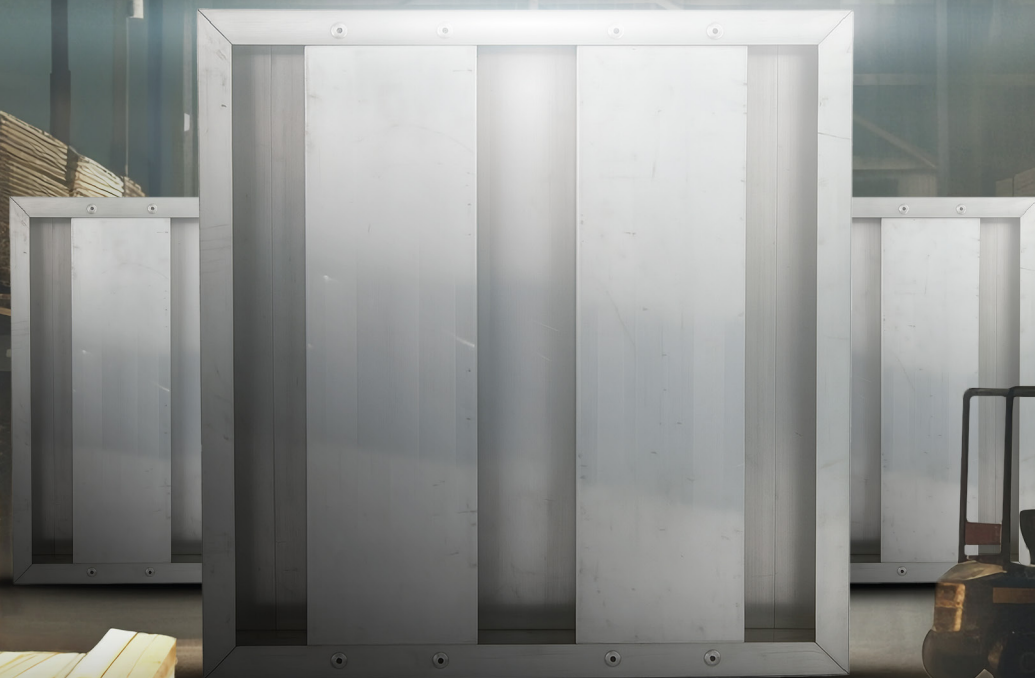




ENGINEERED SAND TRAP LOUVERS

**BUILT FOR PRECISION,
ENGINEERED FOR PERFORMANCE**



www.naffcoflow.com

ABOUT US



Introduction

NAFFCO Flow Control provides a complete solution for Fire Rated Cladding, along with customized system design and supply for the unique projects.

Since its inception, NAFFCO Flow Control has been continuously striving through its research and development to find out the ever changing needs of the market and cater to the same. The product portfolio offers a wide, unique and exclusive range of innovative, efficient and eco-friendly products.

Establishing the cladding division was the right move into a high demanding market for Aluminium Composite Panel and Rockwool Sandwich Panel.

Mission

To empower customer to secure life, environment, property and business by delivering high quality and innovative protection solutions and knowledge using world class manufacturing.

Vision

To be the world's number one provider of innovative solutions in protecting life, environment and property.

TABLE OF CONTENTS

NAFFCO Sand Trap Louvers - NFC STL AL 9710 04

Construction details

Engineering Performance Data 05

Sand Rejection Effectiveness Data

Air Performance Data / Pressure Drop v/s Free Area Velocity Data

Free Area Table 07

Construction Drawing 08

Model: NFC STL AL 9710

Model: NFC STL + C AL 9710

Installation / Assembly Drawing 09

Optional Construction

NAFFCO Sand Trap Louvers

01 NFC STL AL 9710

The **NAFFCO Sand Trap Louver** is a specially designed ventilation component used to separate sand, dust, and other airborne particles from the air before it enters HVAC systems. Engineered for use in environments prone to sandstorms or heavy dust—such as desert regions and industrial areas—it ensures clean airflow and protects air handling equipment from clogging and damage.

