STATIONARY LOUVER
STORM CLASS LOUVERS
ARCHITECTURAL LOUVER

AIRFLOW AC

Airflow AC Middle East FZE-LLC

Our Product Ranges

Dampers

1 Fire Dampers
2 Fire / Smoke Dampers
3 Volume Control Dampers
4 Motorized Control Dampers
5 Pressure Relief Dampers /Non Return Dampers

Variable Air Volumes

6 Pressure Independent VAV
7 Constant Air Volume VAV
8 By Pass VAV

Louvers

9 Sand Trap Louvers
10 Acoustic Louvers
11 Stationery Louvers / Architectural Louvers
12 Storm Louvers
13 Weather Louvers

Sound Attenuators

14 Rectangular Sound Attenuators
15 Circular Sound Attenuators
16 Crosstalk Attenuators

Electric Duct Heaters

17 Flange & Slip 'n' Type
18 Modulating & On/Off Type

Air Outlets

19 Registers & Grilles
20 Diffusers (Linear Diffusers, Sq. & Rect. Ceiling Diffusers, Round Diffusers, Jetflow Diffusers
21 Swirl Diffusers & Disc Valves
22 Drum Louvers

AIRFLOW AC

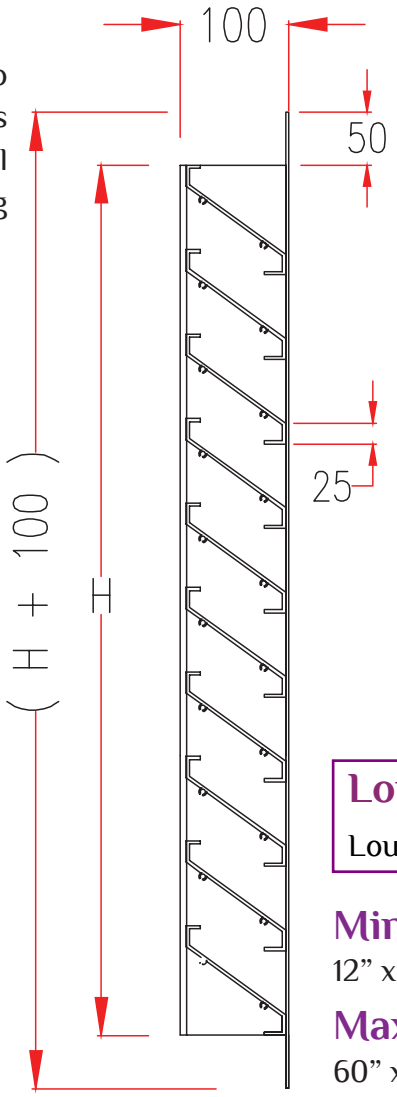
Airflow AC Middle East FZE-LLC

INDEX

Model : AHS WL 400 A

STATIONARY LOUVER

Airflow Non Drainable Stationary Louvers are designed and engineered to meet the most demanding specifications and applications with an architectural & artistic appealing while providing superior performance.



Construction Details

Frame
3.0mm Thick. high quality Extruded Aluminium Profiles, 100mm deep (4 inch.)

Blade
3.0mm Thick. high quality Extruded Aluminium Horizontal Blades.

Blade Angle
Blade Angles are generally arranged in 45°.

Blade Orientation
Fixed & horizontal construction.

Louver Screen
Aluminium, Galvanized or Stainless Steel Louver Screens are fabricated and fastened to ensure the highest product quality and durability.

Standard Screen Size: 12 x 12 x 1.0mm thick. galvanized steel

Louver Free Area
Louver Free Area shall be 45%

Minimum Size (Single Module)
12" x 12" (300mm Wide x 300mm Height)

Maximum Size (Single Module)
60" x 60" (1500mm Wide x 1500mm Height)

Finish & Colour
Standard Powder Coating finish as per RAL Colour Codes. The following custom based optional coatings / finish are also available on request.

- Super-Durable Polyester Powder Coating (SDF)
- Hyper-Durable Flurocarbon Polymer Coating (HDF)
- Polyvinylidene fluoride coating/KYNAR Coating (PVDF/KYNAR)

The above finishes complies to AAMA 2603 / 2604 / 2605 requirements with 20-year limited warranty against failure or excessive fading.

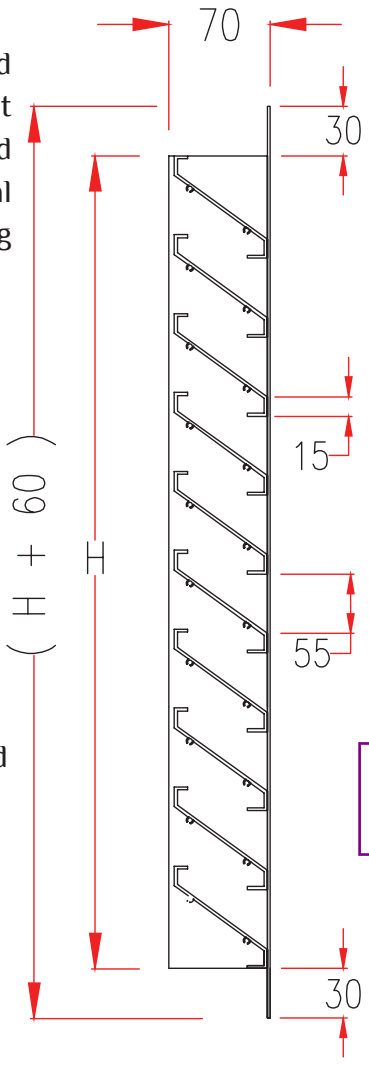
Airflow AC Middle East FZE-LLC

AIRFLOW AC

Model: AHS WL 400 B

STATIONARY LOUVER

Airflow Non Drainable Stationary Louvers are designed and engineered to meet the most demanding specifications and applications with an architectural & artistic appealing while providing superior performance.



Construction Details

Frame
2.0mm Thick. high quality Extruded Aluminium Profiles, 70mm deep.

Blade
1.2mm Thick. high quality Extruded Aluminium Horizontal Blades.

Blade Angle
Blade Angles are generally arranged in 45°.

Blade Orientation
Fixed & horizontal construction.

Louver Screen
Aluminium, Galvanized or Stainless Steel Louver Screens are fabricated and fastened to ensure the highest product quality and durability.

Standard Screen Size: 12 x 12 x 1.0mm thick. galvanized steel

Louver Free Area
Louver Free Area shall be 45%

Minimum Size (Single Module)
12" x 12" (300mm Wide x 300mm Height)

Maximum Size (Single Module)
60" x 60" (1500mm Wide x 1500mm Height)

Finish & Colour
Standard Powder Coating finish as per RAL Colour Codes. The following custom based optional coatings / finish are also available on request.

- Super-Durable Polyester Powder Coating (SDF)
- Hyper-Durable Flurocarbon Polymer Coating (HDF)
- Polyvinylidene fluoride coating/KYNAR Coating (PVDF/ KYNAR)

The above finishes complies to AAMA 2603 / 2604 / 2605 requirements with 20-year limited warranty against failure or excessive fading.

Airflow AC Middle East FZE-LLC

AIRFLOW AC

Model: AHS 500 GSL

STATIONARY LOUVER

GALVANIZED STEEL LOUVER

Airflow has developed highest quality galvanized steel horizontal fixed Louvers, having aesthetically pleasing with 4 Inches Deep (100mm Deep) construction.

Welded construction of steel louvers are designed and engineered to meet with most demanding architectural specifications, while providing superior louver performance, providing smooth finish as aluminium. These louvers are corrosion resistant, excellent in strength and perfect for various industrial and commercial applications.

Construction Details

Galvanized Steel horizontal fixed blades are secured into the frame with latest state of the art welding technology.Buffing to the rough welded surfaces to remove spots, dots to obtain smooth finish. All steel louvers frames have mitered and flush welded corners. Exposed edges and metal endsare free from sharp edges.

Frame

16 Gauge high quality galvanized steel, 100mm Deep (4" Deep).

Blade

20 Gauge high quality galvanized steel, 100mm Deep (4" Deep).

Blade Angle

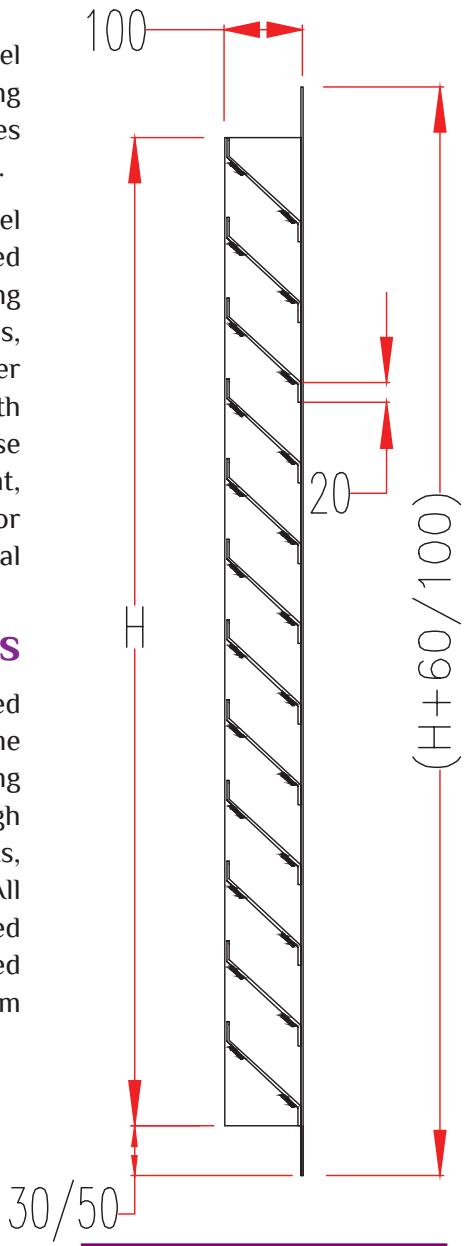
Blade Angles are generally arranged in 45°.

Blade Orientation

Fixed and horizontal construction.

Mullions

Concealed or Exposed.



Louver Free Area

Louver Free Area shall be 45%

WELDED ASSEMBLY

Join stationary blade, head, sill and jamb frames with fillet welds concealed from view, unless the size of the louver makes screwed connections between louver sections necessary. Louver blades shall be joined to each jamb frame with fillet welds produced with the Pulsed Gas Metal Arc Welding (GMAW/ Mig) process.

Louver Screen

Galvanized Screens are fabricated and fastened to ensure the highest product quality and durability.

