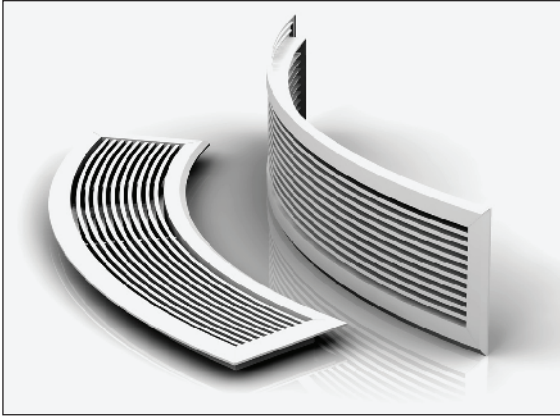


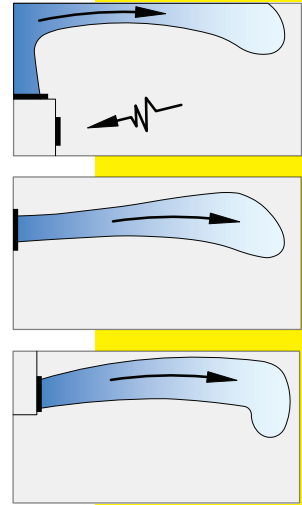
Supply and exhaust air

CURVED LINEAR BAR GRILLES



The F1B and F1N type Linear grilles are both available in curved sections. These may be either ceiling/cill curved or sidewall curved units. Grilles can be supplied in modular units or, for continuous applications, in single sections up to 2.5m.

introduction



F1B - F1N (Note: only available with 0 ° deflection blades) **C**

Dampers in the plenum box or duct.

For all additional available options, fixings, finishes and plenums see document **PART L**

Standard fixing method is by countersunk screw through the flange - SC

Standard finish is powder coated - PC

Linear grilles are available in standard heights ranging from 40 mm up to 600 mm and in single section lengths of up to 2.5m, depending on the height.

Note that grille heights less than 50 mm cannot be fitted with OB dampers.

Flange size 25mm square edge.

type

control

options

fixings

finish

sizes

flange

ordering details

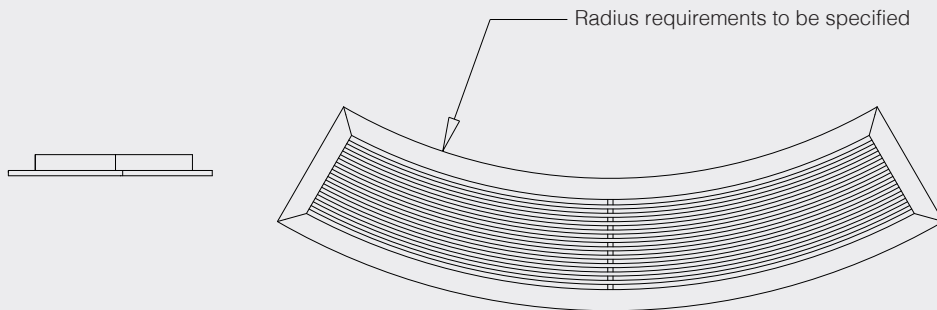
example:

type	control	borders	fixing	finish	width	height	quantity
F1B	OB	25	SC	PC	1000	300	6

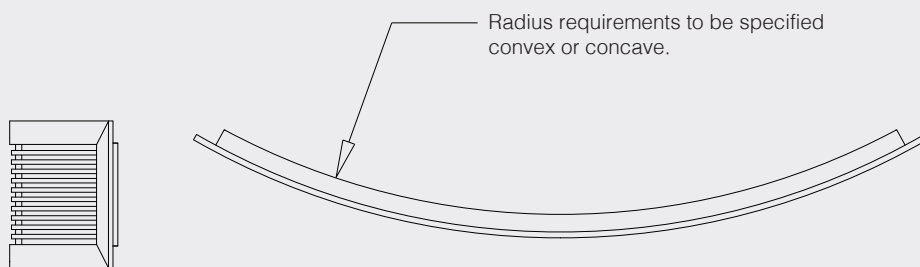
Supply and exhaust air

DIMENSIONS

CURVED CEILING - CILL (CC)