This louver operates by allowing air to pass through vertically arranged blades that trap sand and heavier particles at the bottom of the casing, then trapped particles are collected in a trough or other collection system for disposal. It requires minimal maintenance and is ideal for use in commercial, industrial, and residential applications where air purity and system longevity are critical.



CONSTRUCTION DETAILS

- * Frame: 1.5mm thickness extruded Aluminum Frame.
- * Blades: 1.5mm thickness extruded Aluminum, U-Shaped Blade.
- * Assembly: Mechanically fastened with Rivets.
- * Size: Minimum size 300x300 mm, maximum size 2400x2400 mm (single section).
- * Finish: Mill Finish.



NAFFCO FZCO certifies that the Model: NFC STL AL 9710 shown here is Licensed to bear the **AMCA Seal**. The rating shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Rating Program. The AMCA Certified Rating Seal applies to Wind Driven Sand and Air Performance ratings.

NAFFCO Sand Trap Louvers

02 Engineering Performance Data



SAND REJECTION EFFECTIVENESS DATA

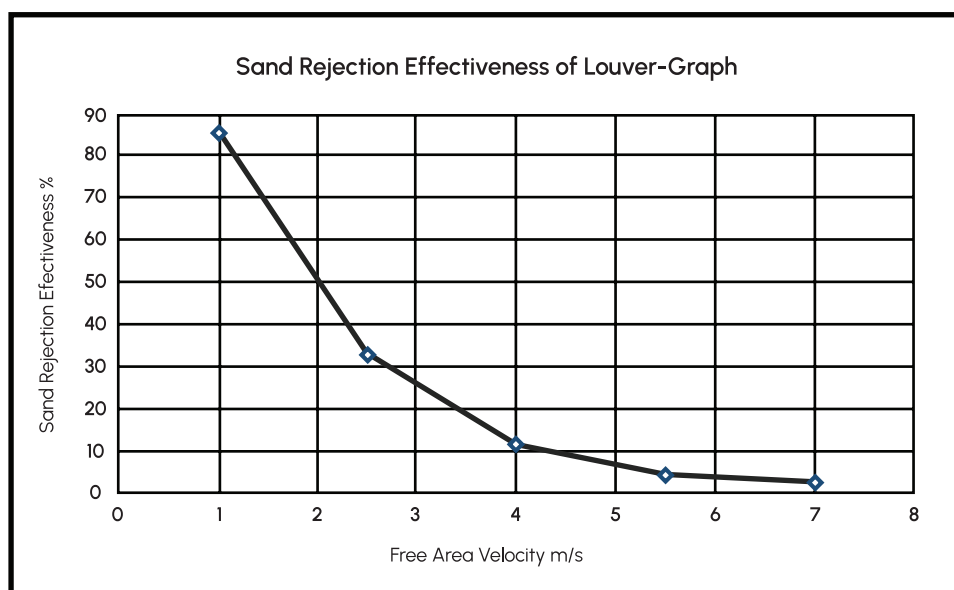
Sand Rejection Performance:

The sand Rejection performance is based on 48"x48" (1219x1219mm) louver area tested per ANSI/AMCA 500-L, figure 5.12/6.3, performance testing of louver is subject to wind driven sand at an airflow speed of 20-25 m/s.

The Sand grading used throughout the wind driven sand test procedure was between 76µm - 699µm as per AMCA 500L, Annex H, Table 8.

Sand Rejection Effectiveness of Louver					
Free Area Velocity, m/s	Weight of sand (g)	Discharge Duration, s	Sand Feed-rate, g/s	Sand Rejection Effectiveness	Effectiveness Class
1	1000	200	5	85.13	B
2.5	1000	75	13	32.92	D
4	2000	100	20	11.57	D
5.5	2002	70	29	4.59	D
7	2000	60	33	2.76	D

Grading of the sand used for wind driven sand performance tests was per ANSI / AMCA Standard 500-L.