Standard Screen Size: 12 x 12 x 1.0mm thick.

Finish & Colour:

Standard Powder Coating finish as per RAL Colour Codes. The following custom based optional coatings / finish are also available on request.

- Super-Durable Polyester Powder Coating (SDF).
- Hyper-Durable Fluorocarbon Polymer Coating (HDF).
- Polyvinylidene fluoride coating/KYNAR Coating (PVDF/KYNAR).

The above finishes comply to AAMA 2603/ 2604 / 2605 requirements.

Airflow AC Middle East FZE-LLC

AIRFLOW AC

Model: AHS 500 SSL

STATIONARY LOUVER

STAINLESS STEEL LOUVER

Airflow has developed highest quality Stainless Steel Horizontal Fixed Louvers constructed of Grade 316 L & 304, having aesthetically pleasing with 4 Inches Deep (100mm Deep) construction.

In addition to the visual appearance of Stainless Steel Louvers, many in-house functional areas in projects, apparently, Hospitals, On-shore & off-shore plants, Chemical Plants, Hotels etc. can be well-managed to reduce the risk of bacteria, micro-organisms being retained by the material. Corrosion resistant and most attractive design, provides everlasting finish. Welded construction of Stainless Steel louvers appearance meet with architectural & artistic appeal, while providing superior performance. Stainless Steel Fixed Louvers are perfect for all kinds of industrial and commercial applications, where the incredible facade will change magnificently.

Construction Details

Stainless Steel horizontal fixed blades are secured into the frame with latest state of the art welding technology. Buffing to the welded surfaces to eliminate spots, dots to obtain smooth finish. All Stainless Steel louver frames have mitered and flush welded corners. Exposed edges and metal endsare free from sharp edges.

Frame

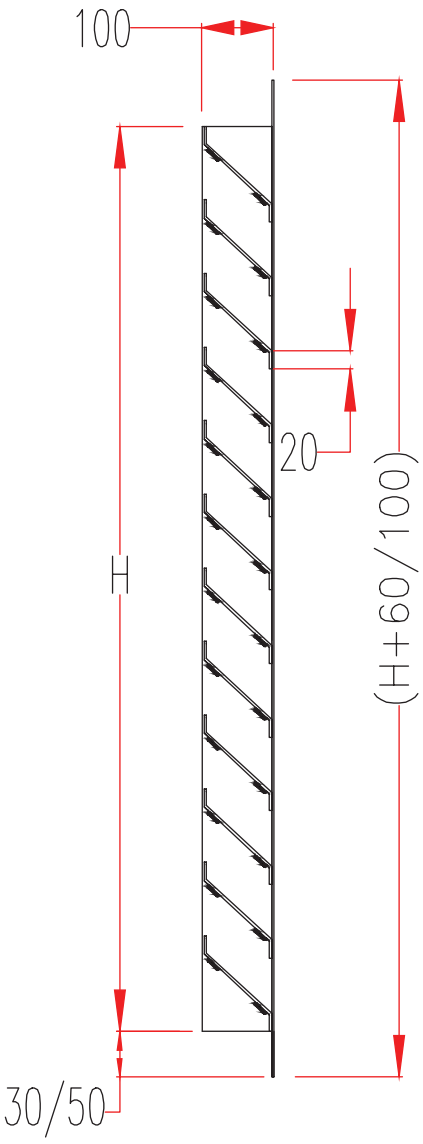
16 Gauge high quality stainless steel, grade 316 L, 100mm Deep (4" Deep).

Blade

20 Gauge high quality stainless steel, grade 316 L.

Blade Angle

Blade Angles are generally arranged in 45°.



WELDED ASSEMBLY

Join stationary blade, head, sill and jamb frames with fillet welds concealed from view, unless the size of the louver makes screwed connections between louver sections necessary. Louver blades shall be joined to each jamb frame with fillet welds produced with the Pulsed Gas Metal Arc Welding (GMAW/ Mig) process.

Blade Orientation

Fixed and horizontal construction.

Mullion

Concealed or Exposed.

Louver Screen

Stainless Steel Screens are fabricated and fastened to ensure the highest product quality and durability. Galvanized or Aluminium Screens are optional.

Standard Screen Size: 12 x 12 x 1.0mm thick.

Louver Free Area

Louver Free Area shall be 45%

Finish

It is important to pay close attention to the selection of the most appropriate finish for the application required. Stainless Steel is available in a wide variety of standard and special finishes. The majority of finishes are categorized into :

- Mill Finish
- Satin
- Mirror finish
- 2B Finish
- Brush finish
- Special Finishes

Airflow AC Middle East FZE-LLC

AIRFLOW AC

Model: AHS CL 500

ARCHITECTURAL LOUVER

Airflow Extruded Aluminum Stationary louvers are designed for applications that require intake and exhaust ventilation with moderate protection against water penetration. Louvers are available with visible or concealed vertical mullions in 4 inches frame depths. High performance continuous line extruded aluminium louver soffers effective air and water penetration performance comprising >50% free Area (based on 48" x 48"), with continuous recessed caulking channels & mitered corner joints.

Construction Details

Heavy gauge aluminium extrusions with reinforcing blades, supported and lined up with heavy-gage extruded aluminum blade braces, positively interlocked to each blade and mechanically secured to structure by aluminum / stainless steel fastenings.

Exposed edges and ends of metal dressed smooth, free from sharp edges. Exposed connections and joints constructed to exclude water penetrations.

Frame

2.0mm Thick. high quality extruded aluminium Profiles, 100mm Deep (4" Deep).

Blade

2.0 mm Thick. high quality extruded aluminium horizontal blades.

Blade Angle

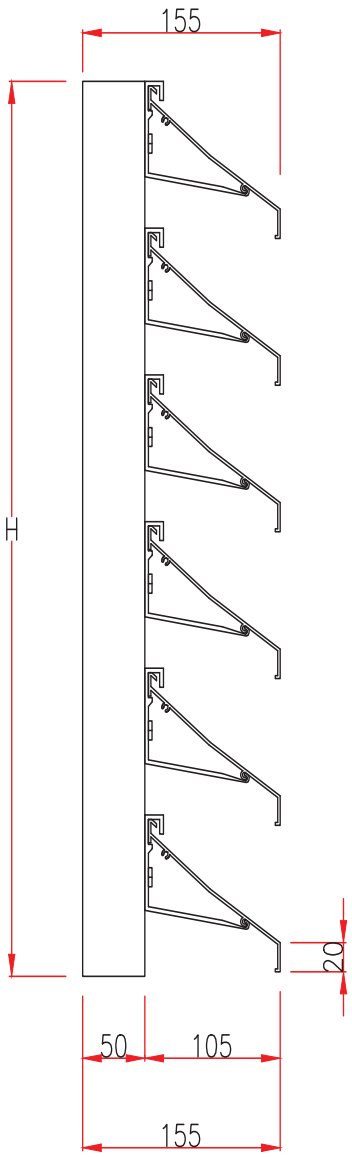
Blade Angles are generally arranged in 45°.

Blade Orientation:

Fixed and Horizontal Construction, continuous Louver Blades.

Mullions

Concealed or Exposed.



Louver Screens

Galvanized or Aluminium Louver Screens are fabricated and fastened to ensure the highest product quality and durability.

Standard Screen Size: 12 x 12 x 1.0mm thick Galvanized steel.

Water & Air Performance

- Free Area Velocity at Beginning Point of Water Penetration: 761.2 fpm (3.87 m/s).
- Air Volume Flow Rate at Beginning Point of Water Penetration - 48" x 48" unit: 6,485 cfm (3.06 m3/s).
- Pressure Dropat Beginning Point of Water Penetration: 0.126in. H2O (32Pa).
- Free Area: >50%, based on test sample of 48"x 48"

Finish &Colour

Standard Powder Coating finish as per RAL Colour Codes. The following custom based optional coatings / finish are also available on request.

- Super-Durable Polyester Powder Coating (SDF).
- Hyper-Durable Fluorocarbon Polymer Coating (HDF).
- Polyvinylidene fluoride coating/KYNAR Coating (PVDF/KYNAR).

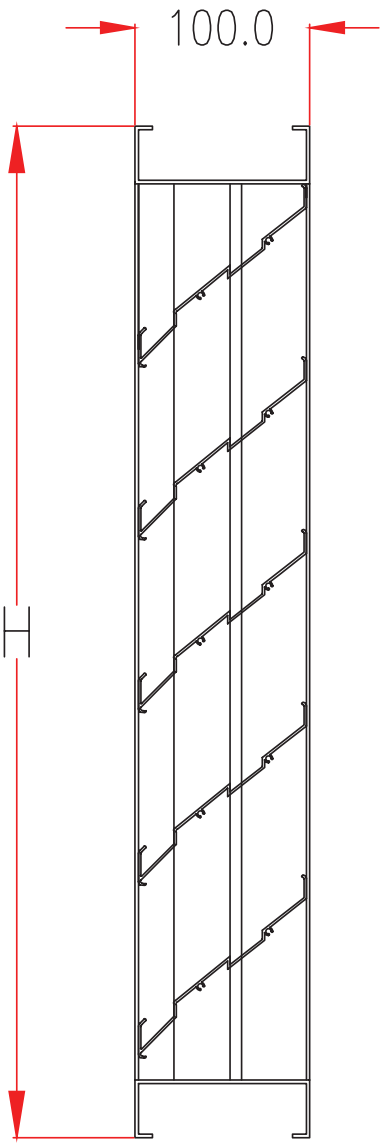
The above finishes comply to AAMA 2603/ 2604 / 2605 requirements with 20-year limited warranty against failure or excessive fading.

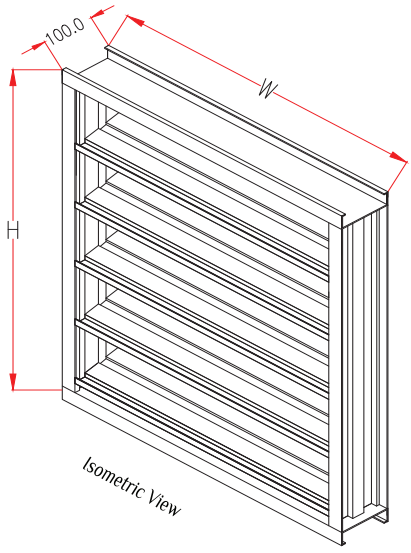
Airflow AC Middle East FZE-LLC

Model: AHS AL 500 DD

DOUBLE DRAINABLE ARCHITECTURAL LOUVER

Airflow Extruded aluminum Double Drainable Architectural louvers are designed for applications that require intake and exhaust ventilation with moderate protection against water penetration. It is designed and engineered to meet the most demanding specifications and applications with an architectural and artistic appealing, while providing superior Water penetration & Air performances.





