	25-31-43	27-33-47
NC		-	14	20	26	30	34	41	47	51	

48x8 24x16	Airflow (CFM)		738	984	1230	1476	1722	1968	2460	2952	3444
	Throw (ft.)	0°	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
		22.5°	13-21-39	18-28-45	23-35-50	28-39-55	32-42-59	36-45-63	41-50-71	45-55-77	48-59-84
		45°	8-12-22	11-16-26	13-20-29	16-22-32	19-24-34	21-26-37	24-29-41	26-32-45	28-34-49
NC		-	14	21	26	31	35	41	47	51	

20x20	Airflow (CFM)		771	1028	1285	1542	1799	2056	2570	3084	3598
	Throw (ft.)	0°	17-27-51	24-37-59	30-46-66	37-51-75	43-55-78	48-59-83	54-66-93	59-72-102	64-78-110
		22.5°	13-21-40	19-28-46	24-35-51	28-40-56	33-43-60	37-46-65	42-51-72	46-56-79	49-60-85
		45°	8-12-23	11-16-27	14-21-30	16-23-32	19-25-35	22-27-38	24-30-42	27-32-46	29-35-50
NC		-	14	21	26	31	35	42	47	52	

36x12 24x18	Airflow (CFM)		825	1100	1375	1650	1925	2200	2750	3300	3850
	Throw (ft.)	0°	18-28-53	25-38-61	31-47-68	38-53-75	44-57-81	50-61-86	56-68-96	61-75-106	68-81-114
		22.5°	14-22-41	20-29-47	24-37-53	29-41-58	34-44-63	39-47-67	43-53-75	47-58-82	51-63-88
		45°	8-13-24	11-17-27	14-21-31	17-24-34	20-26-36	22-27-39	25-31-43	27-34-48	30-36-51
NC		-	15	21	27	31	35	42	47	52	

48x10 30x16 24x20	Airflow (CFM)		933	1244	1555	1866	2177	2488	3110	3732	4354
	Throw (ft.)	0°	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
		22.5°	15-23-44	21-31-50	26-39-56	31-44-62	36-47-66	41-50-71	46-56-79	50-62-87	54-66-94
		45°	8-14-25	12-18-29	15-23-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-51	32-39-55
NC		-	15	22	27	32	36	42	48	52	

22x22	Airflow (CFM)		942	1256	1570	1884	2198	2512	3140	3768	4396
	Throw (ft.)	0°	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
		22.5°	15-23-44	21-31-50	26-39-56	31-44-62	37-47-67	41-50-71	46-56-80	50-62-87	55-67-94
		45°	8-14-25	12-18-29	15-23-33	18-25-36	21-27-39	24-29-41	27-33-46	29-36-51	32-39-55
NC		-	15	22	27	32	36	42	48	53	

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition. Other inlet conditions may alter performance.
3. Performance data includes damper in the full open position.
4. 0°, 22.5° and 45° represent blade deflection angles.
5. Units: Face Velocity = fpm; Total Pressure = in. wc
6. Throw based on terminal velocities of 150 fpm, 100 fpm and 50 fpm.
7. NC is based upon 10dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands.
8. Dash "-" indicates NC value less than 10.



# ENGINEERING DATA

## T50, T60, T52, T62, T54, T64

Nom Duct Size	Core Vel. (fpm)		300	400	500	600	700	800	1000	1200	1400
	Vel. Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
	Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
		22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
	45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606	

42x12 36x14	Airflow (CFM)		966	1288	1610	1932	2254	2576	3220	3864	4508
	Throw (ft.)	0°	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
		22.5°	15-24-44	21-32-51	26-40-57	32-44-63	37-48-68	42-51-72	47-57-81	51-63-89	55-68-96
		45°	9-14-26	12-18-30	15-23-33	18-26-36	21-28-39	24-30-42	27-33-47	30-36-51	32-39-56
NC		-	15	22	27	32	36	43	48	53	

