

ALANDALOSIA

FOR AIR OUTLET



CATALOGUE **NO 18**

NON RETURN **DAMPER** SHUTTER



Air Outlet

Andalosalosia

OUR PRODUCTS

SELECTION GUIDE

- 1- SQUARE CEILING DIFFUSER
- 2- ROUND CEILING DIFFUSER
- 3- SWIRL DIFFUSER
- 4- PERFORATED CEILING DIFFUSER
- 5- LINEAR SLOT DIFFUSER
- 6- LINEAR CEILING DIFFUSER
- 7- LINEAR BAR GRILL
- 8- REGISTER
- 9- FLOOR & PERFORATED FLOOR GRILL
- 10- TRANSFER GRILL
- 11- ACCESS PANEL
- 12- LOUVER
- 13- SAND TRAP LOUVER
- 14- JET NOZZLE
- 15- BALL JET NOZZLE
- 16- DRUM JET NOZZLE
- 17- DISC VALVE
- 18 - NON RETURN DAMPER(SHUTTER)**
- 19- VOLUME DAMPER
- 20- FIRE DAMPER
- 21- SMOKE DAMPER
- 22- DUCT ACCESS DOOR

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Air Outlet

Andalosa

INTERTEK

NON RETURN DAMPERS

Non Return Dampers are designed for automatic shutoff of individual sections of the air conditioning system.

With the fan running, the degree of blade opening is a function of air velocity.

If the fan is turned off, the blade will close automatically. In a multi fan installation system, this prevents back draught through the non- operating fan.

They may be referred to as Shutoff Dampers or Back Pressure Dampers or Pressure Relief Damper or Back Draft Shutter.

DUCT MOUNTED

Used in fresh air intake or air Exhaust opening in commercial or residential premises.

WALL MOUNTED 'GRAVITY SHUTTER'

Used in fresh air intake or air Exhaust opening in commercial or residential premises.

WALL MOUNTED GRAVITY SHUTTER

INTRODUCTION

The gravity air shutter is a wall mounted device. It is composed of a set of horizontally mounted blades; they are normally closed and are free to rotate about the horizontal axis to equalize the pressure across it.

FRAME

Extruded aluminum section frame.

BLADE

Extruded aluminum profile .

STUP SHAFT

Formed from galvanized steel .

SEAL

Sealing foam strips on the blades where they overlap to ensure a good seal and to reduce noise .

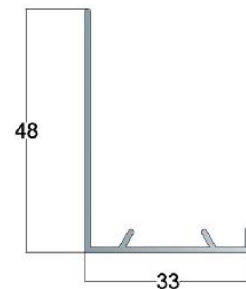
SIZES

WIDTH * HEIGHT

max size : (1000 MM * 1000 MM) for single section .

