

# High Security Grille

## Description

Security ventilation grille for supply, air transfer or extract applications. Stainless Steel type complies with Home Office Recommendations for Anti-Ligature applications. Stainless Steel option to have 2.0mm holes on 4.0mm centres. Mild Steel application to have 3.0mm holes on 6.0mm centres.

## Construction

Constructed from 3.0mm thick Mild Steel or 2.0mm thick Stainless Steel sheet with 50mm borders. Complete with rear plenum box and tamperproof rear mounted fixings.

## Size and Weight

From 150 x 150 to 600 x 600  
 PMR10 + 8C approximately 38kg/m<sup>2</sup>  
 Free Area approximately 22.5%

## How to Specify

STATE QUANTITY, THE PRODUCT CODING AND THE SIZE WIDTH X HEIGHT

e.g. 10 Qty. PSR10+8P 300 x 300 - 200 diameter



Specify 'd' dimension wall depth separately

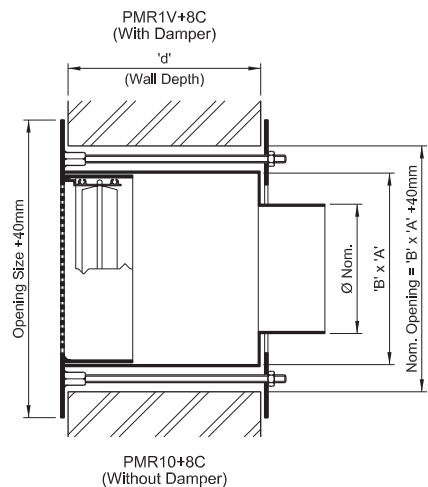
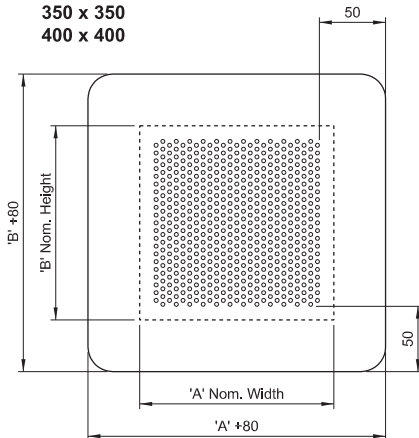
Product	Construction	Options	Accessories
<b>P</b> Prison / Security	<b>M</b> 3.0mm Mild Steel	<b>R1</b> Top Inlet Plenum Box	<b>0</b> None
	<b>S</b> 2.0mm Stainless Steel	<b>R2</b> 50mm Welded Neck	<b>V</b> Damper
			<b>F</b> Flap Damper

+

Fixings	Finish
<b>8</b> High Security Welded Studs & Backing Flange	<b>C</b> PPC BS /RAL Colour
	<b>P</b> Stainless Steel Satin Polish

## 'A' x 'B' (mm)

- 150 x 150
- 200 x 200
- 250 x 250
- 300 x 300
- 350 x 350
- 400 x 400



## Selection Table Steel Security Grille

Grille Size													
<b>150 x 150</b>													
q (l/s)	20	25	30	35	40								
Lt (M)	4.1	5.0	5.9	7.0	8.0								
NC	22	27	30	35	40								
Vk (M/s)	5.3	6.6	7.9	9.2	10.52								
Vn (M/s)	1.17	1.47	1.76	2.06	2.35								
PS (Pa)	15	25	35	45	52								
<b>200 x 200</b>													
q (l/s)	20	25	30	35	40	45	50	55	60				
Lt (M)	3.1	3.9	4.5	5.0	5.8	7.0	7.5	8.3	9.1				
NC	17	18	20	24	27	30	34	38	40				
Vk (M/s)	2.7	3.4	4.1	4.8	5.5	6.2	6.8	7.5	8.2				
Vn (M/s)	0.62	0.78	0.93	1.09	1.25	1.40	1.56	1.71	1.85				
Ps (Pa)	5	8	10	15	20	25	30	35	40				
<b>250 x 250</b>													
q (l/s)	30	35	40	45	50	55	60	65	70	75	80	85	90
Lt (M)	3.5	4.2	5.0	5.5	6.0	7.0	7.5	8.1	9.0	9.5	10.0	11.0	12.0
NC	10	17	20	24	25	27	30	33	35	37	38	40	43
Vk (M/s)	2.5	2.9	3.4	3.8	4.2	4.6	5.0	5.5	5.9	6.3	6.7	7.1	7.6
Vn (M/s)	0.56	0.66	0.75	0.85	0.94	1.03	1.13	1.22	1.32	1.41	1.50	1.60	1.69
Ps (Pa)	4.5	6	9	10	14	16	19	22	27	32	36	40	45
<b>300 x 300</b>													
q (l/s)	40	45	50	60	70	80	90	100	110	120	130		
Lt (M)	4.1	4.5	5.0	6.0	7.5	8.5	9.5	11.0	12.0	13.0	14.0		
NC	15	18	19	24	25	30	35	37	38	43	45		
Vk (M/s)	2.3	2.6	2.8	3.4	4.0	4.5	5.1	5.7	6.3	6.8	7.4		
Vn (M/s)	0.51	0.57	0.64	0.76	0.89	1.02	1.15	1.28	1.41	1.53	1.66		
Ps (Pa)	4	4.6	6	10	13	15	20	27	35	38	42		
<b>350 x 350</b>													
q (l/s)	50	60	70	80	90	100	120	140	160	180			
Lt (M)	4.5	5.5	6.5	7.5	8.5	9.5	11.0	13.0	14.5	17.0			
NC	16	18	22	25	28	31	37	40	45	50			
Vk (M/s)	2.0	2.4	2.8	3.3	3.7	4.1	4.9	5.7	6.5	7.3			
Vn (M/s)	0.45	0.55	0.64	0.73	0.82	0.91	1.10	1.28	1.46	1.65			
Ps (Pa)	4	5	7	9	12	15	20	30	40	50			
<b>400 x 400</b>													
q (l/s)	60	80	100	120	140	160	180	200	220				
Lt (M)	4.5	6.0	8.0	9.5	12.0	13.0	14.0	16.0	18.0				
NC	15	20	25	30	33	39	42	45	50				
Vk (M/s)	1.8	2.5	3.0	3.7	4.3	4.9	5.5	6.2	6.7				
Vn (M/s)	0.41	0.55	0.69	0.83	0.97	1.11	1.25	1.38	1.53				
Ps (Pa)	3	5	8	12	15	24	30	35	45				

EXTRACT + 5 Pa + 5 Nc

LT Figure is at 0.5 M/s Vt