

ENVISIVENT™ AIR FLOW DATA

Air Supply Vents

Product Identifier	Opening Width [in]	Opening Height [in]	Core Area [ft²]	Open Area [sq²]	Core Velocity [FPM]	300	400	500	600	700	800	1000	1200	1400
					Core Velocity Pressure [“wc]	0.006	0.010	0.016	0.022	0.030	0.040	0.062	0.090	0.122
REM 10x4	9	3	0.1875	10.14	Flow [CFM]	39	53	66	79	92	105	132	158	184
					Static Pressure [“wc]	0.018	0.031	0.049	0.070	0.095	0.125	0.195	0.280	0.382
					Throw [ft] (150 100 50)	3 5 10	5 7 14	6 9 17	7 10 21	8 12 24	9 14 28	17 35	14 21 42	16 24 49
REM 12x4	11	3	0.2292	12.40	Flow [CFM]	45	60	75	90	105	120	150	180	210
					Static Pressure [“wc]	0.014	0.024	0.038	0.054	0.074	0.096	0.150	0.217	0.295
					Throw [ft] (150 100 50)	3 5 11	5 7 15	6 9 19	7 11 23	8 13 27	10 15 32	19 40	15 23 49	18 27 57
REM 10x6	9	5	0.3125	16	Flow [CFM]	63	85	106	127	148	169	212	254	296
					Static Pressure [“wc]	0.016	0.029	0.045	0.065	0.088	0.115	0.180	0.259	0.352
					Throw [ft] (150 100 50)	3 4 8	3 5 10	4 6 13	5 8 15	6 9 18	7 10 20	13 25	10 15 30	12 18 35
REM Dia6	6 Dia	6 Dia	0.1963	12.50	Flow [CFM]	39	52	65	78	91	104	131	157	183
					Static Pressure [“wc]	0.011	0.020	0.031	0.045	0.061	0.079	0.124	0.179	0.243
					Throw [ft] (150 100 50)	4 6 13	5 8 18	7 10 23	8 13 29	10 15 34	11 18 40	23 51	18 29 63	21 34 75

Air Return Vents

Product Identifier	Opening Width [in]	Opening Height [in]	Core Area [ft²]	Open Area [sq²]	Core Velocity [FPM]	300	400	500	600	700	800	1000	1200	1400
					Core Velocity Pressure [“wc]	0.006	0.010	0.016	0.022	0.030	0.040	0.062	0.090	0.122
PERM 14x8	12	7.5	0.625	41	Flow [CFM]	138	185	231	277	323	369	461	554	646
					Static Pressure [“wc]	0.025	0.044	0.069	0.099	0.135	0.176	0.275	0.396	0.539
PERM 20x6	20.5	6	0.854	51	Flow [CFM]	174	232	290	348	406	464	581	697	813
					Static Pressure [“wc]	0.025	0.044	0.068	0.098	0.134	0.175	0.273	0.393	0.535
PERM 30x8	28	6	1.167	68	Flow [CFM]	225	300	376	451	526	601	751	901	1052
					Static Pressure [“wc]	0.028	0.050	0.078	0.112	0.153	0.199	0.311	0.448	0.610
REM 14x8	12	8.75	0.729	47.4	Flow [CFM]	153	204	255	306	357	408	510	612	714
					Static Pressure [“wc]	0.027	0.048	0.076	0.109	0.148	0.194	0.303	0.436	0.594
REM 24x8	24	8	1.333	77.8	Flow [CFM]	267	356	445	534	623	712	890	1068	1246
					Static Pressure [“wc]	0.027	0.048	0.075	0.108	0.147	0.192	0.300	0.432	0.588
REM 30x8	28	8	1.556	90	Flow [CFM]	283	377	471	565	659	754	942	1130	1319
					Static Pressure [“wc]	0.024	0.042	0.065	0.094	0.128	0.167	0.261	0.376	0.512
REM 8x8	5.613	5.613	0.219	14.36	Flow [CFM]	48	64	80	96	112	128	160	192	224
					Static Pressure [“wc]	0.027	0.048	0.075	0.107	0.146	0.191	0.298	0.430	0.585
REM 10x10	7.645	7.645	0.406	26.9	Flow [CFM]	86	115	144	173	201	230	288	345	403
					Static Pressure [“wc]	0.023	0.040	0.063	0.090	0.123	0.160	0.250	0.361	0.491
REM 12x12	9.75	9.75	0.66	43.6	Flow [CFM]	140	187	234	281	328	374	468	561	655
					Static Pressure [“wc]	0.025	0.044	0.069	0.100	0.136	0.178	0.278	0.400	0.544

NOTES: The test procedures are based on ASHRAE 70.

Core Velocity– The average airstream velocity at the face of the grille, measured in feet per minute.

Core Velocity Pressure The dynamic pressure of the airstream at the grille face. This pressure is relative to the core velocity and reported in inches of water (‘‘wc).

Flow Rate– The volumetric rate of airflow through the grille, measured in cubic feet per minute (CFM).

Static Pressure– The air pressure difference across the grille at a given flow rate or velocity, measured in inches of water (‘‘wc).

Throw – The distance away from a supply grille (i.e. perpendicular to the grille face) where the airstream velocity has slowed to a particular envelope velocity.

*REM = REMOVABLE / PERM = PERMANENT

tested by:  Airflow Sciences Corporation