

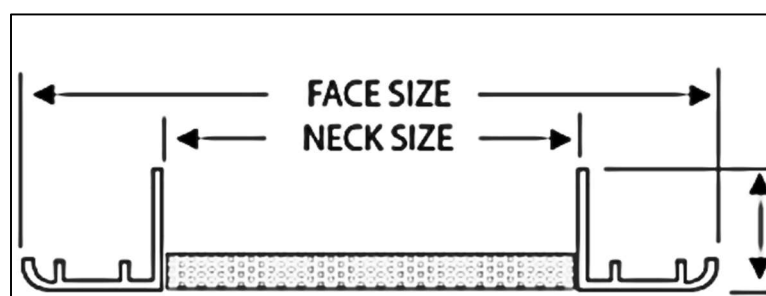
## Perforated Grille

### General Information:

Ventech Perforated Grilles are designed for providing security and are ideal in areas where resistance to tampering is desirable. The small holes on perforated grilles are small enough to prevent fingers through guarding against injury and damage. It is typically used in return and exhaust air applications. Also suitable for heating and cooling in any core pattern.

### Features:

- Suit to application and level of security level
- Suit for ceiling or wall mounted diffuser or as a return
- Optional neck adapter available to suit circular ducting
- Optional box available to suit standard ducting



Nominal (mm)	Flowrate (l/s)	25	50	75	100	150	200	250	300	400	500	600	700	800	900	1000
200x200	Vel (m/s)	0.7	1.5	2.2	2.9	4.4	5.8	7.2								
	$\Delta P_{S1}$ [Pa]	4.2	15.8	36.8	65.1	146.0										
AN = 0.036	$\Delta P_{S2}$ [Pa]	1.1	6.3	13.7	24.2	55.7	98.7	153.3								
	225x225	Vel (m/s)	0.5	1.2	1.7	2.3	3.4	4.5	5.7	6.8						
$\Delta P_{S1}$ [Pa]		2.1	9.5	21.0	37.8	85.1	150.2									
AN = 0.046	$\Delta P_{S2}$ [Pa]	1.1	3.2	8.4	14.7	32.6	56.7	89.3	128.1							
	250x250	Vel (m/s)	0.4	0.9	1.4	1.8	2.7	3.7	4.5	5.5	7.2					
$\Delta P_{S1}$ [Pa]		1.1	6.3	13.7	23.1	52.5	93.5	146.0								
AN = 0.058	$\Delta P_{S2}$ [Pa]	1.1	2.1	5.3	8.4	20.0	35.7	55.7	79.8	141.8						
	300x300	Vel (m/s)	0.3	0.6	0.9	1.3	1.9	2.5	3.2	3.8	5.0	6.2	7.5			
$\Delta P_{S1}$ [Pa]		1.1	2.1	6.3	10.5	23.1	41.0	65.1	93.5	165.9						
AN = 0.084	$\Delta P_{S2}$ [Pa]	0.0	1.1	2.1	4.2	8.4	15.8	24.2	35.7	63.0	98.7	141.8				
	350x350	Vel (m/s)	0.2	0.4	0.6	0.9	1.4	1.8	2.3	2.7	3.7	4.5	5.5	6.4	7.2	
$\Delta P_{S1}$ [Pa]		0.0	1.1	3.2	5.3	11.6	21.0	32.6	47.3	84.0	132.3					
AN = 0.116	$\Delta P_{S2}$ [Pa]	0.0	0.0	1.1	2.1	4.2	8.4	12.6	17.9	32.6	50.4	72.5	97.7	128.1		
	400x400	Vel (m/s)	0.2	0.3	0.5	0.7	1.1	1.4	1.7	2.1	2.7	3.5	4.1	4.8	5.6	6.2
$\Delta P_{S1}$ [Pa]		0.0	1.1	2.1	3.2	6.3	11.6	18.9	26.3	47.3	73.5	107.1				
AN = 0.152	$\Delta P_{S2}$ [Pa]	0.0	0.0	1.1	1.1	2.1	4.2	7.4	10.5	17.9	28.4	41.0	54.6	72.5	91.4	112.4
	450x450	Vel (m/s)	0.1	0.3	0.4	0.5	0.8	1.1	1.4	1.6	2.2	2.7	3.3	3.8	4.3	4.8
$\Delta P_{S1}$ [Pa]		0.0	0.0	1.1	2.1	4.2	7.4	11.6	15.8	28.4	45.2	64.1	87.2	114.5		
AN = 0.194	$\Delta P_{S2}$ [Pa]	0.0	0.0	0.0	1.1	1.1	3.2	4.2	6.3	10.5	16.8	24.2	33.6	43.1	54.6	68.3
	500x500	Vel (m/s)	0.1	0.2	0.3	0.4	0.6	0.8	1.1	1.3	1.8	2.2	2.6	3.0	3.5	3.9
$\Delta P_{S1}$ [Pa]		0.0	0.0	1.1	1.1	2.1	4.2	7.4	10.5	17.9	28.4	41.0	55.7	73.5	92.4	114.5
AN = 0.240	$\Delta P_{S2}$ [Pa]	0.0	0.0	0.0	0.0	1.1	2.1	3.2	4.2	7.4	10.5	15.8	21.0	27.3	34.7	43.1
	550x550	Vel (m/s)	0.1	0.2	0.3	0.3	0.5	0.7	0.9	1.1	1.5	1.8	2.2	2.5	2.8	3.3
$\Delta P_{S1}$ [Pa]		0.0	0.0	0.0	1.1	2.1	3.2	5.3	7.4	12.6	18.9	27.3	37.8	49.4	62.0	76.7
AN = 0.212	$\Delta P_{S2}$ [Pa]	0.0	0.0	0.0	0.0	1.1	1.1	2.1	2.1	4.2	7.4	10.5	14.7	18.9	23.1	29.4
	600x600	Vel (m/s)	0.1	0.1	0.2	0.3	0.4	0.6	0.7	0.9	1.2	1.5	1.8	2.1	2.4	2.7
$\Delta P_{S1}$ [Pa]		0.0	0.0	0.0	1.1	1.1	2.1	3.2	5.3	8.4	13.7	18.9	26.3	33.6	43.1	52.5
AN = 0.348	$\Delta P_{S2}$ [Pa]	0.0	0.0	0.0	0.0	0.0	1.1	1.1	2.1	3.2	5.3	7.4	9.5	12.6	16.8	20.0

## Notes

1. Vel[m/s] is duct velocity.
2. An is neck area in m<sup>2</sup>.
3.  $\Delta P_{S1}$  [Pa] is based on 2 mm thick diffusion with a 2.1 diameter holes. Free area 30%.
4.  $\Delta P_{S2}$  [Pa] is based on 3 mm thick diffusion with a 3.1 diameter holes. Free area 40%.