Frame

100mm Deep, 2.0mm Thick. high quality extruded aluminium Profiles, 6063-T5.

Blade

2.0mm Thick. high quality extruded aluminium Profiles, 6063-T5.

Blade Angle

Blade Angles are generally arranged in 45 .

Blade Orientation

Fixed and horizontal construction.

Louver Free Area

Louver Free Area shall be 45%

Louver Screen

Aluminium Louver Screens are fabricated & fastened to ensure the highest product quality & durability.

Standard Screen
Size: 12 x 12 x 1.0mm thick
Galvanized steel.

Finish & Colour

Standard Powder Coating finish as per RAL Colour Codes. The following custom based optional coatings / finish are also available on request.

- Super-Durable Polyester Powder Coating (SDF)
- Hyper-Durable Flurocarbon Polymer Coating (HDF)
- Polyvinylidene fluoride coating/KYNAR Coating (PVDF/ KYNAR)

The above finishes complies to AAMA 2603 / 2604 / 2605 requirements with 20-year limited warranty against failure or excessive fading.

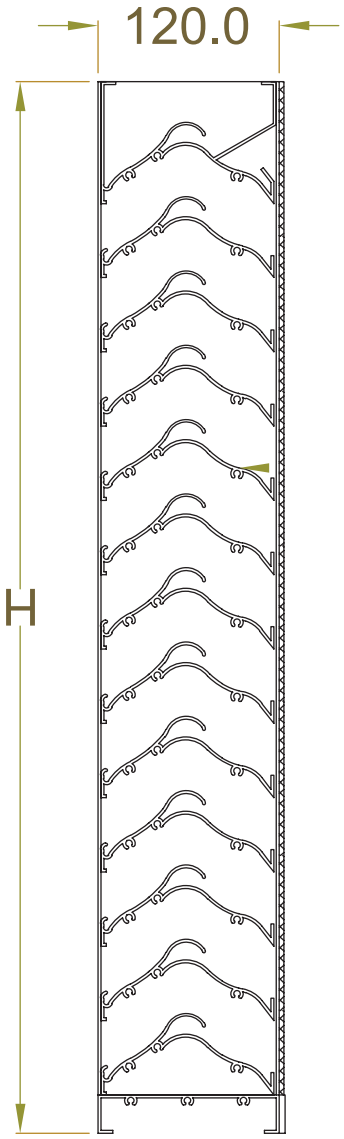
AIRFLOW AC

Airflow AC Middle East FZE-LLC

Model : AHS 400 SL

STORM CLASS LOUVER

Airflow Storm Class Louver is a wind-driven rain louver designed to protect air intake and exhaust openings in building exterior walls from direct water penetration even in the most extreme weather conditions. This Louver design incorporates a drainable head member and 120mm deep horizontal rain resistant blades. Horizontal blades offers the greatest level of protection against water penetration, wind-driven rain and air performance with a distinct look to a building's facade.



Construction Details

Frame
2.0mm Thick. high quality Extruded Aluminium Profiles.

Blade
2.0mm Thick. high quality Extruded Aluminium Horizontal Blades.

Blade Orientation
Fixed & horizontal construction.

Louver Depth
Standard louver Depth shall be 120mm.

Free Area
The percentage of standard louver Free Area shall be 45%.

Louver Screen
Aluminium, Galvanized or Stainless Steel Louver Screens are fabricated and fastened to ensure the highest product quality and durability.

Standard Screen Size: 12 x 12 x 1.0 mm thick. galvanized steel

Minimum Size (Single Module)
12" x 12" (300mm Wide x 300mm Height)

Maximum Size (Single Module)
60" x 60" (1500mm Wide x 1500mm Height)

Finish & Colour
Standard Powder Coating finish as per RAL Colour Codes.
The following custom based optional coatings / finish are also available on request.

- Super-Durable Polyester Powder Coating (SDF)
- Hyper-Durable Flurocarbon Polymer Coating (HDF)
- Polyvinylidene fluoride coating/KYNAR Coating (PVDF/ KYNAR)

The above finishes complies to AAMA 2603 / 2604 / 2605 requirements with 20-year limited warranty against failure or excessive fading.

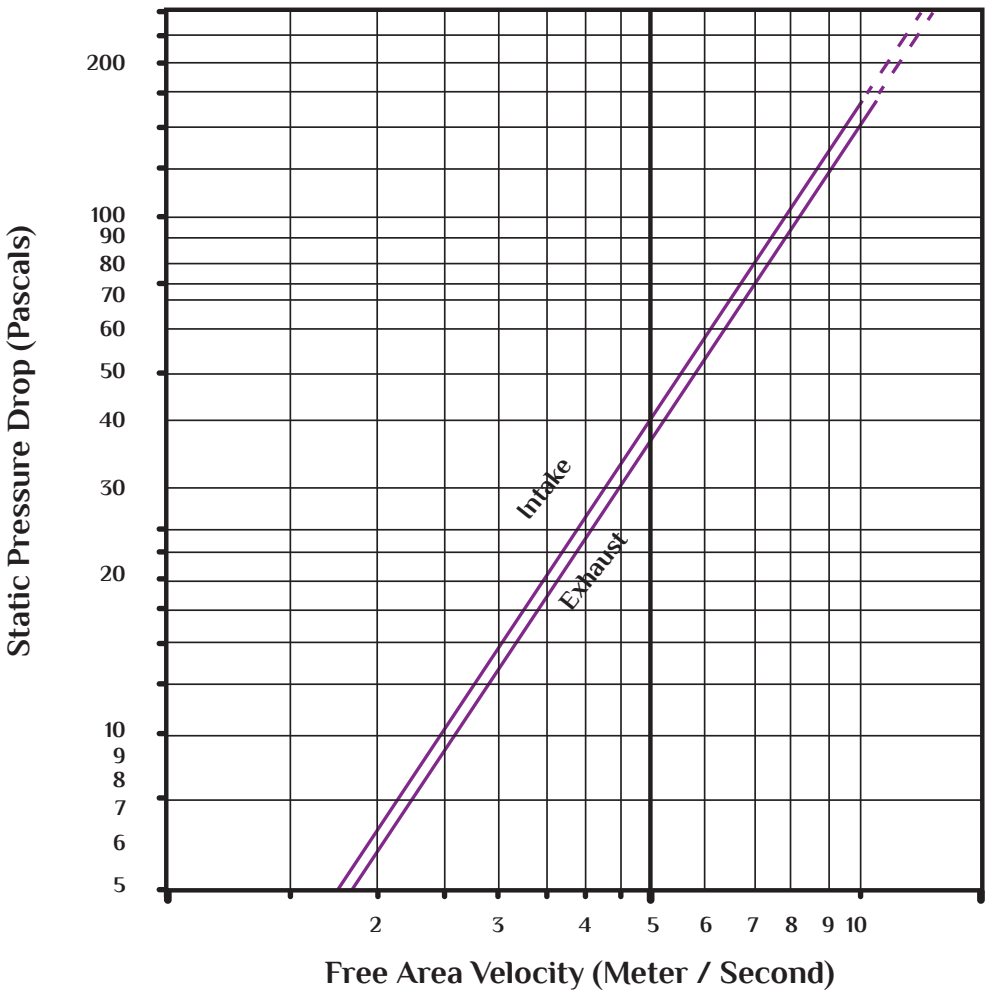
Airflow AC Middle East FZE-LLC

AIRFLOW AC

Model : AHS WL 400 A

ENGINEERING GUIDELINES - STATIONARY LOUVER

Free Area Velocity & Pressure Drop



Free Area (Square meter)

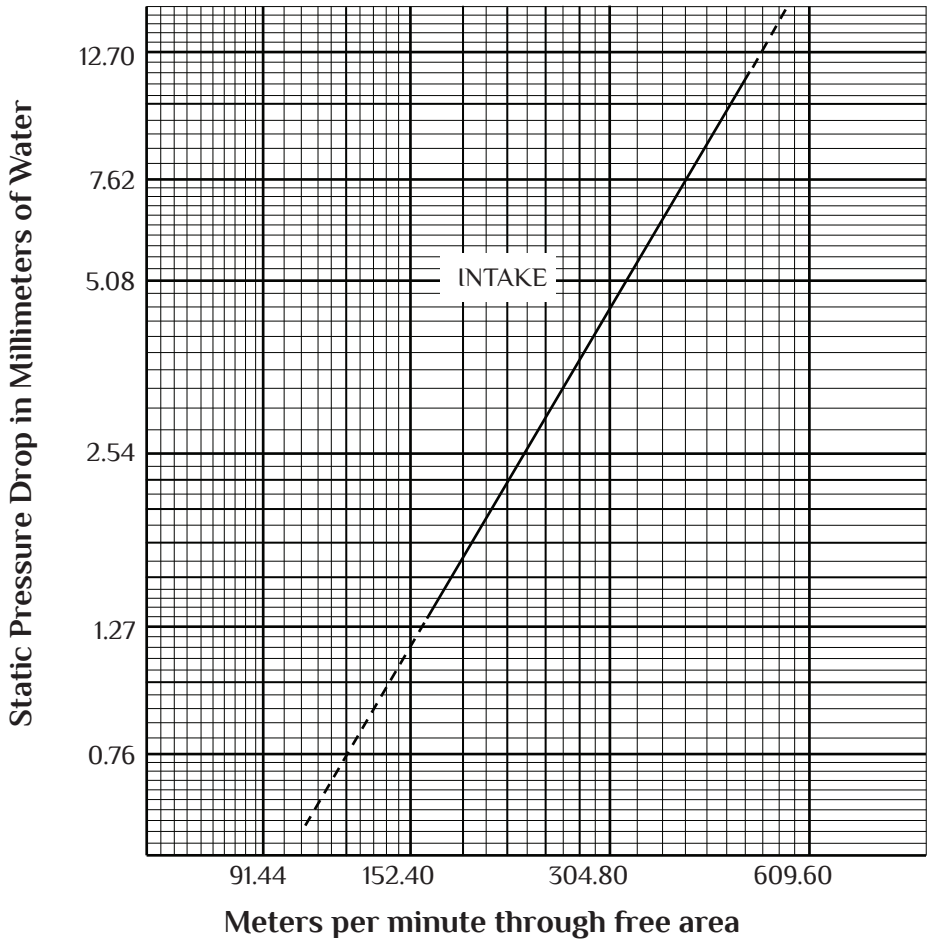
Width in Inches

Height in Inches	12	18	24	30	36	42	48	54	60
12	0.025	0.033	0.035	0.04	0.05	0.065	0.07	0.085	0.09
18	0.42	0.06	0.10	0.12	0.14	0.18	0.20	0.22	0.25
24	0.63	0.12	0.15	0.19	0.23	0.24	0.30	0.35	0.39
30	0.87	0.15	0.20	0.23	0.30	0.36	0.40	0.45	0.50
36	0.12	0.17	0.22	0.30	0.35	0.43	0.50	0.55	0.62
42	0.14	0.20	0.25	0.32	0.42	0.49	0.55	0.65	0.72
48	0.14	0.24	0.33	0.41	0.51	0.60	0.65	0.75	0.85
54	0.18	0.28	0.38	0.49	0.56	0.66	0.79	0.90	1.00
60	0.2	0.31	0.43	0.54	0.68	0.78	0.90	1.00	1.12