FINISH

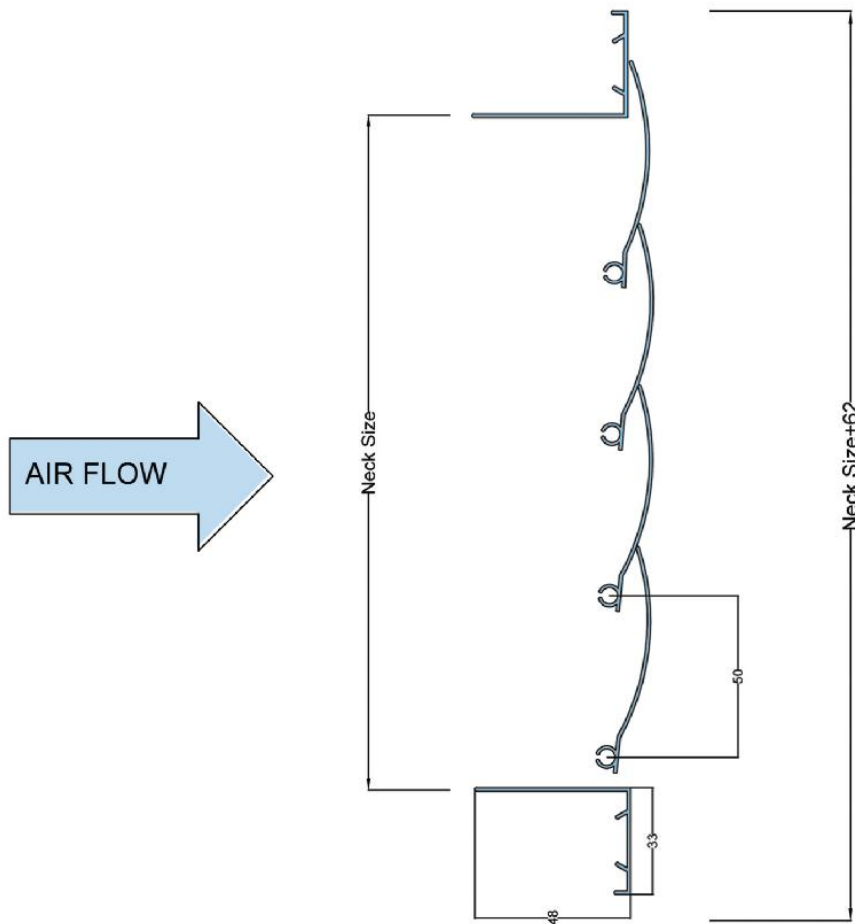
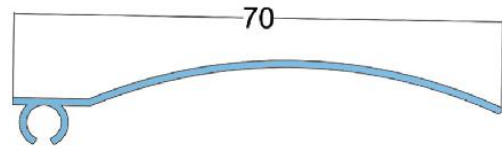
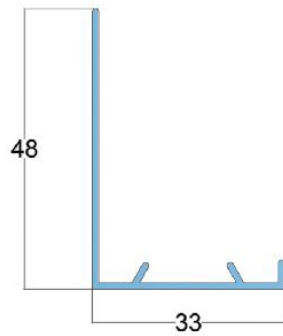
Standard mill finish or powder coated .



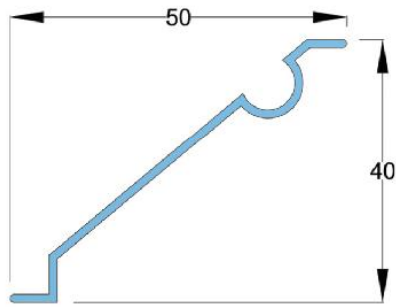
frame

TYPES

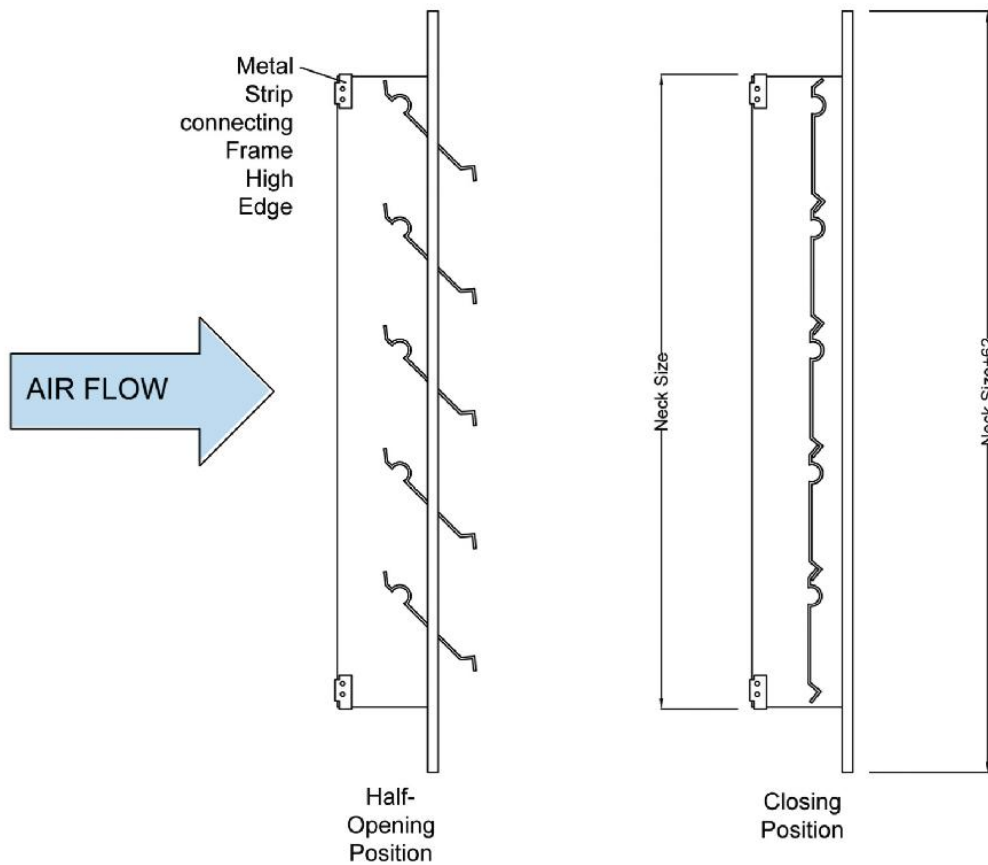
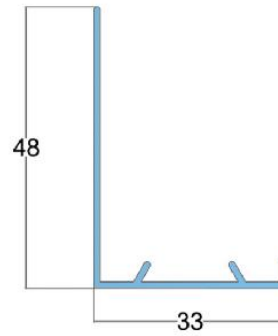
“GRAVITY SHUTTER-70”