NAFFCO FZCO certifies that the Model: NFC STL AL 9710 shown here is Licensed to bear the AMCA Seal. The rating shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Rating Program. The AMCA Certified Rating Seal applies to Wind Driven Sand and Air Performance ratings.

amca INTERNATIONAL
www.amca.org



NAFFCO Sand Trap Louvers

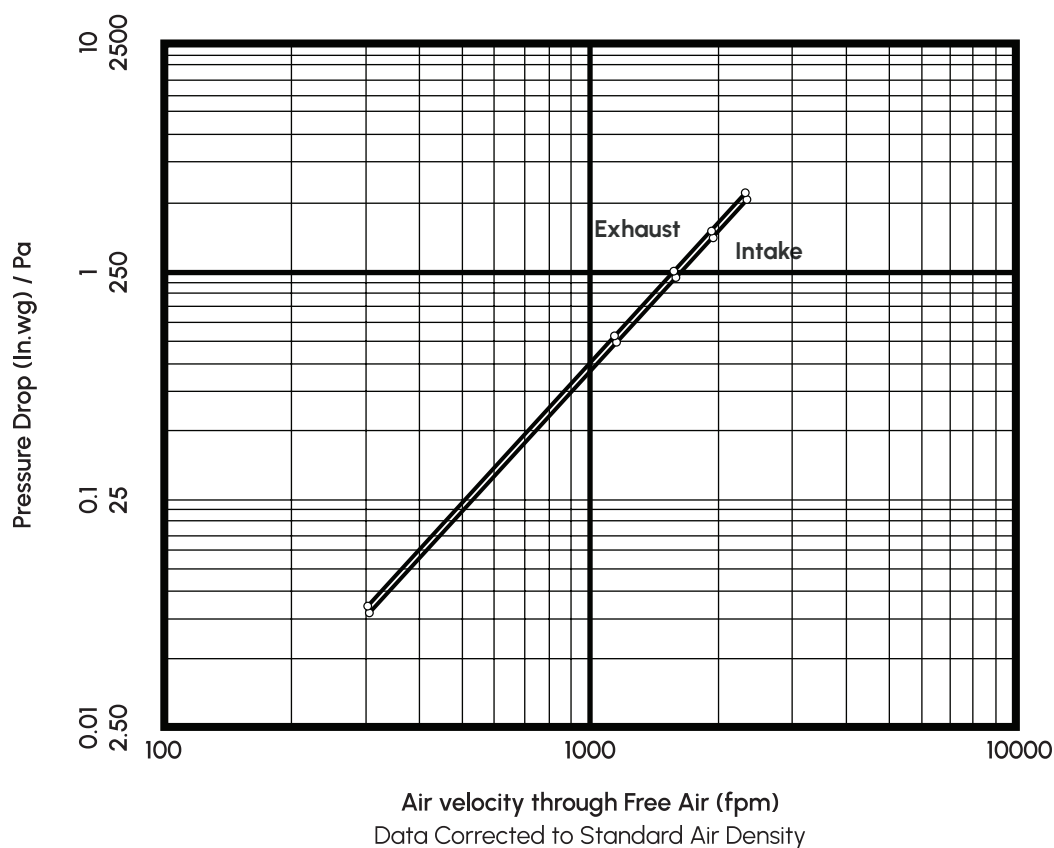
02 Engineering Performance Data

PRESSURE DROP V/S FREE AREA VELOCITY DATA



Air Performance: Tested for Air performance in accordance with ANSI/AMCA Standard 500-L, Figure 5.5. Test sample size is 48 in. x 48 in. **(1219mm x 1219mm)**. Sand Trap louver air performance data are based on intake performance.