Model: AHS CL 500

ENGINEERING GUIDELINES - ARCHITECTURAL LOUVER

Free Area Velocity & Pressure Drop



Free Area (In Sq.Mtr)

Height (In Inches)

With (In Inches)	12	18	24	30	36	42	48	54	60	66	72	78	84
12	0.3	0.48	0.66	0.84	1.02	1.2	1.38	1.56	1.74	1.92	2.1	2.28	2.46
18	0.54	0.86	1.18	1.5	1.82	2.14	2.46	2.78	3.11	3.43	3.75	4.07	4.39
24	0.83	1.34	1.84	2.34	2.84	3.34	3.84	4.34	4.84	5.34	5.84	6.35	6.85
30	1.07	1.71	2.36	3.00	3.64	4.28	4.93	5.57	6.21	6.85	7.5	8.14	8.78
36	1.37	2.19	3.01	3.84	4.66	5.48	6.3	7.13	7.95	8.77	9.59	10.4	11.2
42	1.61	2.57	3.53	4.5	5.46	6.42	7.39	8.35	9.32	10.3	11.2	12.2	13.2
48	1.91	3.05	4.19	5.34	6.48	7.62	8.77	9.91	11.1	12.2	13.3	14.5	15.6
54	2.14	3.43	4.71	6.00	7.28	8.57	9.85	11.1	12.4	13.7	15	16.3	17.6
60	2.44	3.91	5.37	6.84	8.3	9.76	11.2	12.7	14.2	15.6	17.1	18.6	20.03
66	2.68	4.28	5.89	7.5	9.1	10.7	12.3	13.9	15.5	17.1	18.7	20.3	22.00

Airflow Airconditioning Technology

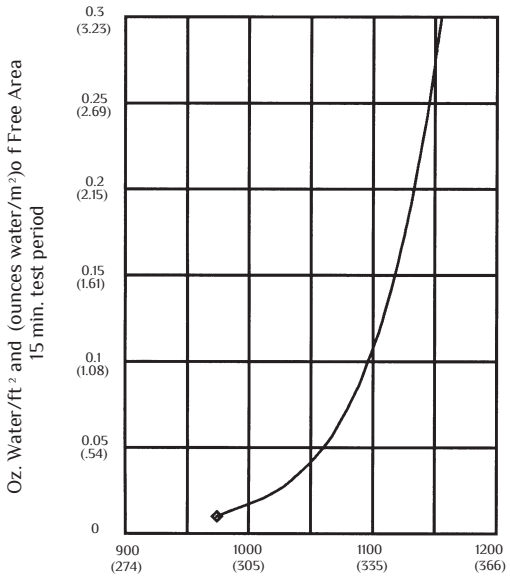
AIRFLOW AC

Model: AHS AL 500 DD

ENGINEERING GUIDELINES - DOUBLE DRAINABLE ARCHITECTURAL LOUVER

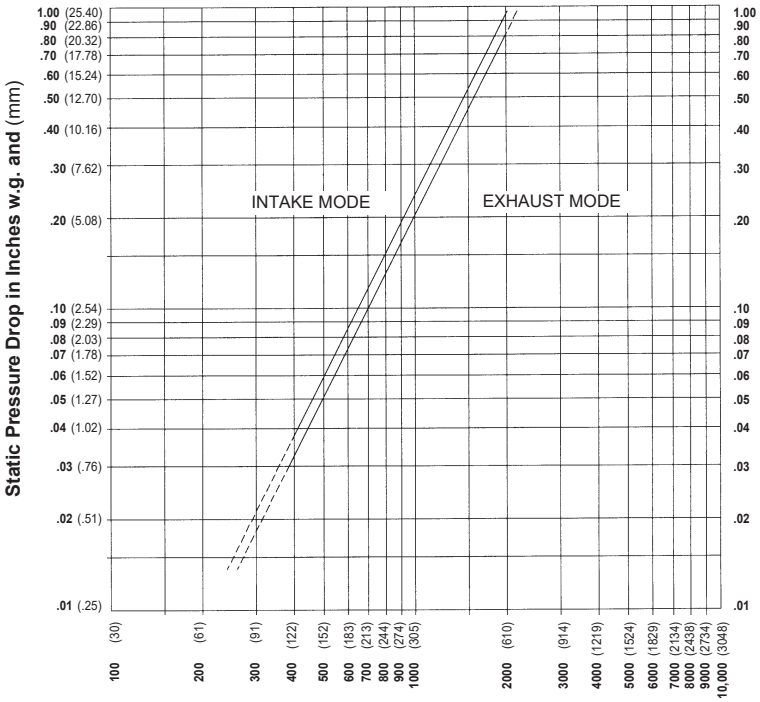
WATER PENETRATION

Test size 48" wide x 48" high (1219 x 1219)
Beginning point of water penetration at .01 oz./sq. ft. is 974 fpm (297 m/min).



Free Area Velocity in feet and (meters) per minute
Standard air .075 lb/ft ³

PRESSURE DROP



Air Velocity in feet and (meters) **per minute through Free Area**

Free Area (in ft² and m²)