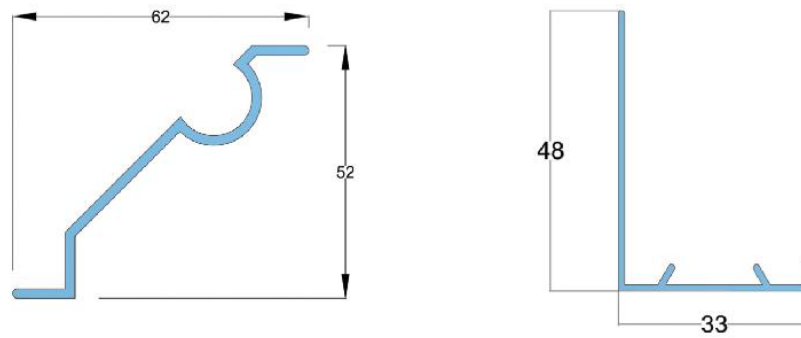
"GRAVITY SHUTTER-50



Wall Thickness of 1.2 mm

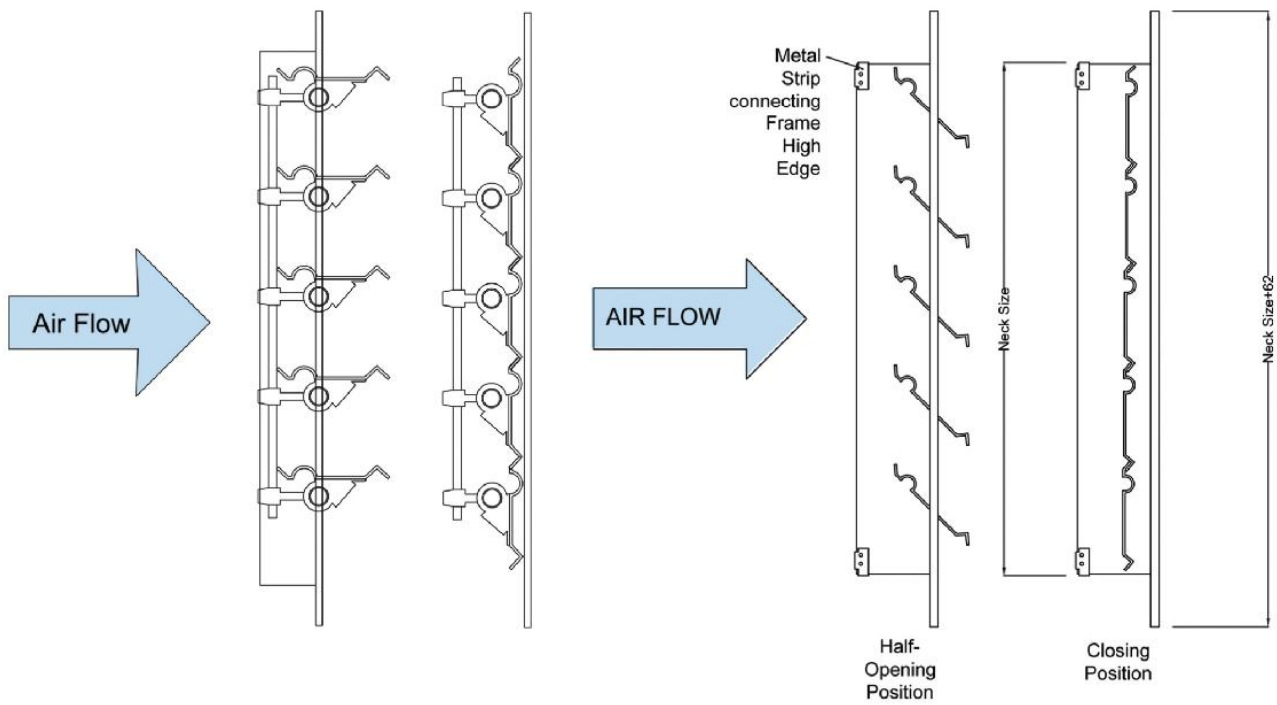


"GRAVITY SHUTTER-62"



Wall Thickness of 2 mm

blades can be provided with back linkage in order to unify the direction of opening



DUCT MOUNTED

INTRODUCTION

Non return damper designed to be duct mounted

FRAME

Made from ga 20. galvanized steel.

BLADE

Made from galvanized steel or aluminium .

SPINDLES

Round spindles \varnothing 12 mm made from galvanized steel bar .

SEAL

Gasket is provided on blade tips for low leakage.

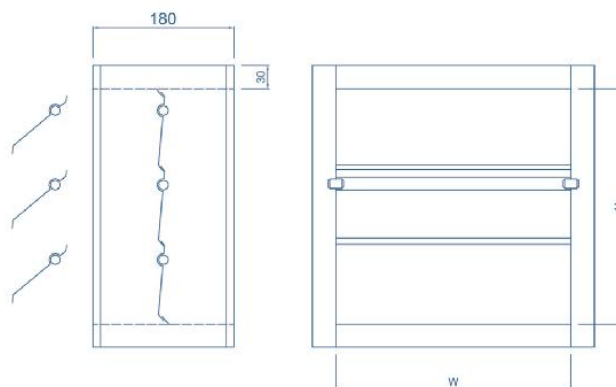
SIZES

WIDTH * HEIGHT

max size : (1000 MM * 1000 MM) for single section .

FINISH

Standard mill finish or powder coated .



Non return Damper
Duct Mounting

PERFORMANCE DATA

LISTED SIZES & AREA FACTOR

Listed Height (inches)	Listed width (inches)												
	12	14	16	18	20	24	30	36	42	48	54	60	72
