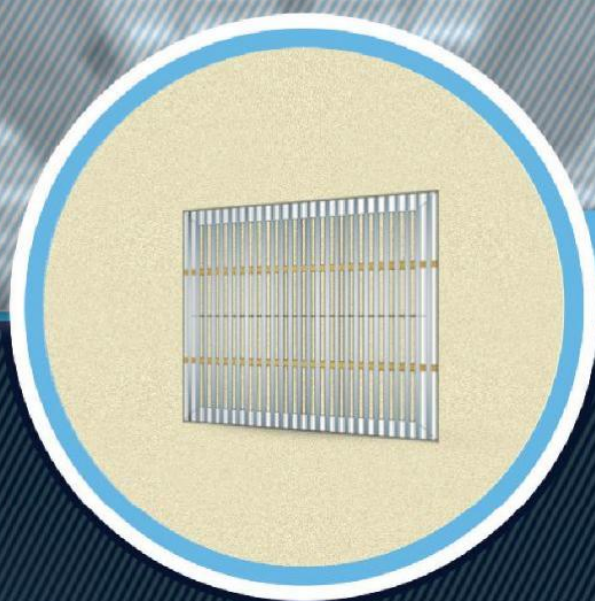


# ALANDALOSIA

FOR AIR OUTLET



CATALOGUE **NO 9**

## FLOOR & PERFORATED FLOOR **GRILL**

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Air Outlet

**Andalosal**





# OUR PRODUCTS

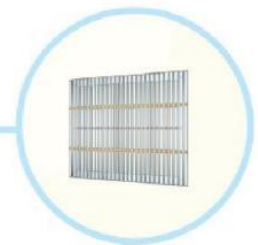
## SELECTION GUIDE

- 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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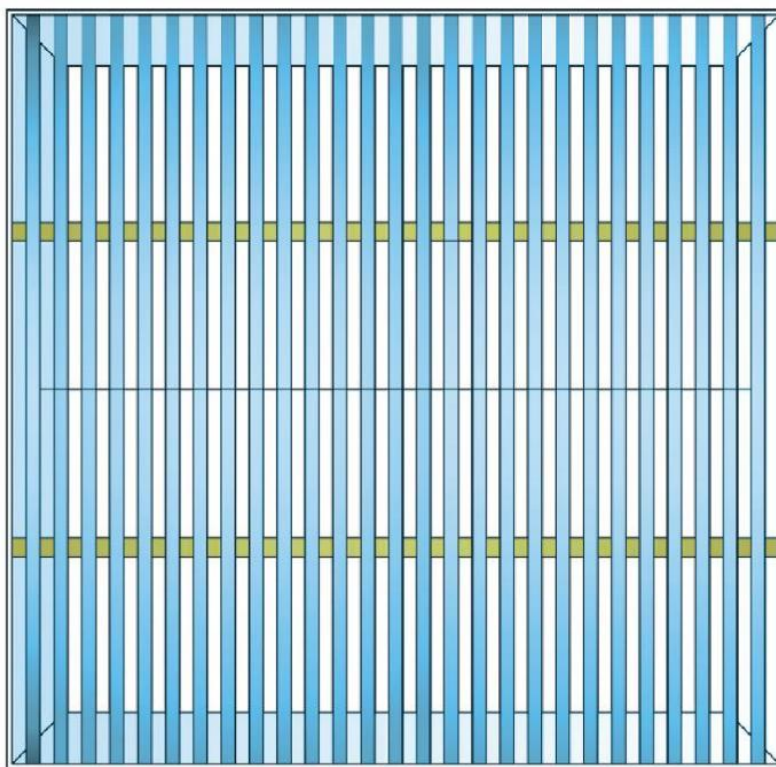
Air Outlet

# Andalosia

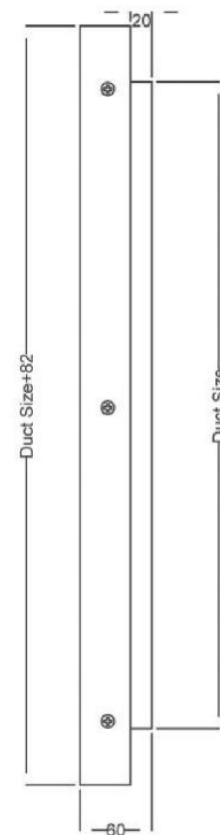
INTERTEK

## APPLICATIONS

Floor fixed bar aluminium grilles are used for air supply and exhaust in all kinds of low pressure air handling.