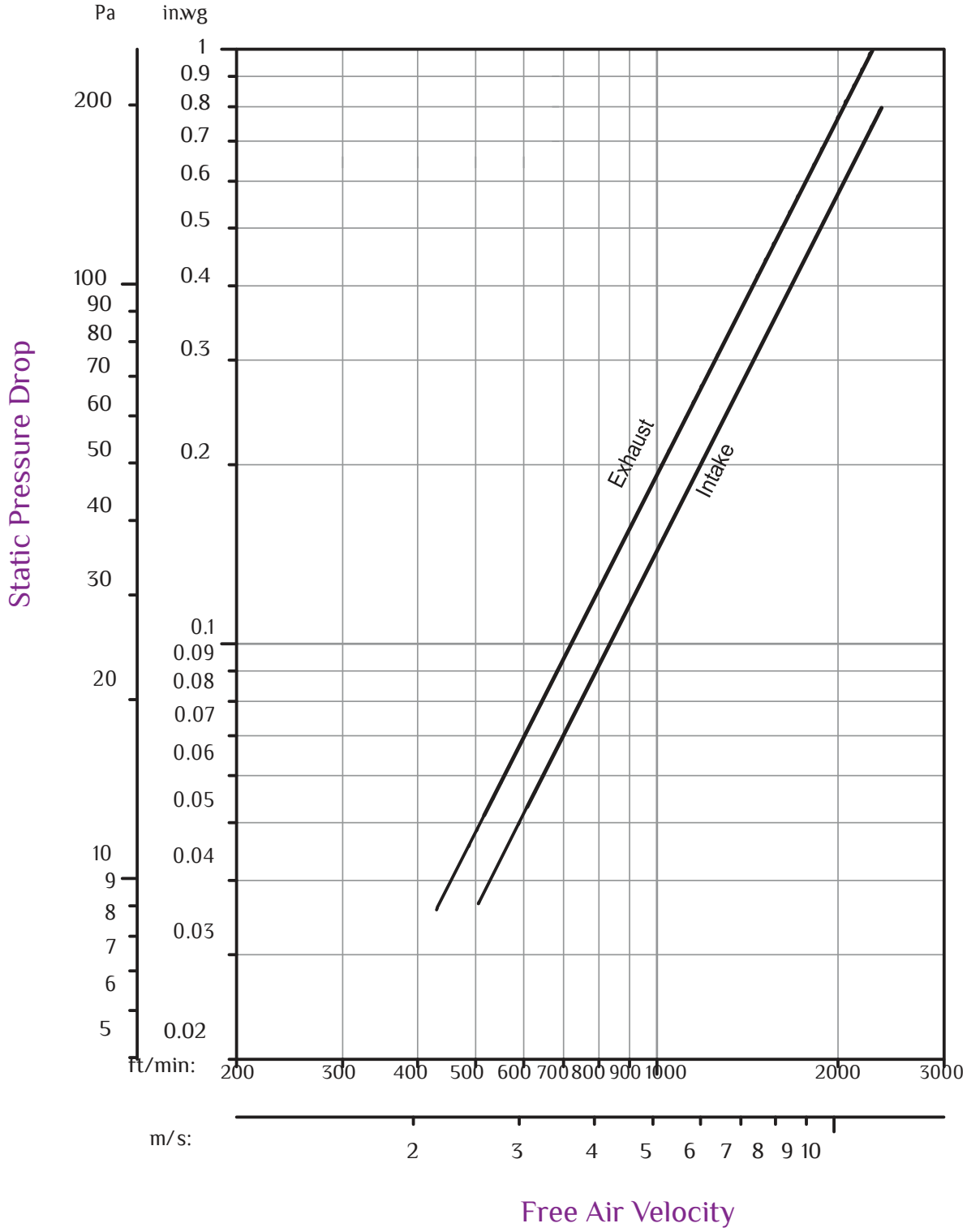
Width – Inches and Meters

Height – Inches and Meters

	12 0.30	**18** 0.46	**24** 0.61	**30** 0.76	**36** 0.91	**42** 1.07	**48** 1.22	**54** 1.37	**60** 1.52	**66** 1.68	**72** 1.83	**78** 1.98	**84** 2.13	**90** 2.29	**96** 2.44	**102** 2.59	**108** 2.74	**114** 2.90	**120** 3.05
12 0.30	**0.17** 0.02	**0.27** 0.03	**0.38** 0.04	**0.48** 0.04	**0.59** 0.05	**0.69** 0.06	**0.80** 0.07	**0.90** 0.08	**1.01** 0.09	**1.11** 0.10	**1.21** 0.11	**1.32** 0.12	**1.42** 0.13	**1.53** 0.14	**1.63** 0.15	**1.74** 0.16	**1.84** 0.17	**1.94** 0.18	**2.05** 0.19
18 0.46	**0.41** 0.04	**0.66** 0.06	**0.91** 0.08	**1.16** 0.11	**1.41** 0.13	**1.65** 0.15	**1.90** 0.18	**2.15** 0.20	**2.40** 0.22	**2.65** 0.25	**2.90** 0.27	**3.15** 0.29	**3.40** 0.32	**3.65** 0.34	**3.90** 0.36	**4.15** 0.39	**4.40** 0.41	**4.65** 0.43	**4.90** 0.46
24 0.61	**0.65** 0.06	**1.06** 0.10	**1.46** 0.14	**1.86** 0.17	**2.27** 0.21	**2.67** 0.25	**3.07** 0.29	**3.47** 0.32	**3.88** 0.36	**4.28** 0.40	**4.68** 0.43	**5.08** 0.47	**5.49** 0.51	**5.89** 0.55	**6.29** 0.58	**6.70** 0.62	**7.10** 0.66	**7.50** 0.70	**7.90** 0.73
30 0.76	**0.90** 0.08	**1.46** 0.14	**2.01** 0.19	**2.57** 0.24	**3.13** 0.29	**3.68** 0.34	**4.24** 0.39	**4.79** 0.45	**5.35** 0.50	**5.90** 0.55	**6.46** 0.60	**7.01** 0.65	**7.57** 0.70	**8.13** 0.76	**8.68** 0.81	**9.24** 0.86	**9.79** 0.91	**10.35** 0.96	**10.90** 1.01
36 0.91	**1.15** 0.11	**1.86** 0.17	**2.57** 0.24	**3.28** 0.30	**3.99** 0.37	**4.69** 0.44	**5.40** 0.50	**6.11** 0.57	**6.82** 0.63	**7.53** 0.70	**8.24** 0.77	**8.95** 0.83	**9.65** 0.90	**10.36** 0.96	**11.07** 1.03	**11.78** 1.09	**12.49** 1.16	**13.20** 1.23	**13.91** 1.29
42 1.07	**1.26** 0.12	**2.04** 0.19	**2.82** 0.26	**3.60** 0.33	**4.38** 0.41	**5.16** 0.48	**5.93** 0.55	**6.71** 0.62	**7.49** 0.70	**8.27** 0.77	**9.05** 0.84	**9.82** 0.91	**10.60** 0.99	**11.38** 1.06	**12.16** 1.13	**12.94** 1.20	**13.72** 1.28	**14.49** 1.35	**15.27** 1.42
48 1.22	**1.50** 0.14	**2.42** 0.22	**3.34** 0.31	**4.26** 0.40	**5.18** 0.48	**6.10** 0.57	**7.02** 0.65	**7.95** 0.74	**8.87** 0.82	**9.79** 0.91	**10.71** 1.00	**11.63** 1.08	**12.55** 1.17	**13.47** 1.25	**14.39** 1.34	**15.31** 1.42	**16.24** 1.51	**17.16** 1.59	**18.08** 1.68
54 1.37	**1.74** 0.16	**2.81** 0.26	**3.88** 0.36	**4.95** 0.46	**6.02** 0.56	**7.09** 0.66	**8.16** 0.76	**9.23** 0.86	**10.30** 0.96	**11.37** 1.06	**12.44** 1.16	**13.51** 1.26	**14.58** 1.35	**15.65** 1.45	**16.72** 1.55	**17.79** 1.65	**18.86** 1.75	**19.93** 1.85	**21.00** 1.95
60 1.52	**1.99** 0.18	**3.21** 0.30	**4.43** 0.41	**5.66** 0.53	**6.88** 0.64	**8.10** 0.75	**9.33** 0.87	**10.55** 0.98	**11.77** 1.09	**13.00** 1.21	**14.22** 1.32	**15.44** 1.43	**16.67** 1.55	**17.89** 1.66	**19.11** 1.78	**20.33** 1.89	**21.56** 2.00	**22.78** 2.12	**24.00** 2.23
66 1.68	**2.24** 0.21	**3.61** 0.34	**4.99** 0.46	**6.36** 0.59	**7.74** 0.72	**9.12** 0.85	**10.49** 0.97	**11.87** 1.10	**13.24** 1.23	**14.62** 1.36	**16.00** 1.49	**17.37** 1.61	**18.75** 1.74	**20.12** 1.87	**21.50** 2.00	**22.88** 2.13	**24.25** 2.25	**25.63** 2.38	**27.00** 2.51
72 1.83	**2.48** 0.23	**4.01** 0.37	**5.54** 0.51	**7.07** 0.66	**8.60** 0.80	**10.13** 0.94	**11.66** 1.08	**13.19** 1.23	**14.72** 1.37	**16.25** 1.51	**17.77** 1.65	**19.30** 1.79	**20.83** 1.94	**22.36** 2.08	**23.89** 2.22	**25.42** 2.36	**26.95** 2.50	**28.48** 2.65	**30.01** 2.79
78 1.98	**2.59** 0.24	**4.19** 0.39	**5.78** 0.54	**7.38** 0.69	**8.97** 0.83	**10.57** 0.98	**12.16** 1.13	**13.76** 1.28	**15.35** 1.43	**16.95** 1.58	**18.54** 1.72	**20.14** 1.87	**21.73** 2.02	**23.33** 2.17	**24.92** 2.32	**26.52** 2.46	**28.11** 2.61	**29.71** 2.76	**31.30** 2.91
84 2.13	**2.82** 0.26	**4.56** 0.42	**6.30** 0.59	**8.04** 0.75	**9.77** 0.91	**11.51** 1.07	**13.25** 1.00	**14.99** 1.39	**16.73** 1.55	**18.46** 1.72	**20.20** 1.88	**21.94** 2.04	**23.68** 2.20	**25.41** 2.36	**27.15** 2.52	**28.89** 2.68	**30.63** 2.85	**32.36** 3.01	**34.10** 3.17
90 2.29	**3.07** 0.29	**4.96** 0.46	**6.85** 0.64	**8.74** 0.81	**10.63** 0.99	**12.53** 1.16	**14.42** 1.34	**16.31** 1.52	**18.20** 1.69	**20.09** 1.87	**21.98** 2.04	**23.87** 2.22	**25.76** 2.39	**27.65** 2.57	**29.54** 2.75	**31.43** 2.92	**33.32** 3.10	**35.21** 3.27	**37.10** 3.45

ENGINEERING GUIDELINES - STORM CLASS LOUVER

Free Area Velocity & Pressure Drop



Airflow Airconditioning Technology

AIRFLOW AC

Model : AHS 400 SL

ENGINEERING GUIDELINES - STORM CLASS LOUVER

WIND-DRIVEN RAIN PERFORMANCE

		76 mm/h (3 in/hr) Rainfall & 13 m/s (29 mph) Wind Velocity		202 .4 mm/h(8 in/hr Rainfall & 22 m/s (50 mph) Wind Velocity	
Free Area Ventilation Rate fpm (m/s)	Ventilation Air Core Velocity fpm (m/s)	Water Penetration Effectiveness %	Water Penetration Classification	Water Penetration Effectiveness %	Water Penetration Classification
0 (0)	0 (0)		A		A
198 (1 .0)	98 (0 .5)		A		A
397 (2 .0)	197 (1 .0)		A		A
595 (3 .0)	295 (1 .5)		A		A
795 (4 .0)	394 (2 .0)		A		A
992 (5 .0)	492 (2 .5)		A	99 .1	A
1,192 (6 .1)	591 (3 .0)	99 .7	A	99 .2	A
1,390 (7 .1)	689 (3 .5)	99 .4	A	99 .2	A
1,587 (8 .1)	787 (4 .0)	99 .1	A	98 .9	B
1,787 (9 .1)	886 (4 .5)	98 .7	B	98 .7	B
1,985 (10 .1)	984 (5 .0)	97 .9	B	94 .4	C

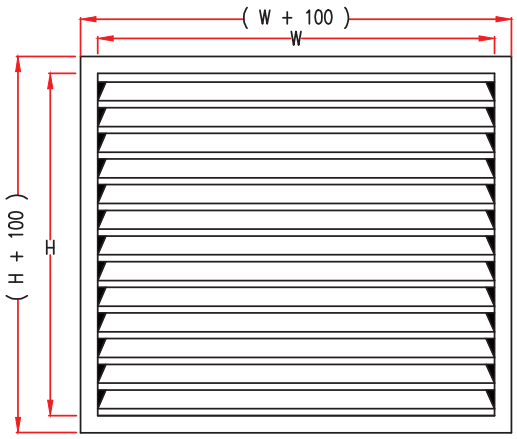
Discharge Loss Coefficient Class (Intake) = 3

FREE AREA CHART (In Square Feet)

