

ALZ SERIES Flush Surface-Matching Register

A Modern, Linear Register That Disappears Into Your Floor

The Airvector® **ALZ** is a flush surface-matching linear register engineered to blend seamlessly into your floor while delivering high-performance air distribution. Designed for professionals and demanding environments, **ALZ** combines minimalist aesthetics with durability and airflow efficiency.

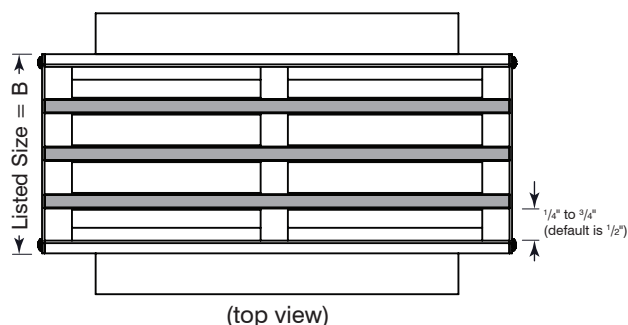
Unlike traditional grilles or framed registers, the **ALZ** sits perfectly level with the surface material, creating a clean, uninterrupted finish. Whether your space features hardwood, tile, luxury vinyl, or carpet, **ALZ** adapts to your flooring for a truly integrated look.



ALZ

FEATURES

- **Sleek Flush Design:** Mounts level with the floor and accommodates custom flooring inserts for a seamless, ultra-discreet architectural finish.
- **Built-In Floor Integration:** Flush-mounted within the finished floor for a discreet, architectural appearance.
- **Linear Format:** Offers a continuous, modern aesthetic and supports greater airflow coverage across larger openings.
- **Durable Construction:** Heavy-gauge steel construction with aluminum core and powder-coated finish for long-lasting performance.
- **Child & Pet Friendly:** Closed-channel design helps prevent toys, pet tags, or small items from falling into the duct.
- **HVAC-Compatible:** Designed to perform with most standard heating and cooling systems.



✓	NO. OF SLOTS	(B)							
		1/4" Flooring Inserts				1/2" Flooring Inserts			
		Slot Width				Slot Width			
		1/8"	1/4"	3/8"	1/2"	1/8"	1/4"	3/8"	1/2"
✓	03	1 ⁹ / ₁₆ "	1 ¹⁵ / ₁₆ "	2 ⁵ / ₁₆ "	2 ¹¹ / ₁₆ "				
✓	04	2"	2 ¹ / ₂ "	3"	3 ¹ / ₅ "				
✓	05	2 ⁷ / ₁₆ "	3 ¹ / ₁₆ "	3 ¹¹ / ₁₆ "	4 ⁵ / ₁₆ "				
✓	06	2 ⁷ / ₈ "	3 ⁵ / ₈ "	4 ³ / ₈ "	5 ¹ / ₈ "	4 ¹ / ₈ "	4 ⁷ / ₈ "	5 ⁵ / ₈ "	6 ³ / ₈ "
✓	07	3 ¹³ / ₁₆ "	4 ¹ / ₄ "	5 ¹ / ₈ "	6"	4 ⁷ / ₈ "	5 ³ / ₄ "	6 ⁵ / ₈ "	7 ¹ / ₂ "
✓	08	3 ⁵ / ₈ "	4 ¹³ / ₁₆ "	5 ¹³ / ₁₆ "	6 ¹³ / ₁₆ "	5 ⁹ / ₁₆ "	6 ⁹ / ₁₆ "	7 ⁹ / ₁₆ "	8 ⁹ / ₁₆ "
✓	09					6 ¹ / ₄ "	7 ³ / ₈ "	8 ¹ / ₂ "	9 ⁵ / ₈ "

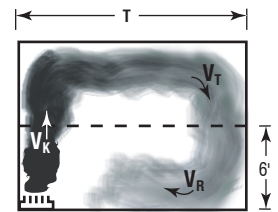
OPTIONS

- Available with 3 to 9 slots
- Slot widths: 1/8", 1/4", 3/8", or 1/2"
- Compatible with 1/4" or 1/2" flooring inserts
- Surface or plaster-in frame installation

