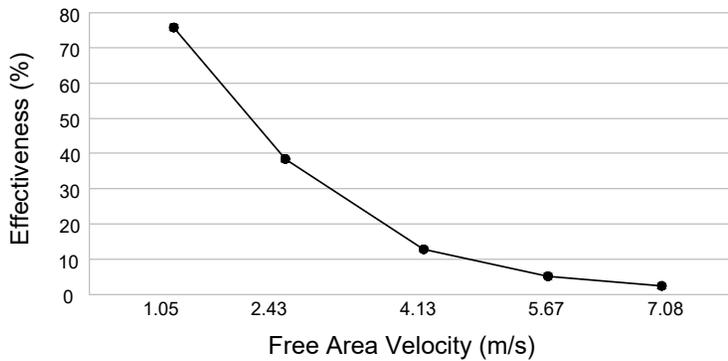## WIND DRIVEN SAND PERFORMANCE GRAPH


SAND REJECTION PERFORMANCE

Free Area Velocity(m/s) = Airflow rate(m³/s) / Free Area (m²)

Test No	Airflow Rate m³/s	Free Area Velocity (m/s)	Total Mass Injected g	Total mass Rejected g	Louver Effectiveness %
1	0.40	1.05	1000.3	761.2	76.10
2	0.94	2.43	1000.2	386.1	38.60
3	1.60	4.13	2000.7	257.8	12.89
4	2.19	5.67	2000.7	106.0	5.30
5	2.74	7.08	2000.9	47.2	2.36

Test Sample size is 48"x48" with a tolerance of +0, -0.25".
Wind driven sand performance data is based on intake performance.
Sand grade mass distribution per AMCA 511.

PRESSURE DROP GRAPH
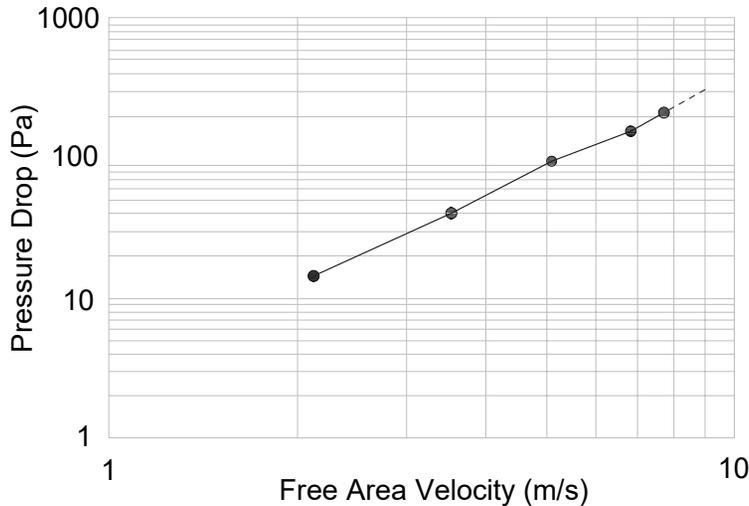
PRESSURE DROP OF LOUVER

Pressure Drop (Pa)	Airflow Rate (m³/s)	Free Area Velocity (m/s)
14.42	0.82	2.12
41.21	1.37	3.54
95.77	1.97	5.08
156.45	2.63	6.79
210.9	2.99	7.72

SUGGESTED SPECIFICATION

"Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary with fixed vertical blades formed or extruded and contained within a 3" frame. Where Duct Connection neck or filter rack is installed, frame shall be extended on the discharge side. Louver components (heads, jambs, sills, blades and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind load of 30lbs. per sq.ft."

"Published louver performance bearing the AMCA Certified Ratings Seal for Air Performance & Wind Driven Sand must be submitted for approval prior to fabrication and must demonstrate pressure drop less than the CVS model specified. "

"Louver shall be model STL 4.2-XT, extruded Aluminum 6063-T6 construction as follows:
Frame: 3" Deep, 0.08" nominal wall thickness with sand discharge points at the bottom
Blades: 0.08" nominal wall thickness, blades are spaced at 2" apart"

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