Test Result			
Free Area Velocity		Pressure Drop	
(fpm)	(m/s)	(i.w.g)	(Pa)
304	1.54	0.03	7
1144	5.81	0.49	122
1589	8.07	0.95	236
1939	9.85	1.41	351
2336	11.86	2.07	515



NAFFCO FZCO certifies that the Model: NFC STL AL 9710 shown here is Licensed to bear the AMCA Seal. The rating shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Rating Program. The AMCA Certified Rating Seal applies to Wind Driven Sand and Air Performance ratings.

NAFFCO Sand Trap Louvers

03 Free Area Table

W H			Louver Outer Width Inch (mm)														
			12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
			300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400
Louver Outer Height Inch (mm)	12	300	0.02	0.03	0.05	0.06	0.07	0.08	0.10	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.20
	18	450	0.03	0.05	0.07	0.09	0.11	0.13	0.15	0.17	0.19	0.21	0.23	0.25	0.27	0.29	0.31
	24	600	0.05	0.07	0.10	0.13	0.15	0.18	0.21	0.24	0.26	0.29	0.32	0.34	0.37	0.40	0.43
	30	750	0.06	0.09	0.13	0.16	0.20	0.23	0.27	0.30	0.33	0.37	0.40	0.44	0.47	0.50	0.54
	36	900	0.07	0.11	0.15	0.20	0.24	0.28	0.32	0.36	0.40	0.45	0.49	0.53	0.57	0.61	0.65
	42	1050	0.08	0.13	0.18	0.23	0.28	0.33	0.38	0.43	0.47	0.52	0.57	0.62	0.67	0.72	0.77
	48	1200	0.10	0.15	0.21	0.27	0.32	0.38	0.43	0.49	0.55	0.60	0.66	0.71	0.77	0.82	0.88
	54	1350	0.11	0.17	0.24	0.30	0.36	0.43	0.49	0.55	0.62	0.68	0.74	0.81	0.87	0.93	0.99
	60	1500	0.12	0.19	0.26	0.33	0.40	0.47	0.55	0.62	0.69	0.76	0.83	0.90	0.97	1.04	1.11
	66	1650	0.13	0.21	0.29	0.37	0.45	0.52	0.60	0.68	0.76	0.83	0.91	0.99	1.07	1.14	1.22
	72	1800	0.15	0.23	0.32	0.40	0.49	0.57	0.66	0.74	0.83	0.91	1.00	1.08	1.17	1.25	1.34
	78	1950	0.16	0.25	0.34	0.44	0.53	0.62	0.71	0.81	0.90	0.99	1.08	1.17	1.27	1.36	1.45
	84	2100	0.17	0.27	0.37	0.47	0.57	0.67	0.77	0.87	0.97	1.07	1.17	1.27	1.37	1.47	1.56
	90	2250	0.18	0.29	0.40	0.50	0.61	0.72	0.82	0.93	1.04	1.14	1.25	1.36	1.47	1.57	1.68
	96	2400	0.20	0.31	0.43	0.54	0.65	0.77	0.88	0.99	1.11	1.22	1.34	1.45	1.56	1.68	1.79

Upper Numerals English Units (Inch) / Lower Numerals Metric Units (mm)
Free area in sqm.

Effective Pressure Areas for non-standard sizes can be interpolated from the above data.

Standard sizes:

Available in square and rectangular sizes.

All combination of width x height.

Non-standard sizes are available.

Refer drawing for listed size, neck size and actual face size.



NAFFCO FZCO certifies that the Model: NFC STL AL 9710 shown here is Licensed to bear the AMCA Seal. The rating shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Rating Program. The AMCA Certified Rating Seal applies to Wind Driven Sand and Air Performance ratings.