Flush Surface-Matching

1/4" Flooring Inserts, Slot Width 1/8"

Slots #	Flooring Inserts #	Static Pressure (in. w.g.)	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08
3	2	Flow rate (cfm/ft)	1	12	17	22	25	29	32	35
		NC	19	23	23	26	26	28	29	31
		Throw (ft)	0 - 0	0 - 1	0 - 1	1 - 2	0 - 2	0 - 3	1 - 3	1 - 3
4	3	Flow rate (cfm/ft)	14	26	30	36	40	46	50	54
		NC	19	23	24	26	27	28	29	32
		Throw (ft)	1 - 1	1 - 3	1 - 3	2 - 4	2 - 4	1 - 3	1 - 4	3 - 6
5	4	Flow rate (cfm/ft)	34	40	44	54	58	64	65	73
		NC	19	24	24	27	27	29	30	33
		Throw (ft)	1 - 2	2 - 4	2 - 4	3 - 6	3 - 7	3 - 7	3 - 7	5 - 10
6	5	Flow rate (cfm/ft)	42	54	57	69	77	81	83	92
		NC	20	24	24	27	28	29	31	33
		Throw (ft)	2 - 3	2 - 5	3 - 6	4 - 8	5 - 10	5 - 10	5 - 11	7 - 14
7	6	Flow rate (cfm/ft)	56	68	71	85	96	98	102	111
		NC	20	24	24	27	28	29	32	34
		Throw (ft)	2 - 4	3 - 6	3 - 7	5 - 10	7 - 13	8 - 14	8 - 15	10 - 18
8	7	Flow rate (cfm/ft)	71	82	85	102	115	115	120	131
		NC	20	25	25	28	29	30	33	35
		Throw (ft)	3 - 6	4 - 7	4 - 8	6 - 12	9 - 16	10 - 18	10 - 19	12 - 22



V_T Terminal Velocity in fpm
 V_R Room Velocity in fpm
 V_K Outlet Velocity in fpm
 T Throw in feet at X and Y

1/4" Flooring Inserts, Slot Width 1/4"

Slots #	Flooring Inserts #	Static Pressure (in. w.g.)	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08
3	2	Flow rate (cfm/ft)	18	25	32	41	44	51	56	62
		NC	19	21	23	26	27	29	30	31
		Throw (ft)	2 - 3	2 - 4	3 - 6	4 - 7	4 - 8	5 - 9	6 - 10	7 - 12
4	3	Flow rate (cfm/ft)	33	42	49	61	68	75	81	89
		NC	19	22	24	27	28	30	31	32
		Throw (ft)	2 - 4	3 - 5	3 - 7	5 - 9	6 - 10	6 - 12	7 - 13	8 - 15
5	4	Flow rate (cfm/ft)	48	58	67	81	91	99	106	115
		NC	20	22	24	27	29	30	31	33
		Throw (ft)	2 - 5	3 - 6	4 - 8	6 - 11	7 - 13	8 - 15	9 - 17	11 - 19
6	5	Flow rate (cfm/ft)	64	75	84	101	115	123	131	142
		NC	20	23	24	28	30	31	32	34
		Throw (ft)	3 - 6	4 - 8	5 - 9	7 - 13	9 - 17	11 - 19	12 - 21	13 - 23
7	6	Flow rate (cfm/ft)	80	92	102	122	139	147	156	168
		NC	21	23	25	28	30	31	33	35
		Throw (ft)	3 - 7	4 - 9	5 - 10	8 - 15	11 - 20	13 - 23	14 - 25	16 - 27
8	7	Flow rate (cfm/ft)	96	109	119	142	164	170	182	195
		NC	21	23	25	29	31	32	34	36
		Throw (ft)	4 - 8	5 - 10	6 - 12	9 - 18	13 - 23	15 - 27	16 - 29	18 - 32

SYMBOLS

Throw Horizontal distances in feet to a terminal velocity of 150, 100 and 50 FPM
 NC Noise Criteria based on 10 db room absorption
 Static Pressure in inches of water.
 CFM/ft Airflow per linear foot.