24x22	Airflow (CFM)		1029	1372	1715	2058	2401	2744	3430	4116	4802
	Throw (ft.)	0°	20-32-59	28-42-68	35-53-76	42-59-83	49-64-90	56-68-96	62-76-108	68-83-118	74-90-127
		22.5°	15-25-46	22-33-53	27-41-59	33-46-65	38-49-70	43-53-75	48-59-83	53-65-91	57-70-99
		45°	9-14-27	13-19-31	16-24-34	19-27-38	22-29-41	25-31-43	28-34-48	31-38-53	33-41-57
NC		-	15	22	28	32	36	43	48	53	

30x18	Airflow (CFM)		1050	1400	1750	2100	2450	2800	3500	4200	4900
	Throw (ft.)	0°	20-32-60	28-34-69	36-53-77	43-60-84	50-64-91	56-69-97	63-77-109	69-84-119	74-91-129
		22.5°	15-25-46	22-33-53	28-41-60	33-46-65	39-50-71	44-53-75	49-60-84	53-65-92	58-71-100
		45°	9-14-27	13-19-31	16-24-35	19-27-38	22-29-41	25-31-44	28-35-49	31-38-54	33-41-58
NC		-	16	22	28	32	36	43	48	53	

48x12 36x16 24x24	Airflow (CFM)		1125	1500	1875	2250	2625	3000	3750	4500	5250
	Throw (ft.)	0°	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
		22.5°	16-26-48	23-34-55	29-43-62	34-48-68	40-52-73	45-55-78	50-62-87	55-68-96	60-73-103
		45°	9-15-28	13-20-32	17-25-36	20-28-39	23-30-42	26-32-45	29-36-51	32-39-55	35-42-60
NC		-	16	22	28	33	37	43	49	53	

36x18	Airflow (CFM)		1266	1688	2110	2532	2954	3376	4220	5064	5908
	Throw (ft.)	0°	22-35-65	31-47-76	39-59-84	47-65-93	55-71-100	62-76-107	69-84-119	76-93-131	82-100-141
		22.5°	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
		45°	10-16-29	14-21-34	18-26-38	21-29-42	25-32-45	28-34-48	31-38-54	34-42-59	37-45-64
NC		-	16	23	28	33	37	44	49	54	

36x20 31x24	Airflow (CFM)		1413	1884	2355	2826	3297	3768	4710	5652	6594
	Throw (ft.)	0°	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
		22.5°	18-29-54	26-38-62	32-48-69	38-54-76	45-58-82	50-62-87	56-69-98	67-76-107	67-82-116
		45°	10-17-31	15-22-36	19-28-40	22-31-44	26-34-48	29-36-51	33-40-57	36-44-62	39-48-67
NC		-	17	23	29	33	37	44	50	54	

42x18	Airflow (CFM)		1482	1976	2470	2964	3458	3952	4940	5928	6916
	Throw (ft.)	0°	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
		22.5°	18-29-55	26-39-63	33-49-71	39-55-71	46-59-84	52-63-90	58-71-100	63-78-110	68-84-118
		45°	11-17-32	15-23-37	19-28-41	19-28-41	27-34-49	30-37-52	34-41-58	37-45-64	40-49-69
NC		-	17	24	24	34	38	44	50	54	

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition. Other inlet conditions may alter performance.
3. Performance data includes damper in the full open position.
4. 0°, 22.5° and 45° represent blade deflection angles.
5. Units: Face Velocity = fpm; Total Pressure = in. wc
6. Throw based on terminal velocities of 150 fpm, 100 fpm and 50 fpm.
7. NC is based upon 10dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands.
8. Dash "-" indicates NC value less than 10.