12	0.81	0.96	1.10	1.25	1.40	1.64	2.08	2.47	2.91	3.30	3.74	4.13	4.96
16	1.08	1.27	1.47	1.66	1.86	2.18	2.77	3.29	3.87	4.44	5.02	5.49	6.60
20	1.36	1.60	1.85	2.09	2.33	2.75	3.48	4.13	4.87	5.52	6.25	6.91	8.30
24	1.62	1.92	2.21	2.50	2.79	3.29	4.16	4.95	5.82	6.61	7.48	8.27	9.93
28	1.89	2.23	2.57	2.91	3.25	3.83	4.85	5.76	6.78	7.69	8.71	9.63	11.56
32	2.16	2.55	2.93	3.32	3.71	4.37	5.53	6.57	7.74	8.78	9.94	10.99	13.19
36	2.44	2.87	3.31	3.75	4.19	4.93	6.24	7.42	8.73	9.91	11.22	12.40	14.89
40	2.70	3.19	3.68	4.16	4.65	5.47	6.93	8.23	9.69	11.00	12.45	13.76	16.52
44	2.97	3.50	4.04	4.57	5.11	6.01	7.61	9.05	10.65	12.08	13.68	15.12	18.16
48	3.25	3.83	4.42	5.00	5.59	6.57	8.32	9.89	11.64	13.21	14.97	16.24	19.86
52	3.52	4.15	4.78	5.41	6.04	7.11	9.01	10.71	12.60	14.30	16.20	17.89	21.49
56	3.78	4.46	5.14	5.82	6.50	7.65	9.69	11.52	13.56	15.39	17.43	19.25	23.12
60	4.06	4.79	5.52	6.25	6.98	8.21	10.40	12.36	14.55	16.52	18.71	20.67	24.82