CORRECTION FACTORS

Performance data obtained with 4 ft. long sections. For longer lengths, use the adjustments in adjacent table.

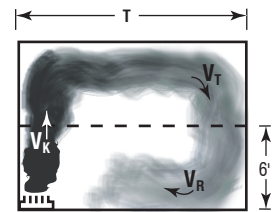
Section Length	4' - 6'	7' - 20'	21' - 100'
NC Adjustment	0	+5	+10
Throw Factor	1	x1.10	x1.15

- Data based on test results according to ANSI/ASHRAE 70-06.

Flush Surface-Matching

1/4" Flooring Inserts, Slot Width 3/8"

Slots #	Flooring Inserts #	Static Pressure (in. w.g.)	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08
3	2	Flow rate (cfm/ft)	31	37	47	59	66	75	83	91
		NC	20	21	23	26	28	30	32	32
		Throw (ft)	2 - 5	3 - 6	4 - 8	6 - 10	7 - 12	8 - 14	9 - 16	10 - 17
4	3	Flow rate (cfm/ft)	47	56	68	83	95	106	115	124
		NC	20	21	24	27	29	31	32	33
		Throw (ft)	3 - 5	4 - 7	5 - 9	6 - 12	8 - 15	10 - 17	11 - 19	12 - 21
5	4	Flow rate (cfm/ft)	64	76	90	108	124	137	147	159
		NC	20	22	24	28	30	32	33	34
		Throw (ft)	3 - 6	4 - 8	5 - 10	8 - 14	10 - 18	12 - 21	13 - 23	14 - 25
6	5	Flow rate (cfm/ft)	82	96	111	133	153	167	180	193
		NC	21	22	25	28	31	33	34	35
		Throw (ft)	3 - 7	5 - 9	6 - 12	9 - 17	12 - 21	14 - 25	15 - 27	17 - 29
7	6	Flow rate (cfm/ft)	100	116	132	158	182	198	212	227
		NC	21	22	25	29	32	34	35	37
		Throw (ft)	4 - 8	5 - 11	7 - 13	10 - 19	14 - 25	16 - 29	18 - 31	20 - 34
8	7	Flow rate (cfm/ft)	118	135	154	183	211	229	244	261
		NC	21	23	25	29	33	34	36	38
		Throw (ft)	4 - 9	6 - 12	7 - 14	11 - 22	15 - 28	18 - 33	20 - 36	22 - 39



V_T Terminal Velocity in fpm
 V_R Room Velocity in fpm
 V_K Outlet Velocity in fpm
 T Throw in feet at X and Y

1/4" Flooring Inserts, Slot Width 1/2"

Slots #	Flooring Inserts #	Static Pressure (in. w.g.)	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08
3	2	Flow rate (cfm/ft)	38.84		57.41	70.87	80.69	91.05	101.14	109.37
		NC	19.7	20.0	23.2	26.5	28.6	30.8	32.6	31.8
		Throw (ft)	3 - 6	4 - 7	5 - 9	7 - 12	8 - 15	10 - 17	12 - 20	13 - 21
4	3	Flow rate (cfm/ft)	57	68	83	100	115	129	141	151
		NC	20	21	24	27	30	32	34	33
		Throw (ft)	3 - 6	4 - 8	5 - 10	8 - 14	10 - 18	12 - 21	13 - 23	15 - 25
5	4	Flow rate (cfm/ft)	77	90	108	129	149	166	180	192
		NC	21	21	24	28	31	33	35	35
		Throw (ft)	3 - 7	5 - 9	6 - 12	9 - 17	12 - 21	14 - 24	15 - 27	17 - 29
6	5	Flow rate (cfm/ft)	96	113	133	158	183	204	219	234
		NC	21	22	25	29	32	34	36	37
		Throw (ft)	4 - 8	5 - 11	7 - 13	10 - 19	13 - 25	16 - 29	18 - 32	20 - 34
7	6	Flow rate (cfm/ft)	116	136	158	188	218	242	259	276
		Sound (NC)	21	22	25	30	33	35	37	38
		Throw (ft)	4 - 9	6 - 12	8 - 15	11 - 22	15 - 29	18 - 33	20 - 36	22 - 39
8	7	Flow rate (cfm/ft)	136	158	184	217	252	280	299	317
		NC	22	23	26	30	34	37	38	40
		Throw (ft)	5 - 10	7 - 14	8 - 17	13 - 25	17 - 32	20 - 37	22 - 41	25 - 44