# ENGINEERING DATA

## T50, T60, T52, T62, T54, T64

Nom Duct Size	Core Vel. (fpm)		300	400	500	600	700	800	1000	1200	1400
	Vel. Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
	Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
		22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
45°		0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606	
28x28	Airflow (CFM)		1548	2064	2580	3096	3612	4128	5160	6192	7224
	Throw (ft.)	0°	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
		22.5°	19-30-56	27-40-65	33-50-72	40-56-79	47-61-86	53-65-92	59-72-102	65-79-112	70-86-121
		45°	11-17-33	16-23-38	19-29-42	23-33-46	27-35-50	31-38-53	34-42-59	38-46-65	41-50-70
NC			-	17	24	29	34	38	45	50	55
42x20 30x28	Airflow (CFM)		1653	2204	2755	3306	3857	4408	5510	6612	7714
	Throw (ft.)	0°	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
		22.5°	19-31-58	28-41-67	35-52-75	41-58-82	48-63-88	55-67-95	61-75-106	67-82-116	72-88-125
		45°	11-18-34	16-24-39	20-30-43	24-34-48	28-36-51	32-39-55	35-43-61	39-48-67	42-51-73
NC			-	17	24	30	34	38	45	50	55
48x18 36x24	Airflow (CFM)		1698	2264	2830	3396	3962	4528	5660	6792	7924
	Throw (ft.)	0°	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
		22.5°	20-32-59	28-42-68	35-53-76	42-59-83	49-63-90	55-68-96	62-76-107	68-83-117	73-90-127
		45°	11-18-34	16-24-39	20-31-44	24-34-48	28-37-52	32-39-56	36-44-62	39-48-68	43-52-74
NC			-	18	24	30	34	38	45	50	55
30x30	Airflow (CFM)		1782	2376	2970	3564	4158	4752	5940	7128	8316
	Throw (ft.)	0°	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
		22.5°	20-32-60	29-43-69	36-54-78	43-60-85	50-65-92	57-69-98	63-78-110	69-85-120	75-92-130
		45°	12-19-35	17-25-40	21-31-45	25-35-49	29-38-53	33-40-57	37-45-64	40-49-70	44-53-75
NC			-	18	24	30	34	38	45	51	55
42x24 36x28	Airflow (CFM)		1998	2664	3330	3996	4662	5328	6660	7992	9324
	Throw (ft.)	0°	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
		22.5°	21-34-64	30-46-74	38-57-82	46-64-90	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
NC			-	18	25	30	35	39	46	51	56
46x22	Airflow (CFM)		2004	2672	3340	4008	4676	5344	6680	8016	9352
	Throw (ft.)	0°	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
		22.5°	21-34-64	30-46-74	38-57-82	46-64-90	53-69-97	60-74-104	67-82-116	74-90-128	80-97-138
		45°	12-20-37	18-27-43	22-33-48	27-37-52	31-40-57	35-43-60	39-48-68	43-52-74	46-57-80
NC			-	18	25	30	35	36	46	51	56
32x32	Airflow (CFM)		2034	2712	3390	4068	4746	5424	6780	8136	9492
	Throw (ft.)	0°	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
		22.5°	22-34-64	31-46-74	38-57-83	46-64-91	54-69-98	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
NC			-	18	25	30	35	39	46	51	56

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition. Other inlet conditions may alter performance.
3. Performance data includes damper in the full open position.
4. 0°, 22.5° and 45° represent blade deflection angles.
5. Units: Face Velocity = fpm; Total Pressure = in. wc
6. Throw based on terminal velocities of 150 fpm, 100 fpm and 50 fpm.
7. NC is based upon 10dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands.
8. Dash "-" indicates NC value less than 10.