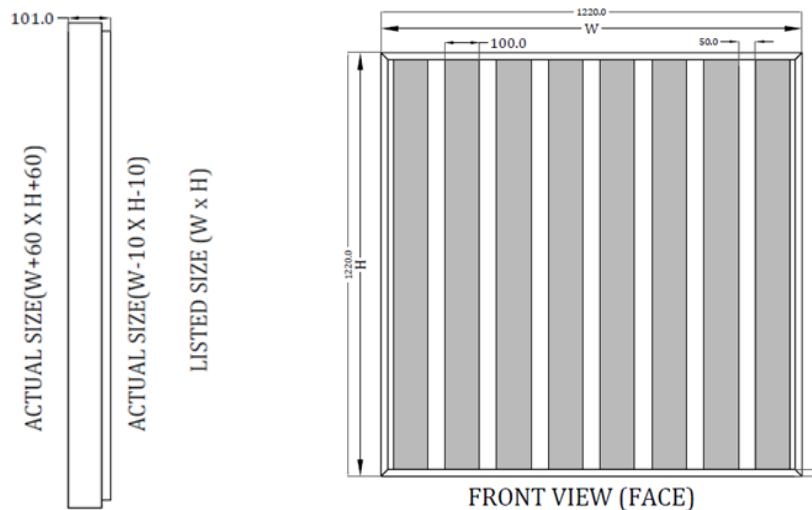
amca INTERNATIONAL
www.amca.org



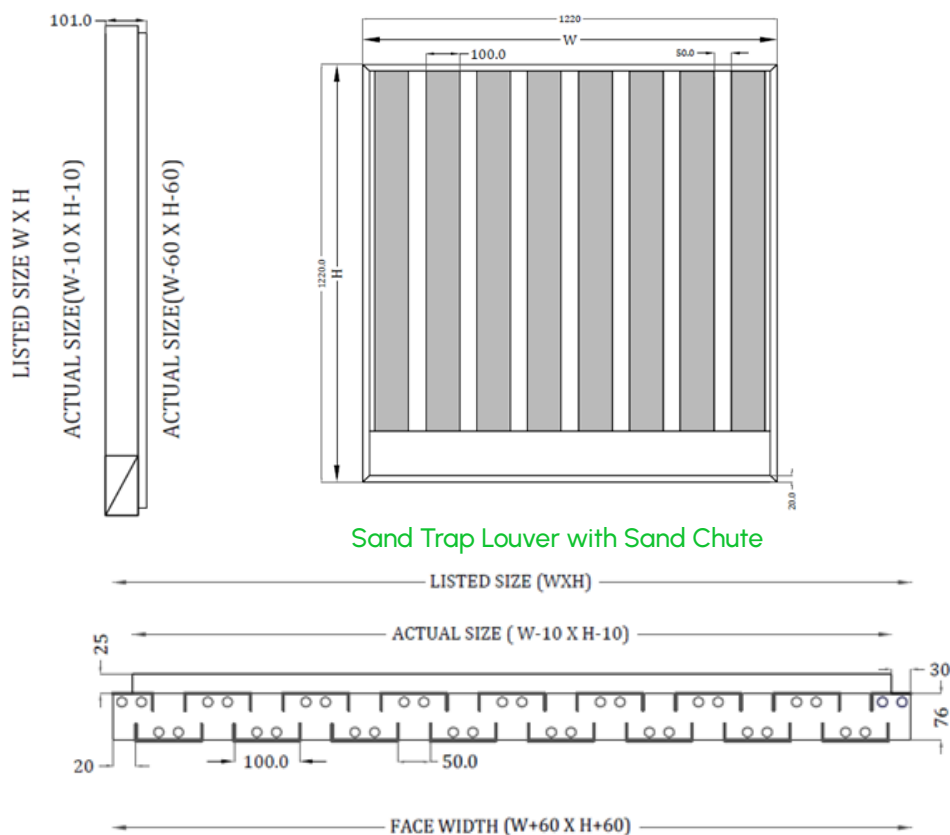
NAFFCO Sand Trap Louvers

04 Construction Drawing

MODEL: NFC STL AL 9710



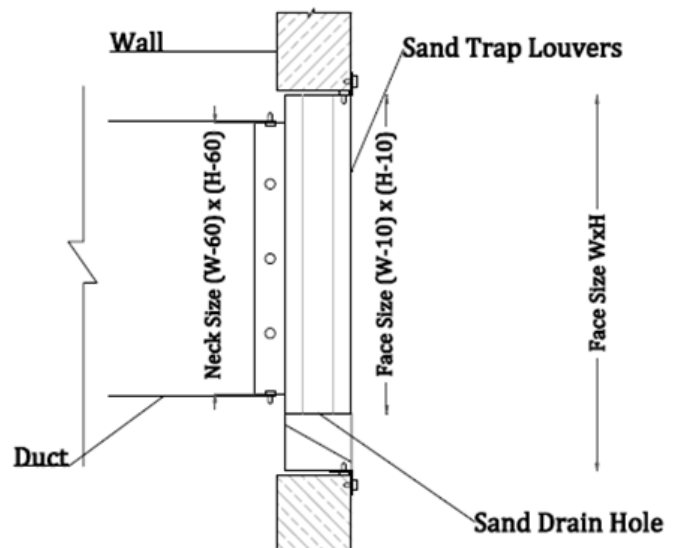
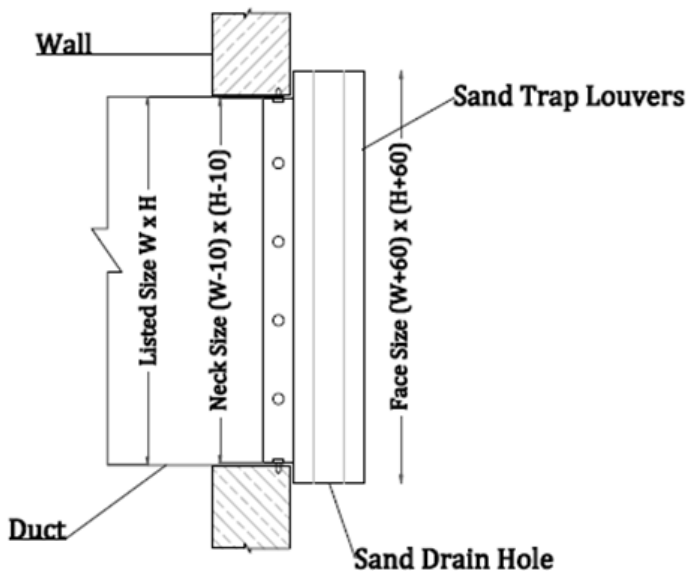
MODEL: NFC STL + C AL 9710



NAFFCO FZCO certifies that the Model: NFC STL AL 9710 shown here is Licensed to bear the AMCA Seal. The rating shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Rating Program. The AMCA Certified Rating Seal applies to Wind Driven Sand and Air Performance ratings.

NAFFCO Sand Trap Louvers

05 Installation / Assembly Drawing



OPTIONAL CONSTRUCTION

- * Finish: Powder coated or spray paint finish.
- * Screen: Galvanized Steel bird Screen/Expanded wire mesh GI/ Aluminum Insect Screen, Variety of bird and insect mesh.
- * Galvanized Steel construction: Frame 1.2mm thickness, Blade 0.9 to 1.2mm thickness Galvanized steel (Model: NFC STL GI 9710).
- * Fresh Air Intake system with wire mesh, VCD, Sliding AL Filter (Removable).
- * Sand Chute: STL with Sand Chute for flush mounting (Model: NFC STL+C AL 9710)

NAFFCO FZCO certifies that the Model: NFC STL AL 9710 shown here is Licensed to bear the AMCA Seal. The rating shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Rating Program. The AMCA Certified Rating Seal applies to Wind Driven Sand and Air Performance ratings.



amca INTERNATIONAL
www.amca.org





Serving Over 100 Countries Worldwide



NAFFCO
FLOW CONTROL

Email: info@naffcoflow.com
www.naffcoflow.com

In line with NAFFCO Flow Control policy for continuous product development,
NAFFCO Flow Control has the right to change specifications without prior notice.