SYMBOLS

Throw Horizontal distances in feet to a terminal velocity of 150, 100 and 50 FPM
 NC Noise Criteria based on 10 db room absorption
 Static Pressure in inches of water.
 CFM/ft Airflow per linear foot.

CORRECTION FACTORS

Performance data obtained with 4 ft. long sections. For longer lengths, use the adjustments in adjacent table.

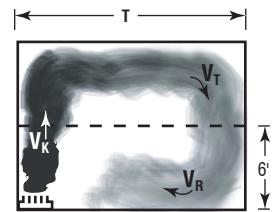
Section Length	4' - 6'	7' - 20'	21' - 100'
NC Adjustment	0	+5	+10
Throw Factor	1	x1.10	x1.15

- Data based on test results according to ANSI/ASHRAE 70-06.

Flush Surface-Matching

1/2" Flooring Inserts, Slot Width 1/8"

Slots #	Flooring Inserts #	Static Pressure (in. w.g.)	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08
6	5	Flow rate (cfm/ft)	86	94	101	108	116	123	130	138
		NC	20	22	25	27	28	29	30	35
		Throw (ft)	3 - 7	4 - 8	4 - 9	7	10 - 18	12 - 21	12 - 21	14 - 25
7	6	Flow rate (cfm/ft)	110	119	126	134	142	150	158	166
		NC	21	24	25	29	31	32	34	36
		Throw (ft)	4 - 9	5 - 10	5 - 11	9 - 17	13 - 24	16 - 28	17 - 29	19 - 32
8	7	Flow rate (cfm/ft)	134	142	151	160	168	177	186	194
		NC	21	26	28	29	31	33	35	37
		Throw (ft)	5 - 12	7 - 13	7 - 13	11 - 21	16 - 29	21 - 35	21 - 36	23 - 39
9	8	Flow rate (cfm/ft)	159	164	175	188	217	194	207	222
		NC	21	27	28	29	31	33	36	38
		Throw (ft)	6 - 14	8 - 15	8 - 15	13 - 24	20 - 34	25 - 42	26 - 43	28 - 46



V_T Terminal Velocity in fpm
 V_R Room Velocity in fpm
 V_K Outlet Velocity in fpm
 T Throw in feet at X and Y

1/2" Flooring Inserts, Slot Width 1/4"

Slots #	Flooring Inserts #	Static Pressure (in. w.g.)	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08
6	5	Flow rate (cfm/ft)	107	118	130	146	153	164	174	187
		NC	21	23	25	27	30	31	33	36
		Throw (ft)	4	5 - 11	6 - 12	9 - 18	13 - 24	17 - 29	17 - 30	19 - 33
7	6	Flow rate (cfm/ft)	133	143	158	175	185	195	208	223
		NC	21	23	26	28	31	33	34	38
		Throw (ft)	5	7 - 13	7 - 14	11 - 22	17 - 30	21 - 36	22 - 37	24 - 40
8	7	Flow rate (cfm/ft)	159	169	183	204	216	229	242	258
		NC	22	24	26	29	31	34	36	39
		Throw (ft)	6	8 - 15	8 - 16	14 - 25	20 - 36	25 - 43	26 - 44	29 - 48
9	8	Flow rate (cfm/ft)	185	194	215	234	247	258	276	294
		NC	22	25	27	31	33	35	36	40
		Throw (ft)	7	9 - 17	10 - 18	16 - 29	23 - 41	29 - 50	31 - 52	33 - 55

SYMBOLS

Throw Horizontal distances in feet to a terminal velocity of 150, 100 and 50 FPM
 NC Noise Criteria based on 10 db room absorption
 Static Pressure in inches of water.
 CFM/ft Airflow per linear foot.