Floor Bar Grille

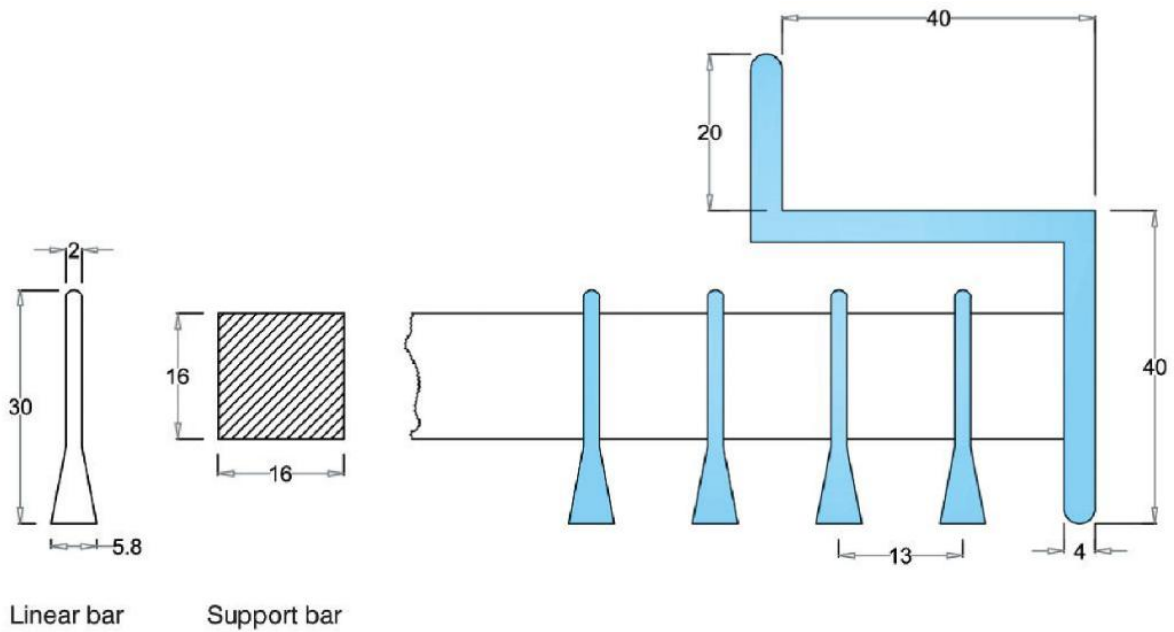


## SIZES

Available as standard in 600 x 600 mm tile replacement but can be manufactured in any size from 300 x 300 mm to 750 x 750.

## SPECIFICATION

The grille is manufactured from extruded aluminium (6063)  
 The core is mounted transversely on deep flat section aluminium alloy support bars welded to the heavy section main frame.

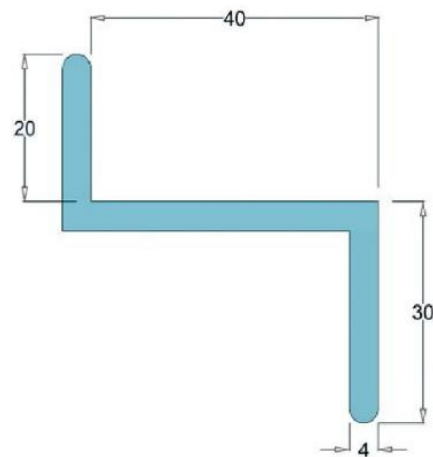


Linear bar

Support bar

## FINISH

Standard anodized finish or painted electrostatically, with 20% gloss RAL 9010 (white) as standard. Other colours are also available upon request.