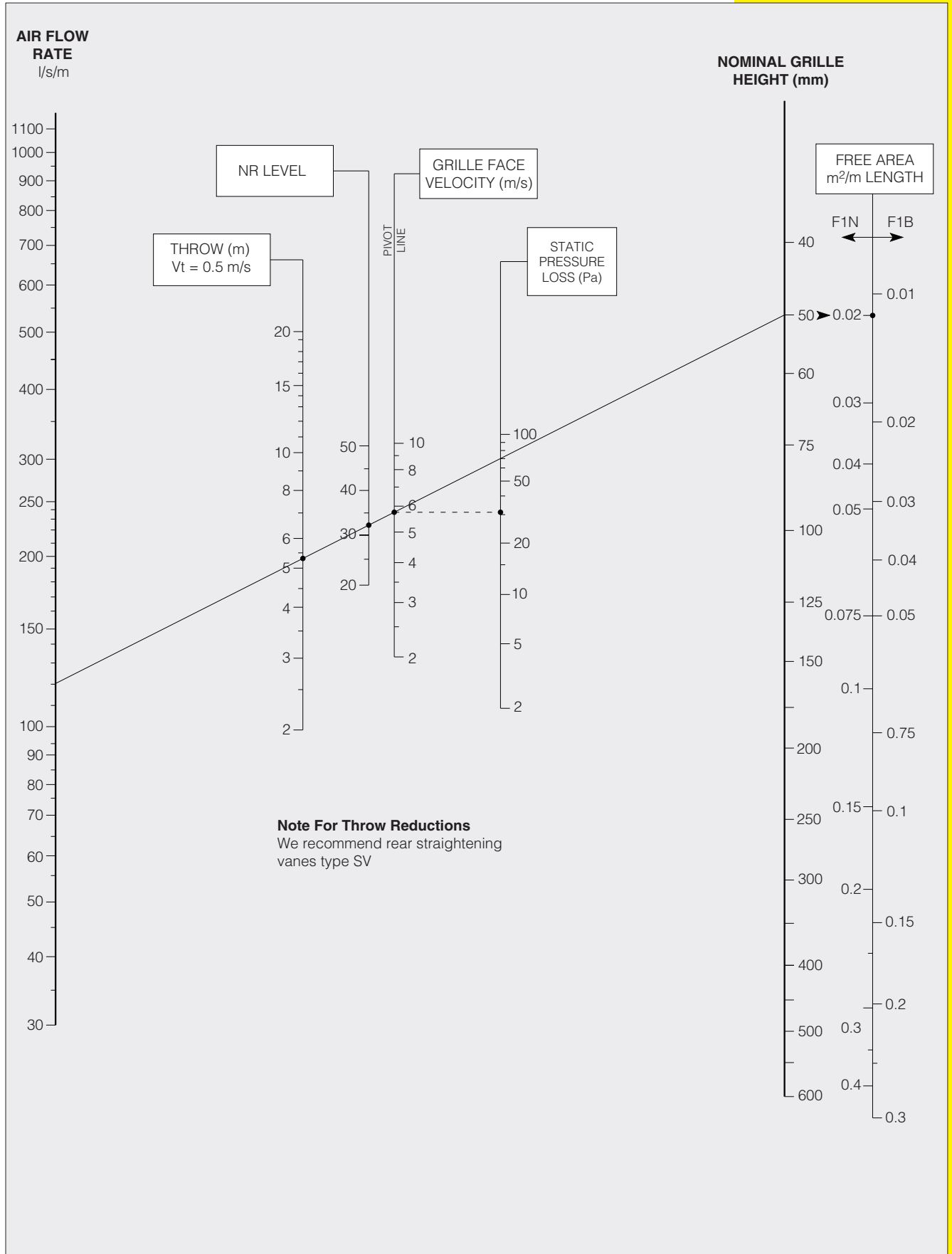


CURVED SIDE WALL (CSW)



Supply and exhaust air

SELECTION NOMOGRAM



Supply and exhaust air

BASIS OF DATA

Throw data is for a 1.2m sidewall grille positioned within 250mm of a ceiling surface and is based on a terminal velocity (V_t) of 0.5m/s and a cooling differential of 10°C. For mounting distances greater than this reduce the throws by a factor of 0.7.

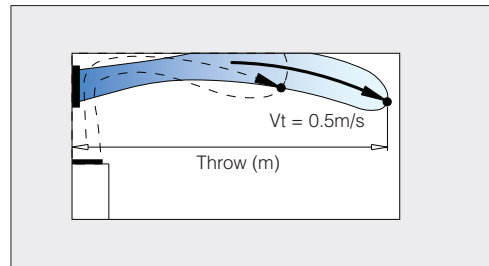
Additional factors can be applied for other temperature differentials. Acoustic data is presented in terms of NR levels based on a room absorption factor of 8dB.

note

NOMOGRAM DATA IS BASED ON F1B AND F15B GRILLE TYPES. FOR F1N, F15N AND F40N GRILLES, THE FOLLOWING CORRECTION FACTORS SHOULD BE APPLIED	THROW (m)	x0.9	x0.75
	NR LEVEL	-3	0
	FACE VELOCITY	x0.85	x0.85
	PRESSURE LOSS	x0.8	0

correction factors

CORRECTIONS FOR LATERAL JET SPREAD		
	30°	45°
THROW FACTOR	0.75	0.55
NR ADDITION	+4	+8
Ps FACTOR	1.25	1.5



CORRECTION FACTORS FOR GRILLE LENGTHS				
LENGTH (m)	0.5	2.0	2.5	3.0+
THROW CORRECTION	0.9	1.0	1.1	1.1
NR CORRECTION	-3	+4	+3	+5

TEMPERATURE CORRECTION FACTORS		
DIFFERENTIAL TEMPERATURE	0°C	+10°C
SIDEWALL THROW FACTOR	1.1	1.15
CILL THROW FACTOR	1.1	1.2

exhaust

EXHAUST APPLICATIONS				
FOR EXHAUST GRILLES, APPLY THE FOLLOWING CORRECTION FACTORS TO THE SUPPLY GRILLE DATA.		F1B / F15B	F1N / F15N	F40N
	Pse	Ps x 1.3	Ps x 1.2	Ps x 1.3
	NRe	NR + 5	NR + 7	NR + 7

example

SELECTION EXAMPLE				
1200mm WIDE SUPPLY GRILLE 50mm HIGH, PASSING AN AIR FLOW RATE OF 120l/s/m (144 l/s total)	GRILL TYPE	THROW (m)	NR	Ps (Pa)
	F1B, F15B	5.4	32	32
	F1N, F15N	4.9	29	26
	F40N	4.0	32	32
F1N FREE AREA = 1.2 x 0.02 = 0.024m ² F1B FREE AREA = 1.2 x 0.012 = 0.014m ²				