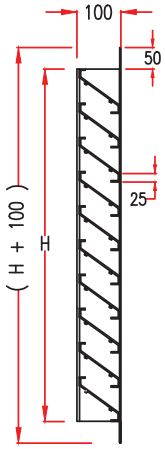
Louver Height Inches	Louver Width (In Inches)																		
	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
7	0 06	0 11	0 15	0 19	0 23	0 27	0 31	0 34	0 38	0 42	0 46	0 50	0 54	0 58	0 62	0 65	0 69	0 73	0 77
12	0 20	0 33	0 45	0 58	0 71	0 83	0 96	1 05	1 18	1 30	1 43	1 56	1 68	1 81	1 93	2 03	2 16	2 28	2 41
18	0 41	0 66	0 91	1 17	1 42	1 68	1 93	2 12	2 38	2 63	2 89	3 14	3 39	3 65	3 90	4 09	4 35	4 60	4 86
24	0 61	0 99	1 38	1 76	2 14	2 52	2 91	3 19	3 58	3 96	4 34	4 72	5 11	5 49	5 87	6 16	6 54	6 92	7 31
30	0 81	1 33	1 84	2 35	2 86	3 37	3 88	4 26	4 77	5 29	5 80	6 31	6 82	7 33	7 84	8 22	8 73	9 25	9 76
36	1 02	1 66	2 30	2 94	3 58	4 22	4 85	5 33	5 97	6 61	7 25	7 89	8 53	9 17	9 81	10 .29	10 .93	11 .57	12 .21
42	1 22	1 99	2 76	3 53	4 29	5 06	5 83	6 40	7 17	7 94	8 71	9 47	10 .24	11 .01	11 .78	12 .35	13 .12	13 .89	14 .66
48	1 43	2 32	3 22	4 12	5 01	5 91	6 80	7 47	8 37	9 27	10 .16	11 .06	11 .95	12 .85	13 .75	14 .42	15 .31	16 .21	17 .10
54	1 63	2 66	3 68	4 70	5 73	6 75	7 78	8 54	9 57	10 .59	11 .62	12 .64	13 .67	14 .69	15 .71	16 .48	17 .51	18 .53	19 .55
60	1 84	2 99	4 14	5 29	6 45	7 60	8 75	9 62	10 .77	11 .92	13 .07	14 .22	15 .38	16 .53	17 .68	18 .55	19 .70	20 .85	22 .00
66	2 04	3 32	4 60	5 88	7 16	8 44	9 73	10 .69	11 .97	13 .25	14 .53	15 .81	17 .09	18 .37	19 .65	20 .61	21 .89	23 .17	24 .45
72	2 25	3 65	5 06	6 47	7 88	9 29	10 .70	11 .76	13 .17	14 .57	15 .98	17 .39	18 .80	20 .21	21 .62	22 .68	24 .08	25 .49	26 .90
78	2 45	3 99	5 52	7 06	8 60	10 .14	11 .67	12 .83	14 .36	15 .90	17 .44	18 .98	20 .51	22 .05	23 .59	24 .74	26 .28	27 .81	29 .35
84	2 65	4 32	5 99	7 65	9 32	10 .98	12 .65	13 .90	15 .56	17 .23	18 .89	20 .56	22 .22	23 .89	25 .56	26 .80	28 .47	30 .14	31 .80
90	2 86	4 65	6 45	8 24	10 .03	11 .83	13 .62	14 .97	16 .76	18 .55	20 .35	22 .14	23 .94	25 .73	27 .52	28 .87	30 .66	32 .46	34 .25
96	3 06	4 99	6 91	8 83	10 .75	12 .67	14 .60	16 .04	17 .96	19 .88	21 .80	23 .73	25 .65	27 .57	29 .49	30 .93	32 .86	34 .78	36 .70
102	3 27	5 32	7 37	9 42	11 .47	13 .52	15 .57	17 .11	19 .16	21 .21	23 .26	25 .31	27 .36	29 .41	31 .46	33 .00	35 .05	37 .10	39 .15
108	3 47	5 65	7 83	10 .01	12 .19	14 .37	16 .54	18 .18	20 .36	22 .54	24 .71	26 .89	29 .07	31 .25	33 .43	35 .06	37 .24	39 .42	41 .60
114	3 68	5 98	8 29	10 .60	12 .90	15 .21	17 .52	19 .25	21 .56	23 .86	26 .17	28 .48	30 .78	33 .09	35 .40	37 .13	39 .43	41 .74	44 .05
120	3 88	6 32	8 75	11 .19	13 .62	16 .06	18 .49	20 .32	22 .75	25 .19	27 .63	30 .06	32 .50	34 .93	37 .37	39 .19	41 .63	44 .06	46 .50