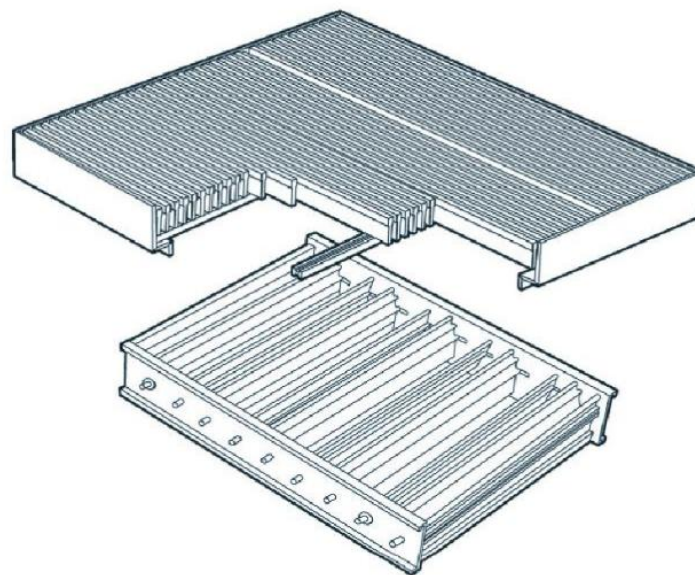
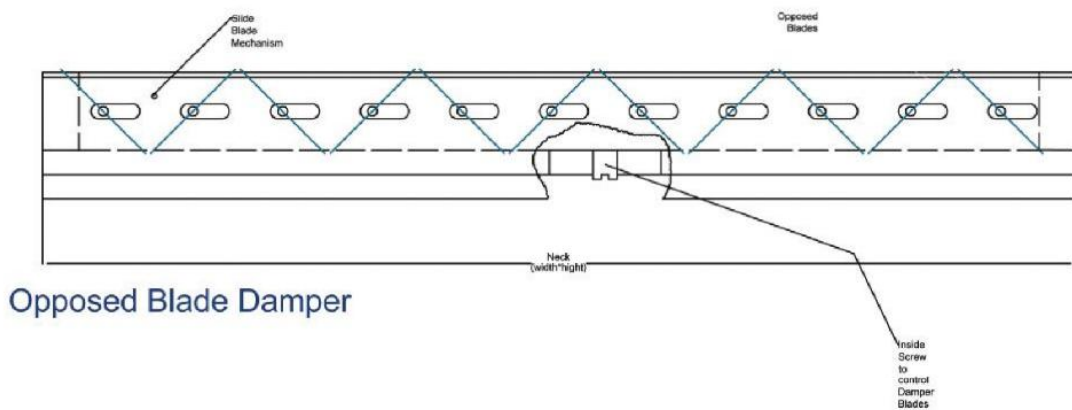