# ENGINEERING DATA

## T50, T60, T52, T62, T54, T64

Nom Duct Size	Core Vel. (fpm)		300	400	500	600	700	800	1000	1200	1400
	Vel. Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
	Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
		22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
	45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606	

36x30	Airflow (CFM)		2148	2864	3580	4296	5012	5728	7160	8592	10024
	Throw (ft.)	0°	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
		22.5°	22-35-66	32-47-76	39-59-85	47-66-93	55-71-101	62-76-108	70-85-121	76-93-132	82-101-143
		45°	13-21-38	18-27-44	23-34-50	27-38-54	32-41-59	36-44-63	40-50-70	44-54-77	48-59-83
NC		-	19	25	31	35	39	46	51	56	

48x24 36x32	Airflow (CFM)		2289	3052	3815	4578	5341	6104	7630	9156	10682
	Throw (ft.)	0°	29-47-88	42-63-102	52-79-114	63-88-124	73-95-134	83-102-144	93-114-161	102-124-176	110-134-147
		22.5°	23-37-68	33-49-79	41-61-88	49-68-96	57-74-104	64-79-111	72-88-124	79-96-136	85-104-147
		45°	13-21-40	19-28-46	24-35-51	28-40-56	33-43-60	37-46-65	42-51-72	46-56-79	49-60-86
NC		-	19	25	31	35	39	46	52	56	

34x34	Airflow (CFM)		2304	3072	3840	4608	5376	6144	7680	9216	10752
	Throw (ft.)	0°	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
		22.5°	23-37-68	33-49-79	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	24-36-51	28-40-56	33-43-61	37-46-65	42-51-73	46-56-79	50-61-86
NC		-	19	25	31	36	40	46	52	56	

36x34	Airflow (CFM)		2442	3256	4070	4884	5698	6512	8140	9768	11396
	Throw (ft.)	0°	30-49-91	43-65-105	54-81-117	65-91-128	76-98-139	86-105-148	96-117-166	105-128-182	113-139-196
		22.5°	24-38-70	34-50-81	42-63-91	50-70-100	59-76-108	66-81-115	74-91-129	81-100-141	88-108-152
		45°	14-22-41	20-29-47	24-37-53	29-41-58	34-44-62	39-47-67	43-53-75	47-58-82	51-62-88
NC		-	19	26	31	36	40	46	52	56	

42x30	Airflow (CFM)		2514	3352	4190	5028	5866	6704	8380	10056	11732
	Throw (ft.)	0°	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
		22.5°	24-38-71	34-51-82	43-64-92	51-71-101	60-77-109	67-82-117	75-92-130	82-101-143	89-109-154
		45°	14-22-41	20-30-48	25-37-54	30-41-59	35-45-63	39-48-68	44-54-76	48-59-83	52-63-90
NC		11	19	26	31	36	40	47	52	57	

36x36	Airflow (CFM)		2589	3452	4315	5178	6041	6904	8630	10356	12082
	Throw (ft.)	0°	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
		22.5°	24-39-72	35-52-84	43-65-94	52-72-103	61-78-111	68-84-118	76-94-132	84-103-145	90-111-157
		45°	14-23-42	20-30-49	25-38-54	30-42-60	35-45-64	40-49-69	44-54-77	49-60-84	53-64-91
NC		11	19	26	31	36	40	47	52	57	

42x34 48x30	Airflow (CFM)		2880	3840	4800	5760	6720	7680	9600	11520	13440
	Throw (ft.)	0°	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
		22.5°	26-41-76	36-55-88	46-68-99	55-76-108	64-83-117	72-88-125	81-99-140	88-108-153	95-117-165
		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
NC		11	20	26	32	36	40	47	53	57	

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition. Other inlet conditions may alter performance.
3. Performance data includes damper in the full open position.
4. 0°, 22.5° and 45° represent blade deflection angles.
5. Units: Face Velocity = fpm; Total Pressure = in. wc
6. Throw based on terminal velocities of 150 fpm, 100 fpm and 50 fpm.
7. NC is based upon 10dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands.
8. Dash "-" indicates NC value less than 10.