Model: AHS WL 400 A

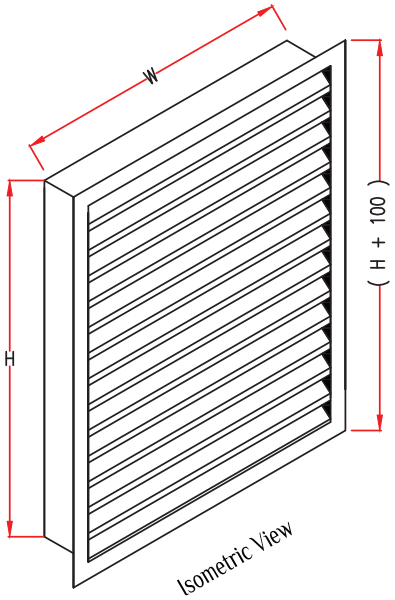
DIMENSIONAL DETAILS



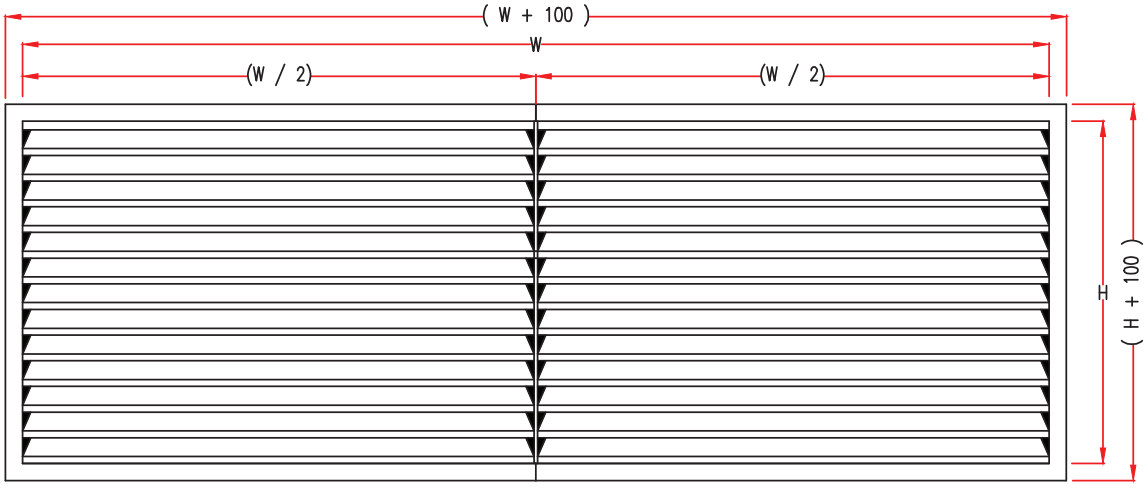
Front View



Side View



Isometric View



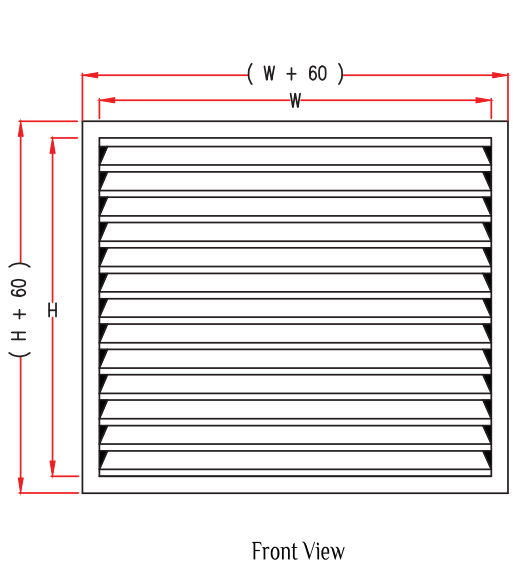
Multiple Section Front View

AIRFLOW AC

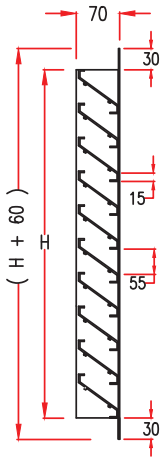
Airflow Airconditioning Technology

Model: AHS WL 400 B

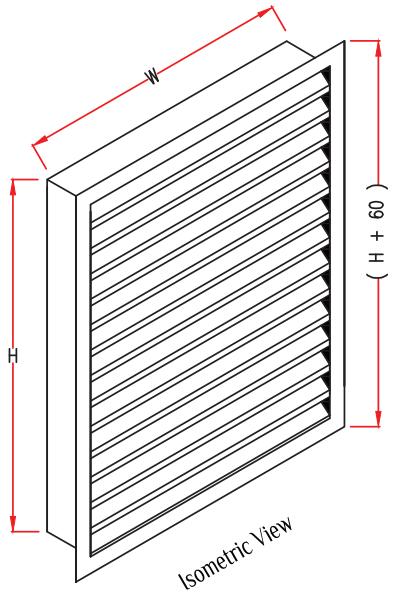
DIMENSIONAL DETAILS



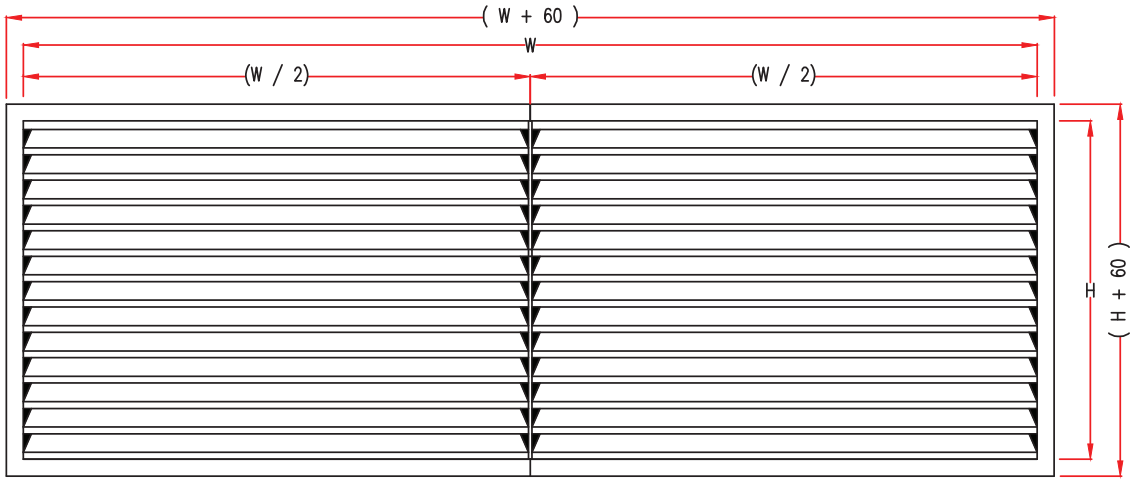
Front View



Side View



Isometric View



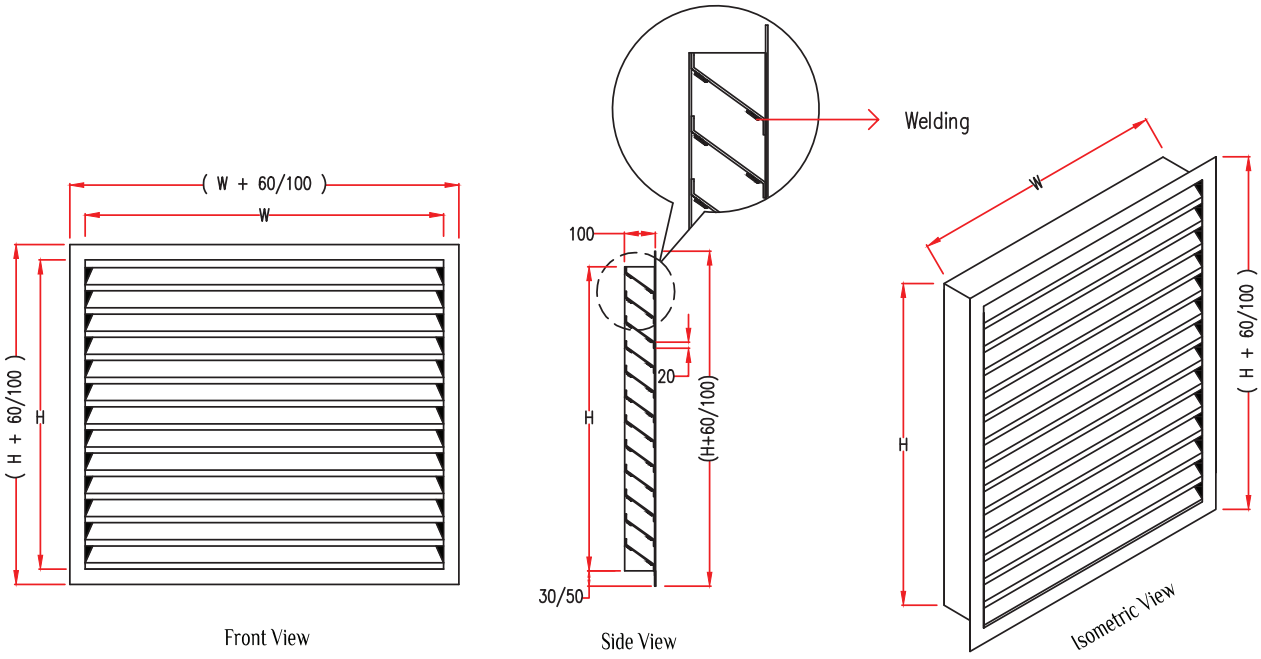
Multiple Section Front View

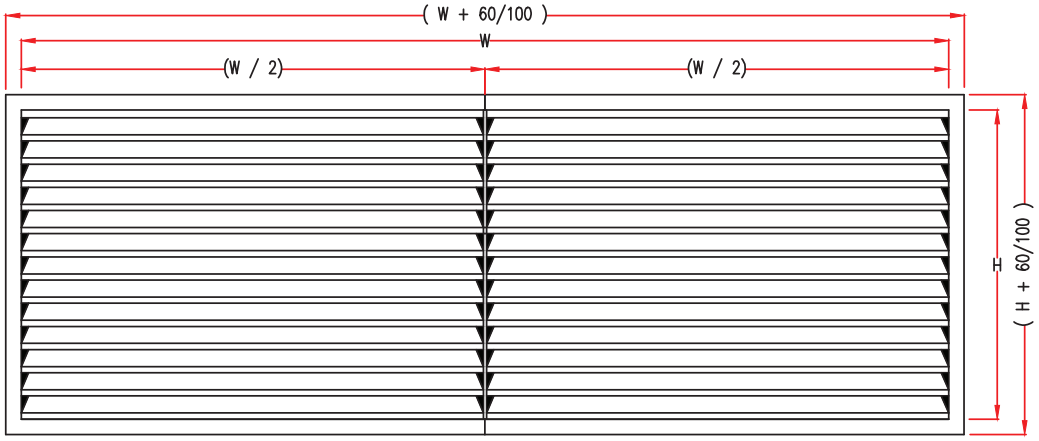
Airflow Airconditioning Technology

AIRFLOW AC

Model: AHS 500 GSL

DIMENSIONAL DETAILS



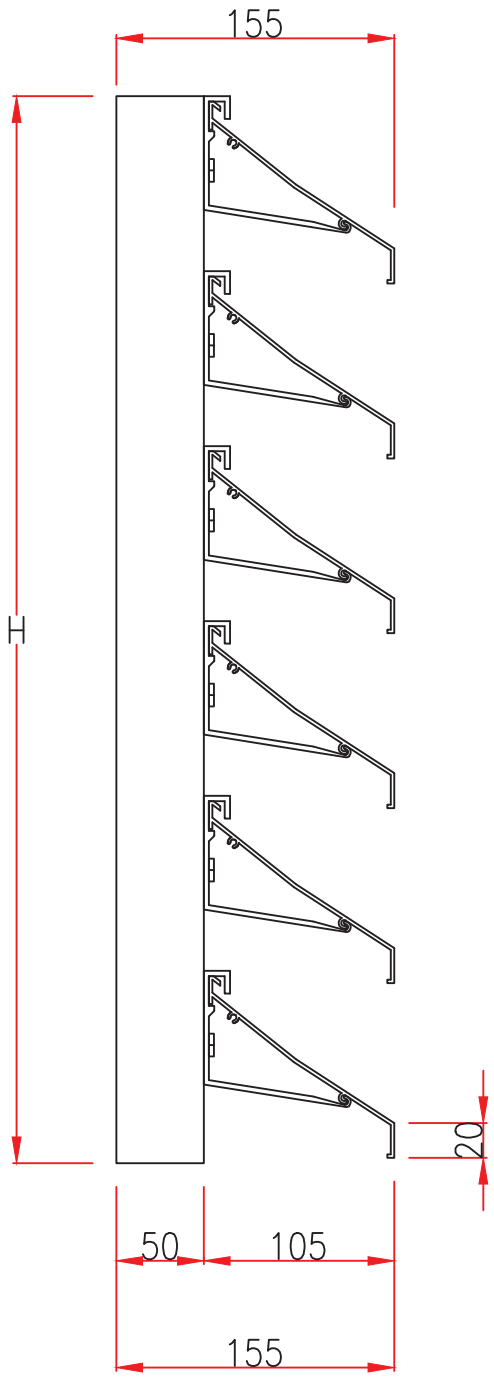


Multiple Section Front View

Model: AHS CL 500

DIMENSIONAL DETAILS

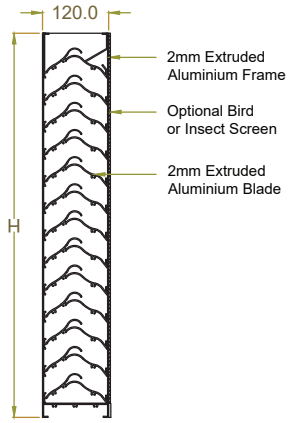
Side View



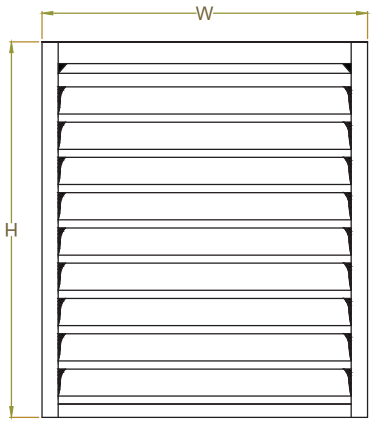
Airflow Airconditioning Technology

Model: AHS 400 SL

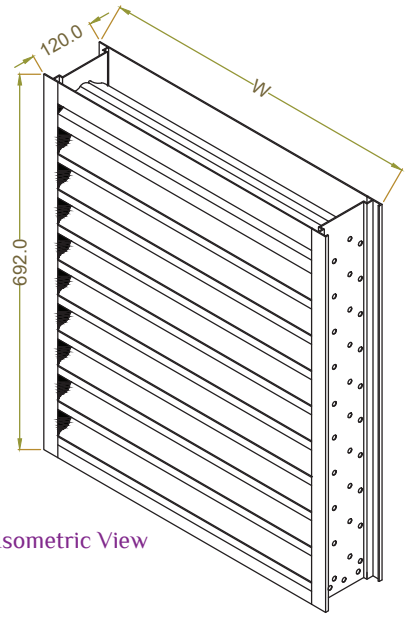
DIMENSIONAL DETAILS



Side View



Front View

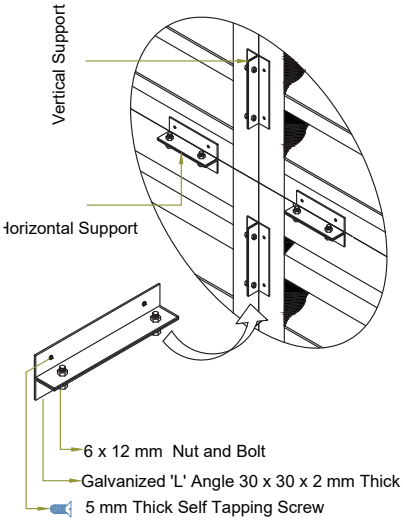


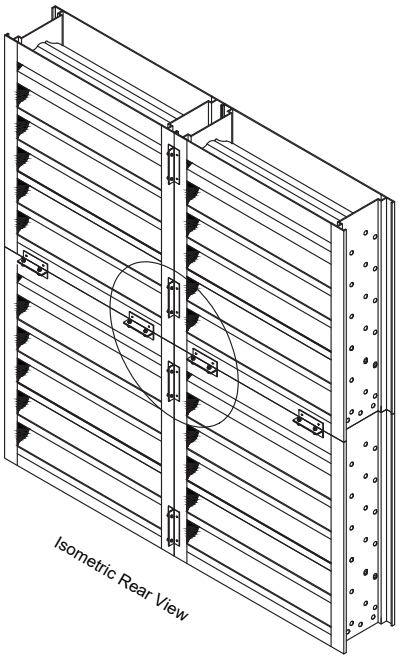
Isometric View

INSTALLATION DETAILS

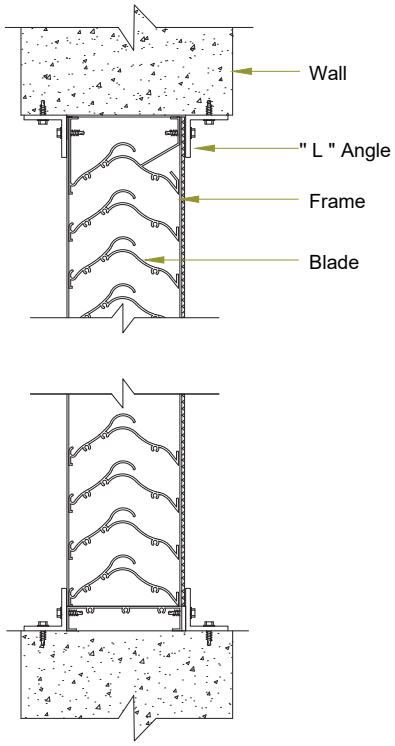
Storm Louver Installation Details

Model: AHS 400 SL



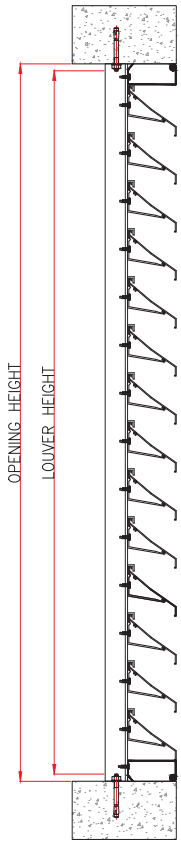


Wall Installation

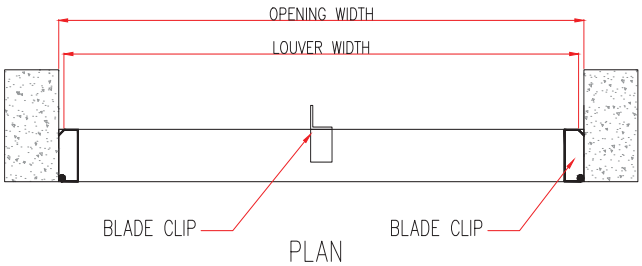


INSTALLATION DETAILS

Model : AHS CL 500

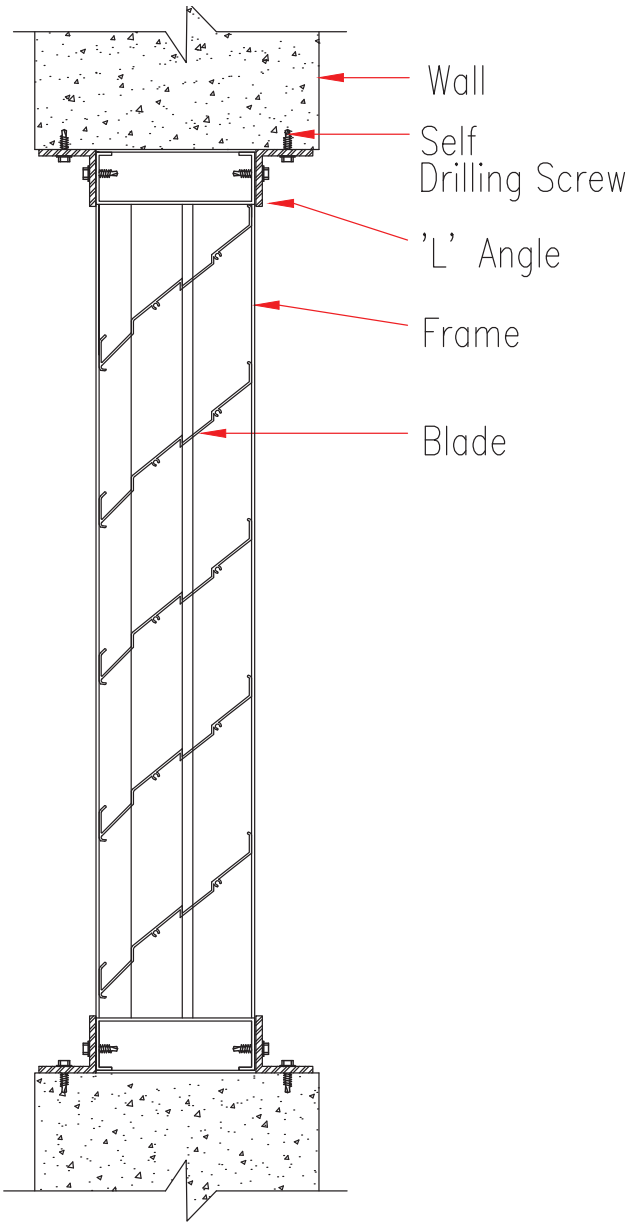


SECTION



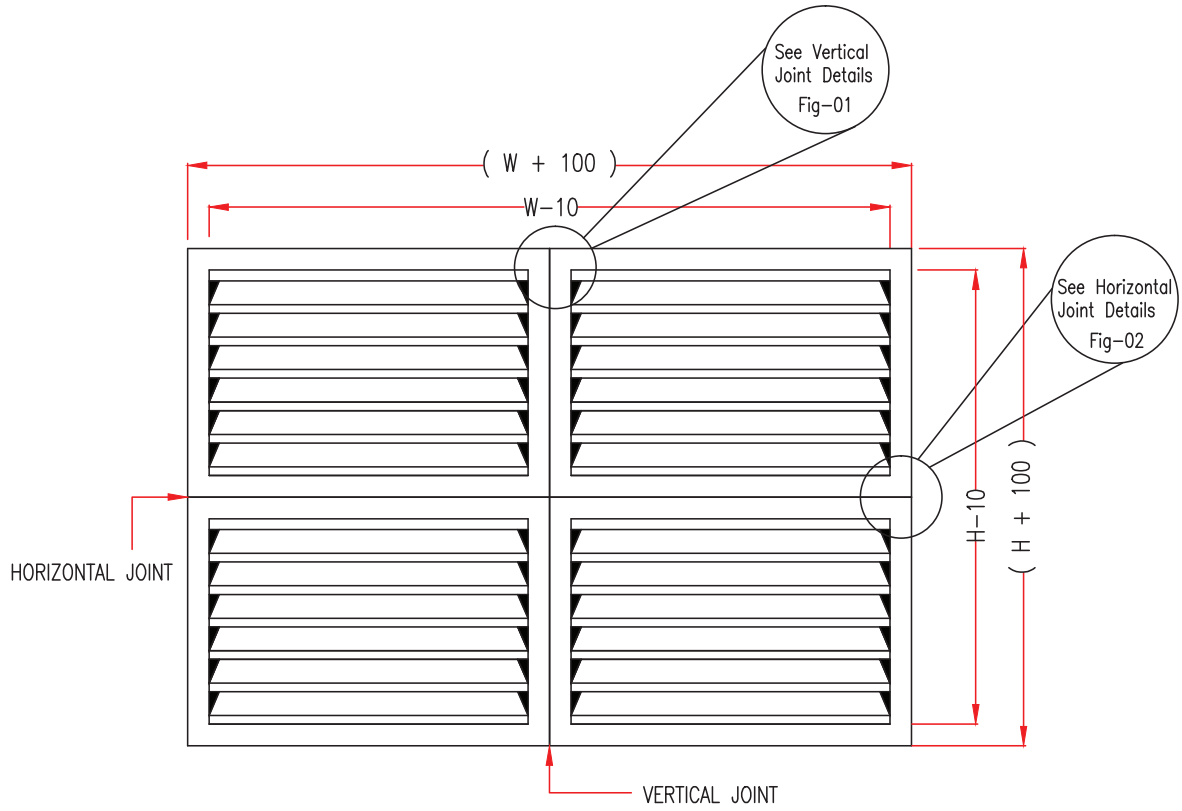
PLAN

Model : AHS AL 500 DD

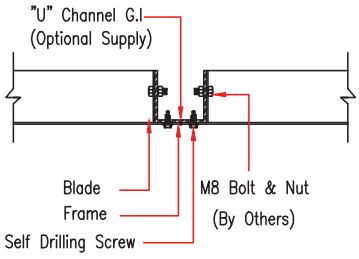


INSTALLATION DETAILS

Multiple Section Assembly Details

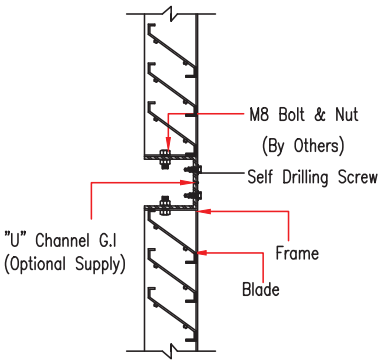


Vertical Joint Details



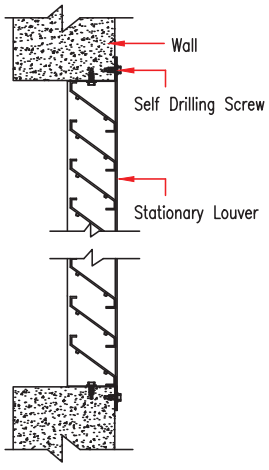
Fig–01

Horizontal Joint Details



Fig–02

Wall Installation



Equipment Description

The Equipment furnished by Airwellcare consists of fixed blade stationary or Architectural louvers and related components as required by the customer's architectural specifications. All louvers and components are supplied in strict compliance with the final approved drawings, and meet or exceed industry standards. Louvers and component materials are of the highest quality available. When installed and maintained properly, in accordance with this manual, they will provide superior performance and longevity.

Storage Instructions