Main frame

## ACCESSORIES

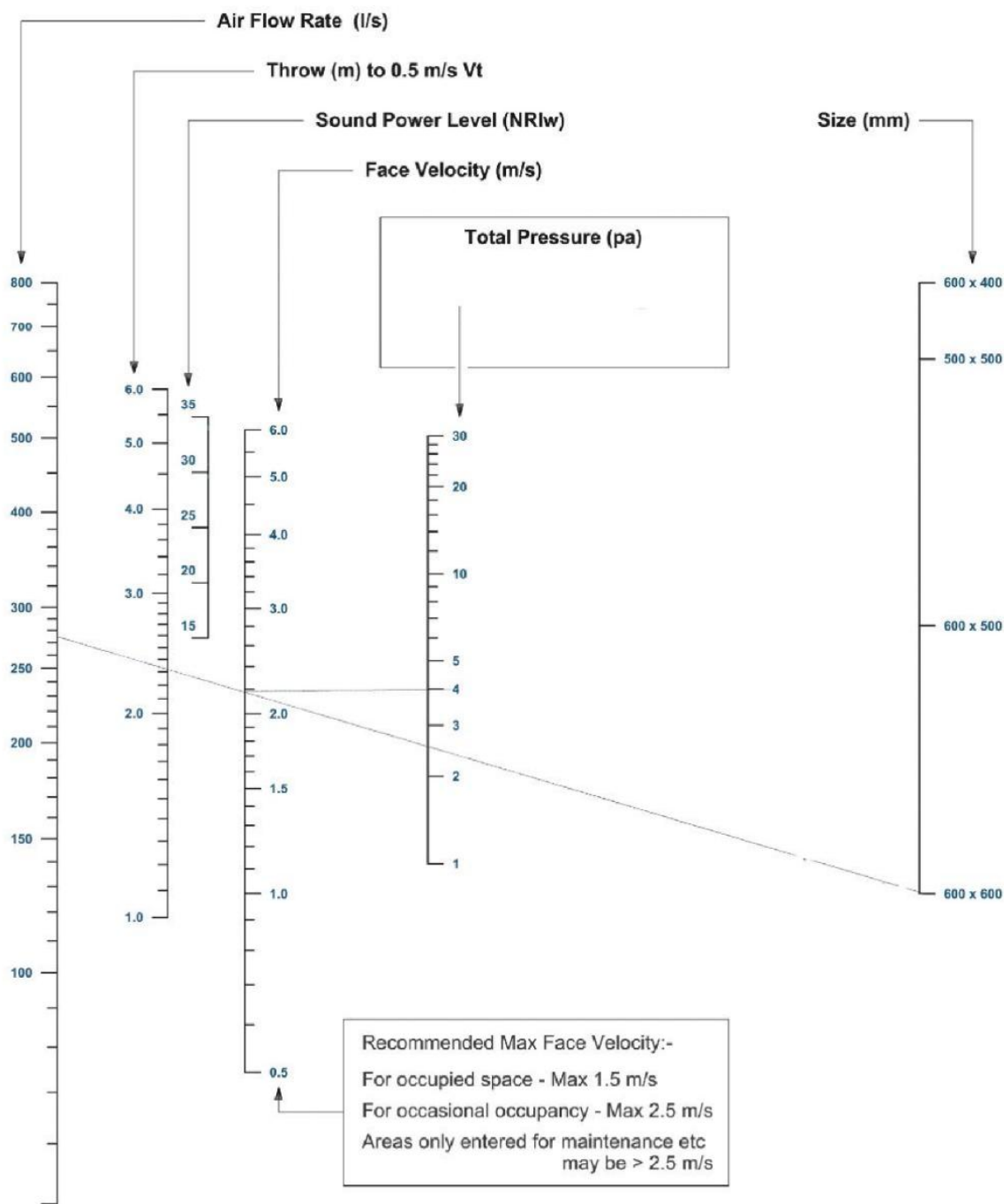
### Damper with opposed blades

Depending on application characteristics, an opposed blade damper can be installed on the back side of the grille. This damper is a separate item which can be operated by its special tool from the face of the grille. Opposed blade dampers are manufactured from ETIAL-60 norm aluminium extruded profiles. To prevent reflection, they are painted RAL 9005 (matt black) as standard.





# PERFORMANCE DIAGRAM



Nomogram based on grille without a damper at isothermal conditions.

Example:-

An area that is only occasionally occupied is to have 600 x 600 mm grilles each handling 275 l/s.

Place a straight edge on the nomogram aligning the grille model and size with the air flowrate.

Reading off the following information:-

Velocity is acceptable for the space at 2.2 m/s.

Throw to 0.5 m/s Vt = 2.3m.

Sound power level is negligible = approx 15 NRlw when addition for -OBD (+2db), added.

For Pressure drop project horizontally from the Face Velocity to the respective pressure line for the model and read = 4 pa.

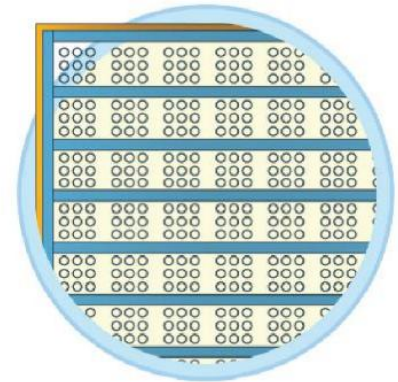
## INTRODUCTION

### RAISED PERFORATED ACCESS PANEL

Provide superior cooling for managing heat loads in mission critical facilities, available with top surface adjustable dampers.

It can be varied according to the free area through which air is going to access.

Rate of air flow varying from 16% up to 32%



## APPLICATION

- Fields of research and production with low particles requirement.
- Data centers.
- Air conditioning of machinery.
- Assembly, conference and meeting rooms.
- Office areas (laminar air flow).

## SPECIFICATIONS

### CONSTRUCTION

- Welded steel grid frame and top sheet assembly.
- Heavy duty load capacity to be used with 1250, 1500, 2000 and 2500 lbs.
- High pressure laminate, vinyl and rubber coverings.
- Back skin perforated sheet.

### SIZE

Standard size of 24"x 24" or 600 mm x 600 mm.

