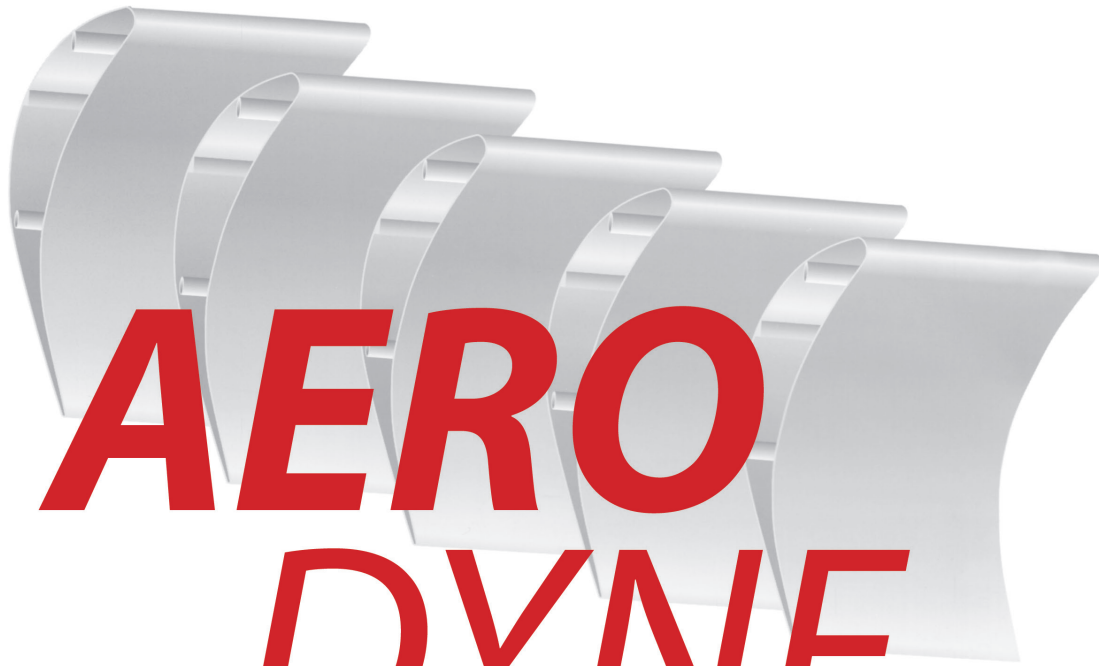




AERO DYNE

SOUND CONTROL

When Performance Matters

H•E•P Turning Vanes & Rail

(800) 522-2423 www.aero-dyne.net

High Efficiency Profile

H.E.P VANES

PROVIDE MAXIMUM TURNING EFFICIENCY

- The superior airfoil contour reduces relative pressure loss to the lowest level attainable.

PRECISE AERODYNAMIC DESIGN

- Results in greatest steadiness of flow through the cascade
- Eliminates breakaway of flow from surfaces on suction side
- Provides velocity distribution of greatest possible uniformity
- Maintains a consistently high degree of deflection accuracy

SUPERIOR QUALITIES

- Precise airfoil contour reduces generated sound power levels to the lowest attainable.
- Continuous internal tubes provide a stiffening and rigidity to the section which prevents distortion and fluttering under air flow.
- Design geometry adapts perfectly to all duct sizes, eliminating the need for two different vane sizes in the system.
- No other product provides comparable quality, structural integrity and performance.

SUGGESTED SPECIFICATION

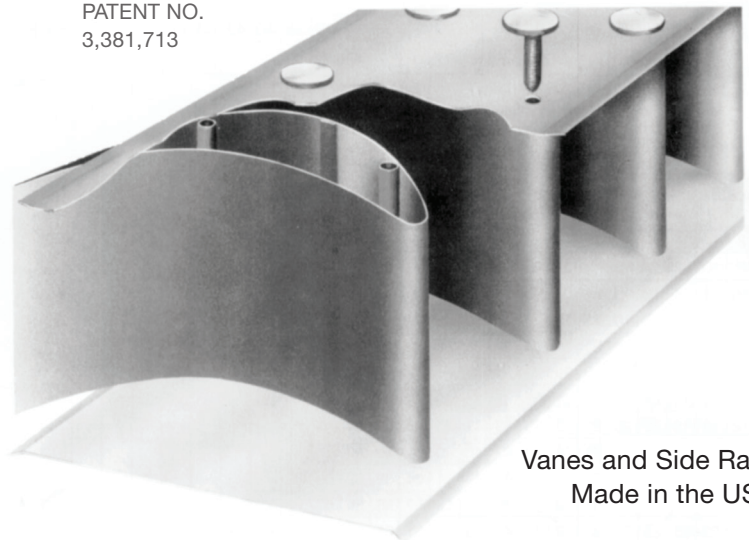
- Turning vanes shall be a true airfoil design; smoothly-rounded entry nose with extended trailing edge. Generated sound power level shall not exceed 54 decibels in band 4 at 2,000 FPM—duct size 24 x 24.
- Turning vanes shall be H•E•P—High Efficiency Profile—as manufactured by AERO/DYNE CO. or equivalent.
- Assemblies shall be fabricated with AERO/DYNE CO. side rails; vanes installed on design centers across the full diagonal dimension of the elbow.
- Submittals are required; proposed substitution shall include independent performance test data for pressure loss and generated sound power levels.