# ENGINEERING DATA

## T50, T60, T52, T62, T54, T64

Nom Duct Size	Core Vel. (fpm)		300	400	500	600	700	800	1000	1200	1400
	Vel. Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
	Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
		22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
	45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606	
38x38	Airflow (CFM)		2892	3856	4820	5784	6748	7712	9640	11568	13496
	Throw (ft.)	0°	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
		22.5°	26-41-77	37-55-88	46-69-99	55-77-108	64-83-117	72-88-125	81-99-140	88-108-153	96-117-166
		45°	15-24-44	21-32-51	27-40-57	32-44-63	37-48-68	42-51-73	47-57-81	51-63-89	55-68-96
	NC	11	20	26	32	36	40	47	53	57	
42x36	Airflow (CFM)		3030	4040	5050	6060	7070	8080	10100	12120	14140
	Throw (ft.)	0°	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
		22.5°	26-42-78	37-56-91	47-70-101	56-78-111	65-85-120	74-91-128	83-101-143	91-111-157	98-120-169
		45°	15-24-46	22-33-53	27-41-59	33-46-64	38-49-70	43-53-74	48-59-83	53-64-91	57-70-98
	NC	11	20	27	32	37	41	47	53	57	
46x34	Airflow (CFM)		3135	4180	5225	6270	7315	8360	10450	12540	14630
	Throw (ft.)	0°	34-55-103	49-74-119	61-92-133	74-103-146	86-111-157	97-119-168	109-133-188	119-146-206	128-157-222
		22.5°	27-43-80	38-57-92	48-71-103	57-80-113	67-86-122	75-92-130	84-103-146	92-113-160	99-122-172
		45°	16-25-46	22-33-53	28-41-60	33-46-66	39-50-71	44-53-76	49-60-85	53-66-93	58-71-100
	NC	11	20	27	32	37	41	47	53	58	
42x38	Airflow (CFM)		3201	4268	5335	6402	7469	8536	10670	12804	14938
	Throw (ft.)	0°	35-56-104	50-74-120	62-93-134	74-104-147	84-112-159	98-120-170	110-134-190	120-147-208	130-159-225
		22.5°	27-43-81	38-58-93	48-72-104	58-81-114	67-87-123	76-93-132	85-104-147	93-114-161	101-123-174
		45°	16-25-47	22-34-54	28-42-60	34-47-66	39-51-71	44-54-76	49-60-85	54-66-94	58-71-101
	NC	12	20	27	32	37	41	48	53	58	
40x40	Airflow (CFM)		3210	4280	5350	6420	7490	8560	10700	12840	14980
	Throw (ft.)	0°	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
		22.5°	27-43-81	39-58-93	48-72-104	58-81-114	67-87-123	76-93-132	85-104-147	93-114-161	101-123-174
		45°	16-25-47	22-34-54	28-42-61	34-47-66	39-51-72	44-54-77	49-61-86	54-66-94	58-72-101
	NC	12	20	27	32	37	44	48	53	58	
48x36	Airflow (CFM)		3471	4628	5785	6942	8099	9256	11570	13884	16198
	Throw (ft.)	0°	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
		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	29-44-63	35-49-69	41-53-74	46-56-80	51-63-89	56-69-97	61-74-105
	NC	12	21	27	33	37	41	48	53	58	
42x42	Airflow (CFM)		3546	4728	5910	7092	8274	9456	11820	14184	16548
	Throw (ft.)	0°	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
		22.5°	24-46-85	40-61-126	51-76-110	61-85-120	71-92-130	80-98-139	89-110-155	98-120-170	106-130-183
		45°	16-26-49	24-35-57	29-44-64	35-49-70	41-53-75	46-57-80	52-64-90	57-70-99	61-75-106
	NC	12	27	27	33	37	41	48	53	58	

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition. Other inlet conditions may alter performance.
3. Performance data includes damper in the full open position.
4. 0°, 22.5° and 45° represent blade deflection angles.
5. Units: Face Velocity = fpm; Total Pressure = in. wc
6. Throw based on terminal velocities of 150 fpm, 100 fpm and 50 fpm.
7. NC is based upon 10dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands.
8. Dash "-" indicates NC value less than 10.





