

Adjustable Blade Grilles

1H / 1V / 2H / 2V

Introduction

The Waterloo adjustable, single and double deflection, grilles are suitable for duct, ceiling and sidewall applications in most commercial projects. The grille vanes are individually adjustable to allow jet spread or deflection to be set within 45° of the duct axis.

Product Description

- 1H** Single set of horizontal blades
- 1V** Single set of vertical blades
- 2H** Double set of blades with front set horizontal
- 2V** Double set of blades with front set vertical
- OBSS** Allen key operated opposed blade damper
- ED** Equalising deflector
- DT-2M** Adjustable duct turn (Installed in duct)

Features

- Single or double deflection for complete air pattern control
- Teardrop blade for quiet operation but maximum induction

Finishes

- PPG9010 (RAL 9010 Gloss - 80% Gloss White)
- PPM9010 (RAL 9010 Matt - 20% Gloss White)
- PPM9006 (RAL 9006 Matt - 30% Gloss Silver)
- Other colours or anodised finish available on request

Weights

- 1H/1V 8.5 kg/m² face area
- 2H/2V 12.0 kg/m² face area
- OBSS/ED 9.5 kg/m² face area
- DT2M 9.0 kg/m² face area

Sizes

- Minimum Size - 75 x 75
- Maximum Size - 1500 x 1200

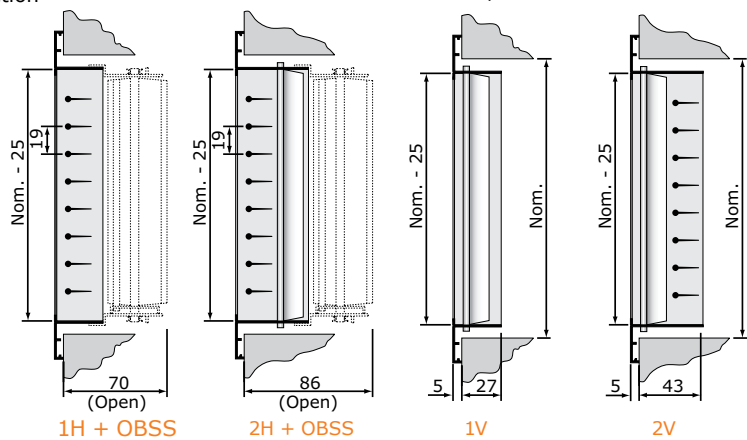
Fixing Options

- SF CF CRB VS AFVS
- PFVS RCHS AFHS AFCF RCCF
- BSSBD
- BSSBP (NOT for 2H or 2V)



Free Area	
1H/1V	2H/2V
74%	66%

Please refer to pages 29 - 31 for full details of:
 Fixing Options
 Control Options
 Sub Frames
 Sizing Implications
 Border Options



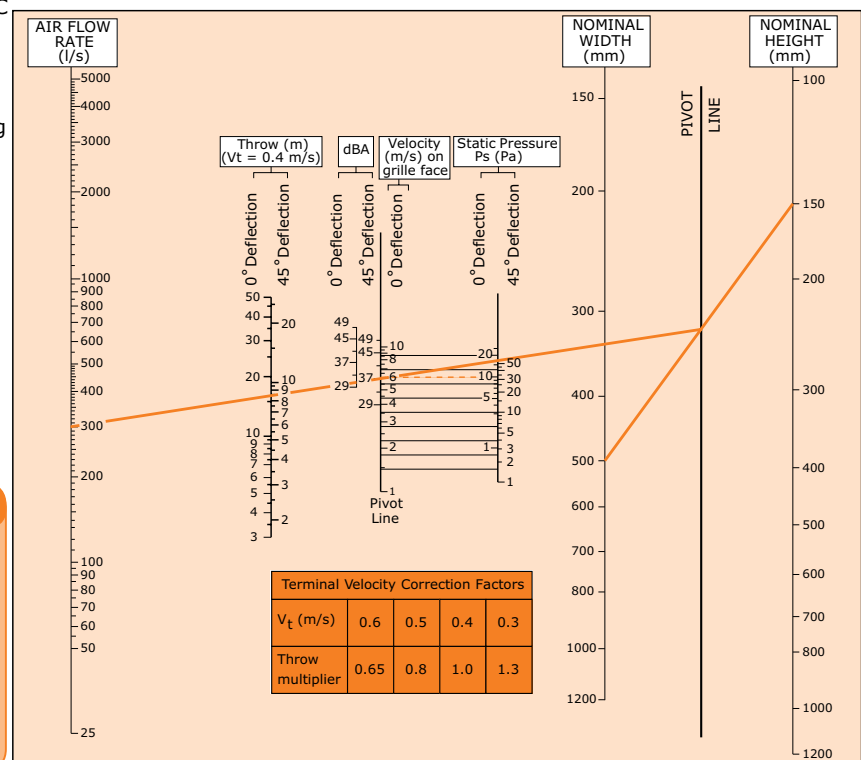
dBA and Static Pressure (P_s) Correction Factors for Grilles with an Open Damper

Grille Width	100+	125+	150+	200+	250+	300+	350+	450+	550+	600+	700+	850+	>1000
L _w Addition (C _L)	10	9	8	7	6	5	4	4	4	3	3	3	2
P _s Multiplier (C _p)	2.5	2.4	2.2	2.0	1.9	1.8	1.7	1.6	1.5	1.5	1.4	1.3	1.2

Selection Criteria

Performance data is based on grilles situated within 0.3m of ceiling with supply air at a 10°C cooling differential. Throw is the horizontal distance from the grille face to the point at which the velocity of the airstream has retarded to 0.4m/s. For grilles situated 0.3m or more below ceiling level reduce throw by 1/3. dBA is based on a room absorption of 8 dB for sound power ref 10⁻¹² W.

Performance Nomogram



Selection Example 2H/500/150/25T/SF

- Air Volume 300 l/s
- Grille @ 0° deflection**
Throw 16m, Velocity 6.1m/s, dBA 31, P_s 10
- Grille @ 45° deflection**
Throw 8.5m, Velocity 6.1m/s, dBA 37, P_s 32
- Grille with damper @ 0° deflection**
Throw 16m, Velocity 6.1m/s, dBA 35, P_s 16
- Grille with damper @ 45° deflection**
Throw 8.5m, Velocity 6.1m/s, dBA 41, P_s 51

ORDER EXAMPLE

1H/300/300/PPM9010/R25/SF/OBSS

Type _____
 Nominal Width _____
 Nominal Height _____
 Finish _____
 Border _____
 Fixing _____
 Options _____