PERFORMANCE MATTERS

ASSEMBLY IS QUICK, EASY & POSITIVE

Fastener is simply driven through the pre-punched side rail slot and into the continuous tubular channel in the vane. This exclusive method provides rigid, permanently rattle-proof assemblies at the LOWEST POSSIBLE COST.

PATENT NO.
3,381,713



Vanes and Side Rails
Made in the USA

VEL-FPM	Generated Sound Power Levels—dB re10 ⁻¹² Watts							
	TEST UNIT	A	B	C	D	E	F	
1000	BAND	3	37	43	47	42	43	37
		4	35	43	42	42	41	37
		5	31	39	37	37	35	32
		6	22	29	27	26	25	24
1500	BAND	3	49	52	56	53	53	47
		4	47	53	53	51	53	46
		5	44	51	50	50	48	43
		6	39	44	45	42	43	38
2000	BAND	3	57	61	64	60	61	55
		4	54	59	61	59	60	54
		5	52	58	58	58	56	51
		6	49	53	55	52	53	47
2500	BAND	3	62	65	69	66	67	62
		4	60	64	67	64	66	60
		5	57	63	64	63	62	56
		6	54	59	62	58	60	53

* Data shown are extracts from ETL Testing Laboratories, Inc. Report No. 480837, Dated 9/15/87. Report is available upon request.

COMPARATIVE PERFORMANCE*

A		H•E•P 3" radius vanes spaced on centers of 2.4"
B		2" radius 'hollow' vanes spaced on centers of 2.5"
C		2" radius 'hollow' vanes spaced on centers of 1.5"
D		4" radius 'hollow' vanes spaced on centers of 3.5"
E		4" radius 'single-thickness' spaced on centers of 3.25"
F		Single-width radius elbow (r/w=1) without turning vanes

FITTING PRESSURE LOSS—INCHES W.G.						
TEST UNIT	DUCT AIR VELOCITY—FPM					
	500	1000	1500	2000	2500	3000
A	.011	.027	.060	.105	.17	.24
B	.025	.070	.160	.285	.43	.62
C	.015	.035	.075	.125	.19	.27
D	.014	.029	.065	.115	.18	.25
E	.01	.025	.055	.10	.16	.23
F	.028	.050	.115	.21	.32	.47

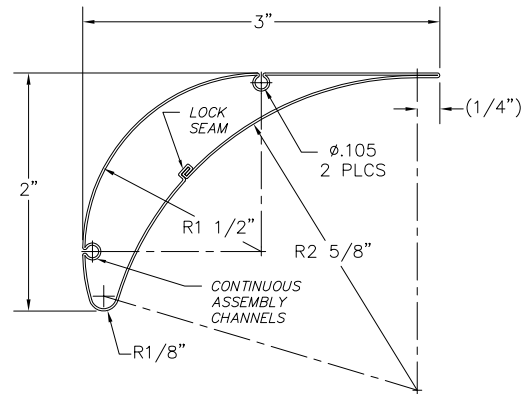
SPECIFICATIONS

VANES

- No. 27 gauge HDG G60 steel, furnished in 10-foot lengths.

SIDE RAIL

- No. 24 gauge hot-dipped galvanized steel, furnished in 100-foot coils with fasteners. Assembly slots are located on design center spacing of 2.4".



PACKAGING

VANES

- 200 lineal feet per carton (20 pieces).

SIDE RAIL

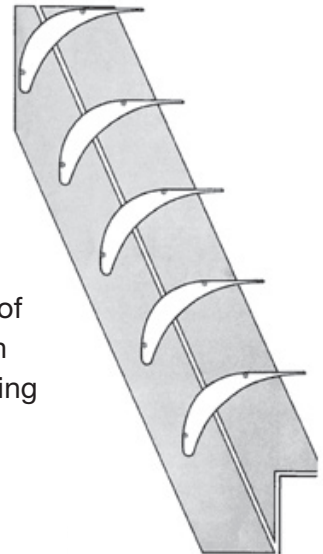
- Coil of 100 lineal feet per carton.

INSTALLATION IN UNEQUAL ELBOWS

An entire assembly of H•E•P turning vanes can be adjusted easily and precisely to the proper angle of attack, regardless of the inlet and outlet dimensions of the elbow.

A narrow strip (approx. 3/4") is sheared from the center of both top and bottom side rail pieces. Vanes are attached to them by the usual method of driving fasteners through the slots. All of the vanes in the assembly then move together as the correct alignment is made for the elbow, maintaining the leading and trailing edges in an exactly parallel relationship.

NO OTHER AVAILABLE PRODUCT PROVIDES THIS CAPABILITY.



For more information or to receive a free Engineer's Kit, call
(800) 522-2423 or visit **www.aero-dyne.net**