The louvers and components are shipped in semi-enclosed wooden crates. Inside storage is preferable. If outside storage is required, the crates should be blocked up or otherwise elevated from the ground or pavement, and covered securely with waterproof coverings of plastic film. If prolonged storage is anticipated, either inside or out in the weather, adequate steps should be taken to protect the units and their finishes. It is also possible to order individual section plastic wrap when long term storage is anticipated.

Handling to and from storage should be accomplished with the wooden crates intact. Physical damages, marred finishes, loss of loose parts and fasteners, and separation of associated components may occur if crates are dismantled and louver components removed to facilitate storage.

Operating Instructions

Stationary or fixed blade louvers, do not require operational procedures. Louvers are functional dependent upon natural or mechanically produced air pressures. Care should be taken in the placement on non-related equipment on both internal and external faces of the louvers, so as not to obstruct or hinder the required air flow patterns for proper operation.Air volumes are directly related, and in proportion to the un-obstructed free face areas on both sides of the louvers.

Maintenance Instructions

Stationary or fixed blade louvers require no maintenance to remain functional. The louver finish may be subject to deterioration dependent solely upon the environment in which louvers are installed. Appearance and longevity of the finish may be greatly extended by an occasional cleaning, the frequency of which, is again solely dependent upon the environment. Proper cleaning may be accomplished with the use of a light scrubbing action, used in conjunction with a good grade of common household mild detergent. Harsh acidic or caustic cleaners are not recommended. Under no condition should the louver or component finish be scrubbed with an abrasive cleaner or apparatus.

Special Tools, Instruments & Parts List

Stationary, or fixed blade louvers may be all welded, tenoned or mechanically fastened assemblies and have no field replaceable parts. Also, no special tools or instruments are required to install or maintain the louvers furnished and covered by this manual.

AIRFLOW AC

Airflow AC Middle East FZE-LLC
Um al quwain,UAE

www.airflowac.me
Email: airflowacme@gmail.com
Tel:00971509293811