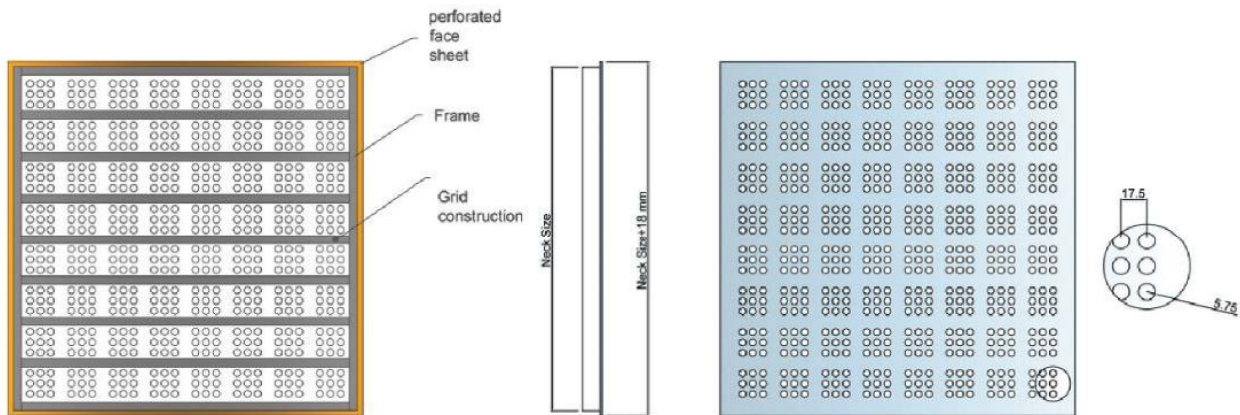
Depth of 33 mm without covering.

### FINISH

Standard powder coating of any RAL- color as required.

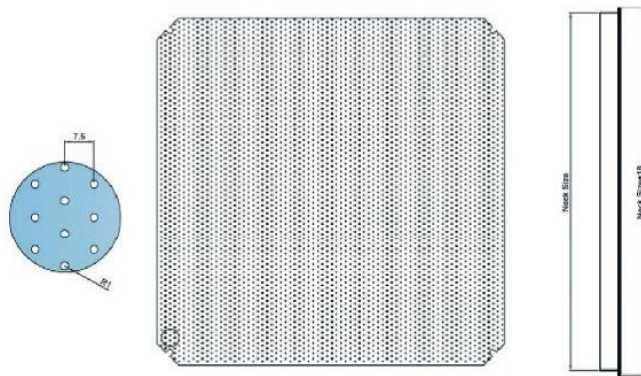


# CONSTRUCTION



Grid construction, welded in main frame to get a rigid construction  
Back side of the Panel

Perforated Floor Grille-Face Plan

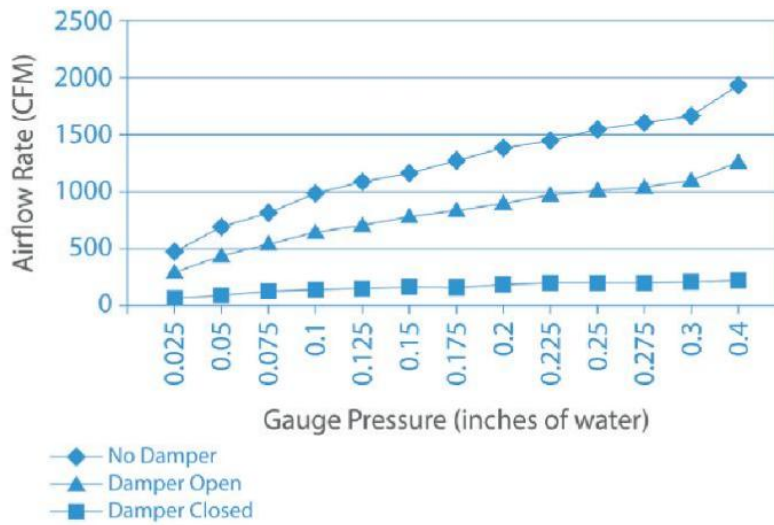


Perforated Back Skin

## PERFORMANCE DATA

### CFM Test Results

Airflow Rate for Perforated Panel



Gauge Pressure (inches of water)	CFM		
	No Damper	Damper Open	Damper Closed
0.025	460	294	58
0.05	701	436	87
0.075	824	550	110
0.1	991	646	125
0.125	1093	712	135
0.15	1182	780	149
0.175	1283	839	159
0.2	1393	901	170
0.225	1461	965	177
0.25	1553	1015	185
0.275	1625	1049	191
0.3	1687	1106	195
0.4	1947	1275	216