CORRECTION FACTORS

Performance data obtained with 4 ft. long sections. For longer lengths, use the adjustments in adjacent table.

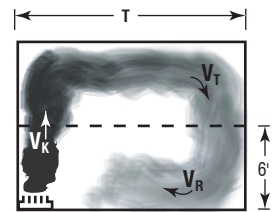
Section Length	4' - 6'	7' - 20'	21' - 100'
NC Adjustment	0	+5	+10
Throw Factor	1	x1.10	x1.15

• Data based on test results according to ANSI/ASHRAE 70-06.

Flush Surface-Matching

1/2" Flooring Inserts, Slot Width 3/8"

Slots #	Flooring Inserts #	Static Pressure (in. w.g.)	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08
6	5	Flow rate (cfm/ft)	126	139	149	177	205	208	222	238
		NC	21	23	26	29	31	33	35	38
		Throw (ft)	5 - 11	6 - 12	7 - 14	11 - 22	16 - 39	20 - 34	21 - 36	23 - 40
7	6	Flow rate (cfm/ft)	153	167	178	211	230	246	263	281
		NC	22	25	26	30	32	33	36	39
		Throw (ft)	6 - 13	7 - 15	9 - 16	13 - 25	19 - 35	24 - 41	26 - 44	28 - 47
8	7	Flow rate (cfm/ft)	180	194	206	243	262	281	301	320
		NC	22	25	26	31	33	34	37	41
		Throw (ft)	7 - 15	9 - 17	10 - 19	15 - 29	23 - 41	28 - 48	30 - 51	32 - 54
9	8	Flow rate (cfm/ft)	209	224	236	278	324	322	345	366
		NC	23	26	27	31	34	37	39	42
		Throw (ft)	8 - 17	10 - 19	11 - 21	18 - 33	26 - 47	32 - 56	35 - 59	37 - 63



V_T Terminal Velocity in fpm
 V_R Room Velocity in fpm
 V_K Outlet Velocity in fpm
 T Throw in feet at X and Y

1/2" Flooring Inserts, Slot Width 1/2"

Slots #	Flooring Inserts #	Static Pressure (in. w.g.)	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08
6	5	Flow rate (cfm/ft)	141	157	172	204	237	246	264	281
		NC	22	24	26	30	33	34	36	39
		Throw (ft)	5 - 12	7 - 14	8 - 16	13 - 24	18 - 33	22 - 39	24 - 41	26 - 45
7	6	Flow rate (cfm/ft)	171	188	205	242	281	291	311	331
		NC	22	24	26	31	35	35	38	41
		Throw (ft)	6 - 14	8 - 16	10 - 19	15 - 29	21 - 39	26 - 46	28 - 49	31 - 52
8	7	Flow rate (cfm/ft)	200	219	238	280	326	336	360	382
		NC	23	25	27	32	36	37	39	43
		Throw (ft)	7 - 16	9 - 18	11 - 21	17 - 33	25 - 45	30 - 53	33 - 57	35 - 60
9	8	Flow rate (cfm/ft)	230	250	271	319	371	381	407	432
		NC	23	26	28	33	38	38	41	44
		Throw (ft)	8 - 18	10 - 21	12 - 24	19 - 37	28 - 51	34 - 60	37 - 64	40 - 68

SYMBOLS

Throw Horizontal distances in feet to a terminal velocity of 150, 100 and 50 FPM
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CORRECTION FACTORS

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