# ENGINEERING DATA

## T50, T60, T52, T62, T54, T64

Nom Duct Size	Core Vel. (fpm)		300	400	500	600	700	800	1000	1200	1400
	Vel. Pressure		0.006	0.010	0.016	0.022	0.031	0.040	0.062	0.090	0.122
	Total Pressure	0°	0.016	0.029	0.046	0.066	0.090	0.117	0.183	0.263	0.358
		22.5°	0.018	0.033	0.051	0.074	0.100	0.131	0.204	0.294	0.401
	45°	0.028	0.049	0.077	0.111	0.152	0.198	0.309	0.445	0.606	

44x44	Airflow (CFM)		3897	5196	6495	7794	9093	10392	12990	15588	18186
	Throw (ft.)	0°	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
		22.5°	30-48-89	42-64-103	53-80-115	64-89-126	74-96-136	84-103-145	94-115-162	103-126-178	111-136-192
		45°	17-28-52	25-37-60	31-46-67	37-52-73	43-55-79	49-60-84	54-67-94	60-73-103	64-79-112
	NC	12	21	28	33	38	42	48	54	58	

48x42	Airflow (CFM)		4062	5416	6770	8124	9478	10832	13540	16248	18956
	Throw (ft.)	0°	36-63-117	58-84-135	70-105-151	84-117-166	98-127-179	110-135-191	124-151-214	135-166-234	146-179-253
		22.5°	30-49-91	43-65-105	54-81-117	65-91-128	76-98-139	86-105-148	96-117-166	105-128-182	113-139-196
		45°	18-28-53	25-38-61	31-47-68	38-53-75	44-57-81	50-61-86	56-68-96	61-75-105	68-81-114
	NC	13	21	28	33	38	42	49	54	59	

46x46	Airflow (CFM)		4266	5699	7110	8532	9954	11376	14220	17064	19908
	Throw (ft.)	0°	40-64-120	57-86-139	72-107-155	86-120-170	100-130-183	113-139-196	127-155-219	139-170-240	150-183-259
		22.5°	31-50-93	44-67-107	56-83-120	67-93-132	78-101-142	88-107-152	98-120-170	107-132-186	116-142-201
		45°	18-29-54	26-39-62	32-48-70	39-54-76	45-58-83	51-62-88	57-70-99	62-76-108	67-83-117
	NC	13	21	28	33	38	42	49	54	59	

48x46	Airflow (CFM)		4455	5940	7425	8910	10395	11880	14850	17820	20790
	Throw (ft.)	0°	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
		22.5°	32-51-95	45-68-110	57-85-123	68-95-134	79-103-145	90-110-155	100-123-174	110-134-190	119-145-205
		45°	18-30-55	26-40-64	33-49-71	40-55-78	46-60-84	52-64-90	58-71-101	64-78-110	69-84-119
	NC	13	22	28	34	38	42	49	54	59	

48x48	Airflow (CFM)		4650	6200	7750	9300	10850	12400	15500	18600	21700
	Throw (ft.)	0°	42-67-125	60-90-145	75-112-162	90-125-177	105-135-192	118-145-202	132-162-229	145-177-251	156-192-271
		22.5°	33-52-97	46-70-112	58-87-125	70-97-137	81-105-148	92-112-159	102-125-177	112-137-194	121-148-210
		45°	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
	NC	13	22	28	34	38	42	49	55	59	

Notes:

1. Tests conducted in accordance with ANSI/ASHRAE 70-1991 at isothermal conditions.
2. Tests conducted with a straight rigid inlet condition. Other inlet conditions may alter performance.
3. Performance data includes damper in the full open position.
4. 0°, 22.5° and 45° represent blade deflection angles.
5. Units: Face Velocity = fpm; Total Pressure = in. wc
6. Throw based on terminal velocities of 150 fpm, 100 fpm and 50 fpm.
7. NC is based upon 10dB room absorption (Re: 10<sup>-12</sup> watts) evaluated at 125 through 4000 Hz octave bands.
8. Dash "-" indicates NC value less than 10.