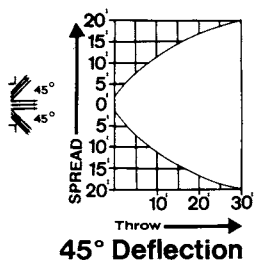
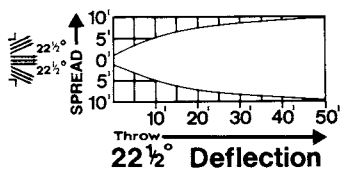
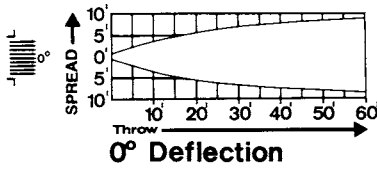


Guidance for reading tables on following pages

Variable deflection settings to satisfy all air distribution requirements are obtained by individual adjustment of airfoil blades in AIRGUIDE Supply Grilles and Registers.

To obtain long throw and narrow air pattern use 0° to 22½° deflection. For shorter throw and wide air patterns use up to 45° deflection, or more. Performance data shown in the selection charts on the following pages is based on double deflection grilles with vertical airfoil blades set at 0°, 22½° and 45°, as illustrated below.

MAXIMUM NOISE CRITERIA (NC) RECOMMENDATIONS – For AIRGUIDE Supply Grilles



The sound level of a supply grille or register is in direct ratio to the velocity of the air passing through it.

Air passing through a properly selected outlet will not add any appreciable noise to the sound level of the existing system.

APPLICATIONS

	N.C. LEVEL Below NC-25
Broadcast studios	
Residences, apartments, churches, hotel bedrooms	NC-25-30
Movie theatres, private offices	NC-30-35
General offices	NC-35-40
Department stores	NC-40-45
Factories, computer rooms, etc.	NC-45-50 & Over

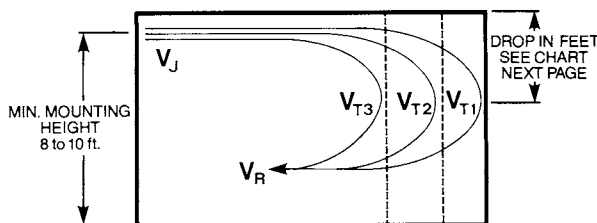
**AK – Area In. Sq. Ft.
For Sizes Not Shown**

LISTED HEIGHT

AK Factors

LISTED WIDTHS	LISTED HEIGHT											Deflection		
	4	5	6	8	10	12	14	16	18	20	24	0°	22½°	45°
4												.08	.07	.058
6												.11	.10	.082
8												.15	.14	.11
10												.18	.17	.14
12												.23	.22	.18
14												.30	.28	.22
18												.32	.30	.235
20												.42	.38	.31
24												.52	.48	.39
30												.65	.59	.48
38												.78	.72	.58
40												.98	.90	.75
44												1.14	1.04	.85
												1.25	1.12	.90
												1.49	1.36	1.07
												1.61	1.45	1.17
												2.07	1.86	1.50
												2.48	2.17	1.82
												2.94	2.65	2.10
												3.25	2.84	2.47
												3.97	3.57	3.27
												4.58	4.08	3.68
												5.08	4.58	4.18
												5.69	5.09	4.59
												6.08	5.60	4.79

VELOCITY AND THROW CHART



V_J – Outlet velocity as indicated by average velocity readings on Alnor Velometer with 2220A jet.

V_T – Terminal velocity of 50 ft. per min. used for maximum throw data and 100 ft. per min. for minimum.

V_R – Resulting room velocity, V_R of 25 to 35 ft. per min. depending on ceiling height.

V_{T1} – Throw for 0° deflection

V_{T2} – Throw for 22½° deflection

V_{T3} – Throw for 45° deflection

CORRECTION FACTORS TO PERFORMANCE DATA PAGES

For Model VML, V or H Single Deflection Grilles, effective area may be increased by 5%.

When OB Volume Control is used in conjunction with VH or HV Supply Grille models, the effective area is reduced by approximately 5%. However, the effect is negligible on throw and drop.

When OB damper is partially closed for balancing purposes, pressure drop and sound are affected and following correction factors should apply.

Damper Closed	1/4	1/3	1/2
Pressure Addition	.05	.15	.25
NC Addition	5	10	15

When Damper on VML model is partially closed for balancing purposes, in addition to pressure and sound corrections, the throw pattern will be reduced from 10% to 25% depending on amount of throttling. Drop will increase accordingly.