Note:

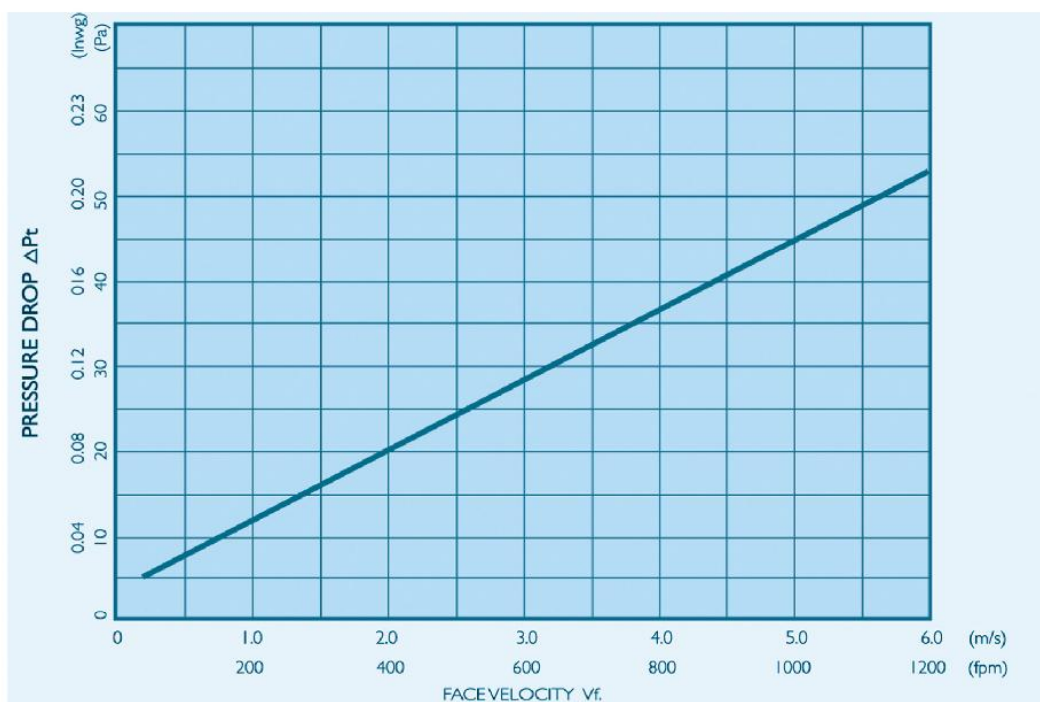
For sizes not shown, the approximate area factor can be calculated by using the formula below:

$$\text{Area Factor} = \frac{0.8 (\text{Height}) \times (\text{width})}{144}$$

$$\text{CFM} = \text{Area factor (ft}^2\text{)} \times \text{face velocity (fpm)}$$

PER FORMANCE DATA

Air Flow Resistance Diagram (All Models)
Pressure Drop (ΔP_t) versus Face Velocity (Vf.)



To Calculate The Air Flow Rate (All Models)

L : louver of damper length

H : louver of damper hieght

Pt (pa) : pressure Drop

Vf (m/s) : Air velocity

$$\text{Air flow rate in (CFM)} = \frac{0.8 * L(\text{in}) * H(\text{in}) * Vf(\text{FPM})}{144}$$